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PATAVII

XIII JUNII MDCCCLXXXII

SUMPTIBUS AUCTORIS

TYPIS SEMINARIIL.

SYLLOGE

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PYRENOMYCETUM

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Vol. I.

PATAVII

XIII JUNII MDCCCLXXXII

SUMPTIBUS AUCTORIS

TYPIS SEMINARIJ.

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P. A. SACRABU

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PRÆFATIO

Quinquaginta elapsi sunt anni post systematis mycologici Friesiani editionem, nec ullum opus posthinc prodiit, quod totius orbis mycetes complecti eniteretur. Quantum observationes mycologicæ (præcipue microscopii auxilio) per decem hæc lustra accretæ, quot et quantæ in tota morphologia et taxonomia fungorum acquisitiones factæ, quot species et genera nova descripta nemo profecto mycologorum ignorat; neminemque latet utilitas, ne dicam necessitas, libri cujuscumque, collectitii quidem, ubi species omnes hucusque descriptæ inveniuntur. Hoc affirmare audeo quod si intra paucos annos liber hujuscemodi adhuc defuerit, mycographia tota in chaos dilabi maxime periclitaretur; nemo enim potest innumera opera, opuscula, diaria, annales, ubi quotidie species descriptæ sunt, consulere, et inde vel species novæ frustra conditæ vel vere novæ metu inexploratæ vel oblivioni traditæ. His perpensis, operis hujusmodi perscribendi propositum duobus abhinc annis mycologis manifestavi. Et nunc eorum votis et incitamentis ferventissimis benignisque fretus, *Syllogen fungorum omnium* aggredior. Animus est, Deo favente, opus universum intra decennium absolvere et re vera copiosa adsunt jam mihi ad hoc perficiendum elementa. Sed magni mihi et scientiæ foret si collegæ æstumatisissimi, gravissimi laboris partes quasdam suscipere velint; quo fieret ut et opus totum multo celerius prodiret et singulæ fungorum familiæ concinnius

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elaboratæ. De Sylloge, quam suscipio, sequentia præmonenda sunt.

I. Species, quarum diagnoses eduntur, non pauca a me ipso observatæ sunt; ceteræ ex mycologorum quam plurimorum operibus, quæ citantur, excerptæ sunt. De his vero sponsonem nullam mihi sumere licet.

II. Contigisse potest quod species identica bis vel pluries variis nominibus exponatur: sed cum de æquipollentia nominum certitudo mihi adhuc desideretur, species omnes referre coactus fui, tutius iudicium autoptis relinquens.

III. Diagnoses fungorum, quotquot potui (nec multas deesse spero) undecumque comparare studui. Mycologos tamen enixe rogo, ut si quas diagnoses sibi notas omiserim humanissime transmittant. Propositum est enim diagnoses omissas vel illas fungorum novorum quotannis imprimendi, et eo modo ut singula additamenta suis locis inseri queant. Mycologos insuper rogatos velim ut nominibus plantarum nutricum nonnisi latinis utantur et fungorum dimensiones tantummodo per millimetra et micromillimetra exprimant *).

IV. Diagnoses ubi completas invenire potui, ex unico auctore exscripsi vel latine reddidi; sæpe vero e duobus, raro pluribus auctoribus sese invicem perficientibus erui. Hoc vero non feci nisi quum omnino certus essem diversas auctorum notas ad eandem speciem pertinere. Si aliter, fontes vel dubia notavi. Diagnoses plurimas nimis longas, ablatis minoris momenti notis, breviavi, rarius reformavi.

V. Species omnes hucusque cognitæ, quantum fieri potuit, ad genera nuperrime strictius definita referre conatus sum. Studiosis tamen valde commendo ut suas species non sub uno genere inquirant, sed et sub affinibus omnibus; non

*) In præsentī opere, ut in præcedentibus meis, ad organa minima metienda adhibetur micromillimetrum (= $\frac{1}{1000}$ millimetri) quod exprimitur signo μ . Ubi adsunt numeri, interjecto signo μ , primus numerus denotat maximam longitudinem, alter vero maximam latitudinem organi v. fungi partis, de qua sermo est.

raro enim forte contigit ut species quasdam mihi non visas, ob ignorantiam characterum quorundam, ad genera non stricte sua, etsi affinia, invitus adduxerim. Conferantur e. g. species *Hypoxyli* et *Nummulariæ*, *Didymellæ* et *Sphaerellæ*, *Læstadiæ* et *Physalosporæ* etc. etc. *).

VI. Genera vastiora, quantum fieri potuit, in subgenera vel sectiones divisi; sed et hic contigisse potest, ut species, ob notas non plene definitas, ad sectionem non suam relatæ sint. Sub variis ergo generis sectionibus species late inquirendæ sunt.

VII. Species minus certas ad singulorum generum calcem subjunxi; species vero prorsus dubias ad finem subordinis vel ordinis singuli addidi, nolens ullas formas negligere, ex eo quod fungi quoque male hodie definiti in posterum iterum reperiri riteque describi possint.

VIII. Quoad fungos secundarios seu metageneticos (ad Ascomycetes spectantes) nomina plerumque tantum citavi; diagnoses vero sub proprio ordine reperientur.

IX. De dispositione systematica adhibita pauca mihi notanda. In quoque ordine quod ex auctorum systematibus mihi rectius et simplicius visum prætuli. Quoad *Pyrenomyceteas*, *Sphaeropsideas*, *Melanconicas*, *Hyphomyceteas* systema sporologicum meum cum vegetativo auctorum combinatum, correctis corrigendis, adhibui. Si quid boni, simplicis et naturalis in hoc systemate insit, mycographia hæc universalis tute demonstrabit.

X. Si observationes quasdam ab illis Auctorum descendentes addere necessarium duxerim, has inter signa « » imprimi curavi.

XI. Index librorum mycologorum, (re vera fere omnium

*) Erröres et facillime vitandos nonnullos jam irrepsisse candide fateor. Sic species n. 881 evidentissime eadem est ac n. 847; species n. 2171 omnino eadem ac n. 2196. Sed lectores veniam dabunt, spero, ubi meminisse velint schedulas diagnosum fere innumeras et multiformes, perlongo labore fuisse mihi digerendas, seligendas et in systema ordinandas.

hucusque editorum) ex quibus diagnoses excerpti, Syllogi præmittitur. Si libros quosdam et hinc diagnoses contentas omiserim mycologis tunc facile patebit.

XII. Ad finem cujusque sectionis vel subordinis addidi repertorium alphabeticum specierum secundum matrices, quod quam utile sit in nominibus fungorum inquirendis nemo est qui ignoret. Tam repertorium istud, quam indicem librorum prædictum, peritiæ et diligentiae JACOBI BIZZOZERO, Horti patavini conservatori debeo, cui publice permultas ago gratias.

Restat nunc ut botanicis æstumatissimis amicisque plurimis tam Europæ quam Americæ, qui operi meo strenue variisque rationibus faverunt, gratias perquam maximas agam. Inter quos licitum sit mihi illos tantum citare qui vel suorum magni pretii operum duplum exemplar mittendo, vel libros perraros mycologicos commodando vel transcribendo, vel tandem operis notitiam per diaria benevole diffundendo, Sylloges vitam excitarunt; qui sunt: M. J. BERKELEY ¹⁾, T. CARUEL, V. CESATI, M. C. COOKE, J. B. ELLIS, J. H. FABRE, P. A. KARSTEN, E. LAMBOTTE, G. DE NIESSL, G. PASSERINI, C. PECK, N. PEDICINO, O. PENZIG ²⁾, DOCT. REHM, C. ROUMEGUÈRE, J. SCHRÖTER, C. SPEGAZZINI, F. DE THÜMEN, G. WINTER.

Patavii, XIII Junii, MDCCCLXXXII.

P. A. SACCARDO

1) Referre lætor illustrissimum et venerabilem BERKELEY benevole mihi misisse (præter alia opera sua) schedulas permultas diagnoses Hymenomycetum a se jam editorum continentes, quas paraverat ad Syllogem concinnandam, quæ in omnium votis erat. Occupationes vero tarda que ætas propositum impederunt. Utinam celeberrimo Viro datum sit fructus suos videre cunctos in hac Sylloge systematice reollectos.

2) Fungorum aliquot nondum plene descriptorum egregius et amicus prof. PENZIG paravit adumbrationes, quibus usus sum ad eorundem diagnoses perficiendas.

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*) In opusculis nonnullis annus impressionis non indicatur ex eo quod tantum eorum exemplaria ex actis societatum excerpta vidi, quæ sæpius anno carent.

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PYRENOMYCETEÆ FR. EM. DE NOT.

Giorn. bot. ital. I. p. 322 (1844)

Fungi perithecio ascigero instructi, ut plurimum phytogeni, rarius zoogeni, numquam vere terrestres. Adsunt in plerisque varii status secundarii seu metagenetici familias Sphæropsidearum, Melanconiearum atque Hyphomycetearum sistentes.

Fam. 1. **Perisporiaceæ** FR. Summa V. S. p. 375 p. p.

Simplices. Perithecia membranacea, coriacea v. subcarbonacea tota clausa, hinc astoma et irregulariter fissilia.

Subfam. 1. **Erysiphææ** LÉV.

Biogenæ, seu parasiticæ in plantis vivis, mycelio effuso arachnoideo albido (plerumque *Oidii erysiphoidis* formas sistente) insertæ. Perithecia appendicibus variis plerumque eumorphis instructa subglobosa, astoma, tenui-membranacea.

Clavis analytica generum.

1. Amerosporæ: sporidiis ovoideis continuis hyalinis.

Perithecia	{ monoasca; asci 8-spori; carpogonia orthotropa; perithecii appendices .	{ apice pluries refracto- dichotomæ <i>Podosphæra</i> simplices v. vage ra- mosæ, hyphoideæ <i>Sphærotheca</i>
{ polyasca; asci 2-8-spo- ri; carpogonia campy- lotropa; perithecii ap- pendices		

2. Dictyosporæ: sporidiis clathrato-septatis.

Perithecia polyasca; asci octospori globosi v. oblongi. *Saccardia*

Sect. 1. Amerosporæ.

a) Perithecia monoasca.

PODOSPHÆRA Kunze Myc. Heft. II. p. 111. Lév. Ann. Sc. nat. 1851 XV. p. 135 (Etym. *pous*, pes et *sphæra*, h. e. sphaerula quasi pedicellis instructa). — Mycelium effusum arachnoideum, plerumque evanidum; perithecia sphaerica, monoasca,asco octosporo; sporidia ovoidea, continua, hyalina; appendices parvæ (3-8), dichotomæ, fusæ, apice hyalinæ, turgidæ. Stat. conidicus *Oidii erysiphoidis* formas sistens.

Clavis specierum.

Appendices perithecium subæquantés	<i>Oxyacanthæ</i>
» perithecio triplo longiores radiatim divergentes	<i>myrtillina</i>
» » » » erecto-fasciculatæ .	<i>tridactyla</i>
» » 6-10-plo longiores cirrhosæ . . .	<i>Schlechtendalii</i>
» » » » biuncinatae . . .	<i>biuncinata</i>

1. **Podosphæra Oxyacanthæ** (DC.) de Bary Syst. Ueb. Erys. in Hedw. 1 1871 p. 68. *Erysiphe Oxyacanthæ* DC. (1815), *Podosphæra clandestina* (Wallr. 1819) Lév. in Ann. Sc. nat. 1851 p. 135 t. 6. fig. 5. — Amphigena; peritheciis minutis, globosis, sparsis; appendicibus (8-10) perithecium sub-æquantibus, ramulis brevibus apice dilatato-rotundatis.

Hab. in foliis Cratægi *Oxyacanthæ* et *C. monogynæ* in tota fere Europa, Algeria etc.

2. **Podosphæra myrtillina** Kunze Myk. Heft. II. p. 111. *P. Kunzei* 2 Lév. in Ann. Sc. nat. 1851, tom. XV., p. 135 (p. p.), t. 6. f. 6. — Amphigena; peritheciis sparsis, sphaeroideis, minutis; appendicibus ter perithecii diametrum superantibus, pluribus (6-10), in perithecii parte superiore sparsis, radiatim divergentibus aut arcuatim reflexis.

Hab. in foliis vivis *Vaccinii Myrtilli*, in Succia, Germania, Belgio, Italia etc.

3. **Podosphæra tridactyla** (Wallr.) de Bary Syst. Ueb. Erys. in Hedw. 3 1871 p. 68. *Alphitomorpha tridactyla* Wallr. *Podosphæra Kunzei* Lév. in Ann. Sc. nat. (p. p. in Prunis). — Amphigena; peritheciis sphaeroideis minutis, appendicibus paucis (3-7) e summo perithecio erectis, parallelis.

Hab. in utraque pagina *Pruni Padi*, *P. spinosæ*, *P. Cerasi*, *P. domesticæ* etc. in tota fere Europa. America boreali.

4. **Podosphæra Schlechtendalii** Lév. Disp. meth. Erys. p. 29 t. 6. 4
fig. 7. — Hypophylla; peritheciis globosis minutis sparsis; appendicibus parcis, longissimis, perithecii diametrum decies superantibus, ramulis filiformibus cirrhosis.

Hab. Nenilly prope Parisios ad folia Salicis albæ et viminalis.

5. **Podosphæra biuncinata** C. et Peck 22 Rep. p. 94. — Mycelio tenui; 5 peritheciis minutis, nigris; appendicibus 6-10, longissimis, hyalinis, bi-uncinatis, apicibus quandoque repetito-divisis; asco globoso, octosporo.

Hab. in Amer. boreal., Poughkeepsie, New-Baltimore etc. in foliis Hamamelidis virginianæ. — Appendicularum rami curvuli, fere rectangulo-patentes.

SPHÆROTHECA Lév. in Ann. Scienc. nat. 1851 XV. p. 138 (Etym. *sphæra* et *theca*, h. e. ascus sphæricus). — Perithecia monoasca, appendicibus floccosis vagis mycelio intertextis cincta; ascus globosus, octosporus; sporidia ovoidea, continua, hyalina. — St. conidicus *Oidii erysiphoidis* v. *leucoconii* formas sistit.

Clavis specierum.

Species calyci-foliicolæ; appendices hyalinæ	$\left\{ \begin{array}{l} \text{mycelium crassum pannosum} \\ \text{mycelium tenue pruinose} \end{array} \right.$	<i>pannosa</i>	
		<i>pruinosa</i>	
Species foliicolæ; appendices fuliginæ	$\left\{ \begin{array}{l} \text{vage ramosæ} \\ \text{setiformes, simplices, copiosæ} \\ \text{parcissimæ v. nullæ} \end{array} \right.$	$\left\{ \begin{array}{l} \text{ascus amplus} \\ \text{ascus minor} \end{array} \right.$	<i>Castagnei</i>
			<i>Niesslii</i>
			<i>Epilobii</i>
Species fruticola			<i>detonsa</i>
			<i>Mors-uvæ</i>

1. **Sphærotheca pannosa** (Wallr.) Lév. Ann. Scienc. nat. 1851 XV. p. 138 t. 6 fig. 8. *Alphitomorpha pannosa* Wallr. (1819). — Mycelio lanuginoso, dein pannoso, persistente; peritheciis minutis, globosis, sparsis; appendicibus floccosis, hyalinis, perithecio brevioribus; ascis globulosis; sporidiis octonis ovoideis.

Hab. in foliis, calycibus ramulisque Rosarum cultarum, perithecia plerumque in calycibus ramulisque tantum, in Anglia, Gallia, Belgio, Italia, Germania, Amer. bor., India. — St. conidicus *Oidium leucoconium* Desm. sistit.

2. **Sphærotheca pruinosa** C. et Peck 25 Rep. p. 94. — Hypogena; 7 mycelio tenui, effuso, persistente; peritheciis minutis nigris; appendicibus parcis, longis, hyalinis; asco ovato, octosporo.

Hab. in Amer. boreal. Greenbush in foliis *Rhois glabræ*.
— A *Sph. Castagnei* præcipue differt appendiculis longis, hyalinis.

3. **Sphærotheca Castagnei** Lév. in Ann. Scienc. nat. 1851. tom. XV.,⁸
p. 139, t. 6. f. 9 et 10. *Erysiphe macularis*, *Dipsacearum*, *Potentilla*, *fuliginea*, *ferruginea*, *fumosa* etc. Auct. — Amphigena. Mycelio effuso, arachnoideo, plerumque evanido; peritheciis sparsis, sphaeroideis, minutis; appendicibus numerosis, brevibus, sursum flexis.

Hab. in foliis Rosacearum, Compositarum, Scrophulariacearum, Cucurbitacearum, Urticacearum, Plantaginearum in tota fere Europa, America boreali, Asia.

4. **Sphærotheca Niesslii** Verhandl. z. b. Gesell. Wien. (1879). — Mycelio subnullo, evanescente; peritheciis hypophyllis, parvulis, sparsis vel pro ratione subsolitariis et nunquam aggregatis ut in *S. Castagnei*, oculo nudo atris, membrana tenui, globosis, fuscis, clathrato-areolatis sed levibus, 80-120 μ , plerumque 86 d.; appendiculis brevibus, numerosis, filiformibus, simplicibus, dilute fuliginosis vel sæpe subhyalinis, apice obtusatis, 4-5 μ , crassis; ascis unicis, acutato-ovoideis, latis, membrana levi, 2 μ , crassis hyalinis, 80 \approx 60-64 crass.; sporidiis ellipsoideis, utrinque rotundatis, octo, levibus, achrois, 20-24 \approx 15-16, endoplasmate subgranuloso.

Hab. in foliis sureulorum juniorum Sorbi Arizæ, in viridario Jesuitarum Kalksburg et Leopoldsberg prope Vindobonam: in Apennino Mutinensi (Italia) Sept., Oct. — Peritheciis et ascis multo minoribus a *Sph. Castagnei* distinguitur.

5. **Sphærotheca Epilobii** (Link.) De Bary Syst. Uebers. d. Erysiph. in¹⁰
Hedw. 1871 p. 68. *Erysiphe Epilobii* Link. Sp. pl. VI. 102. — Mycelio densissimo, ramis erectis conidiophoris et sterilibus onusto: peritheciis dense congregatis, appendicibus fuscis, simplicibus setiformibus radiatim patentibus undique horridis; ascis et sporidiis generis.

Hab. in *Epilobii* parviflori foliis, ubi macule magnæ fuscae subbullatæ oriuntur, in Germania.

6. **Sphærotheca detonsa** (Fr.) Kickx Fl. crypt. Fl. I. 375. *Erysiphe*¹¹
detonsa Fr. — Mycelio effuso, sordide rufescente, peritheciis globulosis, fusco-brunneis, sub vitro rufis; ascis solitariis, globulosis; appendicibus 3-4 a mycelio vix discretis, simplicibus furcatisve, flexuosis, brevibus, interdum obsolete.

Hab. in foliis *Apargiæ*, *Erigerontis* in Belgio (Kickx);

in foliis *Tanacetii* in Vogesia (Μουγεοτ, t. Fries). — Specimina Mougeotiana pertinerent sec. Lèveillé ad *Phyllactiniam*, quod vere improbabile videtur.

7. **Sphærotheca Mors-uvæ** (Schw.) Berk. et Curt. in Grev. IV. p. 158. 12
 Thuem. F. pomic. 92. *Erysiphe Mors-uvæ* Schw. — Mycelio denso, crassiusculo, margine albo, centro fusco-brunneo; peritheciis minutis, crebris, sparsis, atris, applanato-globosis, rugulosis, e mycelio denique emergentibus (Schw); sporidiis 15 μ . long. sec. B. et C. l. c.

Hab. in Amer. bor. Pennsylvania (Schw.) et Carolina sup. (Curtis) in baccis *Ribis Uvæ crispæ*.

b) Perithecia polyasca.

PHYLLACTINIA Lév. in Ann. Sc. nat. 1851, p. 144. (Etym. *phyllon*, folium et *actin* radius). — Perithecia globoso-depressa, polyasca, majuscula, appendiculata, mycelio arachnoideo (*Oidii*) insidentia. Appendices aciculares, rectæ, radiantes basi vesiculoso-inflatae. Asci 2-4-spori. — Sec. Tulasne pycnidia adsunt peritheciis ascophoris similia sed stylosporas fuscidulas ovoideas foventia.

1. **Phyllactinia suffulta** (Reb.) Sacc. Mich. II., p. 50. *Ph. guttata* 13
 (Wallr.) Lév. in Ann. Sc. nat. 1851, tom. XV, p. 144, t. 7, f. 11. — Amphigena sed sæpius hypophylla; mycelio arachnoideo plerumque evanido; peritheciis sparsis hemisphæricis, demum depressis, magnis; appendicibus hyalinis, simplicibus; ascis in singulo perithecio 4-20, breviter pedicellatis 2-4-sporis.

Hab. ad folia viva *Alni*, *Cratægi*, *Pyri*, *Mespili*, *Loniceræ*, *Fagi*, *Coryli*, *Quercus*, *Carpini*, *Betulæ*, *Fraxini*, *Catalpæ*, *Corni*, *Celastris* etc. in tota fere Europa, Sibiria asiatica, America boreali, per æstatem et autumnum.

Obs. Speciei synonymia, quam extricare conatus sum, sequens est: *Sclerotium Erysiphe* β *corylea* Pers. (1801), *Scl.* (*Erysibe*) *suffulta* Reber. (1804), *E. Coryli* DC. (1805), *E. vagans* Biv. Bernh. (1815), *E. pachypus* Martius (1817), *Alphitomorpha guttata* Wallr. (1819). Ex quo patet nomen Reber. esse jure prioritatis præferendum. Observandum quod *Mucor Erysiphe* Linnæi et *Sclerotium Erisiphe* Pers. omnes pene Erysiphaceas complectantur.

2. **Phyllactinia Candollei** Lév. Disp. meth. Erys. p. 42. — Hypo- 14
 phylla; mycelio tenui evanido; peritheciis sparsis, magnis; ascis 8, tetrasporis.

Hab. in Amer. sept. ad folia Nyssæ (herb. DC.); Canada, Poe (n. 6164 ex Grevillea). — A *Ph. suffulta* (Reb.) differt ascis octonis, tetrasporis.

3. ? **Phyllactinia Schweinitzii** Lév. Disp. meth. Erysiph. p. 42. — 15
Hypophylla; mycelio arachnoideo, evanido; peritheciis magnis, sparsis, hemisphæricis demum depressis, appendicibus nigris; ascis sporidiisque.....

Hab. Meudon (Gallia). ad folia Quercus sessilifloræ (Lév. l. c.). — Species dubia et ob ignotam fructificationem et ob defectum vesiculæ basilaris appendicularum.

4. ? **Phyllactinia fungicola** (Schulz.) Sacc. *Erysiphe fungicola* Schulz. 16
Myk. in Æsterr. bot. Zeit. 1876, p. 58. — Peritheciis brunneo-fuscis, sphaericis, 300 μ . diam., subiculo mucedineo stellatim effuso insidentibus; conidiis in hyphis acrogenis brunneis; appendicibus radiatis, basi inflatis; ascis vesicularibus, copiosis, 1-2-sporis; sporidiis ovato-cylindraceis 4 \approx 1,5.

Hab. in superficie Boleti duriusculi, Slavonia. — Videtur *Phyllactinia* species, sed ob habitationem insuetam dubia.

UNCINULA Lév. in Ann. Sc. nat. 1851, XVI, p. 151. (Etym. ab *unco*, quia appendices uncinatæ). — Perithecia polyasca, ascis bi-octosporis; appendices simplices ramosæve, apice uncinata, hyalinæ. Mycelium arachnoideum v. pruinoseum, conidiis ovoideis, *Oidii erysiphoidis* formas sistens.

Clavis specierum.

Asci bispori	{ in quovis perithecio quaterni <i>Bivonæ</i> in quovis perithecio plures (8-12) <i>macrospora</i>
Asci trispori	
Asci tetraspori	<i>adunca</i>
Asci 4-6-spori	{ appendices omnino hyalinæ <i>Clintonii</i>
	{ appendices deorsum fuliginæ <i>Ampelopsidis</i>
Asci 6-spori	{ appendices sursum non contortæ <i>Prunastri</i>
	{ appendices sursum spiraliter contortæ <i>americana</i>
Asci 8-spori	{ conidia ovoidea { appendices { flexuosæ <i>flexuosa</i> rectæ { bitidæ, uncinatæ <i>Aceris</i> simplices <i>circinata</i> conidia globosa <i>Tulasnei</i>

1. **Uncinula Bivonæ** Lév. in Ann. Scienc. nat. XV. 1851 t. 7 fig. 14. 17
Erysiphe clandestina Biv. Bern. (1815). — Mycelio arachnoideo evanido; peritheciis plerumque sparsis minutis; ascis quaternis,

subglobosis, bisporis; appendicibus perithecium vix superantibus, apice uncinatis.

Hab. in foliis Ulmi campestris in Gallia, Italia, Germania.

2. **Uncinula macrospora** Peck. 25 Rep. p. 95 (1871). — Mycelio effuso, 18 persistente; peritheciis subglobosis; appendiculis copiosis (30 vel pluribus), perithecium fere æquantibus; ascis 8-12, bisporis; sporidiis magnis ellipsoideis, 30-36 μ . longis.

Hab. in Amer. bor. Buffalo, in foliis Ulmi americanæ. — Ab *U. Bivonæ* differt ascis et appendiculis copiosioribus, mycelioque persistente.

3. **Uncinula intermedia** B. et C., Berk. North Amer. Fungi n. 995 19 (1876). — Peritheciis in macula lata candida insidentibus; appendicibus plurimis; sporidiis majoribus, ternis.

Hab. in foliis Ulmi, Alabama, Amer. bor. — Verisimiliter non differt ab *U. macrospora* Peck.

4. **Uncinula adunca** (Wallr.) Lév. in Ann. Sc. nat. 1851, tom. XV., 20 p. 151, t. 7, f. 15, *Alphitomorpha adunca* Wallr. — Mycelio vario; peritheciis sparsis vel gregariis, minutis; ascis in singulo perithecio 8-12, subpyriformibus, 4-sporis; appendicibus simplicibus uncinatis.

Hab. in utraque pagina Populorum, Salicum, Betularum in Europa tota, Sibiria asiatica, Amer. boreali.

5. **Uncinula Clintoni** Peck. 26 Rep. p. 96. — Amphigena; 21 mycelio tenui, persistente; peritheciis minutis globosis, nigris; appendiculis 15-25, perithecium subæquantibus, hyalinis, apice uncinatis parumque incrassatis; ascis 4-6, 4-6-sporis.

Hab. in Amer. bor. Buffalo, Watkins, in foliis Tiliæ americanæ. — Apicibus appendicularum incrassatis species facile dignoscenda. Mycelium in pag. superiore magis conspicuum.

6. **Uncinula Ampelopsidis** Peck. 25 Rep. (1871). *Unc. subfusca* B. 22 et C., Berk. North. Amer. Fungi n.° 994 (1876). — Amphigena; mycelio arachnoideo, tenui evanescente; peritheciis, minutis globosis, nigris; appendiculis 10-20 perithecium æquantibus vel duplo longioribus, indivisis, obscure prope basim, septatis, fuscisque, sursum pallidioribus; ascis 4-6, subglobosis ovatisve, 4-6-sporis.

Hab. in Amer. boreal. Buffalo, Greenbush, in foliis Ampelopsidis quinquefoliæ. — Appendicibus coloratis species mox dignoscenda. Appendices sec. Berk. sæpe sursum contortæ.

7. **Uncinula Prunastri** (DC.) Sacc. *Erysiphe Prunastri* DC. (1815) 23
Uncinula Wallrothii Lév. in Ann. Sc. nat. 1851, XV., p. 153,

t. 7, fig. 16. — Amphigena; mycelio arachnoideo evanescente; peritheciis minutis, sparsis; ascis 12–16 in quoque perithecio, pyriformibus, 6-sporis; appendicibus numerosis, perithecium duplum æquantibus.

Hab. in foliis Pruni spinosæ in Britannia, Belgio, Gallia, Italia, Germania.

8. **Uncinula americana** How. (1872) *U. spiralis* B. et Curt. North Am. 24
Fungi n. 992 (1876). — Amphigena, mycelio tenui, subarachnoideo, cito evanido; peritheciis globosis, sparsis, minutis atronitidis, levibus; appendicibus longis flexuoso-subcurvatis perithecium bis fere superantibus, apice spirali; ascis late pyriformibus v. ovoideo-pyriformibus, hyalinis, 80 μ . d.; sporidiis senis, ellipsoideis utrinque rotundatis, interdum inæquilateralibus, 20 = 8–10 (secundum Thuem. Pilze d. Weinst. p. 183).

Hab. in foliis Vitis cordifoliæ et Labruscæ, Albany, New-York, New Baltimore, Buffalo, Poughkeepsie. — *U. spiralis* ab *U. americana* vix differt appendicibus minus longis.

9. **Uncinula geniculata** Ger. in Just Bot. Jahr. 1874 p. 301. — Mycelio 25
persistente, orbiculatim effuso v. totam folii pag. superiorem obducente; peritheciis 100 μ . diam.; appendicibus 30–40, perithecio sesquolongioribus; ascis 5–8, ovoideis, subrostratis; sporidiis senis.

Hab. in Amer. bor. Poughkeepsie, in foliis Mori rubræ. — Appendices sæpe leniter geniculatæ.

10. **Uncinula flexuosa** Peck. Trans. Albany Inst. v. VII, p. 215, f. 10–12 26
(1872). — Mycelio tenui, arachnoideo, evanido; peritheciis minutis, 80–90 μ . d., appendicibus 15–25, perithecium subæquantibus, sursum flexuosis, et interdum subincrassatis; ascis 8–10, ovoideis v. ellipticis; sporidiis octonis, ellipsoideis, 17–20 μ . long.

Hab. in pag. sup. foliorum Æsculi Hippocastani, Buffalo, Am. bor. (G. W. CLINTON) Sept. — Appendicibus flexuosis, ascisque octonis ab *U. adunca* dignoscitur.

11. **Uncinula Aceris** (DC.) Sacc. *Erysiphe Aceris* DC. (1815) *Unc.* 27
bicornis (Wallr., 1819) Lév. Ann. Scienc. nat. 1851, XV, p. 153, t. 7, fig. 17. — Amphigena; mycelio arachnoideo, effuso, evanido, v. subpersistente; peritheciis hemisphæricis, denique depressis; appendicibus simplicibus, bifidis v. dichotomis, apicibus uncinatis; ascis octonis, subpyriformibus, octosporis.

Hab. in foliis Aceris campestris, Ac. Pseudoplatani et (teste Lév.) Phyllireæ in tota fere Europa, Algeria.

12. **Uncinula circinata** C. et Peck. 25 Rep. p. 96. — Mycelio denso ef- 28

fuso, persistente; peritheciis majusculis depressis, nigris; appendiculis copiosissimis, angustis, perithecium subæquantibus, simplicibus, hyalinis; ascis oblongis v. anguste ovoideis, 8-16, octosporis.

Hab. in Amer. bor. Watkins et Greenbush, in foliis *Aceris* spicati et rubri. — Ab *U. Aceris* differt quia hypophylla, ascis copiosioribus, appendicibusque simplicibus prædita.

13. **Uncinula Tulasnei** Fuck. Symb. Mycol. p. 81. — Mycelio orbiculatim effuso, epiphylo, niveo, margine fimbriato; conidiis catenulatis, perfecte globosis 8 μ . d.; peritheciis sparsis mycelio subimmersis, majusculis, hemisphæricis demum depressis, atris; appendicibus plerumque simplicibus v. bifidis, raro bis bifidis; ascis octonis, octosporis. 29

Hab. in pag. sup. foliorum *Aceris* platanoidis, circa Johannisberg in Rhenogovia. — Præcipue habitu et conidiis globosis dignoscenda species.

Species nomine tantum notæ

14. **Uncinula luculenta** Howe (citat. in Peck 29 Rep. on the St. Mus.). 30

Hab. in foliis *Populi* heterophyllæ in Amer. bor.

15. **Uncinula parvula** C. et P. (citat. in Peck 26 Rep. on the St. Mus.). 31

Hab. in foliis *Celtidis* occidentalis, Poughkeepsie, Amer. bor. (GERARD).

PLEOCHÆTA Sacc. et Speg. Michel. II. p. (Etym. *Pleon*, plus et *chæta*, seta). — Perithecia subiculo mucedineo insidentia, globuloso-lenticularia, astoma, contextu parenchymatico solidiusculo, setis copiosissimis radiantibus, bacillaribus, rectis, simplicibus, hyalinis cincta. Asci clavulati, bispori; sporidia ellipsoidea, continua, subhyalina. — Setis creberrimis rectis, contextu peritheci subcoriaceo, ascis teretiusculis etc., ab *Erysiphe* et *Uncinula* dignositur.

1. **Pleochæta Curtisii** Sacc. et Speg. Fung. Arg. Pug. II. p. 44. *Erysiphe* et *Uncinula polychæta* Berk. et Curt. Grev. 1876 p. 159. 32

Uncinula Lynckii Speg. Fung. Arg. Pug. II. p. 17 n.º 54. —

Mycelio hypophyllo, orbiculatim effuso albido-lutescente; peritheciis sparsis; appendicibus (circ. 28) perithecio sesquilongioribus, hyalinis; ascis tereti-clavatis in stipitem basi nodulosum productis 80-90 \approx 25-30, bisporis; sporidiis ellipsoideis, 25 \approx 17, hyalinis.

Hab. in pag. infer. foliorum *Celtidis* Talæ et C. occi-

dentalis prope *Buenos-Ayres*, Apr. 1880 (SPEGAZZINI), Alabama et Carolina (CURTIS).

MICROSPHÆRA Lév. Disp. meth. Erysiph. in Ann. Scienc. nat. 1851 II. pag. 381 (ubi nomen *Calocladie* paulo ante a se propositum [l. c. p. 154] sed ineptum, quia jamdudum a Grevilleo pro Algarum genere usurpatum, in *Microsphæram* mutandum declarat). — Perithecia polyasca, ascis ovoideis oblongisve, 4–8-sporis. Appendices sursum dichotomæ. Mycelium arachnoideum *Oidii erysiphoidis* formas varias sistens.

Clavis specierum.

Asci 4-spori . . .	<i>Dubyi</i> <i>Hedwigii</i> <i>abbreviata</i> <i>divaricata</i> <i>Evonymi</i> <i>semitonsa</i>	Asci 6-spori . . .	<i>Euphorbiæ</i> <i>Friesii</i>
Asci 2-spori . . .	<i>Lycii</i>	Asci 6–8-spori . . .	<i>Vaccinii</i> <i>Berberidis</i>
Asci 4–6-spori . . .	<i>Grossulariæ</i> <i>Astragali</i> <i>diffusa</i> <i>Russellii</i> <i>pulchra</i> <i>extensa</i>	Asci 8-spori . . .	<i>penicillata</i> <i>Ehrenbergii</i> <i>Van-Bruntiana</i> <i>Ravenelii</i>
		Asci non visi . . .	<i>fulvo-fulcra</i> <i>Platani</i>
		Species minus notæ.	<i>Symphoricarpi</i> <i>Menispermi</i> <i>densissima</i>

1. **Microsphæra Lycii** (Lasch.) Sacc. et Roum. Mich. II. 310. *M. Mougotii* Lév. (1851). *Erysiphe Lycii* Lasch. (1850). — Mycelio arachnoideo, plerumque persistente; haustoriis plerumque appendiculatis, numquam lobulatis; conidiis breve cylindrico-oblongis; peritheciis minutis globoso-depressis, appendiculis copiosis, radiatim divergentibus, hyalinis, perithecii diametrum duplo superantibus, quater, raro ter dichotomis, apicibus obtusis; ascis 12–16, parvis bisporis.

Hab. in Germania, Anglia, Gallia, Italia, Amer. bor. in foliis *Lycii* europæi, *L. ruthenici*, *L. barbari* (et *Desmodii* teste Berk.).

2. **Microsphæra Dubyi** Lév. Erys. p. 40, t. 9, fig. 26. — Kx Fl. crypt. 34

Flandr. I. 379. — *Erysiphe abnormis* Duby p. p. — Mycelio effuso arachnoideo vel subcontexto evanido vel persistente: peritheciis sparsis vel gregariis globosis, minutis; ascis 4 ovatis subrostratis 4-sporis; appendicibus parvis (7-10) perithecio vix longioribus, ramulis bicornibus.

Hab. in Italia, Gallia, in foliis *Loniceræ Caprifolii*; Amer. bor. in foliis *Loniceræ parvifloræ*.

3. **Microsphæra Hedwigii** Lév. in Ann. Scienc. nat. 1851, XV, p. 155, 35 t. 8, fig. 19. — Hypophylla; mycelio arachnoideo, evanido; peritheciis minutis globosis, sparsis; appendicibus paucis, perithecio paulo longioribus; ascis quaternis, 4-sporis.

Hab. in Anglia, Italia, Belgio, Germania, Amer. bor. in foliis *Viburni Lantanæ*, *V. Lentaginis* (et *Quercus* t. Berk.) Forte *E. Viburni* Schw. (et Howe?) huc spectat.

4. **Microsphæra abbreviata** Peck 28 Rep. St. Mās. N. York. t. 2, fig. 4- 36 5. — Mycelio tenui; peritheciis minutis, appendicibus 6-15, hyalinis, asperulis, perithecio brevioribus, apice pluries dichotomis, ramulis ultimis curvatis; ascis 3-4, plerumque 4-sporis, rarius 3-5-sporis; sporidiis ellipsoideis 25-32 ≈ 16.

Hab. in Amer. bor. Buffalo, in pag. inf. foliorum *Quercus bicoloris* (CLINTON). — Affinis *M. Hedwigii*, a qua differt appendicibus scabriusculis, brevibus,

5. **Microsphæra divaricata** (Wallr.) Lév. in Ann. Scienc. nat. 1851, 37 tom. XV, p. 155, t. 8, f. 18. *Alphitomorpha divaricata* Wallr. — Hypophylla; mycelio arachnoideo, evanido; peritheciis sparsis, sphæroideis, minutis; ascis in quovis perithecio 4, ovoideo-rostratis, 4-sporis; appendicibus parvis, perithecio quinquies longioribus.

Hab. in Gallia, Germania, Fennia, Belgio, in foliis vivis *Rhamni Frangulæ* æstate et autumno passim.

6. **Microsphæra Evonymi** (DC.) Sacc. *Erysiphe Evonymi* DC. (1815). 38 *Micr. comata* (Wallr.) Lév. Ann. Sc. nat. 1851, XV, p. 157, t. 9, f. 23. *Alphitomorpha comata* Wallr. (1819). — Hypophylla; mycelio arachnoideo, fugaci; peritheciis sparsis, minutis, globosis; ascis 8, ovoideo-subrostratis, 4-sporis; appendicibus paucis, perithecio sextuplo longioribus.

Hab. in Gallia, Italia, Germania, Anglia, Belgio in foliis *Evonymi europæi*, autumno.

7. **Microsphæra semitonsa**. B. et C. Berk. North Am. Fungi N. 996. 39 — Mycelio parco; peritheciis sparsis; appendicibus deorsum abrupte fuscis; sporidiis quaternis.

Hab. in foliis *Cephalanthi* in Carolina sup. — Mycelium evanescens; appendices ter furcatæ, perithecio duplo longiores.

8. **Microsphæra Grossulariæ** Lév. Disp. Erys. in Ann. Sc. Nat. 1851. 40
 XV. p. 160, t. 9, fig. 25. *Er. penicillata* var. *Grossulariæ* Link. — Amphigena; peritheciis minutis, globulosis, sparsis gregariisque, mycelio arachnoideo insidentibus; appendicibus 10–15, perithecia æquantibus, vage dichotomis, ramulis ultimis bidentatis; ascis 4–8, ovoideis, 4–5-sporis.

Hab. in Gallia, Anglia, Germania, Amer. bor., Sibiria asiatica, in foliis *Ribis Grossulariæ* (et *Sambuci canad.* t. Berk).

9. **Microsphæra Astragali** (DC.) Trev. *Alphitomorpha holosericea* 41
 Wallr. (1819) *Erysiphe Astragali* DC. (1815) *Micr. holosericea* (Wallr.) Lév. Ann. Sc. nat. 1851, p. 159, t. 9, fig. 27. — Mycelio arachnoideo fugaci; peritheciis minutis, sparsis v. gregariis, globulosis; appendicibus 12–16 perithecio sextuplo longioribus, simplicibus bifidisve; ascis suboctonis, 4–6-sporis.

Hab. in Gallia, Belgio, Italia, Germania, America bor. in foliis *Astragali Glycyphylli* et *Cooperi*, Autumno. — Ob appendices non definite dichotomas an potius ex *Erysiphes* genere?

10. **Microsphæra diffusa** C. et Peck 25 Rep. p. 95. — Mycelio tenui 42
 evanescente; peritheciis minutis, globulosis, nigris; appendiculis copiosis (18–25) perithecium æquantibus v. duplo longioribus, hyalinis, interdum vage ramosis apiceque nodulosis; ascis 4–6, ovatis 4–6-sporis.

Hab. Amer. bor., Albany, in foliis *Desmodii canadensis* plerumque epiphylla.

11. **Microsphæra Russellii** Clint., Peck 26 Rep. 80. — Amphigena; 43
 mycelio arachnoideo, evanescente; appendicibus 8–18, longissimis, flexuosis, coloratis, versus apicem simplicem aut bis terve divisum rectiusculum dilutioribus; ascis ovatis, 4–8; sporidiis 4–6 ellipsoideis 17–20 ≈ 10.

Hab. in Amer. bor. Buffalo, North Greenbush, in foliis et petiolis *Oxalidis strictæ*. «Appendices perithecium sextuplo superantes; ascis 46–48 μ . diam.».

12. **Microsphæra pulchra** C. et Peck 25 Rep. p. 95. — Amphigena; 44
 mycelio tenui persistente; peritheciis numerosis, globosis, nigris; appendiculis octo-duodecim, fere perithecium æquantibus, hyalinis «apice pluries refracto-dichotomis, apicibus obtuse bidentatis; ascis 4–5; sporidiis 4–6, 18–20 ≈ 8–10».

Hab. in Amer. boreal. Greenbush, in foliis *Corni alterni-*

foliæ. — Mycelium in pag. superiore magis conspicuum. «Asci globulosi 50 \approx 40 ».

13. **Microsphæra extensa** C. et Peck. 25 Rep. p. 95. — Mycelio tenui, effuso, persistente; peritheciis globosis, nigris; appendiculis 8-12 perithecium ter vel quater superantibus, hyalinis; ascis 4, subglobosis aut ovatis, 4-6-sporis.

Hab. in Amer. bor. Greenbush, in foliis *Quercus rubræ*, epiphylla. — *A. M. Vaccinii* differt habitu formaque ascorum.

14. **Microsphæra Vaccinii** (Schw?) C. et Peck. Journ. Bot. Jan. 1872. — 46 Peritheciis minutis, globosis; ascis 6-8, ovoideis, 6-8-sporis; appendicibus 10-20, hyalinis, perithecii diametro plus duplo longioribus.

Hab. in Amer. bor. West-Albany, in utraque pagina *Vaccinii vacillant*is, Oct. — An *Erys. Vaccinii* Schw. huc spectet nescio; huc tamen ducit cl. FARLOW in herb. — «Asci (in exemplaribus Ellisianis) quandoque quaterni, 45-50 \approx 20-25; sporidia sena 14-15 \approx 8-9. Appendices perithecium quintuplo superantes, sursum pluries refracto-dichotomæ, apicibus obtusiusculis».

15. **Microsphæra Berberidis** (DC.) Lév. in Ann. Sc. nat. 1851, tom. XV, 47 p. 159, t. 10, f. 28. *Erysiphe Berberidis* DC. — Bifrons; mycelio arachnoideo, plerumque persistente; peritheciis sparsis vel gregariis, sphæroideis, minutis; ascis in singulo perithecio 6, ovoideo-rostratis, 6-8-sporis; appendicibus parvis (5-10), ramulis elongatis divaricatis apice obtusiusculis.

Hab. in Italia, Gallia, Germania, Anglia, Belgio, Fennia, in foliis *Berberidis vulgaris*, autumno.

16. **Microsphæra Friesii** Lév. Ann. Scienc. nat. 1851, XV, p. 156, t. 8, 48 f. 20. — Mycelio arachnoideo fugaci vel persistente; peritheciis minutis globosis sparsis aut confertis; ascis 4, ovato-rostratis, 6-sporis; appendiculis parvis (8-10) perithecium æquantibus.

Hab. in foliis *Betulæ albæ* (*E. Betulæ* DC.) in Gallia, *Rhamn*i catharticæ, Saxoniam, *Syringæ* in Amer. bor., *Betulæ verrucosæ* in Italia et Austria.

17. **Microsphæra Euphorbiæ** B. et C., Berk. N. Am. Fungi n. 997. — 49 Mycelio effuso; appendicibus longissimis furcatis, apicibus furcato-lobatis.

Hab. in Carolina inf. in foliis *Euphorbiæ*. — Appendices perithecium pluries excedentes, simpliciter bisve furcatæ, apicibus lobulatis, «irregulariter nodulosæ; ascis 4 obovatis, 54-60 \approx 28-30; sporidia 6, hyalina 12-14 \approx 8-9».

18. **Microsphæra penicillata** (Wallr.) Lév. in Ann. Sc. nat. 1851, t. XV, 50

p. 155, t. 8, f. 21. — *Alphitomorpha penicillata* Wallr. — Bifrons. Mycelio arachnoideo, effuso. evanido; peritheciis sparsis, sphaeroidis, minutis; ascis in singulo perithecio 4. ovoideo-rostratis, 8-sporis; appendicibus 8-12 perithecium æquantibus.

Hab. in Europa tota et Amer. bor. in foliis Alni, Viburni Opuli, et acerifolii, Coryli rostratæ, Quercus nigrae, Lonicerae sempervirentis. Andromedæ, Betulae pubescentis etc., autumno.

19. **Microsphæra Ehrenbergii** Lév. in Ann. Scienc. nat. 1851, tom. XV, 51 p. 155, t. 8, f. 22. — Epiphylla. Mycelio subcontexto, orbiculari, persistente; peritheciis gregariis, sphaeroideis, minutis; ascis in quovis perithecio 4. ovoideo-rostratis, 8-sporis; appendicibus gracilibus, uncinatis, circiter 20. perithecium æquantibus.

Hab. in Gallia, Belgio, Germania, Fennia etc. in foliis vivis Lonicerae tataricæ, autumno.

20. **Microsphæra Van-Bruntiana** Ger. New Fungi. Hedw. 1875 p. 189. 52 Peck 28 Rep. on the St. Mus. — Amphigena: mycelio denso, albo, persistente; peritheciis globosis sparsis v. aggregatis; appendicibus 12-15, perithecium subæquantibus, plerumque furcatis, apicibus obtusis; ascis 8-sporis.

Hab. in Amer. bor. Poughkeepsie, Buffalo, Oneida etc. in foliis Sambuci canadensis. — Fabrica appendicium a ceteris speciebus recedit (Ger.). — Ascis in speciminibus visis 4-spori, nec 8-spori (Peck).

21. **Microsphæra Ravenelii** Berk. North Amer. Fungi n. 998. — Rav. 53 F. Am. n. 87. — Mycelio effuso albido; appendicibus pluries refracto-furcatis, «perithecio sesquilongioribus; ascis 4-5; sporidiis octonis 18-20 ≈ 10».

Hab. in Amer. bor. Aiken S. Car. in foliis Gleditschiæ.

22. **Microsphæra fulvofulcra** Cooke Calif. Fungi. in Grevill. V. p. 110. 54 — Mycelio arachnoideo; peritheciis minutis, globosis, gregariis; appendicibus 8-12, ad basim brunneis, ad apicem hyalinis, compactis, 2-3 dichotomis.

Hab. in California in foliis Spirææ. — Appendices 8-12 perithecio duplo longiores, *M. Friesii* similes; sporidia ovoidea; ascis nondum visi.

Species quarum diagnoses nondum mihi innotuerunt v. dubiæ.

23. **Microsphæra Platani** Howe (cit. in Peck, 28 Rep. on the St. Mus. 55 New-York.).

Hab. in foliis Platani occidentalis, Yonkers, Amer. bor.

24. **Microsphæra Symphoricarpi** Howe (cit. in Peck. l. c.).

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Hab. in foliis Symphoricarpi racemosæ, Yonkers, America bor.

25. **Microsphæra Menispermii** Howe (cit. in Peck. l. c.).

57

Hab. in foliis Menispermii canadensis, Yonkers, Amer. bor.

26. **Microsphæra densissima** (Schw.) Peck. 28 Rep. New-York. *Erysiphe densissima* Schw. Syn. Am. Bor. n. 2479. — *Hyphasma densissimum* tomentum filamentosum himantioideum, filis robustis, eleganter orbiculatim effiguratum sistit; a semi-uncia ad duas uncias effusum; filis candido-lacteis intertextis in ambitu subradiantibus; peritheciis globosis, nigro-fuscis, crebris.

58

Hab. in foliis Quercus, Bethlehem (Schw.), Saratoga, Amer. bor. (Peck.) — *Distinctissima* species, maculas definite orbiculares, compactas, albas formans, Peck. l. c.

ERYSIPHE Hedw., Lév. in Ann. Scienc. nat. 1851, t. XV, p. 161. (Ety. *Erysibe*, rubigo). — Perithecia superficialia, sphaeroidea vel hemisphaerica, undique clausa, primitus lutescentia, dein fusca, tandem atra, minuta s. minutissima, ceraceo-membranacea, mycelio arachnoideo, sæpe contexto, fugaci vel persistente imposita appendicibusque floccosis, simplicibus vel vage ramosis nunquam dichotomis cum mycelio intertextis suffulta. Asci plures in quovis perithecio, ovoidei vel subovoidei, brevissime pedicellati. Paraphyses nullæ. Sporidia ovoidea, hyalina. Conidia ovato-oblonga *Oidii erysiphoidis* formas spectantia.

Clavis specierum.

Asci 2-spори . . .	$\left\{ \begin{array}{l} \textit{Linkii} \\ \textit{taurica} \\ \textit{lamprocarpa} \\ \textit{Galeopsidis} \\ \textit{Duriæi} \end{array} \right.$	Asci 4-8-spори .	$\left\{ \begin{array}{l} \textit{communis} \\ \textit{gigantasca} \\ \textit{Martii} \\ \textit{densa} \end{array} \right.$
Asci 2-3-spори . . .		$\left\{ \begin{array}{l} \textit{Montagnei} \\ \textit{tortilis} \end{array} \right.$	
Asci 3-4-spори . . .	$\left\{ \begin{array}{l} \textit{horridula} \\ \textit{Umbelliferarum} \\ \textit{Euphorbiæ} \\ \textit{spadicea} \end{array} \right.$	Asci 8-spори .	$\left\{ \begin{array}{l} \textit{Ulmariæ} \\ \textit{fuscata} \\ \textit{Erodii} \end{array} \right.$
Species dubiæ v. minus notæ		Asci 8-12-spори	

1. **Erysiphe Linkii** Lév. in Ann. Scienc. nat. 1851, XV, p. 161, t. 10, f. 29. — Amphigena; mycelio arachnoideo, fugaci vel persistente; peritheciis sparsis, emersis, sphaeroideis, minutis; ascis 8-20 in singulo perithecio, pyriformibus, in pedicellum protractis bisporis; appendicibus cum mycelio intertextis, hyalinis.

Hab. in Italia, Gallia, Anglia, Germania, Sibiria Asiatica, in foliis *Artemisiae vulgaris*, *A. glaucae*, *Tanacetii*.

2. **Erysiphe taurica** Lév. Disp. meth. Erysiph. p. 53. — Mycelio floccoso, evanido vel persistente; peritheciis gregariis aut sparsis hemisphaericis, magnis, demum depressis; ascis 8-30 in pedicellum longiuseculum productis bisporis; appendiculis cum mycelio intertextis, albis.

Hab. in Balaklava (Tauria) ad folia *Zygophylli Fabaginis* et *Pegani Harmalæ*. — Adsunt varietates in *Dorychnio herbaceo* (Tauria), *Eryngio campes.* (Alger), *Inula viscosa* (Tauria), *Carlina corymbosa* et *lanata* (Gallia) *Cirsio eriophoro* (prope Mimatem), *Aplotaxi* (Himalaya), *Cerithe majore* (Tauria), *Ptarmica vulgari* (Sibiria Asiatica). — Perithecia majora, appendices hyalinae, asci semper bispori (t. Thüm.).

3. **Erysiphe lamprocarpa** (Wallr.) Lév. in Ann. Sc. nat. 1851, XV, p. 163, t. 10, f. 31. *Aphitomorpha lamprocarpa* Wallr. — Amphigena; mycelio arachnoideo, effuso vel limitato, evanido vel persistente; haustoriis exappendiculatis, non lobulatis; peritheciis sparsis vel gregariis, sphaeroideis, minutis; ascis in singulo perithecio 8-16, in pedicellum breve productis, bisporis; appendicibus cum mycelio intertextis.

Hab. in foliis *Compositarum*, *Plantaginearum*, *Scrophulariacearum*, *Labiatarum*, *Campanulacearum*, etc. in Britannia, Fennia, Gallia, Germania, Italia, Belgio, Sibiria Asiatica, Ægypto, Amer. boreali etc.

4. **Erysiphe Galeopsidis** DC. fr. 6. 108. De Bary Syst. Ueb. d. Erys. in Hedw. 1871, p. 68. — Amphigena; mycelio arachnoideo albo v. rufescente; peritheciis globulosis minutis, gregariis; appendicibus numerosis exilibus, brevibus, ramosis; haustoriis lobulatis; ascis copiosis (10-21), sporidiis..... ignotis (teste De Bary).

Hab. in foliis *Stachydis*, *Lamii purpurei*, *Galeopsidis* in tota fere Europa. — Differt ab *E. lamprocarpa* haustoriis lobulatis. Ad hanc speciem forte pertinet *E. nervisequia* West. Conf. Lamb. Myc. Belg.

5. **Erysiphe Duriei** Lév. Disp. meth. Erysiph. p. 57. — Mycelio arachnoideo, evanido; peritheciis magnis, sparsis, hemisphæricis, demum depressis; ascis 8 in pedicellum brevem protractis, bisporis; appendiculis subramosis.
Hab. in Gallia (Avignon), Algeria, Tauria, in foliis *Phlomidis tuberosæ*, *Herbæ ventis*, *pungentis*. — Ab *E. taurica* differt præcipue appendiculis coloratis.
6. **Erysiphe Montagnei** Lév. in Ann. Scienc. nat. 1851, XV, p. 169, t. 41, fig. 36. — *Er. depressa* var. *Bardaneæ* Wallr. — Amphigena v. hypophylla; mycelio arachnoideo, evanescente; peritheciis minutis, globosis, gregariis v. sparsis; appendicibus distinctis a mycelio; ascis, octonis ovoideo-subrostratis, 2-3-sporis, sporidiis ovoideis 30 ≈ 28.
Hab. in Gallia, Belgio, Anglia, Italia, Germania, Amer. bor. etc. in foliis *Lappæ*, nec non *Taraxaci* et *Xanthii* (t. Cooke), *Apocyni* (t. Berk.). — Sec. De Bary est var. *E. lamprocarpæ*.
7. **Erysiphe tortilis** (Wallr.) Fr., Lév. in Ann. Scienc. nat. 1851, XV, p. 170, f. 35. *E. Corni* Duby. — Hypophylla; mycelio arachnoideo, effuso, evanido; peritheciis minutis, globosis; appendicibus perithecio decuplo longioribus, coloratis a mycelio discretis; flexuosis; ascis quaternis, ovoideo-subrostratis, 4-sporis.
Hab. in Anglia, Belgio, Germania, Italia, Gallia, etc. in pag. inf. foliorum *Corni sanguineæ*, autumno.
8. **Erysiphe horridula** (Wallr.) Lév. in Ann. Sc. nat. 1851, tom. XV, p. 170, t. 11, f. 37. *Alphitomorpha horridula* Wallr. — Amphigena; mycelio arachnoideo, interdum persistente; peritheciis sparsis vel confertis, sphæroideis, minutis; ascis in quôvis perithecio 20-24, ovoideo-ellipsoideis, pedicellatis, 3-4-sporis; appendicibus brevibus, flexuosis, sursum flexis, firmulis.
Hab. in caulibus folisque *Asperuginis procumbentis*, *Onosmatis*, *Lycopsidis*, *Symphyti*, *Borraginis* aliarumque *Asperifoliarum* in Anglia, Italia, Gallia, Sibiria, Belgio, Germania, Amer. bor. etc. — Sec. De Bary est var. *E. lamprocarpæ*.
9. **Erysiphe Umbelliferarum** (Lév.) De Bary Ueb. d. Erysiph. *E. Martii* Lév. var. *E.* — Haustoriis lobulatis; appendicibus crebris ramosis hyalinis v. basi fuscis, omnibus basalibus et mycelio intermixtis; ascis in quoque perithecio 4-8 (sæpius 6), 2-5-sporis, sæpius 3-4-sporis. — Conidia exacte cylindrica.

Hab. in foliis, caulibusque Angelicæ sylvestris, Hera-
clei etc. in tota Europa.

10. **Erysiphe Euporbiæ** Peck. 26 Rep. 80. — Mycelio tenui; peritheciis minutis 70-80 μ . d. appendicibus paucis longis, flexuosis, coloratis; ascis late ovatis 3-4; sporidiis 3-4, crassis, 25 \approx 16. 68

Hab. in Amer. bor. in foliis Euphorbiæ hypericifoliae. Greenbush. — Perithecia plerumque in pag. superiore, mycelium vero amphigenum.

11. **Erysiphe spadicea** B. et C., Berk. North Amer. Fungi n. 989. — 69
Peritheciis spadiceis, appendicibus flexuosis perithecio triplo longioribus; sporidiis quaternis.

Hab. in foliis Xanthii in Carolina inf. Amer. bor.

12. **Erysiphe communis** (Wallr.) Fr. Summ. Veg. Scand. p. 406 pr. 70
p. *Alphitomorpha communis* Wallr. — Bifrons; mycelio effuso, arachnoideo, evanido vel persistente; haustoriis lobulatis; peritheciis sparsis vel gregariis sphaeroideis minutis; ascis in singulo perithecio 4-8, ovoideo-sphaeroideis, 4-8-sporis; appendicibus abbreviatis.

Hab. in tota Europa, America, Asia. in foliis Ranunculacearum, Leguminosarum, Geraniacearum, Scabiosacearum, Compositarum, Convolvulacearum, Polygonacearum, Scrophulariacearum, Urticacearum, Onagrariarum, Valerianacearum etc. — Asci 110 \approx 72-80. Sporidia ellipsoidea 40-42 \approx 20-22. — *Erys. nitida* Wallr. in Delphinio mera var. videtur.

13. **Erysiphe gigantasca** Sorok. et Thüm. — Myc. univ. n. 645. — 71
Caules ambiens et plus minusve turgescens; mycelio subnullo; peritheciis globosis, congestis, grumosis, brunneis, mediis; appendicibus fuscis, longis, subnodosis, parce vel non divisis, illis *E. communis* proximis; ascis late ovoideis, vertice rotundato, basi subangustato, truncato, 108-120 \approx 70, episporio laevi conformi, 4 μ crass., vertice minime incrassato, hyalinis, 4-8-sporis; sporidiis ellipticis, utrinque rotundatis, 25 \approx 16, hyalinis.

Hab. in Rossia, Kazan, in horto botanico ad caules vivos Euphorbiæ platyphyllæ et *E. dulcis*, æst. 1876 (SOROKIN).

14. **Erysiphe densa** Berk. in Fl. n. Zel. II. 208, tab. CVI, fig. 16. — 72
Bifrons, mycelio denso arachnoideo persistente; peritheciis mediis, globosis, sparsis; appendicibus flexuosis candidis intertextis; ascis obovatis brevibus; sporidiis ellipticis suboctonis.

Hab. in foliis vivis Aristotelie Wairarapa, Nov. Zeland.

(COLENSO). — Ab *Er. Martii*, cui affinis, differt mycelio densiori sublichenoido. Appendices flexuosæ, sursum interdum nodulosæ.

15. **Erysiphe Martii** Lév. in Ann. Sc. nat. 1851, tom. XV, p. 166, 73
t. 10, f. 34. — Amphigena. Mycelio arachnoideo, sæpissime evanido; ascis in quovis perithecio 4–8, sphæroideis, breviter pedicellatis, 4–8-sporis; appendicibus brevibus cum mycelio intertextis.

Hab. in foliis Cruciferarum, Leguminosarum, Galiorum, Umbelliferarum, Hypericacearum, Convolvulacearum, Urticacearum ec. in Britannia, Fennia, Sibiria asiatica, Gallia, Belgio, Italia, Amer. boreal. et. — Sec. De Bary non satis differt ab *Er. communi*.

16. **Erysiphe graminis** DC. Flor. Franc. VI, p. 106. — Bifrons, sæpius epiphylla; mycelio effuso, floccoso-lanuginoso, persistente; peritheciis, gregariis v. disseminatis, hemisphæricis, demum depressis semiimmersis, magnis; ascis in singulo perithecio 20–24, ovoideis, in pedicellum protractis, 8-sporis; appendicibus simplicibus cum mycelio intertextis. — Conidia moniliformi-concatenata, ovoidea, simplicia, facile dilabentia, albida vel hyalina *Oidium monilioides* Link sistentia.

Hab. in foliis Graminum variorum in Europa, Asia, America, Australia.

17. **Erysiphe vernalis** Karst. Myc. Fenn. II. 193. — Mycelio arachnoideo, evanido; peritheciis hemisphæricis mycelio emersis, fuscis, latit. circiter 0,1 mill.; ascis 8, brevissime pedicellatis, ovoideis vel oblongato-sphæroideis, 69 ≈ 39, octosporis sporidiis 8, sphæroideo-ellipsoideis, 16–18 ≈ 11–12; appendicibus, hyalinis, sat longis.

Hab. in ramulis Alni incanæ vivis prope Mustiala (Fennia) mense Majo 1866 (KARST.).

18. **Erysiphe Ulmarie** Pers. in herb., Desm. 13 Not. 1846, p. 66. — 76
Kickx Fl. crypt. Fl. I. 381. — Epitrius hypophylla; peritheciis minutissimis, globosis, nitidis; plerumque nervisequiis, ascis 8; sporidiis octonis ovoideis vel suboblongis mycelio albo, adpresso, radiato; appendicibus elongatis, ramosis, tortuosis, subfuscis, perithecio paulo longioribus.

Hab. in foliis Spirææ Ulmarie in Gallia, Belgio, Germania, Italia etc. — Serius cl. Desm. ad *E. horridula* var. duxit; cl. Lèveillé vero ad var. *E. Martii*.

19. **Erysiphe fuscata** B. et C. North Am. Fungi N. 991. — Tota fusca; peritheciis brunneis; appendicibus quandoque furcatis, fuliginis; sporidiis octonis. 77

Hab. in foliis *Bidentis frondosæ* et *B. connatæ* in Amer. bor. Pensylv., North Greenbush. Aut. — Sec. Peck ad *Spherothecam* spectat.

20. **Erysiphe Erodii** Dur. et Mont. *Fl. Alg.*, 1, p. 567. Mont. *Sylog.* 78 Crypt. N. 903. — Amphigena; mycelio nullo; peritheciis sphaericis minutis rigidis fusco-nigris, appendicibus simplicibus flexuosis albis; ascis pluribus, globosis, 8-sporis 80 μ . diam., sporidiis ovoideo-oblongis 20 μ . long.

Hab. in foliis *Erodii moschati*. Oran (Durieu). — Hæc ad *Spherothecam Castagnei* var, A. Lév. spectat sec. Lév., sed ascii plures, ergo non *Spherotheca*.

21. **Erysiphe lanuginosa** Fuck. in Thuem. Myk. Not. von Griechenland (Bot. Zeit. 1871 n. 2). — Mycelio conidiophoro dense lanuginoso-tomentoso, candido, late effuso, caules foliaque tota occupante; conidiis oblongo-ovatis utrinque obtusis 32 \approx 16; peritheciis sparsis villo immersis, planis, aterrimis, media magnitudine; ascis oblique stipitatis, oblongis, 84 \approx 28, 8-12-sporis; sporidiis ovatis continuis, hyalinis, 12 \approx 3.

Hab. Græcia. Kephyssus, in *Daucos* maximo (HELDREICH).

Species inquirendæ.

22. ?**Erysiphe Rubi** Fuck Symb. myc. p. 96. — Peritheciis ascophoris 80 ignotis; mycelio tenui, arachnoideo, niveo; conidiis ovoideis, apice rotundatis, basi truncatis, 28 \approx 17; ? peritheciis pycnidicis (*Cicinnobolus*) stipitatis, oblongo-ovoides, flavis; stylosporibus (aspermatis?) ovoides, inæquilateralibus, hyalinis, 8 \approx 4.

Hab. in utraque pag. foliorum *Rubi fruticosi* in Germania, Gallia, Lusitania. — Perithecia s. d. pycnidica forte mera parasitica nec metagenetica sunt.

23. ?**Erysiphe Tuckeri** Berk., Kickx *Fl. crypt.* Fl. I. 382. — Peritheciis ascophoris ignotis; mycelio effuso arachnoideo-pruinoso, albicante, conidiis ovoideis v. ellipsoideis, moniliformi-connexis (*Oidium Tuckeri* Berk.); ? peritheciis pycnidicis (*Cicinnobolus Cesatii* de Bary, *Endogonium Vitis* Crocq.) minutissimis ovoideis subpedicellatis, v. globosis et subsessilibus; stylosporibus (aspermatis?) ovoides, obtusis, rectis curvulisve.

Hab. in foliis, fructibusque *Vitis viniferæ*, ubicunque hæc excolitur v. sponte nascitur. — An perithecia pycnidica Erysiphes proles v. ejusdem mere parasitica sint dubium manet: immo cl. de Bary hanc postremam opinionem magis probabilem censet. Peri-

thezia ascophora, ubi innotuerint, speciem inter Uncinulas facile locabunt; re vera *Oidium Uncinulæ spiralis* in Vitibus americanis proveniens ab *Oidio Tuckeri* vix differt conidiis paulo minoribus.

24. **Erysiphe Chelones** Schwein. Syn. Am. bor. n. 2490, Berk. North 82
Am. Fungi in Grevillea — *Hyphasma crassiusculum albidum*, demum pallidum orbiculatim effiguratum, floccis radiantibus, subpulverulentis, peritheciis nigris centro aggregatis.

Hab. vulgatissima in foliis *Chelones* Bethlehem; in Pennsylvania, Michener.

25. **Erysiphe Liriodendri** Schwein. Syn. Am. bor. n. 2480, Peck. 30 83
Rep. on the St. Mus. New-York. — *Hyphasma densus lacteum*, filis intertextis radiantibus maculas efficiens minores, vix $\frac{1}{4}$ unciales, orbiculatim aut effiguratis effusas; peritheciis aggregatis fusco-nigris in centro, deciduis.

Hab. in foliis *Liriodendri Tulipiferæ*, Amer. bor. Bethlehem, Oneida.

26. **Erysiphe Phlogis** Schwein. Syn. Am. bor. n. 2487 Berk. North 84
Amer. Fungi in Grevill. — *Hyphasma densus ex albedo cinerascens*, occupans fere totum folium, pagina superiori; peritheciis fuligineo-fuscis, demum atris, minutis, crebris, primum globosis, demum pezizoideis, corrugatis aut rugulosis.

Hab. in foliis *Phlogis*, Bethlehem, Massachusetts, Am. bor.

27. **Erysiphe Vaccinii** Schw. Syn. Am. bor. n. 2491. Peck. in Rep. on 85
the St. Mus. New-York. — *Hyphasma densus ex albedo cinerascens*, occupans fere totum folium, pagina superiori; peritheciis fuligineo-fuscis, demum atris, minutis, crebris, primum globosis, demum pezizoideis, corrugatis aut rugulosis.

Hab. in foliis *Vaccinii pensylvanici*, Berks County, Pennsylvania, *Epigææ repentis*, New Baltimore, Sandlake (Amer. bor.) Conf. *Microsphaera Vaccinii*. Teste Schwein. distinctissima species.

28. **Erysiphe Viburni** Schw. Syn. Am. bor. n. 2483. — *Hyphasma* 86
effusum, maculas efficiens majores aut minores lacteas, floccis crassiusculis intricatis, subeffiguratum. Peritheciis luteis, demum fuscis aut nigris, sphaericis et collapsis, superficie subrugosis.

Hab. in foliis *Viburni prunifolii*, Bethlehem, Amer. bor. — Cfr. *Microsph. Hedwigii*.

29. **Erysiphe Syringæ** Schw. Syn. Am. bor. n. 2488. — *Hyphasma* 87
tenuissimum candidum laxè et indeterminatum, effusum, floccis vix distinguendis singulis. Peritheciis sparsis, minutissimis, fuscis et nigris.

Hab. in foliis Syringæ et Cydoniæ Hortorum, Bethlehem, Am. bor. — Conferatur *Microsph. Friesii*.

30. **Erysiphe quercina** Schw. Syn. Amer. bor. n. 2492. — Hyphasma 88
occupans fere totum folium, expansum, candicans, tenuissimum, floccis vix distinctis. Peritheciis raris, minutissimis, sparsis nigris; præsertim loco distinguenda species.

Hab. sero autumnno non rara in foliis quercinis præsertim Bannisteris, Pennsylvania (Amer. bor.).

31. **Erysiphe necator** Schw. Syn. Amer. bor. n. 2495. — Hyphasma 89
tenuissimum albidum, floccis valde tenuibus, orbiculatum, non constringens. Peritheciis minutissimis, raris, fusco-nigris, globosis. Ubi omnino evoluta, etiam hæc species destruit uvas.

Hab. multo rarius in Uvis Vitis Labruscæ varietatibus cultis in vineis nostris, Amer. bor.

32. **Erysiphe Ceanothi** Schw. Syn. Amer. bor. n. 2482. — Hyphasma 90
candidum, filis vix lente distinguendis, farinæ ad instar indeterminatim in foliis effusum. Peritheciis minutis immersis, nigro-nitidis.

Hab. in foliis Ceanothi pagina superiori frequens, autumnno, Bethlehem, Am. bor.

33. **Erysiphe Gerardiæ** Schw. Syn. Am. bor. n. 2481. — Hyphasma 91
e sulphureo-olivaceum, filis tenuissimis efficit maculas irregulariter effusas minores, interdum subeffiguratas, confluentes. Peritheciis, absque capillitio gregaria in hyphasmate globosa, demum pezizoidea nigro-fusca. Floccis hyphasmatis prima juventute epidermide folii tectis, demum nudis.

Hab. in foliis Gerardiæ quercifoliæ rara sed distinctissima. Salem, Amer. bor.

34. **Erysiphe Ambrosiæ** Schw. Syn. Am. bor. n. 2484. — Hyphasma 92
candidum, tenuissimis floccis vix distinguendis, indeterminatim latius effusum in toto folio. Peritheciis sphaericis, fuscis nigrisque, raris, capillitio majoribus.

Hab. in foliis Ambrosiarum, autumnno, vulgatissima, Bethlehem, Amer. bor.

35. **Erysiphe Verbenaæ** Schw. Syn. Amer. bor. n. 2485. — Hyphasma 93
lenissimum indeterminatim effusum, maculas tamen efformans confluentes et subdeterminatas candidas. Floccis intertextis brevibus. Peritheciis destitutis capillitio, fuscis nec nigris, rugosis, deciduis.

Hab. in foliis Verbenaæ urticifoliæ vulgatissima sero autumnno, Bethlehem, Amer. bor.

36. **Erysiphe Quisquiliarum** Schw. Syn. Amer. bor. n. 2486. — Hy- 94
 phasma indeterminatim effusum, albo-virens, floccis intricatis. Ca-
 pillitio parco. Peritheciis crebris, rugosis, nigris, globosis.

Hab. super folia caulesque variarum herbarum dejectarum
 inter quisquillas horti, Bethlehem, Amer. bor.

37. **Erysiphe Asterum** Schw. Syn. Amer. bor. n. 2489. — Hyphasma 95
 tenue, album, laxum, indeterminatim effusum. Peritheciis suffultis
 brevi capillitio, nigris.

Hab. frequens in foliis languescentibus *Asterum*, præsertim
Asteris paniculati, Bethlehem, Amer. bor.

Species prorsus dubiæ.

38. **Erysiphe epixylon** Schlecht. Fl. Ber. p. 170. — Floccis tenerri- 96
 mis hyalinis albis, peritheciis sessilibus sphaericis, ascis pluribus.

Hab. in ramis decorticatis *Quercus*, Berolini. — Ad triviales
 accedit. Flocci arachnoidei, late serpentes, laxi, dichotomi, haud
 intricati. Perithecia pro more demum depressa, ascis numerosis.

39. **Erysiphe epigæea** (Wallr.) Link, Fr. S. M. III. 236. — Floccis la- 97
 xis candidis, peritheciis sessilibus maximis, hemisphaericis basi di-
 latatis, peridiolo (asco?) solitario. — Wallr. Fl. cr. pag. 761,
 n. 3670, sub *Alphitomorpha*.

Hab. in terra ad semitas, in ericetis, radicibus etc. in Germa-
 nia. — Initio thallus tenerrimus albus multis granulis inspersus
 est. Tum flocci increscunt, granulis destituuntur, hyalini fiunt se-
 riceo splendentes nitore, utriculares, laxè incumbentes nec intri-
 cati. Peridiolum gelatinosum, album peridium primo replens, tum
 collabens, et cavitatem relinquens. Wallr. et Link. Spec. I. p. 105.
 Hæc sola a me non visa species (Fr. l. c.).

ERYSIPHELLA Peck. in XXVIII. Rep. of New-York. State Mu-
 seum pag. 63, tom. II. fig. 1-2. — Perithecia superficialia, glo-
 bosa, astoma, erysiphoidæa, hypulis mycelicis cincta. — Appendi-
 ces definitæ nullæ; asci octospori, oblongi; sporidia continua, hya-
 lina. — Genus a *Perisporio* Fr. sporidiis continuis hyalinis ab
Erysiphe Lév. etc. defectu appendicum genuinarum differt.

1. **Erysiphella aggregata** Peck. l. c. Myc. Univ. N. 753, 754, *Ery-* 98
siphe aggregata Farl. Herb. — Mycelio arachnoideo, effuso, al-
 bido; peritheciis abundantibus, confertis, subglobosis, glabris, ba-
 diis vel nigris; ascis plerumque 10-12, oblongo-ovatis vel etiam
 subclavatis; sporidiis 8, late ellipticis, 20-22 \approx 12-15, hyalinis. —

Hab. in America septentr.: Albany, North Greenbush, ad amenta feminea Alni serrulatae Ait. quæ interdum omnino obducit. Vere 1875. (C. H. PECK.).

SACCARDIA Cooke Grevill. 1878. VII. p. 49. (Genus mihi humanissime dicatum ab ill. M. C. Cooke). — Mycelium arachnoideum, plerumque evanidum; perithecia globosa; ascis globoso-ovatis, 8-sporis; sporidiis ellipticis, muriformi-polyblastis; appendices nullæ, v. cum mycelio intertextæ.

1. **Saccardia quercina**. Cooke l. c. — Hypophylla; mycelio evanido; 99
peritheciis gregariis vel sparsis; ascis globosis, octosporis; sporidiis ellipticis, hyalinis, merenchymaticis, 20 ≈ 10.

Hab. in foliis Quercus virentis in Darien, Georgia (Amer. boreal.) ubi legit RAVENEL.

2. **Saccardia Martini** Ell. et Sacc. Michel. J. 373. — Peritheciis in 100
subiculo mucedineo ex hyphis tortuosis mox evanescentibus contexto, albo, laxe gregariis, superficialibus, globoso-depressis denique umbilicatis, astomis, nigricantibus, contextu minute anguloso-parenchymatico, fuligineo; ascis fasciculatis, oblongo-clavatis, brevissime stipitatis, apice rotundatis, 65-70 ≈ 25-28, aparaphysatis, octosporis; sporidiis di-tristichis, oblongo-cylindraceis, sæpius curvulis, utrinque rotundatis, 6-7-septatis, septulisque 2-4 longitudinalibus divisus, ad septa leniter constrictis, granulosis, hyalinis.

Hab. in pagina superiore foliorum languentium Quercus laurifoliae, in Florida, U. S. A., legit Doct. S. MARTIN, comm. J. B. ELLIS.

Subfam. 2. **Perisporicæ** Sacc.

Biogenæ v. saprogenæ. Perithecia globosa, pyriformia v. lenticularia, astoma, subiculo mucedineo v. dematiceo plerumque insidentia; *Oidium erysiphoides* nullum.

Clavis analytica generum

1. **Hyalosporæ**. Sporidia globosa v. oblonga, continua, hyalina v. flavida.

‡ Perithecia late colorata, flava v. rufa; sporidia hyalina v. fusca.

Eurotium: perithecia subiculo *Aspergilli* insidentia; ascis octospori.

? *Myriococcum*; perithecia rufa.....

Pisomyxa: perithecia subiculo dematiceo insidentia; ascis polyspori.

†† Perithecia nigra, v. atra; sporidia hyalina.

Lasiobotrys: perithecia, botryoso-aggregata, stromateque cupulari excepta.

Apiosporium: perithecia subglobosa, gregaria, subiculo torulaceo sæpe inserta; asci polyspori.

Meliolopsis (Sect. *Meliolæ*): perithecia globosa subiculo radioso dematieo; asci 2-8-spori.

Asterula (Sect. *Asterinæ*): perithecia applanata subiculo radioso dematieo; asci 4-8-spori.

††† Perithecia spadicea dein nigra; sporidia flavida.

Anixia: perithecia subglobosa, mycelio evanescente; asci 8-spori.

2. **Phæosporæ**. Sporidia globosa v. oblonga, continua, fusca.

† Asci globosi in hyphis ramosis. capitato-acrogeni.

Cephalotheca. Perithecia initio pilosella, non appendiculata.

†† Asci sessiles v. stipite simplici instructi.

Ascotricha. Perithecia appendicibus pluries furcatis basi cincta, globosa.

Magnusia. Perithecia appendicibus apice circinatis basi cincta, globosa.

Orbicula. Perithecia exappendiculata, thallicola, glabra, globosa.

Thielavia. Perithecia exappendiculata, rhizophila, glabra globosa.

Chaetomidium. Perithecia exappendiculata sed undique setosa v. pilosa, globosa.

Asteronia (Sect. *Asterinæ*). Perithecia exappendiculata, sed subiculo radioso innata, globosa, lenticularia.

3. **Didymosporæ**. Sporidia didyma hyalina v. fusca.

Asterina (Euasterina). Perithecia lenticularia, subiculo radioso innata; sporidia fusca.

Asterella (Sect. *Asterinæ*). Ut *Asterina*, sed sporidia hyalina v. subhyalina.

Dimerosporium, Perithecia globulosa, subiculo dematieo insidentia; sporidia hyalina v. fuscidula.

Zopfia. Perithecia subiculo nullo v. obsoleto; sporidia grandia, fusca.

4. **Phragmosporæ**. Sporidia oblonga, 2-pluriseptata, hyalina v. fusca.

Perisporium. Perithecia globosa, subiculo obsoleto; sporidia 3-septata, fusca, loculis secedentibus.

Meliola (Eumeliola). Perithecia globosa, subiculo radioso; sporidia 2-5-septata, fusca, non fatiscentia.

Asteridium (Sect. *Asterinæ*). Perithecia lenticularia, subiculo radioso; sporidia 2-5-septata, non fatiscentia, sæpius hyalina.

5. **Dictyosporæ**. Sporidia ovato-oblonga, clathrata, fusca v. hyalina.

Cookella. Perithecia biogena, applanata; sporidia fusca.

Pleomeliola (Sect. *Meliolæ*). Perithecia biogena, globosa; sporidia fuscidula.

Phymatosphaera. Perithecia saprogena, subglobosa, intus cellulis ascophoris fœta; sporidia hyalina.

APPENDIX

Cystotheca. Perithecia subiculo dematieo inserta, monoasca.

EUROTIIUM Link. Sp. plant. VI. 1. p. 79. (Etym. *evros*, mucor). — Perithecia superficialia, globosa, astoma, membranacea, glabra e sulphureo lateritia v. fusciscentia, e mycelio conidiophoro (*Asper-*

gilli) oriunda. Asci typice sphaeroidei, octospori, aparaphysati. Sporidia continua, subglobosa, typice hyalina.

1. **Eurotium herbariorum** (Wigg.) Link. Spec. Plant. I, p. 79. *Mucor herbariorum* Wigg. (1780). — Peritheciis filamentis repentibus, intricatis, ramosis, primo hyalino-albis suffultis, sphaeroideis, sulphureis, latit. 75–90 μ .; ascis sphaeroideis vel subsphaeroideis, diam. 12–15 μ ., sporidiis octonis conglobatis, hyalinis lentiformibus, biconvexis, margine sulco lato, acute marginato percursis, 8–10 μ . diam. maj., margine radiatim striolatis, diam. 5 μ .; paraphysibus nullis. — Status conidicus est *Aspergillus glaucus* Link.

Hab. in plantis humidulis in herbariis, in lignis, fructibus, quicquiliis putridis in tota Europa, Amer. bor. et austr., Africa, Australia, Asia frequens.

2. **Eurotium repens** de Bary Beitr. z. Morph. u. Phys. d. Pilze et in Hedw. 1871, p. 52. — Mycelio superficiali laxe lateque repente; conidiis globosis v. ovalibus, tenuissime verrucosis, 7–8,5 μ . d.; peritheciis minutis sulphureis; sporidiis hyalinis lentiformibus crasse biconvexis, margine sulco minime profundo, sæpe tægre conspicuo obtusissime marginato percursis, 4–5,6 μ . diam. maj., levissimis.

Hab. in corporibus organicis variis putrescentibus in Germania, Italia etc.

«*Obs.* Asci ovoidei 15 \approx 12, 8-spori; sporidia e fronte subglobosa, 5 \approx 6, marginata, lævia, hyalina. In eodem folio populeo examinavi gregem peritheciarum amœne sulphureorum, conspicue minorum: ascis subglobosis, 10 \approx 11, sporidiis subovoideis 3–4 \approx 2½ minutissime guttulatis, lævibus. An forma, an species diversa? An status immaturus? Sed si status immaturus quomodo asci et sporidia perfecte evoluta? [Michelia]».

3. **Eurotium candidum** Speg. Fungi Arg. IV. n. 109. — Peritheciis sæpius glomeratim aggregatis, minutissimis 70–80 μ . diam., glaberrimis, levissimis, candidis, contextu cellulis polyedricis, majusculis 20–30 μ . diam. composito, hyalino; ascis, globosis 14–18 μ . diam., octosporis, cito diffluentibus; sporidiis globosis 6–8 μ . diam. e mutua pressione sæpe angulosis, crassiuscule tunicatis, muriculato-reticulatis, hyalinis. Status conidicus est *Aspergillus cinereus* Speg. Fung. Arg. pug. III, n. 140.

Hab. ad folia exsiccata loco udo diu servata in Universitate bonariensi, Oct. 1880 (Amer. austr.).

4. **Eurotium lateritium** Mont. Syll. Crypt. n. 918, Cent. VI, n. 45, in Ann., 3. XI. p. 54. — Peritheciis celluloso-membranaceis, luteis

dein ochraceis, floccis dense contextis lanæformibus luteo-aurantiacis immersis; ascis 8-sporis sporidiisque globosis, hyalinis.

Hab. in pane castrensi corrupto, apud Parisios (RAYER.) « An var. *E. herbariorum?* ».

5. **Eurotium Coriorum** Wallr. Fl. crypt. Germ. 331, n. 2076. — Hy- 105
phhis parce intertextis brevibus tortuosis dein cinnamomeis, peritheciis mollibus sphaericis minutissimis nudis, primum sparsis, læte citrinis, dein luteis conglomeratis, hypham nonnisi obvolventibus.

Hab. ad calceamentorum coria in humectis reposita passim in Germania et Italia. — Perithecia *Microsphaerias* æquantia. « Perithecia minutissima globosa citrina, Asci subglobosi, octospori; sporidiis e fronte subsphaericis, $4\frac{1}{2}$ - $5\frac{1}{2}$ diam., lævibus, dilutissime flavidis, hyalinis. Vix ab *E. repente* de Bary diversum [Michelia] ».

6. **Eurotium epixylon** Kunze et Schm. D. Schw. n. 83, Wallr. Fl. crypt. 106
n. 2078. — Hyphis congestis dense contextis, pulvinate-maculatis, primum flaventibus dein fusco-rufescentibus, peritheciis citrinis parvis confertis, hyphasma demum oblitterantibus.

Hab. ad ligna cæsa in locis suffocatis reposita frequens, in Germania et Italia. — « An var. *E. herbariorum?* ».

7. **Eurotium fructigenum** Mart., Wallr. Fl. crypt. n. 2077. — Hyphis 107
tenuissimis testaceo-fuscescentibus, peritheciis minimis, ellipticis, luteis. — Mart. Erl. 369. Link. spec. I. 80.

Hab. ad fructus putridos Fuchsiae in Germania, Erlangen (MARTIUS), ad fructus Cerasi saccharo et spiritu vini incoctos et diu servatos Romæ (FIORINI-MAZZANTI, MONTAGNE Syll. Crypt.). Ab *E. herbariorum* colore et minutie maxime differt. Mont. l. c.

8. **Eurotium pulcherrimum** Wint. in Hans. Fungi fim. dan. p. 104. — 108
Peritheciis globulosis, 144-190 μ . diam., fusco-virentibus; ascis sphaericis, octosporis, 10-14 μ . diam.; sporidiis ellipsoideis 5-6 \simeq 4-5.

Hab. in fimo, in Saxonia.

9. **Eurotium stercorarium** Ch. Hans. Fungi fim. dan. p. 104. — Pe- 109
ritheciis globulosis, basidiis, reticulato-contextis, 260 μ . diam.; ascis fere globosis; sporidiis inæqualiter globulosis 3-4.5 μ . diam.

Hab. in fimo, in Dania.

Species quoad genus dubiæ v. mihi ignotæ

10. **Eurotium chilense** Mont. Syll. crypt. n. 919, Fl. Chil., VII, p. 476. 110
Hypophyllum; perithecio sphaerico vitellino, floccis brevissimis radiantibus basi cincto; sporis liberis (?) globosis cum gelatina diffluentibus.

Hab. in foliis *Ballotæ Miersii*. Quintero in Chile (BERTERO).

11. **Eurotium? Bonariense** Speg. fung. Arg. I. 177. — Peritheciis 111
sparsis vel 3-5 gregariis, sphaericis, astomis, luteo-sulphureis, 120-
200 μ . diam., lævibus undique laxissime hyphis rectis albo-flave-
scentibus, prælongis 250-350 \approx 5-10, vestitis; contextu tenuissime
membranaceo, vivide sulphureo, imperspicue parenchymatico; hyphis
microscopio inspectis basi dilute fulvescentibus apice recto, obtuso
rotundato, hyalino, lævibus; ascis..... (non vidi) cito diffluentibus;
sporidiis confertis, numerosissimis, globosis hyalinis, 3-4 μ . diam.

Hab. in foraminibus interioribus a coleopteris funiculis peractis
in fimo vaccino al Bagnado de S. José de Flores, 6 Mart. 1880
prope Buenos-Ayres (Amer. austr.). Species pulcherrima, a genere
Eurotio nonnihil recedens.

12. **Eurotium fuscum** Preuss Fungi Hoyersw. Linnæa 1852, p. 78. 112
Mycelio evoluta e floccis dense contextis, stipitiformibus, et in
singulos abeuntibus, repentibus; peritheciis minutis gregariis, glo-
bosis, basi applanatis, fuscis; pulpa subalba; sporis minutissimis
globosis fuscis.

Hab. in ramulis Robiniæ Pseudacaciæ, Hoyerswerda, Lu-
satis (Germ.).

13. **Eurotium fulvescens** Cooke Grev. VIII. 11. — *Badhamia ful-* 113
vescens Cooke Grev. IV. 69. — Peritheciis subglobosis, sparsis, v.
3-6 aggregatis, subochraceis, basi circumcirca albo-pubescentibus;
ascis minutis globosis, floccis tenuibus capitato-insertis; sporidiis
pallide fuscis, minutis, ovoideis, 7,5 μ . diam.

Hab. in tela vetusta near Perth N. B. (Britannia).

14. **Eurotium Oryzæ** Ahlburg in Korschelt Ueber Sake (Dingl. Polyt. 114
Journ. 1878). — Peritheciis conspicue flavis mycelio floccoso albo,
septato insidentibus; ascis copiosis; sporidiis non concatenatis(?).

Hab. in caryopsidibus fermentescentibus Oryzæ, Germania.

15. **Eurotium insigne** Wint. Hedw. 1873, p. 146 (nomen), Fungi Eur. 115
n. 1732 (non vidi).

Hab. in fimo, in Borussia.

16. **Eurotium diplocystis** B. et Br. Fungi of Ceylon n. 1180. — Ir- 116
regulare, subglobosum vel elongatum, flavum, demum aurantia-
cum; ascis globosis pedunculatis e floccis decumbentibus oriundis;
sporidiis octonis ellipticis.

Hab. in Ceylon. — Ascis mox difflui, stipitibus longis et flexuosis
ex hyphis decumbentibus ramosisque oriundis. Forte novum genus.

17. **Eurotium creatinum** Nyl. An. myc. in Fl. fenn. p. 126 (non vidi). 117

Hab. in carne cocta. Perithecia nigrescentia. Cfr. De Seynes
Nouv. cas de parasit. d'un Aspergillus p. 4.

18. **Eurotium oblitteratum** Schw. Syn. Amer. bor. n. 2725. — Thallo 118
oblitterato, nullo. Peritheciis magnis citrinis.

Hab. in herbis male exsiccatis in Herbariis Schweinitzii, in
Am. boreal.

APPENDIX

Generi *Eurotio* peraffine, etsi ascigerum nondum repertum, est
sequens genus.

MYRIOCOCCUM Fr. Syst. Myc. II. 304 (Etym. *myrios* et *coccus* h. e.
sphaerulae copiosissimae). — Perithecia globosa, membranacea, asto-
ma, solidiuscula, gregaria e subiculo mucedineo intertexto oriunda.
Nucleus.....

1. **Myriococcum præcox** Fr. Syst. Mycol. II. 304. Corda Icon. fung. 119
V. p. 56, t. III., fig. 39.

Hab. In foliis dejectis fragmentis ligneis et corticibus pu-
trescentibus in Germania, Italia, Scandinavia, Algeria etc. — «Pe-
rithecia in subiculo mucedineo albo effuso dense gregaria, sphæ-
roidea, diam. 50–70 micr., nitida, astoma, rufa; contextu distincte
parenchymatico purpurascente, cellulis polyædricis 6–8 micr. diam.
Corpuscula inclusa globulosa 6–10 micr. diam. hyalina, potius plas-
matis guttulæ videntur. Etsi asci nondum innotuerint eurotiaceum
genus videtur [Michelia]».

PISOMYXA Corda Icon. fung. I, p. 23 (Etym. *pisum*, pisum, *myxa*,
mucus). — Perithecia membranacea, globulosa, colorata, apice de-
nique rimulosa, mycelio radiato dematideo innata. Asci (globuli Cor-
da) ovati, polyspori, liberi(?). Sporidia minutissima globulosa, con-
tinua fusca. — Species foliicola.

1. **Pisomyxa rhacodioides** Corda Icon. I, p. 23. t. VI, fig. 292. — My- 120
celio atro, tomentoso; peritheciis globosis, aureis, diaphanis, floccis
radiantibus dichotomis, septatis, atris suffultis; ascis (sen globulis
sporarum) 3–4, gelatinosis, ovatis, aureis; sporidiis minutissimis,
globosis, fuscis; pseudothallo membranaceo tenuissimo friabili, dia-
phano, luteo.

Hab. in foliis vivis perennibus arborum tropicarum in Bra-
silia. — Perithecia vertice denique rimulosa.

LASIOBOTRYS Kunze Myc. Heft. 2. p. 88 (Etym. *lasios*, pilosus et

botrys racemus, h. e. sphaerulæ aggregatæ setigeræ). — Perithecia subsuperficialia, globosa, astoma, nigra minutissima, plura botryose-aggregata, cupulæque stromaticæ margine setigeræ recepta. Asci cylindræci, octospori. Sporidia oblonga, continua, hyalina.

1. **Lasiobotrys Loniceræ** Kze in Mycol. Heft. II. 88.

Hab. in utraque pagina foliorum languidorum *Loniceræ* nigrae, *Periclymeni*, *Xylostei*, cæruleæ, tataricæ, *Pallasii* in Britannia, Gallia, Italia, Algeria, Belgio, Germania, Sibiria. « *Obs.* Fungillus structura valde peculiaris et (mirum!) a nullo, quem sciam, auctore, excepto forte cl. Desmaziero in Flor. Alger. 569, exacte descriptus vel delineatus. In foliis gignuntur hinc inde gregatim cupulæ stromaticæ aterrimæ, mycelio solò penetrante, superficiales, 150–180 μ . d. celluloso-contextæ, dariusculæ, margine setulis copiosis, septatis olivaceo-fuliginis, 60–150 \approx 4, patulis ciliatæ. In his cupulis nidulantur perithecia numerosa, botryoso-aggregata, perfecte sphaerica, astoma, 50 μ . diam., contextu distinctissime parenchymatico, membranaceo, fuligineo; asci, qui insunt, fasciculati, cylindræco-clavati, deorsum attenuati, 40–50 \approx 10, octospori, aparaphysati; sporidiis breve fusoidis, 8–10 \approx 4–5, hyalinis. Cupulæ stromaticæ, peritheciis facile secessis, perithecium unicum collapse-cupulatum mentiuntur, vel peritheciis faretæ simile nondum collapsum amulantur. Icones et descriptiones auctorum. e. g. *Grevillei*, *Wallrothii*, *Friesii*, *Cordæ* etc. talem fabricam fictitiam ostendunt, perithecia vera haud demonstrant vel pro ascis habent [*Michelia*]».

APIOSPORIUM Kunze Myc. Heft. I. p. 8. (Etym. *apion*, pyrum, *sporos*, proles). — Perithecia superficialia, minutissima, globosa v. pyriformia, astoma, membranacea v. carbonacea, subiculo conidiophoro dematiaceo insidentia. Asci polyspori, aparaphysati. Sporidia globosa v. oblonga, continua, hyalina. St. conidioph. sistit *Fumiginis*, *Torulæ* etc. species. — Mihi male cognitum genus.

Species genuinæ.

1. **Apiosporium pinophilum** Fuk. Symb. Myc. 87. — Peritheciis præcipue in foliorum superficie, sparsis, punctiformibus, planis convexisque, orbicularibus, rugulosis, atris; ascis globosis, magnis, multisporis: sporidiis minutissimis, ovato-cylindræcis, hyalinis. — St. conidioph., sec. Fuck., est *Antennaria pinophila* Nees. (Conf. ad *Capnodia*).

Hab. in ramis foliisque Abietis pectinatæ in Germania, Belgio, etc. Autumnno.

2. **Apiosporium profusum** Wallr. Fl. crypt. p. 262. Fuck. Symb. Myc. 123 p. 88. — Peritheciis gregariis, structura grosse cellulosa, fusca, globosis oblongisve irregularibusque, aterrimis, minutissimis, basi conidiis concatenatis, oblongis, fuscis, emergentibus; ascis magnis, globosis, multisporis; sporidiis ovato-globosis, nucleatis, dilutissime flavis, 3 μ . diam.

Hab. in cortice Populi nigræ et Quercus, rarius, Æstrich, Rhenogovia, et in Thuringia — Maculas nigras granulosas format.

3. **Apiosporium quercicolum** Fuck. Symb. Myc. 87. — Mycelio conidiophoro *Fumaginem* sistente; conidiis cum hyphis articulatis in foliorum pagina superiori, oblongo-ovatis irregularibusve, 2-3-septatis, subopacis, 48 \approx 24; demum peritheciis ascigeris, in superficie ortis, globosis, fuscis, 48 μ . diam.; ascis globosis, multisporis (?); sporidiis globosis, biguttulatis, hyalinis, 6 μ . diametro.

Hab. in foliis vivis Quercus in Rhenogovia, aut.

4. **Apiosporium stygium** Wallr. Fl. crypt. p. 862 (?), Fuck. Symb. Myc. 125 p. 88. — Peritheciorum acervulis densis, minutis, 1 $\frac{1}{2}$ mill. diametr., aterrimis; peritheciis globosis oblongisve, lævibus, atris, 44 μ . diam.; ascis distinctis, majusculis, globoso-ovatis, sessilibus, polysporis; sporidiis globosis, minutis, dilutissime flavis.

Hab. in ligno putrescente Quercus, Juglandis etc. in Germania, Gallia, Italia.

5. **Apiosporium Fumago** Fuck, Symb. myc. p. 87. — Hyphis repentibus, ramosis, moniliformibus, conidiis in catenulas seriatis, demum solutis pilorum simplicium, erectorum, acuminatorum, fuscorum superficiem totam tegentibus, globosis, 8 μ . diam., maturis olivaceis; pilis 144 μ . long. (Fuck. l. c. t. II. fig. 37). Peritheciis ascophoris punctiformibus, demum confluentibus, orbicularibus, planis, subtilissime rugulosis, atris; ascis globosis, 16 μ . diam., multisporis; sporidiis minutis, globosis, hyalinis.

Hab. in foliis adhuc pendulis Fagi sylvaticæ (et Ilicis) crustas fuscas amplas formans, in Jura (Helvetia) ubi legit MORNIER.

6. **Apiosporium tremulicolum** Fuck. Symb. p. 88. — Peritheciis in ramulis præcipue aridis ortis, gregariis, atris, conicis, minutis; ascis globosis, 8(-16?) sporis; sporidiis globosis seu angulato-globosis, uninucleatis, hyalinis, 8-10 μ . diam. — Mycelio conidiophoro præprimis in foliorum vivorum pagina superiori nascente, maculas nigras, tenues, plerumque circumscriptas exhibente; hyphis repen-

tibus, articulatis, junioribus stellatis, (conidiis *Asterosporii Hoffmanni* non absimilibus), primo hyalinis, demum fuscis; conidiis e 2-4 cellulis fuscis connatis, majusculis.

Hab. in foliis ramulisque Populi tremulæ, Eberbach, Rhe-nogovia.

7. **Apiosporium Rhododendri** Fuck. Symb. Myc. p. 87. — Mycelio conidiophoro *Torulam Rhododendri* Kze sistente, præcipue in foliis. — Peritheciis ascigeris in ramulis ortis, minutis, deplanatis, atris; ascis polysporis; sporidiis subglobosis, nucleatis, hyalinis, 8 μ . diam. 128

Hab. in foliis ramulisque Rhododendri ferruginei in Alpibus Italiae et Germaniæ.

8. **Apiosporium microscopicum** Karst. Symb. ad Myc. Fenn. 1879, p. 42. 129
— Peritheciis sparsis, cuticulæ innatis, sphaeroideis, structura sub-grosse cellulosa, fusca (sub microscopio), atris, lævibus diam. 30-40 μ .; ascis pluribus iusimul, primitus subsphaeroideis, dein obovoideo-oblongatis, utrinque attenuatis, ut plurimum curvulis sessilibus, polysporis; sporidiis angulato-sphaeroideis vel sphaeroideo-ellipsoideis, 2-3 \approx 1 hyalinis.

Hab. in ramulis aridis juvenilibus Rubi idæi æstate in regione Mustialensi (Fennia).

9. **Apiosporium fimicolum** Speg. Fung. Arg. Pug. IV. n. 111. — Pe- 130
rithecis sparsis, superficialibus, globosis, v. globoso-depressis 200-250. u. d. bysso nullo insidentibus, glabris, subverruculosis, membranaceo-subcarbonaceis; ascis globosis 8-12 \approx 16 sporis, 25-30 μ . diam.; sporidis ellipticis v. subglobosis, 10-12 \approx 7-8, utrinque obtussime rotundatis, hyalinis.

Hab. in fimo vetusto putrescente Caviæ leucopygæ in paludibus secus el Rio de la Plata, prope Barracas del Sur, (Am. austr.) Maj. 1881.

10. **Apiosporium? australe** Speg. Fungi Arg. Pug. IV. n. 110. — Pe- 131
rithecis superficialibus, dense gregaris, nudis, glaberrimis, atro-nitentibus, globosis 250-300 u. d. carbonaceis fragillimis, tactis nucleum album subpulveraceum mox ostendentibus; ascis globosis 8-10 μ . diam., octosporis (?), dense conglobatis, ac mox fluxilibus; sporidiis elliptico-subrhomboideis, subinequilateralibus 15 \approx 2, utrinque obtusiusculis, non v. 2-guttulatis, hyalinis.

Hab. in disco trunci palmæ ejusdam diu loco udo servati in Universitate bonariensi, Febr. 1881 (Amer. austr.). — An huc *Licea berteriana* Mont. (Gay. Fl. Chil. v. VII, p. 20) ducenda, etsi (ob errorem?) sporis nigris donata describatur?

Species, ob ascos ignotos, dubiæ.

11. **Apiosporium Ulmi** Fuck. Symb. p. 87. — Peritheciis minutis con- 132
fluentibusque, planis, subconvexis, opacis, rugulosis, atro-fuscis;
ascis nondum visis; sporidiis ovatis, vel irregulariter globosis, nu-
cleatis, hyalinis, $8 \approx 6$. — Status conid. est *Torula ulmicola* Rabh.
Hab. in ramis vivis corticatis Ulmi suberosæ, Hattenheim,
Rhenogovia, Autumno, socia *Torula ulmicola*.
12. **Apiosporium Abietis** Kunze Myc. Heft. I. p. 8. Fr. Syst. Mycol. III. 133
255 — Acervulis hemisphæricis, olivaceis, peritheciis e globoso
pyriformibus.
Hab. in ligno abietino in Saxonia. — Pulvis, quo perithe-
cia extus conspersa sunt, velo pulveraceo variarum Sphæriarum
similis est.
13. **Apiosporium Brassicæ** (Lib.) Fuck. Symb. Myc. p. 86. *Perispo-* 134
rium Brassicæ Lib. exs. n. 280. — Peritheciis superficialibus, glo-
bulosis, minutissimis, dense aggregatis; ascis. haud visis; spo-
ridiis subtetragonis, irregulariter ovoideis, globosisque, uniguttu-
latis, hyalinis, $16 \approx 12-14$.
Hab. in caule putri Brassicæ in Germania et Belgio.
14. **Apiosporium stilbosporeum** Fr. Syst. Mycol. III. 256. — Acervu- 135
lis effusis atris, peritheciis e cylindrico ovatis.
Hab. Profuse ad longitudinem ulnarum tegit ramulos cariosos
in Carolina (SCHWEINITZ). — Hic a Stilbospora omnino diversus fun-
gillus ex hac serie potissimum videtur. Perithecia etiam sparsa oc-
currunt, interdum in bacilli fere clavati speciem elongata.
15. **Apiosporium Corni** Wallr. Fl. crypt. n. 4128. — Peritheciis mi- 136
nutissimis tornato-globosis, lævissimis nitidis, olivaceo-nigris spar-
sim aggregatis, dein integram folii faciem oblitterantibus stratoque
granuloso stygio veluti obducentibus.
Hab. in foliis Corni sanguineæ vegetis hypophyllum, ra-
rius, in Germania.
16. **Apiosporium Centaurii** Fuck. Symb. myc. p. 87. t. I. f. 1. — My- 137
celio conidiophoro *Torulam Centaurii* Fuck sistente: catenulis
fasciculatis demum confluentibus, atro-olivaceis, articulis globosis,
plerumque senis octonisve non secedentibus; statu ascophoro ignoto.
Hab. in foliis caulibusque Erythreæ Centaurii in Germa-
nia, Italia.
17. **Apiosporium Salicis** Kze. u. Schm. Myc. Hfte. I, p. 8. Fuck. Symb. 138
p. 88. — Peritheciis ascophoris structura minute cellulosa, fusca,

gregariis, globosis oblongisve, durissimis, aterrimis; ascis?; sporidiis ovatis, nucleatis, hyalinis, $10 \approx 8$; conidiis concatenatis, articulis ovatis, fuscis, e basi perithecorum emergentibus.

Hab. in cortice duriore Salicum in Germania, Italia, Gallia. — Efficit grumulos irregulares, nigros. «Datur var. *populinum*, (cellulis peritheci interioribus—ascis immaturis?—globosis 7–8 μ . d. nucleatis, hyalinis). In ligno Populi in Gallia [Michelia]».

18. **Apiosporium Hyphæ** Fuck. Symb. Mycol. App. III. p. 17. — Peritheciis sparsis, demum totis superficialibus, minutissimis nudo oculo vix conspicuis, globosis, atris, astomis; ascis nondum visis; sporidiis globosis vel parum ovatis, nucleatis, hyalinis, 4 μ . diam.

Hab. in Hypha papyracea cavitatem in trunco quercino obducente, Hattenheim, Rhenogovia.

19. **Apiosporium? Melampyri** Sacc. M. V. n. 1095. Michelia I. 243. Peritheciis hypophyllis, gregariis, sphaericis, diam. 35–45 μ ., superficialibus, rugulosis, nitidulis, nigris, hyphis parcis hyalinis septulatis basi cinctis, nucleo; peritheci contextu parenchymatico, fuligineo.

Hab. in pag. inf. foliorum Melampyri arvensis languidorum, sociis *Spharotheca* et *Coleosporio* in sylva Montello, in Italia. Oct. 1877. — An huc pertinet *Perisporium vagans* Dmz.?

20. **Apiosporium Mali** Wallr. Fl. crypt. p. 861. Fuck, Symb. mycol. p. 88. — Acervulis effusis, olivaceis; peritheciis etiam ascigeris structura subgrosse cellulosa, fusca, globosis, 40–80 μ . diam.; conidiis concatenatis, catenularum articulis globoso-ovatis, fuscis, in perithecorum latere excrescentibus (vide Fuck. l. c. Tab. II. F. 39); ascis?; sporidiis ut in *A. Salicis*.

Hab. in utraque pag. corticis durioris Pyri Mali in Germania.

21. **Apiosporium? velutinum** Wallr. Fl. crypt. n. 4130. — Peritheciis minutis tenuibus elongato-subcylindricis, atris, nitidis, stratum velutinum effusum præstantibus.

Hab. ad truncos quercinos cæsos Hercyn. inferioris passim.

22. **Apiosporium Plantaginis** Fuck. Symb. Myc. p. 87. — Mycelio conidiophoro *Torulam* (*Gyroceras*) *Plantaginis* Corda sistente; statu ascophoro ignoto.

Hab. in pag. inf. foliorum Plantaginis mediæ nondum mortuorum in Germania, Belgio, Italia.

ANIXIA Fr. (?) Nov. Fl. Succ. ed. I., p. 80. Hoffm. Ic. fung. t. XVIII.

(Etym. dubia). — Perithecia superficialia, glabra v. basi villosa, globoso-hemisphærica, astoma, membranacea, superne irregulariter dehiscencia. Asci cylindranei, paraphysati, octospori. Sporidia ellipsoidea, continua e flavo hyalina.

1. **Anixia spadicea** Fuck. Symb. myc. p. 91. — Peritheciis sparsis, 144 superficialibus, basi filamentis longissimis, fuscis, repentibus, laxis, demum evanescentibus obsessis, hemisphæricis, astomis, siccis rugosis, spadiceis, demum atris latit. 0,7–0,8 mill.; ascis cylindraneo-clavatis, longissime pedicellatis, 120–150, part. sporif. 70–80 \approx 10–14; sporidiis octonis, monostichis, ellipsoideis vel subsphæroideis, sulphureis (sub microsc. hyalinis), 10–14 \approx 7–10; paraphysibus filiformibus, ramosis.

Hab. in culmis putrescentibus *Secalis cerealis* in Fennia et Germania. — Secund. cl. Rostafinski — monente Karstenio — *Anixia spadicea* Fuck., *Tubulina bicolor* Poir., *Didymium parietinum* Schrad., *Licea sulphurea* Wallr. et *L. pannorum* Wallr. unam eademque speciem sistunt.

2. **Anixia Wallrothii** Fuck. Symb. mycol. pag. 91. — *Licea sulphurea* 145 Wallr. Fl. crypt. II., p. 344. — Peritheciis majusculis, hemisphæricis, nigro-fuscis, basi subglabris; ascis breviter stipitatis, cylindraneis, 8spor. 79 \approx 10 (p. sporif.); sporidiis oblique monostichis, ovatis, simplicibus, episporio sulphureo, 12 \approx 8.

Hab. in fimo et fermento, Æstrich etc. in Germania (WALLR., FUCK.).

3. **Anixia truncigena** Hoffm. Icon. t. 17, fig. 2. — *Licea sulphurea* 146 Klotzsch. Hb. myc. 1545. — Peritheciis globosis, fuscis glabris; ascis cylindraneis, longissime stipitatis, 8spor. 76 \approx 12 (p. sporif.) sporidiis exacte globosis, simplicibus, episporio sulphureo, 10 μ . d.

Hab. in ligno *Pini* circa Æstrich in Rhenogovia, vere.

4. **Anixia perichænoidea** (Cooke) Sacc., *Orbicula perichænoidea* Cooke 147 Grev. VIII., p. 10. *Chaetomium glabrum* B. et Br. — Peritheciis sparsis superficialibus, depresso-globosis, irregulariter dehiscensibus, intus pallescentibus; contextu sinuoso-parenchymatico; ascis cylindraneis 100–110 \approx 12–13; sporidiis globosis, 10–12 μ . diam., monostichis, e hyalino flavidis paraphysibus filiformibus copiosis, interdum furcatis.

Hab. in caule *Brassicæ*, trahibus, culmis putridis etc., socio quandoque *Mycogalacte parietino*, quod probabiliter est pycnidium, in Anglia, Germania, Gallia etc. — Forma in regione arctica citata a cl. Berk. Arct. Exp. n. 21 gaudet sporidiis minoribus,

nempe 8 μ . d.; specimina malmadyensia Libertiana præbent sporidia 14–15 \approx 12. Conf. Rev. Myc. 1881, t. XX., fig. 14.

5. **Anixia cyclospora** (Cooke) Sacc., *Orbicula cyclospora* Cooke 148
Handb. n. 2788. — Mycelio radiato, ramuloso, hyalino; peritheciis globosis, obscure fuscis, contextu reticulato; ascis cylindricis; sporidiis globosis, hyalinis.

Hab. in charta murali, vernicea in Hollandia et Britannia, sociis *Rhinotricho lanoso*, *Penicillio chartarum* et *Sporodesmio Alternaria*, quorum, sec. cl. Cooke, *Anixia* videtur status perfectus.

Species dubiæ.

6. **Anixia (Orbicula) Buxi** Magnin in Ann. Soc. bot. Lyon. Nov. 1876 149
— Peritheciis sæpius pyriformibus, sporidiis fusoidis.

Hab. in pag. inf. foliorum Buxi, Lyon. «An Nectriella?».

7. **Anixia villosa** Fr. Syst. Myc. III. 227. — Peritheciis difformibus, 150
villo albo obductis, fibris basi radicatis, intus demum cavis, apiceque varie dehiscentibus; ascis..... sporidiis globosis.

Hab. in humo atra foliis obtecta in Scandinavia.

8. **Anixia interrupta** Schw. Syn. Am. bor. n. 2395. — Pallido-car- 151
nea, tuberibus (?) interruptim connexis ad longitudinem uncialem aut biuncialem, tamen faciliter separabilibus, insidentibus fibrillis himantioideis longe repentibus, superficie lacunosa, tuberibus $\frac{1}{4}$ unciali crassitudine, intus albis, cavis.

Hab. in terra ex putrescentibus truncis orta in cavitate, Bethlehem, Amer. bor.

9. **Anixia minuta** Schulz. Verhand. z. bot. Gesell. Wien 1872, p. 405. 152

CEPHALOTHECA Fuck. Symb. Myc. App. I, p. 297 (Etym. *Cephalos*, caput, *theca*, ascus, ob ascos globosos). — Perithecia simplicia, libera, carbonacea, fragilissima, cellulis minutis contexta, globosa, astoma, undique pilosa vel villo floccoso tecta, demum subglabra, fusca atrave. Ascis primo in hypharum ramosarum apicibus, glomerulos globosos formantes, demum liberi, 8spori. Sporidia conglobata, demum libera, simplicia, ovata vel subfusiformia, fusca opacave.

1. **Cephalotheca sulfurea** Fuck. Symb. Myc. App. I, p. 297. — Pe- 153
ritheciis sparsis gregariisve, $\frac{1}{3}$ – $\frac{1}{2}$ mill. diam., globosis, villo sulfureo tectis, demum vertice glabris atrisque, denique totis glabris et mox diffractis; ascis maturis 10 μ . diam.; sporidiis ovatis, 6–7 \approx 3; hyphis ascigeris multiguttulatis, 1 μ . crass.

Hab. in asseribus putridis quercinis in humo ammoniacali positis, circa Æstrich in Rhenogovia, nec non in Britannia (B. et Br. Ann. Hist. Nat. n. 1729, t. IV, fig. 8). — Asci in peritheciis junioribus tantum inspiciendi.

2. **Cephalotheca trabea** Fuck. Symb. Myc. App. III, p. 17. — Peritheciis superficialibus, plerumque dense gregariis, ovatis, atro-olivaceis, vertice pilis crispulis, ramosis, asperis, concoloribus longe comatis, *Chaetomo comato* similibus; ascis globosis, 8sporis, 20 μ . diam.; sporidiis conglobatis, ovato-ellipticis, continuis, fuscis, 12 \approx 8.

Hab. in lignis putridis fabrefactis, circa Æstrich in Rhenogovia.

3. **Cephalotheca reniformis** Sacc. et Th. Michelia II, p. 312. — Peritheciis gregariis inter fibras corticales nidulantibus v. denique superficialibus, globosis, astomis, sed vertice quandoque papillulatis, denique sæpe collabascendo cupulatis fusco-nigricantibus, $\frac{1}{3}$ - $\frac{1}{4}$ μ . diam., initio ubique pilis filiformibus fuligineis, 2 μ . diam. vestitis, dein calvescentibus, basi que tantum vestitis, contextu crassiusculo, minute parenchymatico, fusco; ascis globosis v. ellipsoideis 10 μ . diam., vel 15 \approx 14-12, cito diffluentibus, octosporis; sporidiis conglobatis, reniformibus, 4-5 \approx 3-3 $\frac{1}{2}$, initio olivaceis, dein dilute fuligineis.

Hab. in laminis librosis Populi putrescentis, Lyon, Majo 1880. — A ceteris speciebus ob sporidia reniformia minuta mox dignoscitur.

4. **Cephalotheca curvata** Fuck. Symb. Myc. App. I. p. 298 et App. II, p. 18, fig. 34. — Peritheciis in ligni putridi cavernis minutis nidulantibus, gregariis, sed totis liberis, minutis, astomis, perfecte globosis, subtilissime punctulatis, nitido-fuscis, undique pilis septatis, concoloribus, rigidis, perithecium quadruplo longioribus, patentibus obsitis; ascis ovalibus, globosisve, 8sporis, 18 μ . diam.; sporidiis conglobatis, simplicibus, subfusiformibus, curvatis, antice acuminatis, obtusiusculis, basi truncatis et subtiliter bi-tuberculatis, tuberculis hyalinis, 1-2-guttulatis, primo fuscis, demum totis opacis, 18 \approx 6.

Hab. in cavernis ligni quercini putridi, Eberbach, Rhenogovia.

ASCOTRICHIA Berk. Ann. N. H. n. 116 (Etym. *askos*, ascus et *thrix* capillus h. e. fungillus setiger, ascophorus). — Perithecia minuta, libera, astoma, hyphis seu appendicibus, pluries furcatis radianti-

bus conidiophoris cincta. Asci lineares, octospori. Sporidia ellipsoidea, continua, fusca.

1. **Ascotricha chartarum** Berk. l. c. Cooke Hand. n. 1936, fig. 319. 157
— Peritheciis tenuibus, olivaceo-fuscis, floccis iterato-furcatis cinctis; ascis cylindræis, copiosis; sporidiis suboctonis ellipsoideis, fuligineis.

Hab. in charta typographica, King's Cliffe (Britannia).

MAGNUSIA Sacc. Michel. I, p. 122. — Perithecia e globoso horizontaliter oblonga, membranaceo-carbonacea, astoma, glabra, basi filamentis paucis apice circinatis cincta. Asci.... diffuentes? Sporidia continua, olivacea.

Obs. Hoc novum genus, præclaro inventori PAULO MAGNUS jure meritoque dicatum, a *Chaetomidio* differt peritheciis nitidissimis, applanato-oblongis, sola ima basi filamentis paucis cinctis; a *Perisporio* forma perithecii filamentisque apice exquisite circinatis, fuligineisque; ab *Apiosporio*, filamentis iisdem, sporidiis fuscis, subiculo dematæio nullo etc.

1. **Magnusia nitida** Sacc. Michel. I, p. 122. — Peritheciis superficialibus, horizontaliter oblongis $\frac{1}{4}$ - $\frac{1}{3}$ long., aterrimis, nitidissimis, astomis contextu minute sed distincte celluloso, fuligineo, basi filamentis 6-8, plerumque geminatis, perithecio paulo longioribus, apice exquisite circinatis, fuligineis cinctis; sporidiis ellipsoideis, minutis, 4-5 \approx $3\frac{1}{2}$, lutescenti-olivaceis, guttulam hyalinam includentibus. 158

Hab. in ligno pineo putri Berolini, socio *Chaetomio calvescente*, 1869 (P. MAGNUS).

Obs. Sporidia quandoque in glomerulos congregata videntur, an ergo primitus in ascis (cito diffluentibus?) inclusa sint, probabile est.

ORBICULA Cooke Handb. of British Fungi p. 926, p. p. (Etym. *orbis*).
— Perithecia subsuperficialia, mycelio fusco insidentia, subglobosa, astoma, submembranacea. Asci octospori, paraphysati. Sporidia globoso-ovoidea, tandem opace fuliginea.

1. **Orbicula tartaricola** (Nyl.) Cooke — Handb. n. 2789. *Sphaeria tartaricola* Nyl. Leighton. On *Sph. tartaricola*, cum tabula. — Mycelio superficiali nigro-fusco, radiante, ramosissimo, articulat; cellulis oblongo-moniliformibus nucleolatis; peritheciis sphaerico-ovoideis (vertice rotundatis) sub-superficialibus, nigris; ascis linea-

ribus, paraphysibus simplicibus obvallatis, apice rotundatis, octosporis; sporidiis monostichis initio sphaericis, subhyalinis, dein ellipsoideis, fuliginis, 12-13 \approx 9-10, uniguttulatis.

Hab. in thallo Lecanoræ tartareæ near Dolgelly North Wales (LEIGHTON).

THIELAVIA Zopf. in Verhand. bot. Ver. Brandenb. 1876, p. 101 (Etym. ab *F. v. Thielau*). — Perithecia e ramo mycelico spiraliter convoluta (carpogonio) oriunda, sphaerica, minuta, astoma; asci copiosi ovati, octospori; sporidia oblonga (cucumeriformia) badio-fusca, continua. — Mycelium conidiophorum fuscum, septatum, ramis in conidia fatiscentibus. In eodem mycelio nascitur *Torula basicola* Berk. statum conidicum alterum hibernantem sistens. Spermogonia minuta sphaerica, vertice setulis coronata, spermatis minutissimis foeta.

1. **Thielavia basicola** Zopf. l. c. Charact. generis.

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Hab. in partibus subterraneis Senecionis elegantis quem maxime vexat in Horto Berolinensi. — Rami mycelici fertiles 170 \approx 10. Spermogonia 80-100 μ . diam. Perithecia ascigera 80-130 μ . diam.

CHÆTOMIDIUM Zopf. (ut subg.) Entwick. d. Chætom. p. 280, t. XVIII, fig. 12-18 et t. XIX, fig. 1-12 (Etym. a *Chætomio*, quod cfr.). — Perithecia globulosa superficialia, astoma setosa, nigræ; asci clavati octospori; sporidia globoso-ovoidea, fusca. — Est *Chætomium* prorsus astomum.

1. **Chætomidium fimeti** (Fuck.) Zopf. l. c. *Chætomium fimeti* Fuck. 161

Enum. F. Nass., p. 64 et Symb. Mycol. p. 90. — Peritheciis globosis v. ovoideis, atris, astomis undique subulato-setulosis basi pilis rhizoideis longissimis repente-divaricatis, concoloribus cinctis, usque medium brevissime denique superne levibus, nitidis; ascis majusculis, clavatis longe stipitatis, 40-48 \approx 14-18 (p. sporif.) sporidiis ellipsoideis, fuscis, 14-16 \approx 12, lenissime compressis.

Hab. in fimo equino in pratis Æstrich, Berlin, in Germania, Brünn in Moravia.

ASTERINA Lév. Ann. Scienc. nat. 1845. III. p. 59 (Etym. *aster*, quia mycelium radiosum). — Perithecia in mycelio maculiformi radiosum atro subsuperficiali (rarius subinnato) insidentia, lenticularia v. globoso-depressa, subastoma, membranacea. Asci potius breves et

crassi, plerumque octospori; sporidia typice bilocularia, fusca, quandoque vero continua et pluriseptata, hyalina v. fusca.

Obs. Genus elementis heterogeneis compositum, et in posterum in plura dividendum, sed mihi non satis notum ut nunc divellere audeam. Nonnullæ species ostiolo instructæ videntur et tunc ad Sphæriaceas, prope *Sphærellas*, v. *Microthyria* transferendæ essent. A *Dimerosporio* differt peritheciis applanatis, mycelio magis adhærente et adpresso.

Euasterina: sporidiis bilocularibus, fuscis.

1. **Asterina platasca** B. et C. Cuban Fungi n. 732. — Mycelio tenui nigro; peritheciis confluentibus; ascis globosis; sporidiis magnis oblongis, uniseptatis apud commissuram contractis, 25 \approx 10, dein brunneis. 162

Hab. in foliis Passifloræ etc. in Cuba.

2. **Asterina reticulata** Kalch. et Cke. Grev. 1880 p. 33. tab. 138. f. 47. 163
Phyllogena, effusa, fuliginea; peritheciis convexo-applanatis, reticulato-fimbriatis, fuscis 150 μ . diam.; mycelio intricato, ramoso, anastomotico-reticulato, fusco, processibus hamatis, bicellularis ornatis; ascis clavatis; sporidiis ellipticis, atro-fuscis, medio fascia hyalina ornatis, 16–18 \approx 7.

Hab. in foliis vivis Oliniæ cymosæ in Africa australi. — Species fabricâ sporidiorum vere peculiaris.

3. **Asterina sphærasca** Thüm. Fungi Austro-Africani n. 119. — Mycelio vel stromate tenui, plus minusve orbiculato, stellato-dendritico, nigro; hyphis inæqualibus, griseo-fuscis, repentibus, longis, ramosis; peritheciis minutis, numerosis, granuloso-punctiformibus; ascis exacte sphaericis, tunica crassissima, lævi, quadrisporis, hyalinis, vel flavescentibus, 35 μ . diam.; sporidiis ellipticis, utrinque rotundatis, bicellularibus, medio constrictis, dilute flavidis demum fuscidulis, pellucidis, 20 \approx 12. — *Asterina megalosporæ* Berk. et Curt. Fungi Cubenses p. 373. proxima. 164

Hab. ad Capparidis Gueinzii folia viva pr. Olifants Hoek in ditone Uitenhage in sylvis, Kaffraria. Africa. Julio 1876 (HOLLÁND).

4. **Asterina pemphidioides** Cooke Some Ind. fung. Grev. V. 16. — In maculas orbiculares, confluentesque disposita; peritheciis hemisphaericis, nitidis, pemphidioides, brunneis; mycelio brunneo, evanido; ascis obovatis; sporidiis ellipticis, uniseptatis, constrictis, brunneis, 40 \approx 15. 165

Hab. in pag. sup. foliorum in India (HOBSON). — Mycelii flocci

brunnei processus ovatos laterales gerentes. Affinis *Ast. pelliculosæ* sed sporidia duplo longiora.

5. **Asterina diplodioides** B. et C. North. Am. Fungi n. 787. — Ma. 166
culis orbicularibus, mycelio interrupto; peritheciis minutis; sporidiis oblongis obtusissimis uniseptatis fuscis, 8 μ . longis.

Hab. in foliis *Andromedæ acuminatæ*, Alabama, Am. bor.

6. **Asterina fimbriata** Kalch. et Cke. Grev. 1830, p. 33, tab. 138, 167
fig. 46. — Epiphylla; peritheciis gregariis, radiato-fibrosis, convexo-applanatis, atro-fuscis, stellato-fissurato-dehiscentibus, margine fimbriato 150 μ . diam.; ascis saccatis, pyriformibus; sporidiis ellipticis, profunde constrictis, uniseptatis, fuscis 15 \approx 8.

Hab. in foliis vivis *Sclerochiti Harveyani* in Africa austr. — Perithecia in maculas minutas brunneas collecta.

7. **Asterina inæqualis** Mont. Pl. Cellul. Cent. VII, p. 340. — Epi. 168
phylla, macularis; peritheciis hemisphærico-depressis, atris; ostiolo mamillari demum deciduo, mycelio atro centro concreto ambitu radiante insidentibus; ascis subglobosis, 100 μ . diam., octosporis; sporidiis majusculis ovoideo-oblongis, 35-40 \approx 20-30, bilocularibus, constrictis, initio hyalinis, dein fulvis.

Hab. in pag. sup. foliorum *Malastomatium* in Guyana gallica, (LEPRIEUR). — Ab *Aster. Malastomatis* Lév. diversa.

8. **Asterina Mac-Owaniana** Kalch. et Cooke. Grev. 1880, p. 33, t. 137, 169
fig. 44. — Atra, effusa; peritheciis gregariis, discoideis, applanatis 100 μ . d., mycelio radiante nidulantibus; ascis pyriformibus; sporidiis ellipticis, uniseptatis, constrictis, hyalinis dein fuscis, 20-22 \approx 10.

Hab. in foliis *Celastris buxifoliæ* in Africa australi. — Huc probabiliter *Meliola Mac-Owaniana* Thüm., a quo genere peritheciis applanatis differt. Sec. Rehm Asc. Diagn. n. 295, asci 60 \approx 45; sporidia 30 \approx 15.

9. **Asterina megalospora** B. et C. Cuban Fungi n. 733. — Mycelio 170
tenuissimo, subinconspicuo, filis repentibus constante; peritheciis punctiformibus, tandem stellatim dehiscentibus, margine flocculosis; ascis globosis; sporidiis bilocularibus 25 \approx 15, brunneis, quaternis.

Hab. in foliis languidis *Passifloræ* etc., Bonin Isles, Cuba.

10. **Asterina capensis** Kalch. et Cooke. Grev. 1880, p. 32, tab. 137, 171
fig. 41. — Sparsa; peritheciis orbicularibus, fuscis 150 μ . diam., mycelio fusco, radiante circumdatis; ascis clavatis; sporidiis ellipticis, uniseptatis, fuscis, 16 \approx 6.

Hab. in foliis vivis *Hippobromi alati* in Africa australi. —

Mycelium processibus brevibus uniseptatis, sæpe invicem oppositis, instructum; setæ paucae inter perithecia inspersæ.

11. **Asterina connata** B. et C. Cuban Fungi n. 739. — Peritheciis 172
minutissimis cellulosis nec radiato-cellulosis, in soros minutos confluentibus, floccis brevibus paucissimis cinctis; sporidiis minutis oblongis uniseptatis, brunneis, 5 \approx 2.

Hab. in foliis Clusiæ, in Cuba.

12. **Asterina congesta** Cooke. Fungi Ind. Grev. VIII, p. 95. — Epi- 173
phylla; peritheciis discoideis, atro-brunneis 100–150 μ . diam. rimoso-dehiscentibus, densissime congestis; mycelio tenui, brunneo, sparso; ascis ovatis; sporidiis ellipticis, brunneis, medio hyalinocinctis, demum uniseptatis 20 \approx 10.

Hab. in foliis Santali albi, Belgaum, India (J. Hobson).

13. **Asterina carbonacea** Cooke. Ind. Fungi in Grev. VIII, p. 96. — 174
Maculæformis; peritheciis applanatis, discoideis, opacis, atris, gregariis 150 μ . diam.; hyphis paucis, radiantibus; sporidiis ellipticis, uniseptatis, medio constrictis, atro-brunneis 40–50 \approx 20.

Hab. in foliis coriaceis Belgaum, India (J. Hobson). — Perithecia solito magis carbonacea.

14. **Asterina cupressina** Cooke, New Jersey Fungi, Grev. VI, p. 17. 175
(*Venturia cupressina*, Rehm. Asc., n. 394). — Mycelio prope obsoleto; peritheciis brunneis, membranaceis, floccis radiantibus coalitis, subinde 3–6 pilis rigidis apice obsitis; ascis clavato-pyriformibus, stipitatis; sporidiis uniseptatis, sursum inflatis, globosis, brunneis, 18 \approx 10.

Hab. in foliis Cupressi thyoidis, New Jersey (Am. bor.). — Pycnidia sæpe associata: peritheciis majoribus; stylosporibus ellipticis brunneis, 20 \approx 10. Sec. Rehm. Asc. Diagn. n. 394, asci 50 \approx 15; sporidia 15 \approx 6, valde constricta.

15. **Asterina solaris** Kalch. et Cooke. Grev. 1880, p. 33, tab. 138, 176
f. 48. — Amphigena, crustacea, atra; peritheciis convexis, centro depressis, atro-fuscis, densissime radiato-strigosis; ascis.....; sporidiis ellipticis, 1–2-septatis, fuscis, 20–25 \approx 8.

Hab. in foliis vivis Oleæ verrucosæ in Africa australi. — Fibrae perithecii quandoque fasciculatim coalitæ, patentim verrucosæ.

Asterella: sporidiis bilocularibus hyalinis (v. colore ignoto).

(In nonnullis speciebus sporidia dein fuscescunt).

16. **Asterina megalospora** Berk. et C. in N. Pac. Expl. p. 129, n. 160. 177

— Subiculo parcissimo fimbriante; peritheciis magnis hiantibus; sporidiis maximis uniseptatis.

Hab. in foliis vivis in insulis Bonin. — Affinis *Ast. Azaræ* Lév. 178

17. **Asterina Puiggarii** Speg. Fungi Arg. Pug. IV. n. 114. — Mycelio orbiculariter expanso 2-5 mill. diam., sæpe confluyente ac totum epiphyllum occupante, arcte adnato, tenuissimo, ex hyphis gracilibus 5-7 μ . crass. rectis, parce ramosis, crebre septatis, densissime intricatis, simplicibus composito; peritheciis centro mycelii insidentibus, 4-15 laxissime gregariis, dimidiato-scutatis, sublenticularibus 180-250 μ . diam., in sicco sæpe centro umbilicatis, atris, glabris v. hyphis mycelicis velatis, contextu dense prosenchymatico-radiante, ambitu fimbriatulo, fuligineo; ascis elliptico-clavatis, substantia mucoso-filamentosa obvallatis, octosporis; sporidiis ovoideis v. clavulatis, constricto-1-septatis 30 μ . long., loculo supero quandoque elongato, quandoque globoso majore 16-18 \approx 14-16, loculo infero subconoideo minore 12-15 \approx 9-12, dense granuloso-fartctis, diu hyalinis, in senectute tandem pallidissime fusciscentibus.

Hab. ad folia viva coriacea plantæ cujusdam, Apiahy, Brasilia meridionali (Doct. J. PUIGGARI).

18. **Asterina fragilissima** Berk. Fl. N. Zel. II. 208. — Maculis parvis orbicularibus, mycelio parco; peritheciis congestis fragilissimis; ascis globosis; sporidiis obovato-oblongis, uniseptatis, 20 μ . long. 179

Hab. in foliis Veronicæ in Nova Zelandia (COLENZO). — Maculæ 2. mill. diam.

19. **Asterina sublibera** Berk. Fl. N. Zel. II. 208. tab. CVI. fig. 1. — Mycelio parcissimo e fibris intertextis; peritheciis in maculas minutas collectis; ascis cylindræo-elongatis; sporidiis quaternis monostichis, uniseptatis, hyalinis, leniter constrictis, 14-15 μ . longis. 180

Hab. in foliis Metrosideri effusæ in Nova Zelandia (COLENZO).

20. **Asterina velutina** Berk. et Curt. in N. Pac. Expl. p. 129, n. 165. — Maculis velutinis orbicularibus, fibris erectis, subulatis obsitis; peritheciis minutissimis frequentibus; ascis oblongis; sporidiis oblongis uniseptatis. 181

Hab. in foliis, in insulis Loo Choo in regione Pacifici bor.

21. **Asterina sepulta** Berk. et Curt. in N. Pac. Expl. p. 129, n. 167. — Subiculo repente epidermide diu tecto; peritheciis minutis; ascis oblongis; sporidiis uniseptatis. 182

Hab. in foliis Laurinææ cujusdam in Japonia.

22. **Asterina cincta** Berk. Decad. n. 477. — Mycelio fibrilloso, ma- 183

culoso, fibrillis sparsis ramosis, repentibus; peritheciis globosis setis acutis cinetis; ascis oblongis, v. lineari-oblongis; sporidiis subellipticis, leniter attenuatis, uniseptatis, 10 μ . long., hyalinis.

Hab. in foliis Cameliæ, Khasia (India). Ad *Meliolam* vergit. 184

23. **Asterina difformis** Welw. et Curr. Fungi Angol. p. 284. — Peritheciis orbicularibus v. irregularibus complanatis, filis fuscis e superficie peritheciolorum oriundis et ad basim radiatim extensis; ascis rotundatis v. obovatis; sporidiis biserialis, obovatis, pallidis, 1-septatis, 15-18 μ . long., ad septum constrictis.

Hab. ad folia viva fruticis Menispermacearum in sylva Mata do Pungo, Angola (Africa).

24. **Asterina cordobensis** Speg. Pug. 2. p. 18. — Peritheciis superficialibus minutissimis, 80-90 μ . diam., orbiculari-lentiformibus, contextu dense parenchymatico, membranaceo, atro, in crustam nigram fere totos ramulos ambientem dense congestis; ascis elliptico-clavatis, v. deorsum clavato-pyriformibus, apice crasse tunica-tis, breve stipitatis, 22-30 \approx 12-15, aparaphysatis, octosporis; sporidiis inordinate distichis, ovato-clavatis, 1-septatis non v. vix constrictis, 8-10 \approx 4, loculo sup. majore, obtusato, hyalinis.

Hab. in ramulis vivis Heterothalami brunioïdis in sylvaticis prope Cordobam, Argent. Amer. austr.

25. **Asterina cuticulosa** Cooke, Rav. Am. Fungi in Grevill. VII. p. 49. 186
— Sparsa, orbicularis, atro-brunnea; peritheciis pelliculosis, ap-planatis; mycelio obsoleto; ascis globosis, 25 μ . diam.; sporidiis ellipticis, uniseptatis, utrinque rotundatis, subconstrictis, hyalinis, 10 \approx 5.

Hab. in foliis Ilicis opacæ, Darien, Carol. (Amer. bor.). — Asci æquidistanti-sparsi, infra cuticulam, quæ ibi bullulosa fit; species ergo abnormis.

26. **Asterina labecula** Mont. Syll. Crypt. n. 911 et Cent. II, n. 61, 187
in Ann., 2, XIV, p. 328, sub *Asteroma*, et Fl. Chil., VII, p. 475.
— Epiphylla, maculæ-formis; maculis atris linearibus quoquo-versus irregulariter radiato-ramosis; peritheciis minutis astomis sparsis; ascis ovoideo-oblongis hexasporis, sporidiis hyalinis cymbiformibus transverse septatis.

Hab. ad folia coriacea, Guyana, (LEPRIEUR); in foliis Desfontainie eujusdam, Valdivia, Chile (GAY).

27. **Asterina Ammophilæ** Dur. et M., Fl. Alg., I, p. 548, Mont. Syll. 188
Crypt. n. 912. — Maculis orbiculatis, atris, fibrillis tenuissimis radiantibus dichotomo-ramosis anastomosantibusque; peritheciis se-

riatis convexis; ascis obovatis $30 \approx 15$ sporidia subsena bilocularia oblongo-fusiformia, $10 \approx 2.5$, hyalina foveitibus.

Hab. in foliis *Ammophilæ arenariæ*, Mostaganem, Algeria (DURIEU).

28. **Asterina Eucalypti** (Pass.) Sacc. *Apiosporium Eucalypti* Pass. 189
in Thuem. Myc. Lusit. n. 543. — Amphigena; acervulis punctiformibus, aggregatis, maculas subdiscoideas, fumosas efficientibus; filis ramoso-intricatis, crebre articulatis, castaneo-fuscis; conidiis ellipticis, bi-triseptatis, apicibus hyalinis, interdum moniliformi-concatenatis?; peritheciis membranaceis, cellulis parvis irregularibus, castaneo-fuscis pellucidis contextis; ascis parvis, ovatis, subcurvis, octosporis, madore mox explodentibus; sporidiis oblongis, medio septatis, apicibus obtusis, loculis uni-bi-nucleatis, hyalinis.

Hab. in *Eucalypti* globuli foliis subputridis, Choupal pr. Coimbra, Lusitania (MOLLER).

29. **Asterina microscopica** Lév. Ann. Scienc. nat. 5. 1846, p. 267. — 190
Maculis sparsis hypophyllis 2-3 mill. latis e fibris tenuissimis ramosis radiantibus contextis, peritheciis minutissimis stipatis hemisphæricis nigris, ostiolis obsoletis, ascis oblongis, 8-sporis; sporidiis oblongis, 1-septatis, hyalinis.

Hab. in Chili ad folia *Chusqueæ*, cl. GAY (Herb. Mus. Par.)

30. **Asterina examinans** B. et C. Fungi Cub. n. 737. — Peritheciis 191
minutissimis in soros nigros præcipue nervicolas congregatis, flocis brevibus bifidis apicibus obtusis cinctis; ascis brevibus clavatis; sporidiis ellipticis, uniseptatis, minoribus.

Hab. in foliis, Cuba. — Mycelium obsoletum.

31. **Asterina bullata** B. et C. Cub. Fungi n. 736. — Stromate orbiculari tenuissimo; peritheciis margine laciniatis, radiato-cellulosis; ascis cylindricis; sporidiis biseriatis, oblongis, subfusiformibus, uniseptatis, $15 \approx 2\frac{1}{2}$.

Hab. in foliis *Peperoniæ*, maculis fuscis morbosi parenchymatis insidens, Cuba.

32. **Asterina aspersa** Berk. Decad. n. 476. — Subiculo tenuissimo, 193
margine subradiante; peritheciis punctiformibus, poro apertis; ascis oblongis; sporidiis oblongis, uniseptatis.

Hab. in pag. inf. foliorum *Lauri*, Khasia (India). — Affinis *Asterinæ nubeculæ*.

33. **Asterina nubecula** B. et C. Fungi of Ceylon n. 1142. — Peri- 194
theeciis minimis depressis marginatis, in macula nebulosa sitis, fis-

sura tripartita ruptis; ascis brevibus clavatis; sporidiis fusiformibus, uniseptatis, 12-13 μ long.

Hab. in foliis *Antidesmatis*, Ceylon.

34. **Asterina melioloides** B. et C. Not. of. N. Am. Fungi n. 788. — 195
Orbicularis, parva; peritheciis depressis rugulosis; ascis breve clavatis; sporidiis brevibus, cymbæformibus, uniseptatis.

Hab. in foliis *Baccharidis halimifoliae*, Carol. inf.

35. **Asterina conglobata** B. et C. North Amer. Fungi n. 786 (Grevillea). — 196
Peritheciis globosis, conglomeratis; ascis obovatis; sporidiis breviter subfusiformibus, uniseptatis.

Hab. in *Arbuto uva ursi*, Amer. bor. — Perithecia mycelio tenui-fibrilloso insidentia.

36. **Asterina decolorans** B. et C. North Amer. Fungi n. 785. — 197
Maculis orbicularibus undulatis bullatis rufis; peritheciis punctiformibus; mycelio parco, filis parcis moniliformibus v. inarticulatis; ascis oblongis brevibus; sporidiis uniseptatis, 10 μ longis.

Hab. in folio ignoto, New Jersey. Amer. bor.

37. **Asterina reptans** B. et C. Cuban Fungi n. 734. — 198
Mycelio tenui subreticulato, peritheciis minutis e cellulis radiantibus constructis obsito; ascis clavatis; sporidiis oblongis subfusiformibus uniseptatis.

Hab. in foliis *Piperis*, Cuba. — Habitus cujusdam *Collema-tis* epiphylli. Specimina juvenilia.

38. **Asterina orbicularis** B. et C. Cuban Fungi n. 784. — 199
In maculas orbiculares disposita; mycelio continuo v. subinterrupto, (var. *interrupta* Thuem.) ascis obovatis; sporidiis oblongis obtusissimis curvatis, uniseptatis.

Hab. in foliis *Ilicis opacæ*, *Prini coriaceæ*, Carolina inf. et sup., Florida, Amer. bor. — Sec. Thuem. M. U. n. 849 huc spectat *Sphæria Collinsii* Schw. quæ ad genus *Dimerosporium* referenda esset.

39. **Asterina pelliculosa** Berk. Ant. Voy. Crypt. p. 137. — 200
Pelliculoso, maculiformi, atro; peritheciis globoso-depressis, nigris; ascis obovatis; sporidiis oblongo-ellipsoideis, 16-20 μ long., 1-septatis.

Hab. in foliis *Pavettæ*, *Jasmini*, *Acrotrematis*, *Rotibælliæ*, *Guazumæ*, *Prini* etc. Ceylon, Cuba, Amer. boreali, Tahiti etc.

40. **Asterina picea** B. et C. Cuban Fungi n. 735. — 201
Peritheciis seminiformibus nigris in mycelio parco orbiculari sitis; ascis cla-

vatis; sporidiis biserialibus oblongis, angustis, uniseptatis, 10-12 \approx 3-4.

Hab. in pagina superiore foliorum, Cuba.

Asteronia: sporidiis continuis, atrofuscis.

41. **Asterina erysiphoides** Kalch. et Cke. Grev. 1880, p. 32, t. 137, 202 f. 42. — Minima, gregaria; Erysiphis speciem simulans; peritheciis applanatis, discoideis 60-100 μ . diam. atrofuscis, membranaceis, radiato-cellulosis; mycelio tenui, ramoso, fusco, circumdatis; ascis... sporidiis ellipticis, continuis, atrofuscis, 18-20 \approx 10.

Hab. in foliis *Jasmini tortuosi* in Africa merid.

42. **Asterina appendiculosa** (M. et B.) Mont. Syll. Crypt. n. 914. M. 203 et Berk., in Lond. Jour. of Bot., III., Dec. of Fung., n. 20, t. 15 A, sub *Dothidea*. — Stromate suborbiculari, plano, epiphylo, fusco opaco, ambitu fibrillis articulatis radiosio; peritheciis hemisphæricis prominulis; ascis oblongis brevibus; sporidiis oblongo-ellipticis basi appendiculatis fuscis, sursum (curiosum) circumscissis.

Hab. in foliis vivis, Java (ZOLLINGER).

Asterula: sporidiis continuis, hyalinis

(In nonnullis speciebus mycelium parenchymate innatum).

43. **Asterina Epilobii** Desm. 24 Not. 1857 p. 13. — Maculis minutis, 204 1-3 mill. diam. subrotundis, fuscis, sub epidermide fibrillosis; peritheciis minutissimis, subcentralibus, globosis, collabascendo concavis; ascis brevibus, medio inflatis; sporidiis ovoideis, 10 μ . long. hyalinis.

Hab. in foliis siccis *Epilobii hirsuti*, hieme, in Gallia. — *Sph. Asteroma* Lib., Lamb. Fl. myc. Belg. II. 242 huc spectare videtur.

44. **Asterina Æsculi** Desm. 24 Not. 1856, p. 13. — Maculis minutis, 205 sparsis, brunneis vel griseis, irregulariter rotundatis, fibrillosis; fibrillis numerosis, epidermide tectis, tenuissimis, di-trichotomis, a centro radiantibus; peritheciis laxè gregariis 75 μ . diam. exilissimis, nigris; ascis brevibus, medio inflatis 30-40 μ . diam. e duplici membrana distinctis; sporidiis hyalinis.

Hab. in foliis exsiccatis *Æsculi Hippocastani*, vere, in Gallia.

45. **Asterina Silenes** (Niessl) Sacc. *Asteroma Silenes* Niessl. Notiz. 206 Kr. Pyr. p. 7. — Peritheciis plerumque epiphyllis in fibrillis repentibus, elegantissime dendritice ramosis, seriatis, maculas atro-fu-

scas rotundatas 10 mill. et ultra diam. formantibus, minutissimis 80–90 μ . diam., globoso-conoideis, ostiolo nullo, nitidis, atris; ascis rosulato-fasciculatis, obovatis, sessilibus, 15–18 \approx 10–11, aparaphysatis, sporidiis 8 stipatis in asci lumine sæpe subsphæroideo, cuneatis, utrinque obtusis, rectis, 2–4 guttulatis, hyalinis, 9–11 \approx 3–4.

Hab. in foliis radicalibus *Silenes nutantis* prope Brünn (Moravia) Majo.

46. **Asterina melæna** (Fr.) Sacc. *Asteroma melcenum* (Fr.) Niessl No- 207
tiz. Kr. Pyr. p. 7. *Sph. melæna* Fries S. M. 431. *Sphærella melæna*
Auersw. Myc. eur. Hft. 6. p. 16. F. 65. — Peritheciis in fibrillis
atris densissime stipatis concretescentibus vix dendriticis stratum
crustosum pseudostromaticum formantibus, valde aggregatis, con-
fertis, minutissimis vix 80 μ . diam. e basi globosa vertice subco-
noideo, ostiolo non visibili, atris; ascis rosulato-fasciculatis, obova-
tis, vel subsphæroideis, sessilibus, 12–15 \approx 9–10 vel 10–12 μ . diam.,
aparaphysatis; sporidiis coacervatis faretis, cuneatis, rectis, utrin-
que rotundatis, minutissimis, 7–8 \approx 3, hyalinis, 2– rarius 4–gut-
tulatis; paraphyses desunt.

Hab. in caulibus emortuis *Astragali glycyphylli*, *Co-*
ronillæ variæ et *Dauci Carotæ*, Brünn (Moravia).

47. **Asterina solanicola** B. et C. *Cuban Fungi* n. 738. — Mycelio 208
floccis repentibus; peritheciis globosis marginem versus e cellulis
angustis flexuosis compactis; ascis lanceolatis; sporidiis biseriatis
oblongis, subfusiformibus, hyalinis.

Hab. in foliis *Solani*, Cuba, Febr.

48. **Asterina clavuligera** Cooke, *Rav. Fung. Amer.* n. 76, et in *Grev.* 209
VI. p. 142. — Mycelio atrobrunneo, conidiis ellipticis, brunneis, albo-
fasciatis, septatis, medio-constrictis, pedicellis elongatis, hyalinis; pe-
ritheciis scutellatis; ascis subglobosis, ad basim apiculatis; sporidiis
ellipticis (vix maturis).

Hab. in foliis *Vaccinii*, Gainesville, Florida, Amer. bor. —
Conidia 45 \approx 12 (sine stip.).

49. **Asterina nigerrima** Ellis *Bull. Torr. Cl.* 1881, p. 91. — Perithe- 210
ciis applanatis, minutis 75–100 μ . diam., radiato-contextis; ascis
oblongo-clavatis, sessilibus, 30–34 \approx 10; sporidiis sparsis, oblongo-
clavatis, leniter curvatis, subhyalinis, 12 \approx 3–4, 4-nucleatis; pa-
raphysibus nullis.

Hab. in caule *Erigerontis*, humi dejecto, New Jersey,
Amer. bor.

50. **Asterina congregata** Berk. et C. in *N. Pac. expl.* p. 129, n. 169. 211

— Peritheciis minimis nitidis congregatis; subiculo parcissimo; ore rotundo; ascis helvolis; sporidiis angustis.

Hab. in foliis emortuis, in Nicaragua. — Habitus *Sphaerellæ maculiformis*.

Asteridium: sporidiis 2-pluriseptatis.

51. **Asterina Pleurostylia** B. et Br. Fungi of Ceyl. n. 1143. — Peritheciis in maculis suborbicularibus membranaceis nigris sitis; sporidiis doliiformibus 4-septatis, articulis constrictis, 50–56 \approx 25. 212

Hab. in Pleurostyliæ, Peradeniya, Ceylon. — Mycelii flocci septati, compacti.

52. **Asterina Eugeniæ** Mont. Syll. Crypt. n. 913. Cent. I., n. 36, in Ann., 2, I., p. 359, sub *Dothidea*. — Amphigena, maculæformis, centro opaca atra, fibrillis ramoso-pinnatis, ramis patentibus, ambitu radiata; peritheciis confertis minimis ($\frac{1}{10}$ millim.) umbilicatis, ostiolo instructis; ascis ovoideis sporidiisque oblongo-subclavatis triseptatis hyalinis. 213

Hab. in foliis vivis Eugeniæ cujusdam, Porto-Ricco (BERTERO). 214

53. **Asterina anomala** Cooke et Harkn. Grevill. 1881, p. 87. — Effusa atra, velutina; peritheciis hemisphæricis v. globoso-depressis; mycelio intricato fusco nidulantibus, hinc inde setis rigidis erectis inspersis; ascis clavatis; sporidiis biseriatis, lanceolatis, 1–5-septatis, hyalinis, 20–22 \approx 4.

Hab. in foliis vivis Lauri, California. — Setæ interdum e perithecio oriundæ; eoque duplo longiores; perithecia 80 μ . diam.

54. **Asterina torulosa** Berk. Fl. N. Zel. II. 208. — Mycelio parcissimo in maculas laxè digestis; ascis elongatis, sporidiis cylindraceis torulosis, 3–5-septatis, viridi-hyalinis, 13–16 μ . long. 215

Hab. in foliis Piperis excelsi in Nova Zelandia (COLENZO).

Species dubiæ.

55. **Asterina comata** B. et Rav. North Am. Fungi n. 791. — Sparsa, major; mycelio obsoleto; floccis brunneis dense vestita. 216

Hab. in foliis Magnoliæ glaucæ et M. grandifloræ, Alabama, Santee Canal, Florida. — Specimina immatura, sed prædistincta visa.

56. **Asterina Wrightii** B. et C. North Amer. Fungi n. 790. — Mycelio tenuissimo; peritheciis granuliformibus, fuscis, floccis cirrhatibus circumdatis; ascis clavatis brevibus. 217

Hab. in quadam Cucurbitacea levi, Texas, Amer. bor.

57. **Asterina confluens** Kalck. et Cooke, Grev. 1880, p. 33, tab. 137, 218

fig. 45. — Epiphylla, crustacea, membranacea; peritheciis applanatis, discoideis, 100 μ . d., confluentibus, radiato-cellulosis, hinc illinc maculis crustaceis efformantibus.

Hab. in foliis emortuis *Plectroniæ ciliatæ* in Africa austr. — Specimina immatura, ergo dubia.

58. **Asterina scutellifera** Berk. Decad. n. 468. — Mycelio tenuissimo pelliculoso reticulato; peritheciis scutelliformibus, immixtis aliis punctiformibus; ascis.... sporidiis (in peritheciis punctiformibus) oblongis, curvulis, hyalinis 2-3 μ . long. 219

Hab. in foliis vivis *Antidesmatis*, Chittagong, India.

59. **Asterina granulosa** (Klotzs.), Hooker et Arn., in Beechey's, Voy. II, p. 54. — Mont., Fl. Chil., VII, p. 451 (ubi descriptio invenitur et fructus qui nondum innotuerat), sub *Dothidea*, Mont. Syll. crypt. p. 256. 220

Hab. in foliis *Baccharidis* cujusdam aut *Myrti*, Valparaiso, Chile (BERTERO). — «Libros citatos non vidi».

60. **Asterina asperata** (Schw.) B. et Curt. Exot. Fungi Schw. p. 291. — Maculis orbicularibus tenuissimis; peritheciis minutissimis, punctiformibus asperatis, ascis et sporidiis ignotis. 221

Hab. in foliis vivis Surinam. — Maculæ 2-3 lin. latæ.

61. **Asterina micropeltis** B. et Br. Fungi of Ceylon n. 1141. — Peritheciis punctiformibus solitariis, mycelio brevi ramoso cinctis. 222

Hab. in foliis *Jambosæ hemisphæricæ*, Ceylon.

62. **Asterina ditricha** Kalch. et Cooke. Grev. 1880, p. 32, tab. 137, f. 43. — Hypophylla, effusa, fuliginea; mycelio radiante, ramoso, atro-fusco, processibus papillatis, gangliformibus ornatis; hyphis tenuioribus, ramosis, conidiiferis immixtis; conidiis fusiformibus triseptatis, fuscis, 15-16 \approx 4; peritheciis discoideis, (imperfecte evolutis). 223

Hab. in foliis vivis *Celastris* cujusdam. — Dubia ob immaturitatem perithecorum.

63. **Asterina spurca** B. et C. Fungi North Amer. n. 789. — Peritheciis sparsis punctiformibus, floccis brevibus duobus vel pluribus junctis, articulatis, radiantibus ornatis. 224

Hab. in foliis caulibusque *Hyptidis* radiatæ, Carol. inf., Alabama. — Flocci apice quandoque furcati.

64. **Asterina punctiformis** Lév. Ann. scienc. nat. 5, 1846, p. 267. — Mycelio e fibris adnatis ramosis discretis radiantibus contexto; peritheciis nigris minutis sparsis, ostiolis obsoletis. 225

Hab. in Java ad paginam superiorem *Conceveibi javensis*. ZOLLINGER n. 185 (herb. Mus. Par.).

65. **Asterina pulla** Lév. Ann. scienc. nat. 3, 1845, p. 60. — Epiphylla, receptaculis centro confluentibus, subglobosis, apiculatis, fibrillis cohærentibus, ambitu distinctis ramosis radiantibus. 226
Hab. in Bolivia, ad folia *Melastomatum*. PENTLAND.
66. **Asterina Azaræ** Lév. Ann. Scienc. nat. 3. p. 59. — Epi-hypophylla; peritheciis gregariis, nigris, lævibus, conicis demum depressis, fibrillis distinctis ramosis radiantibus vix maculantibus. 227
Hab. in Chili, in foliis *Azaræ serratæ* (herb. Mus. Par.). — Maculæ 1-2 mill. latæ.
67. **Asterina Melastomatis** Lév. Ann. scienc. nat. 3. 1845, p. 59, *Dothidea Melastomatis* Kunze? — Epiphylla, peritheciis gregariis nigris apiculatis, fibrillis parcis ramosis radiantibus vix maculantibus. 228
Hab. in Brasilia, in foliis *Melastomatum* (herb. GUILLEMIN).
68. **Asterina compacta** Lév. Ann. scienc. nat. 3. 1845, p. 60. — Epiphylla, peritheciis subglobosis, centro confluentibus, depressis maculis orbiculatis insidentibus, fibrillis vix distinctis. 229
Hab. in Chili austr., in foliis *Drymidis chilensis*. — Maculæ 1-3 mill. latæ.
69. **Asterina bullata** Berk. et C. in N. Pac. Expl. p. 129, n. 170. — Maculis orbicularibus e matrice elevata enatis, filis in stratum compactum tenue hic illic celluloseum intertextis; peritheciis prominulis. 230
Hab. in foliis emortuis in Nicaragua. — Habitus *Strigulæ*.
70. **Asterina ostiolata** Berk. et C. in N. Pac. Expl. p. 129, n. 166. — Punctiformis, nigra; subiculo nullo nisi peritheciali; ostiolo distincto papillæformi. 231
Hab. in pag. sup. foliorum, socio *Cephaleuro virescente*, Nicaragua.

DIMEROSPORIUM Fuck. Symb. Myc. p. 89 (Etym. *dis*, bis; *meros* pars et *spora*, quia sporidiis bilocularibus pollet). — Perithecia superficialia, globulosa, astoma, membranaceo-carbonacea, mycelio copioso subcrustaceo nigro, conidiophoro insidentia. Asci breves, octospori. Sporidia didyma, hyalina v. fusca. — Confer *Asterina* species (subgenera *Euasterina* et *Asterella*).

1. **Dimerosporium abjectum** (Lib.) Fuck. Symb. Myc. p. 89. *Dothidea Veronicæ* Lib. (1830-1837), *Sphæria abjecta* Wall. (1833). *Capnodium sphaericum* Cooke. *Meliola abjecta* Schröt. — Peritheciis gregariis, superficialibus, minutis globoso-conicis, atris, basi hyphis repentibus ramosis, fuscis, conidiophoris cinctis; conidiis

oblongis didymis constrictis $16 \approx 8$, fuscis; ascis ovatis sessilibus, 8-sporis, $30-36 \approx 20$; sporidiis clavato-oblongis, bilocularibus, loculo sup. majori, $12 \approx 6$, hyalinis dein fuscidulis.

Hab. in utraque pagina foliorum *Veronicæ officinalis* in Germania, Helvetia, Anglia, Belgio.

2. **Dimerosporium pulchrum** Sacc. in Thüm. Mycoth. Univ. n. 52 (sub 233 *Apiosporio*) et Fungi Ven. novi ser. II, p. 299, F. it. tab. 127. — Hyphis repentibus dense intricato-ramosis, remote septatis, fuliginosis, pelliculas aterrimas amphigenas facile secedentes saepe totum folium occupantes efformantibus; conidiis in vel sub ramulorum apice quandoque obtusato vel subclavato oriundis, dimorphis, aliis sarcinuliformibus 4-12-cellularibus, $20-25 \mu$. diam., atris; dein prorsus opacis, aliis cylindraceo-fusoideis, leniter falcatis, $39 \approx 9$, 3-septatis, ad septa non constrictis, hyalinis; peritheciis raris ex hyphis oriundis, subglobosis, fuliginosis, $90-100 \mu$. diam.; ascis ellipsoideis, $46 \approx 30$, 8-sporis; sporidiis polystichis oblongo-ovoideis, $22 \approx 11$, constricto-1-septatis, hyalino-nebulosis.

Hab. in foliis *Ligustri vulgaris* languentibus copiose et *Corni sanguineæ*, *Carpini Betuli* et *Loniceræ Xylostei* longe rarius in sylva *Montello*, *Treviso* (Italia). — Status conid. sistit *Sarcinellam heterosporam* Sacc. (*Coniothecium Quetieri* Desm.?).

3. **Dimerosporium oreophilum** Speg. in Roum. Rev. Mycol. II. 32. 234 Mich. II. 160. — Peritheciis gregariis v. hinc inde sparsis, superficialibus, minutissimis, $110-120 \mu$. diam., globosis, undique hyphis exiguis fuliginosis, peritheci diametrum vix æquantibus, ostiolo vix perspicuo, atris; contextu tenui membranaceo-parenchymatico, atro-fuligineo; ascis cylindraceo-clavatis, antice obtuse rotundatis, postice in stipitem brevissimum et nodosum desinentibus, $60-65 \approx 20$, paraphysibus filiformibus paulo longioribus obvallatis, octosporis; sporidiis ovoideis, medio constricto-1-septatis, $15-16 \approx 7-8$, loculo superiore majore, hyalinis.

Hab. ad ramulos vivos *Rhododendri ferruginei* in alpibus *M. Marmolade* alt. 2800^m, *Cadore* (Italia), Oct. 1879. SPEGAZZINI.

4. **Dimerosporium maculosum** (Speg.) Sacc. Mich. II. 159. *Apiosporium maculosum* Dec. Mycol. n. 85. — Peritheciis in pulvinulis conidiophoris (*Cladotrichum maculosum* Speg.) sparsis, parvulis, $60-70 \mu$. diam., globosis, astomis, hyphulis fuliginosis exiguis, crassitie sat variis instructis, contextu membranaceo-parenchymatico, fuligineo; ascis cylindraceo-clavatis, $30-35 \approx 8$, octosporis; sporidiis 235

distichis cylindraceo-fusoideis, utrinque obtusiusculis, 8-10 \approx 2 $\frac{1}{2}$ -3 $\frac{1}{2}$, 2-4-guttulatis, dein 1-septatis, leniter constrictis hyalinis.

Hab. Ad folia viva v. exsiccata Rhododendri Chamæcisti in vertice *M. Crosera* (Ital. bor.) Aug. 1879, (SPEGAZZINI). Descriptio cl. Spegazzini l. c. exemplaria immatura spectare videtur.

5. **Dimerosporium mangiferum** (Cooke) Sacc. *Capnodium mangiferum* 236
Cooke Rep. diseas. plant. p. 5, fig. 3. — Mycelio effuso crustaceo nigro, velutino e filis ramosis catenulisque conidiorum sphaericorum fuliginosis constante; peritheciis globoso-pyriformibus $\frac{1}{10}$ mill. alt. vertice rotundatis, astomis; ascis obovoideis, apice rotundatis, subsessilibus; sporidiis subtristichis oblongis, utrinque rotundatis, uniseptatis, leniter constrictis, hyalinis, 12-14 μ . long.

Hab. in utraque pagina Mangiferæ indicæ (*Mango*) in India orient.

6. **Dimerosporium molle** (B. et Br.) Sacc. *Meliola mollis*, B. et Br. 237
Fungi of Ceyl. n. 1178. — Filis mollibus rhachodioideis; ascis linearibus; sporidiis ellipticis, uniseptatis, 20 \approx 10.

Hab. in foliis Syzygii Jambolanæ, Damboul, Ceylon. — Maculæ orbiculares, molles, nigræ; conidia minuta 4-5 μ . long., floccorum apicibus inserta.

7. **Dimerosporium Baccharidis** (B. et Rav.) Sacc. *Meliola Baccharidis*. B. et Rav. Berk. North Am. Fungi n. 988, in Grevillea. — Peritheciis globosis lævibus; floccis flexuosis quandoque furcatis; sporidiis oblongis, angustis, uniseptatis.

Hab. in foliis Baccharidis in Carolina inf. (RAVENEL).

8. **Dimerosporium Fumago** (Niessl) Sacc. *Meliola Fumago* Niessl. 239
Hedw. 1881, p. 99. — Mycelium epiphyllum fuliginosum v. fuscum, effusum, adnatum; peritheciis e mycelio erumpentibus, gregariis, rugulosis atris; ascis amplis obovatis, stipite brevissimo 75-80 \approx 56-65; sporidiis octonis, inordinatis, oblongis, utrinque obtuse rotundatis, medio septatis, valde constrictis, atrofuscis, 30-36 \approx 12-15, paraphysibus crassis ascos æquantibus.

Hab. in foliis Celastri, Calcutta, Ind. or. (KURZ).

9. **Dimerosporium Mac-Owanianum** (Thuem.) Sacc. *Meliola Mac-Owaniana* Thm. Myc. univ. n. 568. — Cæspitulis epiphyllis, numerosis, sæpe confluentibus, aërrimis, ex centro radiatis; peritheciis carbonaceis, magnis; ascis fere pyriformibus, octosporis, hyalinis, episporio tenui, 75 \approx 50; sporidiis clavatis, medio eximie constrictis, bilocularibus, parte superiore 10,5 μ . crass., parte inferiore 13 μ . crass., sporidiis totis 25 μ . long., utrinque acutiusculis, hya-

linis; setulis erectis, continuis, subramosis, gangligeris, apicibus clavatis, fuscis.

Hab. in Promont. bonæ spei: Somerset-East in dumetis montis «Boschberg» ad folia viva *Celastris buxifolii* Lin. Æst. 1876 (P. MAC-OWAN.).

10. **Dimerosporium Ellisii** Sacc. *Meliola maculosa* Ellis Bull. Torr. 241 Bot. Cl. 1881, p. 91. *Venturia maculosa* Ellis. N. A. F. n. 200. — Maculis hypophyllis, 10 μ . circ. diam., nigris; peritheciis subglobosis, pertusis (?), subiculo brunneo insertis, appendicibus paucis, rectis, nigris perithecium subæquantibus; ascis sessilibus oblongo-cylindræis, 50 \approx 10; sporidiis inordinate monostichis, ellipsoideis 10-12 \approx 5, constricto-1-septatis, subhyalinis.

Hab. in foliis dejectis *Andromedæ*?, New Jersey, Am. bor.

11. **Dimerosporium Psilostomatis** (Thuem.) Sacc. *Meliola Psilostomatis* Thuem. M. U. n. 775. — Maculas radiantes magnas effusas tenuissimas atras plus minusve orbiculatas in foliorum pag. inf. raro in super. formans; peritheciis subcarbonaceis parvis, subglobosis; floccis repentibus ramosis, interdum obscure septatis, fuscis, tenuibus; ascis late clavatis, vertice epidermide incrassato, basi angustato, sæpe subcurvatis, 45 \approx 24-26, octosporis; sporidiis trifariis, anguste ellipticis, septatis, medio constrictis, loculis æqualibus utrinque rotundatis, sæpe uni-binucleatis, 16-20 \approx 6-9, fuscis, paraphysibus nullis.

Hab. in Promot. Bonæ spei, Somerset-East in foliis vivis *Psilostomatis ciliati* ad pedem montis Boschberg in sylvis Dec. 1876 (Prof. MAC-OWAN.).

12. **Dimerosporium oligotrichum** (Mont.) Sacc. *Meliola oligotricha* 243 Mont. Syll. Crypt. n. 909. — Epiphylla; peritheciis sparsis subsolitariis minutissimis, sphaerico-depressis, setulis erectis subulatis cinetis, stromate fibroso radiante ramoso fultis; ascis oblongo-ovoides basi unguiculo specie pedicellatis, octosporis, hyalinis; sporidiis ovoideis, transversim uniseptatis, tandem fuliginosis.

Hab. in foliis *Olyrae* apud Cayennam (LEPRIEUR). — Habitus *Vermicularia* eujusdam. A *Meliola amphitricha* sporidiis ovoideis, non cylindricis, triplo minoribus, etc., maxime recedit. Uno verbo est *Meliola* cum fructificatione *Asterinæ*.

Dimerosporium Collinsii (Schw.) Thuem. M. U. n. 849. Vide *Asterinam orbicularem*.

ZOPFIA Rabh. Fungi Eur. n. 1734 (Etym. a W. Zopf, mycologo in-

ventori). — Perithecia innata carbonacea, rotundato-depressa, parce fibrillosa, astoma demum vertice rumpentia. Asci magni scrotiformes, breve stipitati, 4–8-spori, mox deliquescentes. Sporidia grandia, oblonga, bilocularia, constricta, utrinque apiculata, atrofusca.

1. **Zopfia rhizophila** Rabh. l. c. Characteres generis.

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Hab. in radicibus Asparagi off. in Germania. — Fungulus quasi hypogæus; perithecia globoso-depressa; sporidia 65–70 \approx 32–35.

PERISPORIUM Fr. S. M. III. 248 (Etym. *perispeiro*, dissemino) — *Preussia* Fuck. Symb. myc. p. 91 [species genuinæ ascigeræ]. — Perithecia ascigera gregaria, superficialia, carbonacea, astoma, dein irregulariter rupta, globosa depressave, basi hyphopodio delicatulo, floccoso, hyalino suffulta; asci clavati, longe stipitati, 8spori: paraphyses nullæ; sporidia oblongo-cylindracea, 4cellularia, cellulis utrinque ultimis conicis, interioribus subquadratis ovatisve, opacofusca mox fatiscientia. — St. conidiophorus in nonnullis *Torulam* referens. — Genus paucis speciebus vere genuinis, ceteris mihi incertissimis compositum.

Species genuinæ.

1. **Perisporium vulgare** Corda Icon. II. fig. 97. Sacc. F. it. tab. 599. 245

Gregarium, globosum, nigrum, nitens, superficiale, astomum; ascis crasse clavatis, breviter noduloso-stipitatis, 35–40 \approx 17–19, 8sporis; sporidiis cylindraceis, 4-cellularibus, fuligineis, 28 \approx 5, articulis mediis oblongo-cuboideis, extimis subconoideis, 6–7 \approx 5.

Hab. in lignis, charta, stercore ovino, chorda etc. putridis in Britannia, Germania, Gallia, Italia, Austria etc. «Distinguitur: in ramis corticatis: ascis brevissime stipitatis 35–40 \approx 17–19, stipite 7–8 long.; sporidiis 28 \approx 5. — in charta putri: ascis mediocriter stipitatis 80–100 \approx 18, stipite 20–30 long.; sporidiis 26 \approx 7–8. — in stercore ovino nunc: ascis brevi-stipitatis 45 \approx 15–17, stipite 10 long.; sporidiis 25 \approx 5 $\frac{1}{2}$ –6. Nunc: ascis 170–190 \approx 20, stipite 70–100 long.; sporidiis 35 \approx 6 $\frac{1}{2}$ –7 «[Micbelia]».

2. **Perisporium Typharum** Sacc. Myc. Ven. Spec. pag. 92, t. XV, 246

fig. 41–47 F. it. t. 598. — Peritheciis sparsis, subsphæricis, subsuperficialibus, lævibus, atronitentibus, astomis, $\frac{1}{3}$ mill. diam., basi flocculis hyalinis paucis præditis, contextu distincte parenchymatico, fuligineo; ascis oblongo-clavatis longe tenuiterque stipitatis, tunica crassa, 110 μ . longis, parte sporifera 60 \approx 22, sti-

pite 50, 8sporis: sporidiis ante maturitatem 4-cellularibus oblongo-cylindraceis, articulis cito secedentibus e sphaerico angulosis, 6 μ . diam. brunneis, subopacis.

Hab. ad folia dejecta putrescentia Typharum, quæ jam ad storeas conficiendas usa sunt, nec non in lignis putridis in Agro Veneto et in Gallia. — Affine Perisporio vulgari Corda et P. funiculato Preuss, a quibus differt præcipue ascis angustius clavatis et longius tenuiterque stipitatis et præterea loco natali diverso. Forma in lignis decorticatis distinguitur ascis longe stipitatis 140 \approx 15-18, stipite 70 long.; sporidiis 25-30 \approx 6 $\frac{1}{2}$ -7.

3. **Perisporium funiculatum** Pr. in Linnæa 24 n. 145. *Pr. funiculata* 247
(Pr.) Fuck. Symb. myc. p. 91. — *Fleischhækia lewis* Auersw. — Peritheciis gregariis vel sparsis, superficialibus, sphaeroideis vel hemisphaericis, lævibus, nitidulis, dein irregulariter ruptis filamentis hyalinis, evanescentibus suffultis, atris, $\frac{1}{2}$ mill. diam.; ascis creberrimis, oblongatis vel obovoideis, 55-64 \approx 18-20, pedicello gracili, curvato vel flexo, 30-80 μ . long.; sporidiis elongatis, tetrameris, fuscis, 33-40 \approx 6-8, mox fatiscensibus, segmentis mediis subquadratis, 8-11 \approx 6-8, terminalibus subconoideis, 10-12 \approx 6.

Hab. in merda humana et caulibus putridis, lignisque in Germania et Fennia. — St. conid., sec. Fuck., *Torulam niveam* sistens: conidiis globoso-ovatis 3-4 μ . diam. v. 4 \approx 3, hyalinis.

4. **Perisporium punctatum** (Auersw.) Sacc. *Fleischhækia punctata* 248
Auersw. Hedw. 1869, p. 2. — Peritheciis dense gregariis, imo caespitosis, depresso-globulosis, undique impresso-punctatis, atris, opacis $\frac{1}{2}$ -1 $\frac{1}{4}$ mill. diam., (denique operculatim circumscissis) paraphysibus numerosis filiformibus; ascis ovoideis abrupte longissime stipitatis, 200-300 μ . long., p. sp. 68 \approx 27; sporidiis senis(?), tetrameris, fuliginoso-atris, 27-31 μ . long., sporidiorum segmentis subæqualibus rotundatis.

Hab. in Thuringia: Arnstadt, ad lignum quercinum mucidum (Doct. FLEISCHHÆK). — A *Perisp. funiculato* et *vulgari* differt peritheciis punctatis, ascis 4-6-sporis etc.

5. **Perisporium Kunzei** (Fuck.) Sacc. *Preussia Kunzei* Fuck. Symb. App. 249
II, 18. — Peritheciis gregariis sparsisve, demum totis liberis, globosis seu parum depressis, 1-2 μ . latis, atro-fuscis, lævibus, siccis rugulosis, durissimis, intus corneis, ostiolo minuto, perforato; ascis clavatis, longe anguste subabrupte stipitatis, 8sporis, 56 μ . long. (pars sporifer.), 16 μ . crass.; sporidiis faretis, oblongo-cylindraceis, quandoque curvatis, 4cellularibus, ad septa constrictis, cellulis utrimque

ultimis conicis, interioribus binis subquadratis, opaco-fuscis, facile fatiscens, totis 24 μ . long., 7 μ . crass.

Hab. in chorda putrescente cannabina, Eisleben, Germania (KUNZE). — A *P. funiculato* peritheciis corneis, ascis sporidiisque minoribus differt.

6. **Perisporium Princeps** Berk. Outl. p. 403. — Peritheciis aggregatis, subhemisphæricis, nigerrimis, majusculis; sporidiis brunneis, intra ascos valde stipatis. 250

Hab. in radio rotæ ligneæ intemperii diu exposito, King's Cliffe, Anglia.

7. **Perisporium Wrightii** B. et C. Cuban Fungi n. 987. — Congestum, 251 granulatum, nigerrimum; ascis brevibus, obovatis; sporidiis (articulis) subglobosis, nucleo lilacino.

Hab. in Opuntiae macrorrhizæ caule, Texas (WRIGHT).

8. **Perisporium Secalis** (Ch. Rich.) Sacc. *Preussia Secalis* Ch. Rich. 252 in Revue Mycol. II. 91. — Peritheciis minutis $\frac{1}{2}$ mill., simplicibus, sparsis vel aggregatis, globosis, lævibus, nigro-fuscis, astomis, basi hyphopodio albo suffultis; ascis pyriformibus, abrupte longe stipitatis, 8-sporis, 70 μ . long.; paraphysibus nullis; sporidiis cylindraceis, 24 μ . long. subopacofuscis, in articulos quatuor decedentibus, articulis 6 μ . long. binis interioribus ovatis utrinque truncatis, binis, utrinque ultimis conicis.

Hab. in culmis secalinis putridis S-Amand-de-Fion, Marne (Gallia). — «*Perisporio Typharum* affine».

9. **Perisporium fimeti** B. et C. Cuban Fungi n. 985. — Minutum, 253 sparsum; ascis late ellipticis; sporidiis oblongis ellipticisque plurimis (articulis secessis) brunneis.

Hab. in stercore Cuniculi in Carolina inf., Amer. bor.

10. **Perisporium Zeæ** B. et C. Cuban Fungi n. 986. — Peritheciis 254 seriatis basi subtiliter tomentosis; ascis lanceolatis, sporidiis breviter fusiformibus angustis triseptatis, ad septa leniter constrictis.

Hab. in culmo Zeæ in Carolina. inf. Amer. bor.

11. **Perisporium nitidum** Berk. Enum. Fungi collect. Portugal. p. 8. 255 — Nitidum, nigrum in maculas congregatum; peritheciis minutis hemisphæricis; sporidiis subglobosis minutis fuscis.

Hab. in foliis putridis Agaves americanæ, socia *Nectria sanguinea* et *Pleospora*, prope Situbal (Lusitania). — Ascii non visi, quia jam resorpti.

Species dubiæ

(Nonnullæ forte sclerotiaceæ v. sphæriaceæ).

12. **Perisporium disseminatum** Fr. S. M. II. 513. III. 250. — Emergens, 256
globosum, nulla macula cinctum, fuscum nigrumve, intus concolor,
demum umbilicatum.

Hab. in caulibus plantarum, culmisque locis humentibus in Suecia, Gallia. — Est e minimis, frequenter quasi disseminatum, confertum, ferme liberum, opacum, læve. Sec. nonnullos auctores est *Perisp. vulgaris* forma.

13. **Perisporium Lentisci** Dur. et M. — Mont. Fl. Alg. I. p. 563. Mont. 257
syll. crypt. p. 900. — Hypophyllum; peritheciis gregariis confer-
tis atris minutissimis nitidissimis, subsphæricis; sporidiis oblongo-
fusiformibus 10 ≈ 2 pellucidis, binucleatis.

Hab. in foliis dejectis Pistaciæ Lentisci, in præruptis montis Boudjouch Algeriæ (DURIÉU). — Asci non visi.

14. **Perisporium Ammophilæ** Dur. et M. — Mont. Fl. Alg. I. p. 564. 258
— Mont. Syll. crypt. n. 901. — Emergens, globosum, minutissimum,
myriadeum, atrum, maculæ cinereæ insidens; sporis.... —
Species dubia.

Hab. in foliis Ammophilæ arenariæ, La Calle, (DURIÉU).

15. **Perisporium crocophilum** Mont. — Etude microg. du Tacon (Maladie 259
du safran) in Mem. Soc. de Biologie tom. I. (1849) p. 68. — Mont.
syll. crypt. n. 902. — Peritheciis minutis ovoideo-globosis atro-
nitentibus, apice poro pertusis, e basi fibras irradiantes emitten-
tibus; nucleo primitus celluloso, cellulis subconcatenatis; sporis
globosis minimis.

Hab. in bulbis Croci sativi morbo nomine Tacon nuncupato vitiat in Gallia.

16. **Perisporium acerinum** Wallr. Fl. crypt. n. 3613. — Innatum, 260
subrotundum, depressum, ambitu veluti marginato elevatum, fu-
scum, intus carnosum concolor.

Hab. ad folia Aceris Pseudoplatani delapsa in Germania.

17. **Perisporium Fragariæ** Wallr. Fl. crypt. n. 3614. — Innatum, 261
orbiculare, convexiusculum, tenuissime alutaceum, nigro-fuscum.

Hab. ad folia Fragariæ virginianæ putrida in Germania.

18. **Perisporium agaricola** Wallr. Fl. crypt. n. 3622. — Peritheciis 262
globosis fuscis parvis, carnosis, cubilia undique penetrantibus, intus
dilatioribus.

Hab. in stipite Russulæ emeticæ intus extusque infarciens in Germania.

19. **Perisporium Colchici** Rabh. D. crypt. Fl. I. 229. — Superficiale, 263
sphæricum, minutum, gregarium, lutescens, dein nigrum, opacum.
Hab. in foliis languidis et exsiccatis Colchici autumnalis,
Dresdæ, Germania.
20. **Perisporium Iridis** (Schw.) Fr. S. M. III. 249. — Superficiale, 264
globulare, minimum, opacum e flavo-fusco nigrum; colore præ-
cedentium, sed minimum, confertum, globulare, vix distincte col-
lapsum; internam structuram lustrare non contigit.
Hab. in foliis exsiccatis Iridearum Amer. bor. — An idem
ac præcedens? Rabh.
21. **Perisporium Alismatis** Fr. S. M. III. 252. II. 257. — Emergens, 265
globosum, fuscum, macula indeterminata effusa expallente; sclero-
tiaceum est, intus compactum; macula folio exarido oritur.
Hab. ad folia subvirentia Alismatis natantis in Germania.
22. **Perisporium Arundinis** Desm. Crypt. exs. n. 329 Cooke Handb. 266
n. 1908. — Sparsum, depressum, fere nigrum, minutum; sporidiis
ovoideis, v. oblongis, pallide fuscis.
Hab. in foliis et vaginis Arundinis in Britannia, Gallia, Ger-
mania, — Sec. Fuck. est species imperfecta, sec. Kickx etc. con-
venit cum *Perisporio vulgari* Corda.
23. **Perisporium Galba** Fr. S. M. III. 251, II, 512. — Emergens, ma- 267
culis indeterminatis, albicanti-testaceis cinctum, globosum, subper-
tusum, nigrum.
Hab. in caulibus Heraclei, Chærophylli bulbosi in Scan-
dinavia, Germania. — Maculæ, licet non distincte floccosæ et li-
beræ, evidenter mucedineæ indolis sunt, albido-lutescentes v. sub-
testaceæ, late circa nodos plantarum majorum effusæ. Ceterum pu-
sillum, opacum, vix liberum, demum pertusum.
24. **Perisporium poliotum**, Fr. S. M. III, 251. II, 512. — Emergens, 268
macula determinata grisea cinctum, globoso-oblongum, subpertu-
sum, nigrum.
Hab. in caulibus in Scandinavia, Germania. — Sporæ, sec
Kickx globoso-ovoideæ. Sphæriaceis perquam affine, sed ob vege-
tationem et habitum a ceteris separari non potest. Maculæ sunt
thalli species, elongatæ, superficiales, passim spurie fibrillosæ.
25. **Perisporium betulinum** (A. S.) Fr. S. M. III, 249. — Adnatum, 269
rotundato-adpressum, demum collapsio-umbilicatum, opacum, e fla-
vo-fusco nigrescens.
Hab. ad folia emarcida Betulæ albæ in Suecia et Germania.
— Omnino superficiale, licet firmiter adnatum basi que subappla-

datum, laxe gregarium, folio exsiccatò nunc immutato nunc dealbato-maculati insidens, haud vero exasperans. Coloris mutationes ut in Erysiphe. «An *Melampsora Betulæ*?».

26. **Perisporium exuberans** Fr. S. M. III, 251. II. 432. — Emergens, 270 cumulis substriiformibus, subcoacervatum, demum liberum, subglobosum, nigrum.

Hab. in caulibus Alliorum in Suecia et Germania. — Non tantum vegetatione caespititia, sed et stromate quodam sæpius præsentente nigro a reliquis dignoscitur.

27. **Perisporium Tragopogi** (A. S.) Fr. S. M. III. 250. — Emergens, 271 globosum, nulla macula cinctum, e fusco nigrum, intus album, disco collapsò subpezizoideo.

Hab. in caulibus Tragopogi etc. in Suecia, Germania. — Sparsum, sed satis evidens, præcipue pulpæ colore albido distinctum.

28. **Perisporium fagineum** Fr. S. M. III. 250. — Superficiale, globo- 272 sum ovatumve, spadiceo-pallens, nitidum.

Hab. ad folia putrescentia Fagi in Suecia et Germania. — Perpusillum, sed colore et nitore satis eminens, nec non situ conferto. Refert glandulas in pagina inferiori foliorum *Ribis rubri*, at color magis sordidus et pallidus.

29. **Perisporium ocellulatum** Ces. in Kl. Herb. myc. II. n. 721. Bot. Zeit. 1858, p. 302. (Vercelli, Italia).

30. **Perisporium Belladonnæ** Kirchn. Lotos 1856 p. 244 (Bohemia).

Species excludendæ.

Perisporium erysiphoides Fr. — Erysiphe communis, forma caulicola (Erys.

Perisporium Corda, Cfr. Corda Ic. II, 28, fig. 99).

Perisporium alienum Fr. Moug. — Phyllosticta aliena (Fr.) Sacc.

Perisporium speireum Fr. — Microsticta vagans Desm.

Perisporium gramineum Fr. — Crociereas gramineum Fr.

Perisporium maculare Fr. — Sphærella macularis (Fr.).

Perisporium alneum Fr. — Sphærella Alni (Fuck) Sacc. (?).

Perisporium circinans Fr. — Venturia circinans (Fr.) Sacc.

Perisporium populinum (Pers.) Wallr. — Melampsora populina Lév.

Perisporium Brassicæ (Lib. — Apiosporium Brassicæ Fuck.

MELIOLA Fr. Elench. Fung. II, 109. (Ety. *melon*, malum v. mamma, ob peritheci formam). — Perithecia in mycelio maculiformi superficiali grumoso radiosò atro insidentia, globosa, astoma, membranacea, setis v. appendicibus sæpe eumorphis cincta. Asci sæpius breves, crassi, 2-8-spori aparaphysati. Sporidia typice oblonga, 2-

5-septata, fusca, quandoque vero continua v. fenestrata, hyalina v. fusca.

Obs. Genus elementis heterogeneis compositum, in posterum in plura divellendum; nonnullæ species rectius forte inter *Asterinas* adnumerandæ. Species didymosporas ad *Dimerosporium* transtuli.

Eumeliola: sporidiis 2-5-septatis, fuscis v. fuscidulis.

1. **Meliola cymbisperma** Mont. Syll. n. 904. Cent. IV, n. 96, in Ann. 275
2, XX, p. 374. — Cæspitulis epiphyllis confluentibus atris, fibris erectis; peritheciis opacis globoso-depressis, magnis, scabrosis; sporidiis cymbiformibus altero fine attenuato substipitatis, bi-triseptatis.

Hab. in foliis *Smilacis globosæ* in Surinamo (SPLITGERBER). — In monographia cl. Bornetii hæc species desideratur.

2. **Meliola Araliæ** Mont. Syll. Crypt. n. 907, Cuba p. 327. *Amphi-* 276
trichum Araliæ SPRENG.! — Hypo- rarius epiphylla; hypothallo maculæformi nigro radiante, ramulis pluriarticulatis; peritheciis ovato-globosis, atris, tandem *Chaetomii* ad instar apice ruptis, fibris rigidis nitidis; ascis trisporis.

Hab. in Cuba in foliis *Araliæ* (BERTERO). — Sec. Bornet (Organ. Meliol.) *Amphitrichum Araliæ* Spr. spectat ad *M. amphitricam*, a qua tamen *M. Araliæ* Mont. satis differt.

3. **Meliola Argentina** Speg. Fung. Argent. Pug. I. p. 177. — *Amphi-* 277
gena, orbiculato-confluens, velutina, atronitens; peritheciis sphæricis, astomis, 250-300 μ . d. appendicibus paucis radiantibus, 200-300 \approx 9, fuligineis, basi cinctis, granulosis, atris; ascis paucis ellipsoideis, breve crasseque stipitatis, bisporis, 45-50 \approx 18-20; sporidiis oblongo-cymbiformibus, 40 \approx 8-10, utrinque obtusiusculis, 3-septatis (spurie?), fumosis. — Macroconidia *Helminthosporium argentinum* Speg. sistencia, clavata, fusca, 4-septata, 55 \approx 15, hyphis rigidis fulta.

Hab. ad folia languida *Cyperaceæ* cujusdam in paludosis prope Buenos-Aires, Argent., Amer. merid. — Habitu externo perfecte congruit cum *Meliola amphitricha* Fr. forma *Sabalidis* (Ravenel, North-american fungi n. 81) sporidiis vero tantum 3-septatis mox recedit.

4. **Meliola capnodioides** Thuem. Fungi Austro-Afr. n. 53. — *Epiphylla,* 278
orbiculata, maculæformi, crassa, nigra, radiante, tandem pluribus confluentibus; fibris vel floccis subramosis, flexuosis, brevibus, crassis, fuscis; peritheciis subglobosis, grumosis, carbonaceis; ascis clavatis, apice obtuso, basi angustatis, tunica tenui, 30 \approx 9, hyali-

nis; sporidiis 8, subelavatis vel cylindraceis, utrinque obtusatis, triseptatis, ad septa non constrictis, $11 \approx 3$, hyalinis, pellucidis.

Hab. in *Plectranthi ciliati* foliis vivis, in sylvis prope Grahamstown, Promont. bonæ spei. Julio 1876. Leg. P. Mac-OWAN. (n. 1259).

4. **Meliola corallina** Mont. Syll. n. 910, Fl. Chil. VII, p. 472. *Dothidea corallina* M., Fl. ins. Fern., n. 46. — Amphigena; mycelio macula-formi, aterrimo, maculis orbiculatis; peritheciis pro ratione magnis globosis vix depressis raro umbilicato-collapsis, tandem circumscissis fibrisque atris rigidis nitidis cinctis; sporidiis triseptatis, oblongis. 279

Hab. in foliis *Drymidis chilensis* in Chile (BERTERO), Juan Fernandez, Cuba (BERK.).

5. **Meliola Cameliæ** (Catt.) Sacc. *Fumago Cameliæ* Catt. Nero, Fumago etc. p. 5, t. XVIII, fig. 1-4. — Mycelio crustaceo nigro, fragili, maculiformi, hyphis confervoideis, ramosis; peritheciis subglobosis 150 μ . diam., setulis rigidis ornatis (præcipue superne); ascis numerosis, crasse ovato-fusoideis, sessilibus, aparaphysatis, octosporis, $50 \approx 22$; sporidiis oblongis, utrinque rotundatis, 3-septatis, 16-18 \approx 45, olivaceo-lutescentibus. Conidiis pluricellularibus? Spermogoniis tereti-clavatis, apice acuto dentato dehiscentibus; spermatis ovoideis, biguttulatis, flavidis, 5 μ . long. (an potius ad genuini *Capnodii* formam spectantibus). 280

Hab. in foliis ramulisque *Cameliæ japonicæ* et *Citri* in Italia boreali.

6. **Meliola mucronata** (Mont.) Sacc. *Capnodium mucronatum* Mont. Cell. Cent. IX, p. 9, t. 10, fig. A. — Epicladon et epiphyllum, spongiosum, atrum; peritheciis carnosis, sphaericis undique hirsutis, ex hyphis mycelii ramosis articulatis, fasciculatim pinnatimque concretis oriundis; ascis clavatis, octosporis, 160 \approx 30-40, breve stipitatis; sporidiis ex oblongo cymbiformibus, subdistichis 6-septatis, vix constrictis, utroque fine mucronatis, fuscidulis, 50 \approx 15. 281

Hab. ad ramos et folia *Weinmanniæ trichospermiæ* in Chile.

7. **Meliola bifida** Cooke, *Grevillea* 1880, p. 15. — Epiphylla v. caulogena, atra, effusa, velutina; peritheciis globosis; appendicibus erectis apice bifidis, ramulis brevibus acutis; sporidiis cylindraceis, obtusis, 4-septatis, leniter constrictis, 50 \approx 12, brunneis. 282

Hab. in foliis caulibusque *Osyridocarpi natalensis* in Natal (Africa).

8. **Meliola formosa** Welw. et Curr. Fungi Angol. p. 284, t. 17, fig. 1. ²⁸³
 — Mycelio procumbente, effuso, implicato, pinnato, nigro-fusco, setis sparsis, erectis obsito; peritheciis globosis, demum profunde depressis cupulatis; sporidiis pallidis elongato-ellipticis v. leviter curvatis 3-4-septatis, 15 μ . long.

Hab. ad folia circa Quibolo, Golungo alto (Angola, Afr. occid.).

9. **Meliola cladotricha** Lév. Ann. scienc. nat. 5, 1846, p. 266, Bornet ²⁸⁴
 Organ. Mel. p. 269, t. 22, fig. 16. — Mycelio effuso, ambitu radiato-ramoso, peritheciis globosis, appendicibus erectis bifidis, ramulo exteriori dichotomo, apice acutis; ascis ovatis; sporidiis elongatis obtusis triseptatis.

Hab. in Borneo in foliis Myrsinæ incertæ (herb. Mus. Paris.).

10. **Meliola furcata** Lév. Ann. Scienc. nat. 1846, p. 266, Born. Organ. ²⁸⁵
 Meliol. p. 269, t. 22, fig. 14. — Mycelio epiphyllor orbiculari, nigro, determinato, grumoso, interdum pluribus confluentibus; peritheciis minutis, sphaericis, appendicibus erectis apice dichotomis, ramis ultimis bidentatis; ascis ovatis rostratis, 4-sporis; sporidiis 4-septatis, cylindræis, obtusis.

Hab. ad folia varia Atalantiæ, Piperis, Clematis etc. in Guyana Batava (Amer. austr.), Amer. bor., Nicaragua, Peradeniya, Ceylon. — Sec. Speg. Argent. IV. p. 41, in appendicibus perithecorum nascuntur macroconidia acro-pleurogena, clavulata 40-60 \approx 10-12, uni-triseptata, fuliginea; asci bispori; sporidia 55-65 \approx 22, quadriseptata.

11. **Meliola glabra** B. et C. Cuban Fungi n. 883. — Mycelio con- ²⁸⁶
 ferveoideo depresso adnato subglabro; peritheciis globosis, appendicibus brevibus, verrucæformibus; sporidiis 40 μ . long., utrinque acutiusculis, in quoque asco binis.

Hab. in foliis Rubiacearum in Cuba.

12. **Meliola amphitricha** Fr. Elench. Fung. II, 109. Mont. Cuba p. 326, ²⁸⁷
 t. 12, f. 2. *Sphaeria amphitricha* Fr. S. Myc. II. 513. — Hypophylla; mycelio maculari, a centro radiante, contiguo, aterrimum, ramulis uniarticulatis; peritheciis globoso-depressis rugulosis tandem collabentibus, appendicibus atris opacis rigidis septatis erectis cinctis; ascis disporis; sporidiis 4-septatis, oblongis, fuscis.

Hab. in foliis Loranthi, Salaciæ, Coccolobæ, Perseæ, Psidii, Garriæ, Magnoliæ, Callicarpæ, Cladii, Terminaliæ etc. in America boreali, Amer. austr., Australia, vulgatissima. Conf. Bornet Org. Meliol. t. 22, f. 11. — *Meliola Psidii* Fr. in Linnæa 1830, p. 549 non mihi videtur diversa.

13. **Meliola Mærenhoutiana** Mont. Syll. Crypt. n. 908, Bornet Org. 288
 Mel. p. 268, t. 22, fig. 12. — Hypo- rarius epiphylla, velutina, aterrima; maculis punctiformibus orbiculatis regularibus, nunquam confluentibus; mycelio grumoso vix radiante; peritheciis minimis globosis cupuliformi-collapsis inter fibras rigidas erectas setaceas confertissimas quasi absconditis; ascis ovato-rostratis, bisporis; sporidiis 3-septatis.
Hab. in foliis *Alixie stellatæ*, Taiti (MÆRENHOUT), in foliis *Symploci*, Ceylon, Nuwara Elya (BERK.). — Sporidia, sec. Berk. oblongo-elliptica, 3-septata, 45 μ . long.
14. **Meliola hyalospora** Lev. Ann. Scienc. nat. 1846, V. 256. Bornet 289
 Org. Mel. p. 268, t. 22, fig. 13. — Mycelio amphigeno, orbiculari, sparso; peritheciis minutis sphaericis papillatis; appendicibus erectis, simplicibus setaceis; ascis clavato-pyriformibus, 6-sporis; sporidiis ellipsoideis, utriusque attenuatis 3-septatis, loculis extremis minoribus pellucidis, intermediis majoribus coloratis.
Hab. in Surinam ad folia *Desmonchi* (KEGEL), Ceylon ad folia *Arctotrematis* (BERK.).
15. **Meliola inermis** Kalch. et Cooke. Grev. 1880, p. 34, t. 38, f. 51. 290
 — Amphigena, atra; peritheciis globosis, hinc illinc congestis 200-250 μ . diam., mycelio ramoso, fusco, nidulantibus; appendicibus nullis; ascis ovoideo-clavatis; sporidiis 2, ellipticis, quadriseptatis, constrictis, 55 \approx 15, fuscis, (sec. Rehm 40 \approx 14).
Hab. in foliis vivis *Buddlejæ auriculatæ*, Somerset East, Afr. austr. (MAC OWAN). — Species hæc haud convenit cum diagnosi *M. quinquesporæ* Thüm., M. U. 657 et *M. quinquesepatae* Rehm. Asc. 492 quæ tamen a nostra non differre videntur.
16. **Meliola Musæ** (Kunze) Mont. Syll. Crypt. n. 905, Bornet Organ. 291
 Meliol. p. 269, t. 22, fig. 16, *Myxothecium Musæ* Kunze, Fr. S. M. III. 232. — Cespitulis maculiformibus magnis nigris; peritheciis minutissimis subinconspicuis; appendicibus erectis simplicibus apice curvatis; sporidiis maximis, oblongis, fuscis, 5-locularibus.
Hab. in foliis *Uranie guyanensis*, Surinam (SPLITGERBER).
17. **Meliola lævis** B. et C. Cuban Fungi n. 884. — Stromate orbicu- 292
 lari atramentario e floccis adpressis lobatis oriundo; peritheciis minutis demum collapsis; sporidiis oblongis obtusis, 4-septatis.
Hab. in foliis coriaceis in Cuba.
18. **Meliola Mitchellæ** Cooke. Rav. Fung. Amer. n. 88. — Perithe- 293
 ciis globosis, levibus; floccis erectis, simplicibus; sporidiis elongato-ellipticis, 4-septatis, brunneis; hyphis conidiiferis septatis,

brunneis, apice hyalinis, conidiis lanceolatis vel clavatis, triseptatis, hyalino-fuscis, 20-25 \approx 4.

Hab. in foliis Mitchellæ repentis, Gainesville, Florida (Amer. bor.). — Sec. Speg. F. Arg. IV. p. 41, sporidia 42-50 \approx 15.

19. **Meliola orbicularis** B. et C. Cuban Fungi n. 880. — Maculis 294
crassiusculis orbicularibus; peritheciis globosis; appendicibus flexuosis, curvatis, 50 μ . long. crassis, obtusis; sporidiis quadrisep-tatis.

Hab. in ramis arborum prope summitatem, in Cuba, Februario.

20. **Meliola Cookeana** Speg. in F. Argent. IV. p. 41. *M. amphitricha* 295
Fr. f. *Callicarpæ americanæ*, Rav. F. Amer. n. 84. — Mycelio late et irregulariter effuso, subcrustaceo, atro, ex hyphis densissimis, crassiusculis, brevibus, ramoso-intricatis congesto, mox præcipue ad maturitatem, frustulatim secedente ac evanescente; hyphis conidiophoris paucissimis, rigidulis, sæpius tantum circa perithecia inventis, apice obtusiusculis, integris, monosporis, 120-250 \approx 8-10 (conidiis deficientibus); peritheciis hinc inde sparsis v. densiuscule gregariis, globosis etiam in sicco, 150-200 μ . diam., glabris, granuloso-scaberulis, atris, carbonaceis, opacis; ascis tantum per juventutem inveniendis, ellipticis, bisporis, breviter crasseque stipitatis; sporidiis primo hyalinis, dein opace fuliginis, cylindraceis, utrinque obtuse rotundatis 30-40 \approx 10-12, rectis, 4-septatis, ad septa constrictulis.

Hab. in foliis *Callicarpæ americanæ* in Carolina austr., Amer. bor. — Species *Mel. Mitchellæ* peraffinis, differt tamen mycelio crustaceo, peritheciis majoribus, carbonaceis, sporidiis minoribus semper rectis; a *M. amphitricha* Fr. longe abhorrens.

21. **Meliola fuliginodes** (Rehm) Sacc. *Capnodium fuliginodes* Rehm, 296
Asc. n. 245 (1874). *Spheconisca humilis* Norman in bot. Not. (1876) pag. 174. — Mycelio longe lateque epidermidem ramorum obducente, griseo-fusco, tenuissimo, ex hyphis plus minusve ramosis composito, quarum cellulis monostiche aggregatis, fuscis, subrotundis, 5 μ . cr.; peritheciis globosis minimis, nigro-fuscis, parenchymaticis; ascis pyriformi-clavatis, apice incrassatis, 45 \approx 15, 8-sporis, paraphysibus perparcis, ramosis tenerrimis obvallatis; sporidiis obtuse ellipticis, rectis curvulisve, 14 \approx 5, bi-quadrilocularibus, hyalinis v. fuscidulis, biseriatis.

Hab. ad ramos siccos pendulos *Aceris platanoidis*, Windheim (Germania). — Nucleus jodi ope immutatus.

22. **Meliola? pulveracea** Speg. Fung. Arg. IV. n. 118. — Mycelio 297
late irregulariter effuso, atro, tenui, velutino; hyphis repentibus

dense intricato-ramosis. parce septulatis, gracilibus, 3 μ . crass., flexuosis, simplicibus, fuliginis, hinc inde ramulos fertiles, erectos 120-300 \approx 5. apice integros emittentibus; conidiis solitariis, acrogenis, clavato-fusoideis, 3-septatis loculo infero (seu pedicello) plus minusve elongato, ad septa non v. vix constrictis, 30-40 \approx 6-7, fuliginis; peritheciis minutissimis 60-80 μ . d., hinc inde sparsis, globosis, glaberrimis, papilloso-scabris, subcarbonaceis; ascis ellipticis v. obovatis, sursum obtuse crasseque tunicatis, deorsum abrupte brevissimeque coarctato-stipitatis, 28-35 \approx 12-15, octosporis, aparaphysatis; sporidiis cylindraceo-subclavulatis, utrinque obtusis, medio 1-septatis, ad septum leniter coarctatis, loculis minute v. grosse 2-guttulatis, hyalinis; an postremo 3-septatis, fusciscentibus?

Hab. ad folia coriacea viva plantæ cujusdam, Apiahy, Brasilia meridionali (J. PUIGGARI).

23. **Meliola brasiliensis** Speg. Fung. Arg. Pug. IV. n. 116. — Mycelio orbiculariter expanso, sæpe confluyente ac totum epiphyllum occupante tenuissimo, atro fere fumoso; hyphis omnibus repentibus, gracilibus 5-9 μ . crass., intricato-strigosis, longissimis 1-1.5 mill. long., semper ac exquisite rectis, densiuscule septatis, hinc inde ramos duos oppositos emittentibus, ramis etiam plurijuge ramulosis, omnibus apice attenuato-acutatis rectisque, ubique hyphopodia(?) alterna brevissima, clavulato-capitata 20-22 \approx 10-12, 1-septata gerentibus; peritheciis 3-8 in centro mycelii laxè gregariis, gangliis mycelialibus dense prosenchymatico-radiantibus insidentibus, globosis 120-200 μ . diam., numquam umbilicatis, atris, subnitentibus, papilloso-granulosis, in juventute setis paucis, sparsis, rigidis, erectis, apice incrassatis v. sæpius uncinatis, 59 \approx 8-9, atris vestitis, per ætatem subglabratis; ascis 2-3-sporis, subhomboidis, mox fluxis; sporidiis elliptico-cylindraceis, utrinque obtusis 4-septatis, ad septa leniter constrictis, 40-45 \approx 18-20, loculis grosse 1-guttulatis, primo hyalinis, dein atro-fuliginis.

Hab. ad folia viva subcoriacea plantæ cujusdam, Apiahy, Brasilia meridionali (J. PUIGGARI).

24. **Meliola spinigera** Speg. Fungi Argent. Pug. IV. sub n. 118. — Mycelio aterrimo, in pulvinulos sparsos hemisphæricos 1-2 mill. d., lanoso-compactos aggregato, fasciculis hypharum erectis, rigidis concoloribus, parcis, acutis, spiniformibus hirtis; peritheciis immersis, atris, carbonaceis globosis papillulosis 150-220 μ . diam.; ascis non visis; sporidiis cylindraceo-ellipticis, utrinque obtusis, 4-septatis, atro-fuliginis.

Hab. ad folia coriacea, Apiahy, Brasilia merid., socia *Meliola pulveracea* (J. PUIGGARI).

25. **Meliola megalospora** Speg. Fungi Argent. IV. n. 115. — Mycelio 300
orbiculariter expanso 2-3 mill. diam., sæpius hypophyllo, solitario
v. subgregario, non raro confluyente, tenui-membranaceo, subcrustaceo, glabro, ex hyphis imperspicue radiantibus, crassiusculis 10 μ . crass., densissime ramoso-intricatis, atris, opacis composito, mox per maturitatem obliterato ac frustulatim deciduo; hyphis (*Helminthosporii* spec.?) conidiis deficientibus; peritheciis centrum mycelii occupantibus, sæpe illo deficiente, nudis, udis, globosis, siccis subcupulato-umbilicatis, mujusculis, 300 \approx 450, atris, glaberimis, 4-14 dense gregariis, subcarbonaceis, ubique, cellulis prominulis, granuloso-scabriusculis; ascis ellipticis, sursum obtuse rotundatis, deorsum brevissime et crasse stipitatis, 80-85 \approx 40, paucis, tantum per juventutem conspicuis ac mox diffluentibus, aparaphysatis, bisporis; sporidiis ellipticis v. subcylindræco-ellipticis, utrinque obtuse rotundatis 70-80 \approx 25-32, 4-septatis, ad septa non v. vix leniter constrictis, primo hyalinis, dein opace fuliginis atque fragilissimis.

Hab. ad folia viva Jodinæ rhombifoliæ in sylva australiore «Tordillo» dicta, ac in dumetis maritimis «Cabo S. Antonio», (Amer. austr.) — Species *Meliolæ amphitrichæ* Fr. peraffinis, sed peritheciis majoribus, sporidiis longioribus, crassioribusque, mycelio subcrustaceo sæpius evanido, statu conidico deficiente recedens.

26. **Meliola polytricha** Kalch. et Cooke, Natal. Fungi in Grevill. — 301
Hypophylla, vel amphigena, atra, maculæformis; mycelio effuso, radiato, conidiifero; peritheciis globosis; appendiculis erectis, simplicibus, acutis, plerumque flexuosis; ascis ovatis; sporidiis cylindricis, obtusis, 4-septatis, constrictis, atrobrunneis. Conidiis clavatis, 3-5-septatis, 50 \approx 8, hyphis erectis, flexuosis insertis.

Hab. in foliis *Osyridis* albæ et *Cunoniæ* capensis, Natal (Afr. austr.). — Conidia *Helminthosporium* sistunt.

27. **Meliola zig-zag** B. et C. Cuban Fungi n. 882. — Floccis repentibus confervoideis, articulis utrinque emarginatis obliquis; peritheciis setis acutis tenuibus curvulis cinctis; sporidiis magnis 50 μ . long. conidiis helminthosporoideis 40 μ . long. triseptatis utrinque appendiculatis. 302

Hab. in foliis *Cinnamomi* zeylanici etc. Ceylon et Cuba. Flocci vere singulares.

28. **Meliola Wrightii** B. et C. Cuban Fungi n. 881. — Maculis tenuibus hypophyllis olivaceis; floccis flexuosis cladosporioides; conidiis cymbiformibus articulatis; peritheciis floccis æquilongis obtusis cinctis; sporidiis 4-septatis, 40 μ . long. 303

Hab. in foliis Sapindaceæ, ut videtur, cujusdam in Cuba, Febr. — Conidia interdum floccorum lateribus adnata, triseptata, 30-32 μ . long.

29. **Meliola? penicillata** Lév. ann. scienc. nat. 5, 1846, p. 266. — Myceliis effusis adnatis pulvinatis aterrimis, filis crassis e basi ramosis apice penicillatis. 304

Hab. ad truncos in Brasilia meridionali, DUPRÉ (herb. Mus. Par.). — in foliis coriaceis Laurinææ cujusdam, Apiahy, Brasilia meridionali, Jun. 1881 (PUIGGARI). — Sic describitur a cl. Spegazzini in F. Arg. IV. n. 42. — Mycelium late irregulariterque effusum, tenue, puberulum, atrum; hyphæ repentes densissime ac varie intricato-ramosæ, simplices, crassiusculæ 8-9 μ . cr., septulatæ, fuliginæ; hyphæ fertiles seu stipites, ex hyphis mycelialibus exsurgentibus, fasciculatis, atque arcte coalitis compositi, erecti 200-400 \approx 25, teretes, rigiduli, apice abrupte penicillatim ramoso-expansi; fibræ penicilli, rectæ 150-160 \approx 5, parce septulatæ, verruculoso-scabræ, pallide fuliginæ, monosporæ; conidia in fibris penicillorum acrogena, cylindræo-fusoidea 25-30 \approx 4-5, sursum obtusiuscule attenuata, deorsum elongatula, triseptata, pallide fuliginea; perithecia hinc inde sparsa, globosa, sæpe superne depressa, atra, verruculoso-scabra, subcarbonacea, fragilia, aterrima, 200-220, nuda; asci non visi; sporidia elliptico-cylindræa, utrinque obtusiuscula 55 \approx 18, 4-septata, ad septa leniter constricta, opace atro-fuliginea.

Meliolopsis: sporidiis continuis, hyalinis v. fuscidulis.

30. **Meliola microthecia** Thuem. in Flora 1876. p. 569. — Maculis parvulis, hypophyllis vel raro amphigenis, tenuibus, orbiculatis, radiantibus, nigris, secedenti-adnatis; floccis simplicibus, raro septatis, fuscis, 8 μ . crass.; peritheciis compressis, orbiculatis, carbonaceis; ascis late clavatis, basi angustatis, apice rotundatis, hyalinis, 6-sporis, hyalinis, 40 \approx 12-16; sporidiis ovatis, 8 \approx 4-6, hyalinis. 305

Hab. in foliis vivis Barosmæ scopariæ Eckl. prope Grahamstown, Promont. bonæ spei. (P. Mac-OWAN). — Asci, sporidiaque non perfecte matura! («An *Asterina?*»).

31. **Meliola Mori** (Catt.) Sacc. *Capnodium Mori* Catt. Nero etc. p. 5, 305 t. XVIII. fig. 5-6. — Mycelio ramulos gemmasque obducente, et

quandoque deformante, crustaceo, aterrimo, hyphis septatis repentibus conflato; peritheciis sphaericis, atris, levibus, glabris, superficialibus; ascis obovato-ellipsoideis, $30 \approx 12$, octosporis, aparaphysatis; sporidiis di-tristichis ovoideis, continuis, translucidis, guttulatis, 12μ . long. — Conidia multipartita (gemmae Tul.). Spermogonia peritheciis ascophoris similia; spermatidiis ovoideis, brunneis, 7μ . long.

Hab. in ramulis et gemmis Mori albæ in Insubria (Italia).

32. **Meliola Citri** (Br. et Pass.). Sacc. *Apiosporium Citri* Br. et Pass. 307
Trans. Accad. Lincei vol. I., Catt. Micet. Agrum, p. 22, t. XXII, f. 10. — Mycelio tenui cinereo, folii paginam superam incrustante; filis tenuibus, septatis, ramosis, hyalinis formato; peritheciis punctiformibus badio-fuscis, in mycelii crusta subimmersis; ascis clavatis, octosporis; sporidiis subdistichis oblongis, utrinque rotundatis crassitie sua quadruplo longioribus continuis hyalinis, intus granulosis, simulateque pluriseptatis. — Simul adest stat. conidiophorus *Torulam* subramosam pluri-articulato-guttulatam fuscam sistens et st. pycnidicus *Phomam* microsporam referens.

Hab. ad folia Citri primo cinereo-incrustata, demum veluti fumagine inquinata, in Sicilia. Morbus, quem fungus affert, vulgo dicitur *Mal di cenerè*.

33. **Meliola Abietis** (Cooke) Sacc. *Apiosporium Abietis* Cooke, Grev. 308
1881, p. 94, nec Kunze. — Effusum atrum, velutinum; hyphis mycelioideis atrobrunneis; peritheciis globosis exiguis, 100μ . diam; ascis clavatis $20 \approx 7$; sporidiis ellipsoideis, hyalinis $5 \approx 2$.

Hab. in ramulis vivis Abietis, Glencorse et Penicuik (Britannia). — Crustas format atras, pulveraceas, in quibus perithecia nidulant.

34. **Meliola quinquespora** Thuem. in Flora 1876, p. 568. — Maculis 309
sparsis, epiphyllis, orbiculatis, radiatis, medio elevatis, solubilibus, atris; floccis erectis, crassis, polychotomis, multiarticulatis, flexuosis, fuscis, 10μ . crass.; peritheciis subglobosis, carbonaceis; ascis ellipsoideis, utrinque rotundatis, raro curvatis, dilute fuscis, $35-38 \approx 10-12$ sporidiis 5 , late ovato-ellipsoideis, utrinque obtusis, simplicibus, hyalinis, $10 \approx 5$, subdiaphanis.

Hab. in foliis languentibus Buddleie auriculatae Benth. in dumetis montis «Boschberg» prope Somerset-East, Promont: bonæ spei, Aut. 1876, Leg. P. Mac Owan. — Cfr. *Mel. inermis*.

35. **Meliola Tetraceræ** F. Muell. et Thuem. Symb. Myc. Austral. II. 310
n. 92. — Cæspitibus amphigenis, plus minusve orbiculatis vel sub-

stellatis dendriticisve, atris, secedentibus, planis, sparsis; floccis simplicibus vel raro subramosis, inæqualibus, flexuosis, brevibus, badiis; peritheciis carbonaceis, globosis, grumosis; ascis rarissime occurrentibus, cylindrico-fusiformibus, subarcuatulis, utrinque acutatis, hyalinis, $36 \approx 12$; sporidiis ovoideis vel ellipticis, octonis, distichis, utrinque rotundatis, dilute griseo-fuscis, $7 \approx 5 \mu$., simplicibus, subpellucidis.

Hab. in foliis vivis Tetraceræ Wuthianæ in Daintree River, Rockingham Bay, Australia (F. MULLER).

Pleomeliola; sporidiis muriformibus, fuscis.

36. **Meliola fenestrata** C. et E. in Grev. V. pag. 95. — Subgregaria. 311
Peritheciis subglobosis, brunneis, hinc illinc sparse spinulosis; appendicibus ad basin radiantibus; sporidiis ellipticis, multiseptatis, fenestratis, brunneis, $40 \approx 12$.

Hab. in squamis strobilorum Pini, New Jersey, Amer. bor. — Perithecia interdum glabra, interdum appendicibus rigidis brunneis perithecium æquantibus cincta.

37. **Meliola Penzigi** Sacc. *Capnodium Citri* Penz. Agr. MS. — Mycelio crustaceo, nigrescente, facile secedente, effuso; peritheciis globulosis, superficialibus, e filis mycelicis oriundis sed glabris, umbilicatis $150-160 \mu$ diam., nigris; ascis obovatis, apice rotundatis, sessilibus, octosporis; sporidiis distichis v. conglobatis, ovato-oblongis, 3-septato-muriformibus, constrictis, $11-12 \approx 4-5$, hyalinis dein fuscidulis. Status secundarii: *Coniothecii*, *Heterobotrys*, *Chaetophomæ*, *Capnodii* (spermogonici) species. 312

Hab. in foliis Citrorum in Italia boreali.

Species mihi minus notæ.

38. **Meliola triseptata** B. et B.? (sterilis) Cesati Myc. Born. pag. 25. 313
Hab. Borneo, ab Helminthosporii specie non determinanda obducta.
39. **Meliola tenuis** B. et C. Cooke Ravenel's Fungi, Grev. VII. p. 49 314
(nomen).

Hab. in Amer. bor. in Arundinaria. — Vix diversa a *M. amphitricha* (teste Cooke).

40. **Meliola ganglifera** Kalch. Grev. 1880, p. 34, Tab. 138, f. 49. — 315
Hypophylla; maculis, fuliginis orbicularibus; peritheciis globosis, subverrucosis, atris $150-200 \mu$ diam.; appendicibus erectis, subulatis, simplicibus; mycelio ramoso, repeate, processibus gangliforibus subglobosis stipitatis, conico-verrucosis, ornato.

Hab. in foliis vivis Curtisiæ fagineæ in Africa australi. Asci et sporidia ignota.

41. **Meliola Palmarum** Kunze et Fr. S. M. III, 232 (sub *Myxothecio*). 316
— Cæspitulis aggregatis subcircinantibus, fibris flexuoso-cernuis.

Hab. hypophylla in foliis Palmarum vivis, Surinam. — Cæspituli parvi, sed plerumque confluentes, sistunt maculas subeffusas vel elongatas byssaceas inæquales opacas aterrimas, submarginales, crassas, Perithecia globosa, minus opaca.

42. **Meliola seminata** B. et C. Cuban Fungi n. 885. — Stromate parvo compacto e pilis lobatis; peritheciis totum stroma occupantibus verrucosis; appendiculis setaceis. 317

Hab. in foliis Palicoureæ, Cuba, Dec.

43. **Meliola pachytricha** (Link sub *Sphæria*) Sacc. *Myxothecium pachytrichum* Fr. S. M. III. 232. — Cæspitulis solitariis effusis, fibris erectis crassis rigidis. 318

Hab. in caulibus sepium Brasiliæ (BEYRICH). — Cæspituli magni, effusi, ambientes. Fibræ crassæ, prælongæ, omnino erectæ, distinctæ, continuæ, acuminatæ facie *Helminthospori* cujusdam, sed omnino nudæ. Perithecia globosa, opaca, inter fibras latent.

44. **Meliola dichotoma** Berk. et C. in N. Pac. Expl. p. 130, n. 171. 319
subiculo velutino; peritheciis magnis, appendiculis uni- bifurcatis, ramulis elongatis.

Hab. in foliis cujusdam plantæ scandentis in Japonia.

COOKELLA Sacc. Mich. I. 407 (Etym. ab ill. mycologo *M. C. Cooke*).
— Perithecia applanata, membranacea, subsuperficialia, astoma. Asci globoso-ellipsoidei, aparaphysati, octospori. Sporidia muriformia, colorata. — Cum genere *Phymatosphæria* Pass. et *Saccardia* Cooke ascorum et sporidiorum fabrica convenire videtur, sed conceptacula diversissima et sporidia colorata. A gen. *Asterina* Lév. defectu hypharum et sporidiis muralibus differt.

1. **Cookella microscopica** Sacc. Mich. I. 407, Fungi ital. tab. 397. — 320
Peritheciis punctiformibus, gregariis, superficialibus, dimidiato-applanatis, ambitu irregularibus, astomis; contextu tenerrimo, celluloso, dilutissime fuligineo; ascis copiosis coacervatis, initio sphaeroideis, dein ellipsoideis, 40-45 \approx 30-35, sessilibus aparaphysatis, octosporis; sporidiis distichis, oblongis, 20-24 \approx 8-11, utrinque rotundatis, 3-septato-muriformibus, ad septa leniter constrictis, ochraceo-fuligineis.

Hab. in foliorum pagina inferiore languidorum *Quercus* pe-

dunculatæ in sylva Montello (Ital. bor.), Oct. 1877, ut videtur, rarissime. Autumnis 1878-81 ibidem frustra quæsi.

Obs. Cum peritheciis ascigeris adsunt perithecia similia sed spermatiphora; spermatiis globosis, v. obtuse angulosis, 7-8 micr. diam. initio 1-guttulatis hyalinis, dein ochraceo-fuliginis. *Stigmella dryina* (Corda) Lév. forte statum conidicum sistit.

PHYMATOSPHERA Pass. Funghi Abiss. in N. Giorn. bot. ital. VII. p. 188 (Etym. *phyma*, tuber et *sphæra*, quasi sphæria tuberi affinis). — Perithecia (tubercula) in acervulos irregulares aggregata, stromate atro connata v. interdum subsparsa, subglobosa, vertice convexa v. papillata (astoma) intus ascophora et spermatiphora. Asci per tuberculi contextum homogeneous carbonaceum subrotundi, circulo hyalino (cellula ascophora) cincti, ut plurimum 8-spori. Sporidia oblonga, pluriseptato-muriformia, hyalina. Paraphyses nullæ. — *Cucurbitariam* extus refert, sed fabrica interiore potius *Dothideæ* accedit, a qua loculis ascophoris deficientibus et ascorum forma satis differre videtur, quibus characteribus e contra *Tuberaceas* in memoriam revocat. — Genus prædistingctum sed quoad locum in systemate dubium.

1. **Phymatosphæra abyssinica** Pass. Funghi Abiss. p. 188, t. V, f. 11. 321
— Peritheciis (tuberculis) cortici immaculato impositis, sæpius aggregatis, atris; ascis subglobosis, hinc papilla stipitiforimi præditis, 16-24 \approx 16, 6-8-sporis; sporidiis stipatis oblongo-ellipsoideis, v. ovato-clavatis, subirregularibus, interdum curvis, hyalinis, 5-7-septato-muriformibus, 10-15 \approx 3-4.

Hab. in cortice arborum vivarum ignotarum, Keren (Abyssinia) legit. O. BECCARI. — Asci quandoque madore elongantur et subclavati evadunt; tubercula quandoque spermatiis minutissimis tantum foeta.

CYSTOTHECA Berk et C. in N. Pac. expl. p. 130. — Perithecia globosa, e floccis rigidis brunneis oriunda. Ascus unicus, sacco hexagono-celluloso circumdatus. — Genus pulcherrimum *Pisomyxa*, etc. affine, foliis innascens.

1. **Cystotheca Wrightii** B. et C. in N. Pac. exp. p. 130, n. 172. — 322
Pelliculas tenues fusco-cinnamomeas, hypophyllas sistens; peritheciis globosis, 60-70 μ . diam., monoascis; sacco hexagono-parenchymatico ascum includente: sporidiis..... imperfectis observatis.

Hab. in reg. Pacifico-boreali in foliis.

Subfam. 3. **Capnodiæ** SACC.

Biogenæ. Perithecia verticaliter elongata, simplicia v. ramosa, clavata v. cylindrica, obtusa v. acuta, vertice plerumque laciniatim dehiscentia, mycelio nigro crasso facile secedente innata.

Clavis generum.

Capnodium. Perithecia subiculo crustaceo insidentia. Sporidia (in speciebus typicis) muriformia, fusca, ovoidea.

Generis sectiones adinterim propositæ:

- I. *Eucapnodium*; ascis 6-8-sporis, sporidiis muralibus fuscis.
- II. *Capnodiella*; ascis 8-sporis, sporidiis continuis, globosis.
- III. *Capnodaria*; ascis 10-sporis, sporidiis 3-4-septatis, raro muriformibus, fuscis.
- IV. Ascis ignotis; sporis fenestratis.
- V. Ascis ignotis; sporis 2-5-septatis.
- VI. Ascis ignotis; sporis 1-septatis.
- VII. Ascis ignotis; sporis continuis v. ignotis.
- VIII. *Microxyphium*; ascis ignotis; peritheciis subulatis.

APPENDIX

Antennaria; ut *Capnodium*, sed perithecia minora, lateralia, aspora; verisimiliter status infans *Capnodii*.

Scorias. Perithecia subiculo spongioso scoriaceo insidentia, clavato-pyriformia. Sporidia 3-septata, hyalina, fusoidea.

CAPNODIUM Mont. Ann. Sc. nat. 3. XI, p. 233 (1848) (Ety. *Capnos*, fumus). *Fumago* Tul. Sel. Fung. Carp. II, p. 279. — Mycelium effusum, folia et ramos ambiens, atrum. Perithecia subcarnosa v. carbonacea, nunc simplicia, nunc ramosa, verticaliter elongata, sessilia vel in basim angustatam, vertice sæpius laciniatim dehiscentia; asci obovoideo-oblongati; sporidia octona, ovoideo-oblonga, typice 3-4-septata accedente septulo longitudinali, fusca.

Obs. Genus imperfecte notum, valde polymorphum, cujus specierum plurium fructificatio ascophora nondum innotuit. — Species perithecio sphaerico ad *Meliolam* duxi. *Antennarias*, ut formas imperfecte evolutas *Capnodii* in calcem addidi.

I. *Eucapnodium*. Species typicæ, ascophoræ, sporidiis fenestratis.

1. **Capnodium salicinum** Mont. Syll. Crypt. n. 915 et in B. et Desm., J. 323 Hort. Lon. IV. p. 251, f. 4, et Ann. Scienc. nat., 3, XII, p. 302. — Epiphyllum et epiclodon; perithecio carnoso e clavato corniformi interdum ramo divaricato apice furcato, vertice fimbriato; thalli flocc-

cis cylindricis atro-fuscis varie ramosis, æqualiter breviterque septatis, articulis longitudine diametrum superantibus; ascis obovato-clavæformibus, subsessilibus, 40-45 \approx 24, paraphysibus ramosis obvallatis, sporidiis oblongis transversim triseptatis tandem fuscis cellulosis (muriformibus), 16-23 \approx 7-9, ad septa constrictis, sæpius senis.

Hab. in foliis ramulisque Salicis capreæ, auritæ, cineræ, vitellinæ, viminalis etc. Populi nigræ in Britannia, Helvetia, Gallia, Lusitania, Italia, Germania, Fennia, Austria, Belgio etc. socio statu conidiophoro (*Fumago vagans* Pers.) — *Cap. sphaeroideum* Laer., Kickx Fl. Fl. I. 373, sec. Tul., est forma caulicola (in Salice) peritheciis brevioribus, ascis octosporis.

2. **Capnodium australe** Mont. Syll. crypt. n. 916 et in B. et Desm., 324 Journ. Hort. Lond. IV, (1849) p. 253, f. 9. — Involvens, velutinum; peridiis subdichotomis ut plurimum obtusis; mycelii fibris ramosis moniliformibus, articulis diametro brevioribus; ascis breve stipitatis, obovatis, 8-sporis; sporidiis ellipticis, 4-5-septato-muriformibus, non constrictis, fuscis.

Hab. in ramis Coniferarum, ad flumen Cycnorum (*Swan River*) in Australia (DRUMMOND), in ramis Abietum in Italia, in foliis Taxi baccatæ in Gallia.

II. *Capnodiella*: sporidiis octonis, globulosis, continuis.

3. **Capnodium maximum** B. et C. Cuban Fungi n. 876. — Peritheciis 325 elongatis nitidis nigris, setiformibus hic illic inflatis, apice capitulatis, e mycelio parco oriundis; ascis clavatis longe pedicellatis; sporidiis octonis globosis 5 μ . diam.; conidiis oblongis, sub-reniformibus.

Hab. in soris Polypodiorum, Cuba, Januario, Febuario. — Asci videntur infixi ubi perithecia inflata sunt. — Habitus fere *Sphaerostilbis*.

III. *Capnodaria*: sporidiis sexdenis, septatis.

4. **Capnodium Tiliæ** (Fuck.) Sacc. *Fumago Tiliæ* Fuck. Symb. p. 142 326
Capnodium Persoonii pl. auct. nec Berk. et Demaz. — Mycelio effuso subcrustaceo nigro; peritheciis minutis, gregariis, conico-obtusis, atris, non ramosis; ascis stipitatis, 16-sporis, ovatis, 32 \approx 16-18; sporidiis faretis, 14 \approx 7, oblongis, utrinque obtusis, fuscis, 3-4 septatis, septo longitudinali.

Hab. in ramulis corticatis Tiliæ europææ et ulmifoliæ,

rarius, Biebrich (Germania), Coimbra (Lusitania). — An *Meliola* (e sect. *Pleomeliolæ*)?

IV. Asci ignoti; sporidia fenestrata.

5. **Capnodium Araucariæ** Thuem. Contr. Myc. Lus. n. 311. — Ra- 327
mulos et folia tota occupans et involvens crustaque solubili, membranacea, aterrima obducens; mycelio ex hyphis longissimis, simplicibus, subrectis vel minime curvatis multi- brevissimeque articulatis, fere moniliformibus, fuscis composito; sporidiis diversis, maturis clavatis, utrinque rotundatis, multicellularibus, spadiceis, ad septa constrictulis, 16 μ . long., 7-9 μ . crass.
- Hab.* in Araucariæ excelsæ ramulis foliisque vivis, Coimbra in horto botanico (MOLLER). — *Obs.* Probabiliter fungus conidiophorus *Capnodii australis* Mont. Sylloge plant. cryptog. p. 257.
6. **Capnodium Crouanii** Mont. Pl. cell. Cent. VIII. p. 147, n. 44, et 328
Cr. Fl. Finist. p. 21. — Epiphyllum, maculare; peritheciis carnosiss, sphaericis, $\frac{1}{6}$ - $\frac{1}{3}$ mill. d. centro tandem ruptis, ambitu basi pauciciliatis; mycelii floccis variis ramosis, subhyalinis et fuliginis, articulatis reticulum densiusculum formantibus; ascis..... sporidiis oblongis, 3-septato-muriformibus.
- Hab.* ad paginam sup. foliorum Salicis capreae, Brest (Gallia). — Potius e subg. *Pleomeliola* generis *Meliolæ*, ob perithecia sphaeroidea.
7. **Capnodium elongatum** Berk et Desm., Berk. Moulds referred Fumago, p. 251, fig. 5 (1849). — Setosum; peritheciis elongatis acuminatis ut plurimum simplicibus apice fimbriatis; ascis..... sporidiis 2-3-septatis, articulis demum constrictis quandoque longitudinaliter divis. 329
- Hab.* in foliis Persicæ, Smilacis, Populi, Liriodendri, Pyri, Bignoniæ, Tussilaginis etc. in Europa et Amer. bor.
8. **Capnodium Pini** B. et C. North Am. Fungi n. 982. — Mycelio 330
laxo, floccis in perithecia repentibus et cum iis conjunctis; ascis.....; sporidiis oblongis quadriseptatis quandoque verticaliter divis.
- Hab.* in cortice Pini, Maine, Amer. bor.
9. **Capnodium Schweinitzii** Berk. et Desm., Berk. Moulds referred 331
Fumago, fig. 3. *Dematium Fuligo* Schw. p. p. — Velutinum; floccis subcylindricis; peritheciis subsimplicibus, elongatis, lævibus; ascis..... sporidiis obovatis celluloso-muriformibus, ad septa vix constrictis.

Hab. in foliis herbarum Pennsylvania (SCHWEINITZ).

10. **Capnodium Mesnierianum** Thüm. Myc. un. n. 1281. — *Paginam* 332
superiorem foliorum, plus minusve crusta solubili crassa, atra
consistente obducens; mycelio toruloideo, articulis plus minus glo-
bosis, 6-11 μ . diam., concatenatis, fuscis; hyphis erectis; ascis.....
sporis fusiformibus, utrinque acutatis, quadriseptatis, hyalinis, 14-
16 \approx 3.5-4, quandoque immixtis sporidiis bicellularibus, ovoideis
utrinque rotundo-obtusatis, fuscis.

Hab. Lusitania, Coimbra in horto publico ad *Hakeæ* sali-
gnæ folia viva, 1877 (P. G. MESNIER).

11. **Capnodium carolinense** Berk. et Desm., Berk. moulds referred 333
Fumago p. 12, fig. 7 (1849). — Sparsum, setosum; mycelio par-
co; peritheciis laxis ramosis, lateralibus elongatis lageniformibus;
ascis..... sporidiis oblongis bi-triseptatis.

Hab. in pag. inf. foliorum *Quercus obtusilobæ* in Caro-
lina austr. (CURTIS).

12. **Capnodium expansum** Berk. et Desm., Berk. moulds referred 334
Fumago p. 12, fig. 8 (1849). — Late expansum velutinum; peri-
theciis conicis brevibus connatis sæpe filamentis brevibus liberis
moniliformibus obsitis; ascis..... sporidiis tri-septatis, oblongis,
curvulis.

Hab. in cortice *Aceris nigri*, quem latissime strato velutino
nigro obducit, Ohio, Amer. bor. (HOOKER).

13. **Capnodium Thuemenii** Sacc. *Capnodium Fuligo* Thuem. Symb. 335
mycol. Austral. II, n. 103, nec Berk. — Acervulis epiphyllis, macu-
las indeterminatas, expansas, magnas, atras formans; ascis.....;
sporis elongato-ovalibus vel ovato-clavatis, rectis, raro paucicurva-
tis, apicibus utrinque rotundatis, quadri- raro triseptatis, ad septa
non constrictis, 12-14 \approx 5, fuligineis; hyphis paucis, brevibus, ar-
cuatis, ramosulis, dilute fuscis.

Hab. in foliis vivis cujusdam *Fici*, Nova Guinea (Australia).
Comm. FERD. MÜLLER.

14. **Capnodium Loniceræ** (Fuck.) Sacc. *F. Loniceræ* Fuck. Symb. myc. 336
p. 143. F. rh. 1829. — Cæspitibus effusis, densis, velutinis, atris,
e cellulis concatenatis, digitato-iterato-ramosis contextis, cellulis
(conidiis) ovatis, oblongis obovatisve, simplicibus didymisve, atro-
fuscis seu omnino obscuris, singulis 24-28 \approx 10; ascis?; sporidiis
oblongis, 3septatis, fuscis, 16 \approx 4.

Hab. in cortice ramulorum adhuc viventium *Loniceræ* Xy-
lostei, autumno, in Germania et Italia.

VI. Asci ignoti; sporidia 1-septata.

15. **Capnodium rhamnlicolum** Rabh. Fungi Eur. n. 666. Hedw. 1864, 327
p. 73. — Mycelio, moniliformi, vage ramoso; peritheciis brevibus
e basi dilatata subconicis; ascis sporidiis elliptico-oblongis,
hyalinis, uniseptatis.
Hab. in foliis Rhamni in Germania.
16. **Capnodium Fuligo** Berk. et Desm. Moulds referred Fumago p. 9, 338
fig. 2. (1849). — Mycelio crassiusculo, compacto a matrice secer-
nibili, nigro; peritheciis conico-cylindricis nigris floccis processibus-
que ostioliformibus exasperatis; ascis sporidiis minoribus,
ovato-oblongis, subinde spurie uniseptatis, subhyalinis.
Hab. in foliis Uvariæ trilobæ, plerumque in pag. superio-
re, Ohio, et in foliis plantarum variarum Pennsylvania, Amer. bor.
17. **Capnodium mangiferum** C. et Broome Some Indian Fungi in Grev. 339
IV. p. 117. — Effusum velutinum amphigenum; peritheciis ovatis
pyriformibus vel lageniformibus, 75–80 μ . altis; ascis spo-
ridiis arcte ellipticis, hyalinis, uniseptatis, 12–15 μ . long.
Hab. in foliis Mangiferæ indicæ, Mysore, India. Fere ab-
sque dubio idem ac *Dimerosporium mangiferum* quod cfr.
18. **Capnodium lanosum** Cooke Indian Fungi in Grev. VIII. 96. — Late 340
effusum, lanosum, atro-brunneum. Peritheciis simplicibus, vel ramo-
sis, attenuatis, $\frac{1}{3}$ mill. altis, hinc illinc cæspitoso-fasciculatis;
ascis sporidiis ellipticis, uniseptatis, hyalinis 16–18 \approx 8; hy-
phis ramosis, densissime intertextis, moniliformibus.
Hab. in foliis Fici, Belgaum (India); legit J. Hobson.
19. **Capnodium Nerii** Rabh. Fungi Eur. n. 662. Hedw. 1864, p. 73. — My- 341
celio moniliformi ramoso-reticulato, Capnodii Citri simillimo;
peritheciis elongatis, subconicis; ascis sporidiis oblongis uni-
septatis. — St. spermogonicus (*Apiosporium fœdum* Sacc.). Hyphis
intricatis, ramosis, repentibus, septatis, fuliginis, hinc inde coale-
scendo dilatationes cellulares irregulares formantibus, crustasque
latas, atras, facile secedentes efficientibus; conidiis hinc inde in-
spersis ovoideo-fusoideis, 1–3-septatis, cladosporioideis; peritheciis
ex hyphis oriundis globoso-depressis, 50 micr. diam., astomis, ver-
tice laciniatim dehiscentibus, contextu minutè parenchymatico, fu-
ligineo; ascis sporidiis (?) sphæroideis 3–4 micr. diam., hya-
linis, 1-guttulatis.
Hab. in pagina superiore et inf. foliorum ramulisque vivis ju-
nioribus Nerii Oleandri, in Lusitania, Italia, Austria, Amer. bor.

20. **Capnodium ilicinum** Thüm. in *Mycotheca universali* n. 1846. — 342
 Mycelio in foliorum pagina superiore crustas secedentes crassas, v. disjunctas, atras, in pagina inferiore caespitulos tenuissimos efficiente; hyphis multiarticulatis, ramosis, flexuoso-erectis, articulis moniliformibus, fumigatis; sporidiis diversis; nunc globosis 4 μ . diam., nunc oblongis uniseptatisve, 5-7 \approx 4, nunc ellipsoideis, 5 \approx 2.5 dilute griseo-fuscis. Asci nondum inventi.
Hab. Græcia, Athenis, in foliis vivis *Quercus Ilicis* L. vere 1877. (DE HELDREICH).
- VII. Asci ignoti; sporidia (spermatia?) continua v. ignota.
21. **Capnodium Cesatii** Mont. in litt. ad cl. baronem *Cesatium* et Syll. 343
Crypt. n. 917. — Epicladon; perithecio simplici corniformi; fertili apice incrassato, fusiformi ostiolato; thalli floccis in telam secedentem contextis; ascis nullis inventis, sporidiis madore evacuatis oblongis continuis hyalinis, 7-8 μ . longis.
Hab. ad ramellos novellos *Alni glutinosæ*, Vercellis (Italia) primo vere (CESATI), in agro Veneto (SACC.). — *Capnodio Citri* affine, præsertim quoad rationem fructificationis, a quo tamen forma tam perithecii quam retis floccorum thalli recedit.
22. **Capnodium axillatum** Cooke Hedw. 1878. p. 40. — 344
 Atrum, velutinum in axillis nervorum situm; peritheciis elongatis setiformibus, sursum attenuatis; mycelio moniliformi.
Hab. in nervis foliorum *Catalpæ cordifoliæ*, Carol. austr. (RAVENEL).
23. **Capnodium Eugeniæ** Cooke Ind. Fungi in Grev. VIII. 96. — 345
 Effusum, fuliginoso-atrum, subpelliculosum; peritheciis simplicibus, ventricosis, sub-rectis, 150 μ . altis, in subiculo membranaceo hinc illic pelliculoso insidentibus; (sporidiis ignotis).
Hab. in foliis *Jambosæ vulgaris*, Belgaum (India) ubi legit J. HOBSON.
24. **Capnodium Citri** Berk. et Desm. Berk. *Moulds referred Fumago* 346
 p. 11, (1849). *Cattaneo Miceti Agr.* p. 25. — Sparsum, setosum vix adhærens; peritheciis elongatis, raro bifurcatis; mycelio ramoso moniliformi pulcherrime reticulato; ascis spermatii oblongis minutis, hyalinis. — Sec. Catt. et Penzig hæc species sisteret spermogonium *Meliolæ Citri* et *M. Cameliæ*.
Hab. in foliis ramulisque Citrorum in Gallia, Hispania, Lusitania, Italia, California, Georgia. — Perithecia prælonga, sæpe fusoides, $\frac{1}{3}$ mill. alta; sporidia spermatia 7 μ . longa. — Var.

fructigena Thum. mycelio tenuissimo griseo-fusco. In fructibus maturis Citri Aurantii, Coimbra (Lusitania).

25. **Capnodium Persoonii** Berk. et Desm. Berk. moulds refer. Fumago p. 11, fig. 6 (1849). *Polychæton Avellanæ* Desm. — Setosum; peritheciis confertis, subramosis quandoque irregularibus; mycelio moniliformi; articulis sæpe oblongis, uniseptatis.

Hab. in foliis Coryli Avellanæ in Gallia. — Sporidia imperfecte cognita.

26. **Capnodium quercinum** (Pers.) Berk. et Desm. Berk. Moulds referred Fumago, p. 11, 1849. — *Polychæton quercinum* Pers. Valde compactum crassum; peritheciis fasciculatis ramosis, strato exteriori transverse secedente; mycelio parco, articulis vix constrictis. Forma conidiophora *Coniothecium quercinum* sistens: conidiis varie conglomeratis, septatisque, crassiuscule tunicatis, fuliginis, loculis singulis angulosis 6-10 micr. diam., maculas minutas confluentesque atras formantibus. — « *Coniothecium phyllogenum* Desm. loculis conidiorum minoribus cellulisque apicalibus mox liberatis, sphæroideis, esseptatis, subhyalinis, 6-7 μ . diam., differt. Ad hoc postremum spectare videtur *Capnodium ilicinum* Thuem. Herb. (in Quercu Ilice) ex Græcia ».

Hab. in pag. sup. foliorum Quercus pedunculatæ, Q. Ilicis, Q. obtusilobæ in Gallia, Lusitania, Italia, Austria, Amer. bor.

27. **Capnodium pelliculosum** B. et Rav. North Am. Fungi n. 981. — Floccis mycelii erectis apice trifidis, perithecio brevioribus; peritheciis elongatis subconstrictis.

Hab. in foliis Pruni Chickasse in Carol. inf. Amer. bor. — Hyphæ subinde apice trifidæ, *Tripasporii* ad instar.

28. **Capnodium pomorum** B. et C. North Amer. Fungi n. 983. — Mycelio obsoleto; peritheciis lævibus, variis ovato-lanceolatis vel obovatis furcatisve pedicellatis, stipite cylindrico, atro.

Hab. in pomis putrescentibus, Carol. inf., Amer. bor.

VIII. *Microxyphium*: peritheciis subulatis; ascis ignotis.

29. **Capnodium Taxi** Sacc. et Roum. Michel. II. 322, ad int. — Hypophyllum, glomerulosum, olivaceo-fuscum, hyphis cladosporioideis, nodulosis, septatis, conidia fusoidea 22 \approx 8, 1-3-septata gerentibus; peritheciis bacillaribus, 500-600 \approx 40, basi leniter incrassatis, fuliginis, apice obtusiusculis, pallidioribus, ascis et ascosporis

Hab. in pagina inferiore foliorum Taxi baccatæ in horto Massey prope Tarbes (Gallia), hieme 1870.

30. **Capnodium Footii** Berk. et Desm. Moulds ref. Fumago p. 13, fig. 352
 10. *Microxyphium Footii* Harw. — Mycelio maculiformi, setoso, nigro e filis subhyalinis et fuscis moniliformibus contexto; peritheciis setiformibus nigris, apice acutis superficialibus, hyphis moniliformibus subhyalinis basi cinctis; ascis et sporidiis ignotis.
Hab. in foliis Fici, Cassines, Ilicis, Clerodendri, Evonymi, Mercurialis, Styracis, Blæagni, Cinnamomi etc. in Anglia, Lusitania, Italia, Austria, etc. — Perithecia quandoque erecto-ramosa, apice hyalino-fimbriata; spermatia ovoideo-oblonga, 2-guttulata, hyalina, 3-5 = 2-2,2.

VIII. Species mihi minus notæ.

31. **Capnodium Corni** Auersw. in sched. et Kunze Fung. Helv. n. 94. 353
Hab. in foliis Corni sanguineæ in Germania, Austria et Helvetia.
 32. **Capnodium Thwaitesii** Berk. Intr. Bot. Crypt. 274, fig. 63 a. 354
 33. **Capnodium fibrosum** Berk. in Hook. Fl. Nov. Zel. II. 209. — Cras- 355
 sum, compactum; peritheciis elongatis rigidis, fasciculato-ramosis.
Hab. in corticibus in N. Zelandia (Colenso). — Format crustas setosas rigidas 8-10 mill. cr. Perithecia dense aggregata. —
 Sec. Cooke in litt. huc spectat *Meliola Palmæ* Schw. ex Surinam.
 35. **Capnodium Lentisci** Thuem. herb. 356
Hab. in foliis Pistaciæ Lentisci, Athenis (Græcia) legit.
 HELOREICH.

APPENDIX AD CAPNODIUM.

- ANTENNARIA** Link. in Schrad. Journ. III. 16. (Ety. ab *antenna*, quia conidia sæpe in antennas connexa). — Characteres *Capnodii* sed perithecia sæpius minuta, lateralialia, non ascophora. Verisimiliter est status infans *Capnodii*.
 1. **Antennaria pithyophila** Nees, Fr. S. Myc. III. 231. Sacc. Gen. Pyr. 357
 it. 17. — *Antennatula pinophila* Fr. — *Torula fuliginosa* Let. — Mycelio effuso compacto, scruposo-inaequabili, hispido, fuliginoso-atro, floccis moniliformibus, peridiis irregularibus basi adnatis « simplicibus v. ramosis, apicibus subtruncatis ».
Hab. in ramis foliisque Abietis in umbrosis Alpium Italiae, Germaniæ, Galliæ, Helvetiæ, Hispaniæ. — A ceteris omnino diversam speciem constituit mycelio dein crassiusculo subfuliginoso (licet flocci proprie atrii), superficie valde inaequabili, hispido granulosoque, peridiis majoribus irregularibus inter bases floccorum in-

natis floccisque obtectis. — «An hujus *Capn. australe* Mont. status perfecte evolutus?».

2. **Antennaria cytisophila** Fr. S. M. III. 231. Ab *Ant. pithyophila* 358
distinguitur mycelio subleproso, sed perithecia non visa.
Hab. ad ramulos *Cytisi incani* in regione atlantica Galliae
(GUEPIN).
3. **Antennaria elæophila** Mont. Syll. Crypt. n. 1067 et Bullet. Soc. 359
centr. d'Agric. Paris, 2. ser., IV, p. 767, et Ann., 3, XII, 304. —
Epiphylla et epiclada, mycelio effuso crustoso velutino, aterrimo,
secedente; fibris seu floccis æqualibus intricatis ramosis, articulis
transversim oblongis, extremis submoniliformiter concatenatis; pe-
ritheciis evoideis lateraliter adfixis; sporis hyalinis, ovoideo-oblongis.
Hab. in foliis vivis ramisque *Oleæ europææ* in Gallia, Lu-
sitania, Italia. — Var. *Phillyreæ*: hyphis majoribus, septatis, apice
catenulatis, 8–9 μ . cr. In foliis et ramulis *Phillyreæ* latifo-
liæ, Coimbra (Lusitania).
4. **Antennaria tropica** Mont. Syll. Crypt. n. 1065 et Cent. II, n. 67, 360
l. c., p. 332. — Mycelio amplo, compacto, crasso, petiolos foliorum,
ramulos truncosque arborum late investiente; floccis moniliformi-
bus, articulis sphærico-suboblongis, fusco-nigris; peritheciis crassis
e globoso elongatis.
Hab. in sylvis prope Cayennam (LEPRIEUR).
5. **Antennaria Guava** Cooke Calif. Fungi in Grev. V. p. 110. — Effusa, 361
epiphylla; floccis moniliformibus, ramosis; ad apicem attenuatis;
sporangii lageniformibus; mycelio tenuissimo.
Hab. in foliis *Guavæ*, California (HARKNESS). — Affinis *Ant.*
Robinsonii Mont.
6. **Antennaria Robinsonii** B. et M., Mont. Syll. Crypt. n. 1066 et in 362
Berk., Not. of Brazil. Fung., Lond. Journ. of Bot., II, t. 24, f. 2.
Cladosporium Fumago var. *elongatum* Mont., Fl. J. Fern., n. 53.
— Mycelio pannoso expanso; fibris tenuissimis elongatis ramosis,
articulis æqualibus moniliformibusve; peritheciis aut lateralibus
ovoideis aut in continuitate fibrarum oblongis.
Hab. ad folia præsertim *Filicum* in insulis Juan Fernandez
(BERTERO).
7. **Antennaria pannosa** Berk. Bot. Lond. Journ. 1843, n. 640, t. XXIII, 363
fig. 1. — Mycelio pannoso expanso, floccis erectis rigidiusculis,
primum moniliformibus, dein cylindricis ramosis, ramulis attenuatis
subalternatis.
Hab. in foliis *Pogopetali* speciei, Chapada de N. S. d'Ab-

dia, prov. Goyaz, Brasilia. — Perithecia non visa, sed adesse censet cl. BERKELEY.

8. **Antennaria scoriadea** Berk. Cryptog. antarct. p. 63. tab. LXVIII, 364
fig. 111. — Spongiosa, floccis fasciculatis sursum lateraliter convexis, peritheciis subellipticis, irregularibus.

Hab. in ramis fruticum et arborum variarum, præsertim *Dracophylli longifolii* in insulis Auckland et Campbell et in N. Zelandia. — Flocci $\frac{1}{4}$ – $\frac{1}{2}$ lin. longi, articulis moniliformibus v. (præsertim in filamentis ultimis) continuis levibus, nucleo globoso solitario. Perithecia elliptica «(an, ex icone, genuina?)».

4. **Antennaria ericophila** Link. Sp. pl. V, p. 118, Fr. S. M. III, 230. 365
— Mycelio amplissimo, crassissimo, compacto, floccis moniliformibus fusco-nigris; peritheciis inspersis adfixis globosis.

Hab. in truncis *Ericæ arboreæ* in Lusitania. — Densis cæspitibus, pollicem et ultra crassis caules et ramos late investit. Massam suberosam constituit, facile cultro discindendam, at firmam elasticam. Flocci (sub microsc. comp.) ramosi, valde implicati, articulis globosis; variat aliis floccis crassioribus, aliis multo tenuioribus; perithecia nigra inspersa, irregulariter globosa, cortice crasso friabili, intus sporulis moniliformibus solutis, quasi ramulis repleta.

10. **Antennaria semiovata** B. et Br. Ann. N. H. n. 784 Cooke Handb. 366
n. 1878. — Mycelio denso, atro, pannoso folia obducente; hyphis fertilibus erectis, brevibus, ramosis, articulis torulosis; pycnidiiis semiovatis; peritheciis curvatis, acuminatis.

Hab. in foliis *Aspidii Filicis maris* in Anglia.

11. **Antennaria Tela** Corda Icon. I, 23, t. VI, f. 290. — Effusa, crassa, 367
coactilis, coffeacea, dein atro-fusca, solubilis; peridiis teretibus, depressis, rugulosis, dein laciniato-apertis; sporis globosis, albidis, hylo verruciformi notatis 40,5 μ .; floccis ramosis, conjugatis, ramulis ultimis adscendentibus, uncinato-incurvis, luteo-fuscis, pelucidis.

Hab. in caulibus putridis *Ruborum* prope Grottau, Bohemiæ.

12. **Antennaria lævigata** Corda Ic. I, 23, t. VI, f. 289. — Effusa, membranacea, lævigata, nitida, rufo-fusca, peridiis concoloribus, subglobosis subdepressis, lævibus; sporis ovatis luteo-fuscis, nucleo obscuriori 12,5 μ . floccis diaphanis, teretibus, fistulosis, dichotome ramosis, amœne fuscis.

Hab. in cortice *Betulæ albæ* ad Hammerstein prope Reichenberg.

13. **Antennaria cistophila** Fr. S. M. III, p. 230. — Mycelio in pul- 369

vinulos lævigatos æquabiles confluentes compacto, floccis moniliformibus nigris, peritheciis immersis globoso-depressis.

Hab. in caulibus Cistorum fruticosis in regione mediterranea Gallie. — *A. ericophilæ* affinis, sed diversa videtur thallo tenuiori crassitiem dimidiæ uncie hæud attingente pulvinulos subhemisphæricos inter se tamen contiguos formante, superficie æquabili lævigata (nec hispida ut in aliis); massam stuposam sistente, difficile separandam; floccis magis ramosis, colore aterrimo, peritheciis thallo immersis obtectisque.

SCORIAS Fries, Syst. myc. III, 290, Mont. Syll. Crypt. p. 257 (Etym. a *scoria*, quia scoriam nigram refert). — Perithecia cornea, superficialia, e clavato pyriformia, obtusa acuminatave, sicca rigida fragilissima, humida mollia gelatinosa, omnia e fibris thalli composita; nucleus mucilaginosus, bibulus; asci obovoideo-clavæformes, crasse tunicati deorsum in stipitem attenuati, sporidia 4 foventes; sporidia fusiformia, hyalina 3-septata. Thallus (mycelium) tandem crassissimus, niger, opacus, spongiosus, persistens, e floccis subparallelis brunneis divergenti-ramosis inæqualiter articulatis muco concolori luxuriante obductis concretisque. — Mont., Ann., 3, XII, p. 303, cum observationibus. — Fries, Nov. Symb. Myc., p. 11, Berk. et Desm. Mould ref. *Fumago* (1849) p. 6 etc. 16 f. 1.

1. **Scorias spongiosa** (Schw.) Fr. S. M. III. 291. *Botrytis spongiosa* Schwein. — Char. generis. 370

Hab. in America bor., Carolina, Ohio etc. in ramis, truncis, radicibus Fagorum, nec alibi, vere, copiose. — Fungus admodum grandis, interdum duos pedes latus et longus, admodum rigidus et persistens, opacus, niger; superficie valde inæquabilis, e fibris magis condensatis solidior, quam basis fungi (quæ inter fibras rudes, gelatina exsiccata, discretas et materia cerino-grisea, humida gelatinosa obductas, cavernosa fit) fibrillis parallelis pellucidioribus in granula racemata abeuntibus obsessa.

REPERTORIUM

SPECIERUM PERISPORIACEARUM

SECUNDUM MATRICES *)

Obs. *E.* indicat Erysipheas, *P.* Perisporieas, *C.* Capnodieas.

Numeri progressioni continuæ specierum respondent.

- | | |
|--|--|
| <p>Abies — <i>P.</i> 122. 133. 308. — <i>C.</i> 824.
357.</p> <p>Acer — <i>E.</i> 27. 28. 29. — <i>P.</i> 260. 296.
— <i>C.</i> 334.</p> <p>Aerotrema — <i>P.</i> 200. 289.</p> <p>Æsculus — <i>E.</i> 26. — <i>P.</i> 205.</p> <p>Agave — <i>P.</i> 255.</p> <p>Alisma — <i>P.</i> 265.</p> <p>Alixia — <i>P.</i> 288.</p> <p>Allium — <i>P.</i> 370.</p> <p>Alnus — <i>E.</i> 13. 50. 75. 98. — <i>C.</i> 343.</p> <p>Ambrosiaceæ — <i>E.</i> 92.</p> <p>Ammophila — <i>P.</i> 188. 258.</p> <p>Ampelopsis — <i>E.</i> 22.</p> <p>Apargia — <i>E.</i> 11.</p> <p>Andromeda — <i>E.</i> 50. — <i>P.</i> 166. 241.</p> <p>Angelica — <i>E.</i> 67.</p> <p>Antidesma — <i>P.</i> 194. 219.</p> <p>Aplotaxis — <i>E.</i> 60.</p> <p>Aralia — <i>P.</i> 276.</p> <p>Araucaria — <i>C.</i> 327.</p> <p>Arbutus — <i>P.</i> 196.</p> <p>Aristotelia — <i>E.</i> 72.</p> <p>Artemisia — <i>E.</i> 59.</p> <p>Arundinaria — <i>P.</i> 314.</p> <p>Arundo — <i>P.</i> 266.</p> <p>Asparagus — <i>P.</i> 244.</p> <p>Asperifoliaceæ — <i>E.</i> 66.</p> <p>Asperugo — <i>E.</i> 66.</p> | <p>Aspidium — <i>C.</i> 366.</p> <p>Aster — <i>E.</i> 95.</p> <p>Astragalus — <i>E.</i> 41. — <i>P.</i> 207.</p> <p>Atalantia — <i>P.</i> 285.</p> <p>Azara — <i>P.</i> 227.</p>
<p>Baccharis — <i>P.</i> 195. 220. 238.</p> <p>Ballota — <i>E.</i> 110.</p> <p>Barosma — <i>P.</i> 305.</p> <p>Berberis — <i>E.</i> 47.</p> <p>Betula — <i>E.</i> 13. 20. 48. 50. — <i>P.</i> 269.
— <i>C.</i> 368.</p> <p>Bidens — <i>E.</i> 77.</p> <p>Bignonia — <i>C.</i> 329.</p> <p>Boletus — <i>E.</i> 16.</p> <p>Borrago — <i>E.</i> 66.</p> <p>Brassica — <i>P.</i> 134. 147.</p> <p>Buddleya — <i>P.</i> 290. 309.</p> <p>Buxus — <i>P.</i> 149.</p>
<p>Callicarpa — <i>P.</i> 287. 295.</p> <p>Camelia — <i>P.</i> 183. 280.</p> <p>Campanulaceæ — <i>E.</i> 61.</p> <p>Capparis — <i>P.</i> 164.</p> <p>Carlina — <i>E.</i> 60.</p> <p>Carpinus — <i>E.</i> 13. — <i>P.</i> 233.</p> <p>Cassine — <i>C.</i> 352.</p> <p>Catalpa — <i>E.</i> 13. — <i>C.</i> 344.</p> <p>Ceanothus — <i>E.</i> 90.</p> |
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*) Matrices vagæ, e. g. humus, ligna, caules, folia etc. plantarum non definitarum consulto omittuntur.

- Celastrus — *E.* 13. — *P.* 169. 223.
 239. 240.
 Celtis — *E.* 31. 32.
 Cephalanthus — *E.* 39.
 Cerinthe — *E.* 60.
 Chærophyllum — *P.* 267.
 Chelone — *E.* 82.
 Chusquea — *P.* 190.
 Cinnamomum — *P.* 302. — *C.* 352.
 Cirsium — *E.* 60.
 Cistus — *C.* 369.
 Citrus — *P.* 280. 307. 312. — *C.* 346.
 Cladium — *P.* 287.
 Clematis — *P.* 285.
 Clerodendron — *C.* 352.
 Clusia — *P.* 172.
 Coccoloba — *P.* 287.
 Colchicum — *P.* 263.
 Compositæ — *E.* 8. 61. 70.
 Conceveibum — *P.* 225.
 Coniferæ — *C.* 324.
 Convolvulacæ — *E.* 70. 73.
 Cornus — *E.* 13. 44. 65. — *P.* 136.
 233. — *C.* 352.
 Coronilla — *P.* 207.
 Corylus — *E.* 13. — *C.* 347.
 Cratægus — *E.* 1. 13.
 Crocus — *P.* 257.
 Cruciferæ — *E.* 73.
 Cucurbitacæ — *E.* 8. — *P.* 217.
 Cunonia — *P.* 301.
 Cupressus — *P.* 175.
 Curtisia — *P.* 315.
 Cydonia — *E.* 87.
 Cyperacæ — *P.* 277.
 Cytisus — *C.* 358.

 Daucus — *E.* 79. — *P.* 207.
 Desfontainia — *P.* 187.
 Desmodium — *E.* 33. 42.
 Desmonchus — *P.* 289.
 Dipsacæ — *E.* 70.
 Dorycnium — *E.* 60.
 Dracophyllum — *C.* 364.
 Drymis — *P.* 229. 279.

 Elæagnus — *C.* 352.
- Epigæa — *E.* 85.
 Epilobium — *E.* 10. — *P.* 204.
 Erica — *C.* 365.
 Erigeron — *E.* 11.
 Erodium — *E.* 78.
 Eryngium — *E.* 60.
 Eucalyptus — *P.* 189.
 Eugenia — *P.* 213.
 Euphorbia — *E.* 49. 68. 71.
 Evonymus — *E.* 38. — *C.* 352.

 Fagus — *E.* 13. — *P.* 126. 272. — *C.*
 370.
 Ficus — *C.* 335. 340.
 Filicacæ — *C.* 362.
 Fragaria — *P.* 261.
 Fraxinus — *E.* 13.
 Fuchsia — *P.* 107.

 Galeopsis — *E.* 62.
 Galium — *E.* 73.
 Garrya — *P.* 287.
 Geraniacæ — *E.* 70.
 Gerardia — *E.* 91.
 Gleditschia — *E.* 53.
 Graminacæ — *E.* 74.
 Guava — *C.* 361.
 Guazuma — *P.* 200.

 Hakea — *C.* 332.
 Hamamelis — *E.* 5.
 Heracleum — *E.* 67. — *P.* 267.
 Heterothalamus — *P.* 185.
 Hippobromus — *P.* 171.
 Hypericacæ — *E.* 73.
 Hyptis — *P.* 224.

 Iambosa — *P.* 222. — *C.* 345.
 Iasminum — *P.* 200. 202.
 Ilex — *P.* 126. 186. 199. — *C.* 352.
 Inula — *E.* 60.
 Iodina — *P.* 300.
 Iridacæ — *P.* 264.
 Juglans — *P.* 125.

 Labiatæ — *E.* 61.
 Lamium — *E.* 62.

- Lappa — *E.* 64.
 Lauraceæ — *P.* 182. 304.
 Lecanora — *P.* 159.
 Leguminosæ — *E.* 70. 73.
 Ligustrum — *P.* 233.
 Liriodendron — *E.* 82. — *C.* 329.
 Lonicera — *E.* 13. 34. 50. 51. — *P.*
 121. 233. — *C.* 336.
 Lycium — *E.* 33.
 Lycopsis — *E.* 66.

 Mangifera — *P.* 236. — *C.* 229.
 Magnolia — *P.* 216. 287.
 Melampyrum — *P.* 140.
 Melastoma — *P.* 168. 226.
 Menispermaceæ — *P.* 184.
 Menispermum — *E.* 57.
 Mercurialis — *C.* 352.
 Mespilus — *E.* 13.
 Metrosideros — *P.* 180.
 Morus — *E.* 25. — *P.* 306.
 Myrsine — *P.* 284.
 Myrtus — *P.* 220.

 Nerium — *C.* 341.
 Nyssa — *E.* 14.

 Olea — *P.* 176. — *C.* 359.
 Olinia — *P.* 163.
 Olyra — *P.* 243.
 Onograriaceæ — *E.* 70.
 Onosma — *E.* 66.
 Opuntia — *P.* 251.
 Oryza — *P.* 114.
 Oxalis — *E.* 43.
 Oxyridocarpus — *P.* 282.
 Oxyris — *P.* 301.

 Palicourea — *P.* 317.
 Palmaceæ — *P.* 131.
 Passiflora — *P.* 162. 170.
 Pavetta — *P.* 200.
 Peperomia — *P.* 192.
 Persea — *P.* 287.
 Persica — *C.* 329.
 Phillyrea — *E.* 27. — *C.* 359.
 Phlox — *E.* 84.

 Phlomis — *E.* 63.
 Pinus — *P.* 146. 158. 311. — *C.* 330.
 Piper — *P.* 198. 215. 285.
 Pistacia — *P.* 257. — *C.* 356.
 Plantaginaceæ — *E.* 8. 61.
 Plantago — *P.* 143.
 Platanus — *E.* 55.
 Plectranthus — *P.* 278.
 Plectronia — *P.* 118.
 Pleurostyliæ — *P.* 212.
 Pogopetalum — *C.* 363.
 Polygonaceæ — *E.* 70.
 Polypodium — *C.* 325.
 Populus — *E.* 20. 30. — *P.* 123. 127.
 155. — *C.* 323. 329.
 Prinos — *P.* 199. 200.
 Prunus — *E.* 3. 23. 107. — *C.* 349.
 Psidium — *P.* 287.
 Psilostoma — *P.* 242.
 Ptarmica — *E.* 60.
 Pyrus — *E.* 13. — *P.* 141. — *C.* 329.
 350.

 Quercus — *E.* 35. 36. 45. 58. 88. 99.
 100. — *P.* 123. 124. 125. 142. 153.
 156. 248. 320. — *C.* 333. 342. 348.

 Rhamnus — *E.* 37. 48. — *C.* 337.
 Rhododendron — *P.* 128. 234. 235.
 Rhus — *E.* 7.
 Ribes — *E.* 12. 40.
 Robinia — *P.* 112.
 Rosa — *E.* 6.
 Rosaceæ — *E.* 8.
 Rottbœllia — *P.* 200.
 Rubiaceæ — *P.* 286.
 Rubus — *E.* 80. — *P.* 129. — *C.* 367.
 Russula — *P.* 262.

 Salacia — 287.
 Salix — *E.* 4. 20. — *P.* 138. — *C.*
 323. 328.
 Sambucus — *E.* 40. 52.
 Santalum — *P.* 173.
 Sapindaceæ — *P.* 303.
 Scabiosaceæ — *E.* 70.
 Sclerochiton — *P.* 167.

- Scrophulariaceæ — *E.* 8. 61. 70.
Secale — *P.* 144. 252.
Senecio — *P.* 160.
Silene — *P.* 206.
Smilax — *P.* 275. — *C.* 329.
Solanum — *P.* 208.
Sorbus — *E.* 9.
Spiræa — *E.* 54. 76.
Stachys — *E.* 62.
Styrax — *C.* 352.
Symphytum — *E.* 66.
Symplocos — *P.* 288.
Syringa — *E.* 48. 87.
Syzygium — *P.* 237.
- Tanacetum — *E.* 11.
Taraxacum — *E.* 64.
Taxus — *P.* 324. — *C.* 351.
Terminalia — *P.* 287.
Tetracera — *P.* 310.
Tilia — *E.* 21. — *C.* 326.
- Tragopogon — *P.* 271.
Tussilago — *C.* 329.
Typhaceæ — *P.* 246.
- Ulmus — *E.* 17. 19. — *P.* 132.
Umbelliferæ — *E.* 73.
Urania — *P.* 291.
Urticaceæ — *E.* 8. 70. 73.
Uvaria — *C.* 338.
- Vaccinium — *E.* 2. 46. 85. — *P.* 48.
Valerianaceæ — *E.* 70.
Verbena — *E.* 93.
Viburnum — *E.* 35. 50. 86.
Vitis — *E.* 24. 81. 89.
- Weinmannia — *P.* 281.
- Zea — *P.* 254.
- Xanthium — *E.* 64. 69.
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Fam. 2. Sphaeriaceæ FR. Summa V. S. p. 381 p. p.

Ces. et De Not. Schema Sfer. p. 196 p. p., Sacc. in Michelia.

Simplices v. compositæ. Perithecia membranacea, coriacea v. carbonacea a stromatis substantia (ubi stroma adest) heterogenea, nigricantia, ostiolo rotundo dehiscentia. — A familia sensu Auctorum aufero *Lophiostomaceas*, *Dothideaceas*, *Microthyriaceas*, *Camilleaceas*, *Hypocreaceas*, quas conferas.

Sect. 1. Allantosporæ Sacc.

Sporidia continua, cylindrica, utrinque obtusiuscula (allantoidea v. botuliformia) curvula, hyalina v. olivascentia.

Clavis analytica generum.

A) Simples v. cæspitosæ.

a) Ostiolum centrale brevissimum.

1. Asci octospori.

† Tectæ.

Massalongiella. Perithecia minuta, glabra, membranacea.

Enchnoa. Perithecia majuscula, strigoso-pilosa.

†† Subsuperficiales.

Cælosphæria. Perithecia acervata, globosa dein cupuliformia.

2. Asci polyspori.

Fracchiæa. Perithecia cæspitosa v. sparsa, non cupularia.

b) Ostiolum laterale conicum.

Pleurostoma. Perithecia superficialia; asci myriospori.

B) Compositæ, stromaticæ.

a) Perithecia sub peridermio relaxato sublibera.

Calosphæria. Asci octospori; ostiolum breve v. longum.

Coronophora. Asci polyspori; ostiolum brevissimum.

b) Perithecia cortice v. ligno immersa.

1. Stroma e matrice mutata formatum.

† Stroma valseum (peritheciis in circulum aggregatis).

§ Asci 4-8-spori.

Quaternaria. Perithecia quaterna v. pauca; asci stipitati.

Valsa. Perithecia copiosiora, circinantia v. monosticha; asci sessiles; ostioli integra.

a) *Euvalsa*. Stroma in cortice non nigrolimitatum.

b) *Leucostoma*. Stroma in cortice nigrolimitatum.

(*Cyptospora*. Perithecia *Valsæ*; sporidia allantoidea, sed longissima a seum subæquantia. Vide inter *Scolecosporas*).

Eutypella. Perithecia copiosiora, monosticha v. polysticha; asci stipitati; ostioli sulcata; stroma corticale v. ligneum, nigrolimitatum.

§§ Asci polyspori.

Valsella. Perithecia corticola, valsiformiter aggregata.

†† Stroma late et indefinite effusum (eutypeum).

§ Asci octospori.

Eutypa. Stroma manifestum corticale v. ligneum; ostiola parva; sporidia subhyalina.

Endoxyla. Stroma obsoletum ligneum; ostiola majuscula; sporidia fuscidula.

Cryptosphæria. Stroma obsoletum, corticale; ostiola parva; sporidia subhyalina.

§§ Asci polyspori.

Cryptosphærella. Ut *Cryptosphæria* sed asci polyspori.

Cryptovalsa. Ut *Eutypa* sed asci polyspori.

2. Stroma a matricis substantia heterogeneum.

Diatrype. Stroma effusum v. disciforme; asci octospori.

Diatrypella. Stroma verruciforme; asci polyspori.

MASSALONGIELLA Speg. F. Arg. I, p, 180 (Etym. a cl. prof. *C. Massalongo*). — Perithecia sparsa, minuta, epidermide tecta, eaque secedente quandoque libera, lenticulari-globosa, ostiolo minuto pertusa; asci cylindræco-subfusiformes, octospori; sporidia allantoidæ, utrinque guttulata, hyalina. — Species caulicola.

1. **Massalongiella Bonariensis** Speg. l. cit. — Peritheciis sparsis 300–500 μ . diam. globoso-lenticularibus, primo tectis dein, epidermide secedente, liberis, ostiolo minuto, pertuso, donatis, contextu membranæco, densiuscule parenchymatico, atro-olivæco; ascis cylindræco-fusoideis, sursum obtuse rotundatis, quandoque subtruncatis, deorsum in pedicellum desinentibus, part. sporif. 90–100 \approx 10–12, pedicello 30 \approx 5, aparaphysatis, octosporis; sporidiis cylindræcois, utrinque obtusiusculis, curvulis, (allantoidæis), hyalinis, 20–24 \approx 4–5, utrinque guttulis. 371

Hab. in caulibus dejectis putr. Jussixæ longifoliæ in palud. secus Rio de la Plata a la Recoleta, Febr. 1880 (Amer. bor.).

ENCHNOA Fr. Summa V. S. p. 410 (Etym. *en*, in et *chnoos*, lanugo). — Perithecia sparsa vel gregaria, cortice tecta, tomento denso, fusco undique obsessa vel insidentia, tenuissima, fragilia, vertice punctiformi peridermium connatum perforante. Asci cylindræco-clavati. Sporidia octona, botuliformia, guttulata hyalina vel olivæca. — Ramicolæ.

1. **Enchnoa infernalis** (Kunze et Fr.) Fuck. Symb. myc. 302. F. it. t. 470. *Sphæria infernalis* Fr. S. M. II, 371. *S. Glis* Berk. et Br. — Tecta, subemergens, stromate effuso, floccoso-strigoso, fusco-nigro, obvolvente perithecia globosa tenuia collabascientia, ostio-

lis obsoletis; ascis clavatis, paraphysatis, longe stipitatis, 8sporis, 100-120 \approx 12-16, p. s., 60 μ . long.; sporidiis distichis v. conglomeratis, cylindræis, curvatis, utrinque introrsum acutiusculis, continuis, guttulatis, pallide olivaceis, 20-24 \approx 5.

Hab. in ramis dejectis corticatis *Quercus pedunculatæ* in Germania, Helvetia, Britannia, Italia. — Nascitur supra corticem interiorem, nec huic immersa, epidermide bullato-prominente tecta, indeterminata. Perithecia majuscula, gregaria, valde tenuia, absque ostiolis distinctis, tamen epidermidem perforant, quæ inle luci obversa minute pertusa.

2. **Enchnoa floccosa** (Fr.?) Karst. Symb. Fenn. IV, 187. — Peritheciis sparsis aut confertis, interdum seriatim aggregatis, ut videtur, primitus peridermio tectis, dein denudatis, sphæroideis, basi collapsis et glabris, tomento araneoso fusco vel umbrino obtectis, vix papillatis, lævibus, tenuibus, $\frac{1}{5}$ - $\frac{1}{3}$ mill. diam.; ascis aparaphysatis, clavatis, ope jodi haud cærulescentibus, 30-36 \approx 8-9; sporidiis, tristichis, elongatis vel cylindræis, 2-guttulatis, curvulis, chlorino-hyalinis, 10-12 \approx 2-2.5. 373

Hab. in ramulis vetustis *Sambuci racemosæ* in horto Mustialensi (Fennia) mense Aprili 1872 parcius. — Verisimiliter est *Sphæria floccosa* Fr. Syst. myc. II, p. 375. Perithecia speciminum fennicorum ligno, cortice orbato, insidentia, astoma, filamentis longis, articulatis, fuscis, 6-7 μ . crassis superne obsessa. — « Ab *E. Friesii* Fuck. sporidiis tristichis, tenuioribus differre videtur ».

3. **Enchnoa lanata** Fr. S. V. S. p. 343 et 410. *Sphæria lanata*. Fr. 374
Syst. myc. II. 482. — Peritheciis tectis, liberis, globosis, lanatis, ferrugineo-fuscis, ostiolo erumpente nigro; ascis amplis, late ellipticis, difficillime diffluentibus, 8sporis; sporidiis cylindræis, utrinque obtusis, curvatis, hyalinis, nucleo medio diviso, septum referente, 9 \approx 3.

Hab. sub epidermide ramorum *Betulæ albæ* et *pendulæ* in Britannia, Scandinavia, Germania, Italia. — Perithecia nunc sparsa, nunc conferta subconfluentia, globosa v. globoso-collapsa, *maxima*, tenuissima, undique tomento longo densissimo ferrugineo-fusco v. alius obscuri coloris lanata, ostiolo erumpente tenui cum epidermide connato, quare illa avulsa secedit, sed vere circumscissa non est. In ætate juniore sistit globulos pellucidos fluxiles in tomento expanso; gelatina albida, copiosissima. — Var. *Notarisii*; sporidiis majoribus, 14-15 \approx 4, hyalino-luteolis. In ramis *Cerasi* in Italia boreali.

4. **Enchnoa Friesii** Fuck. Symb. myc. p. 151. — Peritheciis sub epidermide nidulantibus, circinatis, tomento fusco insidentibus, peritheciis ipsis glabris, minutis, subglobosis, nitido-fuscis, demum obscurioribus, collis perithecio duplo longioribus, decumbentibus, concoloribus instructis, ostiolis in disco spurio, rimoso, tuberculoso, parum prominulis, partibus prominulis conicis, atris; ascis clavatis, 8sporis, $44 \approx 7$; sporidiis distichis, oblongo-cylindraceutis, valde curvatis, utrinque obtusis, 3-4guttulatis, continuis, hyalinis, $12-14 \approx 4$.

Hab. sub epidermide ramorum Sambuci racemosæ, Æstrich (Rhenogovia), rara, socia *Massaria hirta*. — Sec. Fuck. certe differt ab *E. floccosa*.

5. **Enchnoa alniella** Karst. Mycol. Fenn. II. p. 198. — Peritheciis sparsis vel sæpius gregatim stromate furfuraceo, fusco insidentibus peridermio tectis eique soluto non adhærentibus, fusco-atris, villo fusco undique obsessis, vertice punctiformibus sæpe peridermium leviter elevatum perforantibus, tenuissimis, fragilibus, latit. $0,3 \mu$.; ascis cylindraceuto-clavatis, paraphysibus filiformibus obvalvatis obtusis, $70-75 \approx 13-15$; sporidiis octonis, distichis, fusoido-oblongatis, leviter curvulis, 6-guttulatis vel spurie tenuiter 3-septatis, hyalinis, $21-26 \approx 6-8$.

Hab. in ramulis Alni incanæ emortuis prope Mustiala (Fennia) mense Decembri. — Formam ejus conidiferam verisimiliter sistunt pulvinuli, per peridermium laciniatim fissum erumpentes, furfuracei, intus fusci, superne applanati, atrati, sæpe angulati, conidiis ellipsoideis, ovoideo-oblongatis vel subelongatis, simplicibus, hyalinis fœti.

CÆLOSPHÆRIA Sacc. Myc. Ven. spec. p. 115 (Etym. a *coilos*, concavus, quia perithecia dein cupuliformia fiunt) *Nitschkia* Otth, Fuck. Symb. myc. p. 165. — Perithecia cæpitosa vel gregaria, stromate nigro vel villo tenui candido insidentia, globosa dein typice cupuliformia, subastoma. Asci anguste clavati. Sporidia octona, botuliformia guttulata, hyalina. Rami- vel lignicolæ.

Obs. Nomen generis mutavi quia extet antiquis genus, nimis consonum, *Nitzschia*, inter Diatomaceas.

1. **Cælosp hæria cupularis** (Pers.) Karst. Symb. ad Myc. Fenn. 1879, p. 42. *Sphæria cupularis* Pers. *Nitschkia Fuchelii* Nitschke in Fuck. Symb. myc. p. 165. *Cœl. Fuchelii* (Nke) Sacc. Myc. Ven. Spec. p. 115, t. XII, f. 1-2, F. ital. t. 480. — Peritheciis in acervulos subhemisphæricos aggregatis $\frac{1}{5}-\frac{1}{3}$ mill. diam., subglobosis,

regulosis, atris, dein collabescendo exsquisite cupuliformibus; ascis cylindræo-clavatis, breviter stipulatis, 40-60 \approx 9, paraphysibus filiformibus obvallatis, 8sporis; sporidiis distichis, botuliformibus, cylindræis, curvatis, hyalinis quoque polo 1-guttulatis, 9-10 \approx 2-3.

Hab. in ramis exsiccatis Glœditschiæ, Robininiæ, Ulmi, Aceris, Pruni, Carpini, Syringæ, Fraxini, Tiliæ etc. in tota fere Europa et Amer. boreali, socio quandoque spermogonio *Phomam Fuckelii* Sacc.istente.

2. **Cœlosphæria tristis** (Pers.) Sacc. *S. tristis*, Pers. Syn. p. 87. — 378

Peritheciis confertis globosis rugulosis mox collapsis, astomis, nigris, subiculo strigoso insidentibus; ascis ovato-fusoideis, 30 \approx 14, octosporis; sporidiis distichis, botuliformibus, 15-18 \approx 2-2.3, utrinque obtusiusculis, vix curvatis, 3-guttulatis hyalinis.

Hab. in corticibus Coryli, Sambuci, Fagi, Viburni, in Britannia, Gallia, Germania, Algeria, Amer. bor. — Opaca, aterrima. Subiculum tenue, effusum, indeterminatum, contextum. Perithecia minuta, planiusculo-depressa, demumque concava, punctulis minimis rugulosa. — Var. β . *fusca*, peritheciis turgidis læviusculis, subiculo crassiusculo piloso-strigoso fusco semiimmersis. A. S. Lusat. p. 44. Ad ligna cariosa abiegna in Germania. Specie forsân distincta. Perithecia globosa aut subovata.

3. **Cœlosphæria exilis** (Alb. et Schw.) Sacc. *Sphæria exilis* Alb. et Schw. *Nitschkia exilis* (Alb. et Schw.) Fuck. Symb. myc. p. 165. — 379

Peritheciis gregariis, villo tenui candido effuso insidentibus, sphæroideo-depressis, deinde collapsis-concavis seu pezizoideis, atris, pilis patulis, brevibus, acuminatis, concoloribus adpersis, minutissimis 150 μ . diam.; ascis anguste clavatis, 30-32 \approx 4-5; sporidiis octonis oblique distichis vel subdistichis, elongatis sive cylindræis, rectis vel leviter curvulis, guttulatis, hyalinis 4-8 \approx 1 (Karsten), 10 \approx 2 (Fuckel).

Hab. in acubus Pini, in ramis Rubi, Populi, Pruni, Quercus, Corni in ligno vetusto Betulæ, et Salicis in Fennia meridionali et media in Germania, Britannia, Amer. bor. — Pili perithecii inarticulati, acutati, 20-100 \approx 3-5.

4. **Cœlosphæria acervata** Karst. Symb. Mycol. Fenn. 1879, p. 41. — 380

Peritheciis cœspitosis aggregatis, erumpentibus, coriæco-carbonaceis, subsphæroideis, astomis, rubris, demum nigrescentibus vel subatris, collabescendo cupulæformibus; ascis cylindræo-clavatis, 80 \approx 10-12; sporidiis elongatis, rectis vel leniter curvulis, simplicibus, hyalinis, 8-12 \approx 2; paraphysibus haud bene discretis.

Hab. in ramis aridis Pyri Mali, in Mustialia (Fennia) mense Aprili semel observata. — Cæspites plerumque orbiculares, per epidermidem erumpentes, stromate tenuiusculo, flavo, latit. 2–3 mill. Perithecia tandem dehiscentia, molliuscula, stromati manifesto, flavo dense acervatim insidentia. A *C. cupulari* (Pers.) et *C. tristi* (Pers.) Sacc. peritheciis lævibus, rubris, paullo majoribus, stromate flavo statim dignoscenda. Cum *Cucurbitaria acervata* Fuck. Symb. myc. p. 175 nihil commune habet. *C. acervata* Cook. Brit. Fung. II, p. 841 duas species spectat sec. syn. — «Auctoritate cl. Karstenii hoc loco retinui sed «perithecia rubra» potius Hypocreaceam designant».

5. **Cœlosphæria chiliopyxis** (B. et C.) Sacc. *Sphæria chiliopyxis* B. 381 et C. North Amer. Fungi n. 906. — Minutissima, gregaria, nitida globosa; sporidiis hyalinis leviter allantoideis.

Hab. in lignis putridis in Carolina inf. (Amer. bor.).

6. **Cœlosphæria radicalis** (Cooke) Sacc. *Cucurbitaria radicalis* Cooke 382 Grevill. VI, 51. — Pustulis variis, erumpentibus, valsoideis, prominulis; peritheciis atris, ovatis, papillatis, opacis; ascis clavatis; sporidiis linearibus, leniter curvulis, obtusis 8 μ . long.

Hab. in radicibus quercinis, Aiken, Carolina (Amer. bor.).

7. **Cœlosphæria subconnata** (B. et C.) Sacc. *Sphæria subconnata* B. 383 et C. North Amer. Fungi n. 905. — Peritheciis hemisphæricis supra corticem sparsis, depressis, subconnatis; ascis clavatis farctis; sporidiis allantoideis.

Hab. in ramis Liquidambaris, Carolina Inf. (Amer. bor.)

FRACCHIAEA Sacc. Myc. Ven. Spec. p. 115 (Etym. a cl. *Josepho Fracchia* Tarvisino, 1797–1869, mycologiæ cultore). — Perithecia aggregata v. subsparsa, crustula stromatica insidentia, superficialia, globoso-umbilicata, verruculosa, coriaceo-carbonacea, atra. Asci clavati, polyspori. Sporidia allantoidea, subhyalina. — Species inter se admodum affines et nonnullæ ægre distinguendæ. — Ramicolæ.

1. **Fracchiæa heterogenea** Sacc. Myc. Ven. Spec. p. 115, tab. XII. 384 f. 3–7. Fungi ital. t. 465. — Peritheciis aggregatis v. subsparsis, crustula stromatica insidentibus supra lignum v. corticem nascentibus e sphæroideo depressis, diam. $\frac{1}{3}$ mill., extus intusque atris, verruculosis, ostiolo minuto vix v. non prominulo, dein umbilicato; ascis elongato-clavatis, basi attenuatis, 70 \approx 12–14, polysporis, paraphysibus asco longioribus, guttulatis, jodi ope tantum conspicuis

(teste Speg.) obvallatis; sporidiis valseis cylindræcis curvatis utriusque rotundatis, $12 \approx 2$, 3-4-guttulatis, hyalinis, dense et polystiche stipatis. — Spermatia, in peritheciis junioribus ascophoris, minima cylindræca, hyalina, curvula, $3 \approx \frac{1}{2}$, sterigmatibus filiformibus curvatis, $15 \approx \frac{1}{2}$, suffulta.

Hab. in ramis corticatis decorticatisque exsiccatis Aceris campestris, Rhamni Frangulæ, Æsculi Hippocastani, Loniceræ Caprifolii, Buxi sempervirentis, Rubi fruticosi, Alni viridis in agro Tarvisino, Patavino, Bellunensi (Italia); ad ramos Paliuri in Gallia merid. (FABRE), Eucalypti Globuli in Amer. austr. (SPEGAZZINI), vere, frequens. — Habitus Cœlosphæriæ, a qua ascis polysporis et peritheciis non tandem cupularibus differt. — Dixi *heterogeneam* ex eo quod perithecorum fabrica ad *Cucurbitarias*, fructificatione vero ad *Valsas* accedit.

2. **Fracchiæa cucurbitarioides** Speg. Pug. 2, p. 21. — Peritheciis globosis superne subapplanatis, $\frac{1}{4}$ - $\frac{1}{3}$ mill. diam. glabris, atris; 4-9 cæspitose-gregariis; ostiolo vix perspicuo; contextu coriaceo membranaceo vel subcarbonaceo, atro, ascis cylindræco-clavatis, plus minusve rotundatis, deorsum in pedicellum breviusculum desinentibus, 80-85 \approx 10, polysporis, apapophysatis; sporidiis inordinatis, cylindræco-allantoideis, utrinque rotundatis, $10 \approx 2$, granuloso-farctis, hyalinis. 385

Hab. in ligno putri decorticato Erythrinæ Crista-galli secus Rio de la Plata prope la Becoleta, Maj. 1880. — Videtur var. *Fracchiæa heterogeneæ*.

3. ? **Fracchiæa brevibarbata** B. et C. North Am. Fungi n. 822. (Cucurbitaria). — Cæspitosa globosa, nec collapsa, minutissime tomentosa; ascis clavatis farctis; sporidiis allantoideis. 386

Hab. in Amer. bor. (sed nutritrix et locus specialis desideratur).

4. **Fracchiæa moricarpa** Cooke in Grevill. VI. p. 51. (Gibbera). — Pustulis erumpentibus; peritheciis convexo-applanatis, atris, opacis, minute velutinis, demum subglabris; ascis late clavatis; sporidiis numerosis, linearibus, curvulis, obtusis 8-10 μ . long. 387

Hab. in ramis Myricæ, Darien, Georgia (Amer. bor.). — « An var. *F. heterogeneæ*? »

5. **Fracchiæa callista** B. et C. North Amer. Fungi n. 821. (Cucurbitaria). — Effusa, peritheciis in crusta fusca insidentibus, primum globosis, dein collapsis; sporidiis minutis allantoideis, copiosis. 388

Hab. in ramis Carpini in Amer. bor., Corni alternifoliæ, Buffalo, Sandlake, Amer. bor. (CLINTON, PECK).

6. **Fracchiæa rasa** (Berk.) Sacc. *Sphæria* (cæspitosæ) *rasa* Berk. in 389
Fl. N. Zel. II. 205, tab. CVI, f. 5. — Conferta; peritheciis oblongis apice convexo obtuso liberis, ostiolo punctiformi, superficie opaca quasi rasa; ascis faretis cylindrico-clavatis, polysporis; sporidiis allantoideis, 5 μ . long.

Hab. in ramis putridis decorticatis Weinmanniæ in Nova Zelandia, River Manawatu (COLENSO).

PLEUROSSTOMA Tul. Sel. Carp. (Ety. *pleura*, latus et *stoma*). — Perithecia superficialia, membranacea, sphæroidea, ostiolo laterali, immo subhorizontali, papillato. Asci ovoidei, stipitibus ramulosis suffulti, myriospori. Sporidia botuliformia, tenuissima. Spermogonia nota. — Ad *Calosphærias* accedere videtur.

1. **Pleurostoma Candollei** Tul. l. c. *Sphæria latericollis* DC., Fr. S. 390
M. II. 464. — Gregaria, nigra; peritheciis emergentibus, sphericis, levibus, ostiolo laterali, conico, rigido; ascis generis p. s. 40–50 \approx 13–16, myriosporis; sporidiis allantoideis, minimis 3.5 μ . long. hyalinis.

Hab. in ligno quercino in Gallia. — Perithecia distincta sed in acervulos subcompressos collecta, glabra, demum emersa, cupuliformia.

CALOSPHÆRIA Tul. Sel. Carp. II. 108 (Ety. *calos*, pulcher et *sphæria*). — Perithecia cortice interiore adnata, nec immersa, peridermio tecta v. denique, eo secesso, libera, globosa v. ovoidea, in soros plerumque congregata v. subsolitaria, stromate vero obsoleto; ostiolo vario, brevissimo v. longissimo. Asci tereti-clavati, paraphysati, octospori. Sporidia botuliformia, hyalina. — Adsunt quandoque spermogonia. — Fungi minuti, corticolæ.

A) *Eucalosphæria*: peritheciis rostellatis.

a) Perithecia glabra.

1. **Calosphæria Princeps** Sel. Tul. Fung. Carp. II, p. 109, t. XIII, f. 17– 391
22. Sacc. F. ital. t. 476. — *Sphæria pulchella* Pers. — Peritheciis corticis interioris superficiei adnatis, liberis, in soros orbiculares, ovales v. ellipticos dense stipatis, globosis, glabris, nitidis; collis longissimis, decumbentibus, flexuosis, cylindricis ostiolisque per peridermii rimas, transversim directas erumpentibus ac plus minus exstantibus, obtusis, sejunctis instructis; ascis clavatis, longe ac tenuiter pedicellatis, octosporis, pseudoparaphysibus, simpli-

cibus, crassiusculis, unicellularibus longissime superatis, 18-26 \approx 4 (p. sporif.); sporidiis laxe conglobatis, cylindricis, curvatis, hyalinis, 6 \approx 1 $\frac{1}{2}$ («8-10 \approx 1 $\frac{1}{2}$ »).

Hab. intermixtis spermogoniis conico-cylindraceis, in cortice Pruni Cerasi et P. Avium in Britannia, Belgio, Gallia, Germania, Helvetia, Suecia, Italia, Amer. bor.

2. **Calosphæria ciliatula** (Fr.) Karst. Mycol. Fenn. II. 156 *Sphæria* ³⁹²
ciliatula Fr. S. M. II. 406. — Peritheciis in soros obiculares vel oblongatos aggregatis, circinantibus, sphæroideis, glabris, lævibus, atris, collis decumbentibus, flexuosis, nunc longissimis (sæpe 10 mill. longitudine metientibus), capillaceis, acutissimis, nunc brevibus, per rimas peridermii vix emergentibus, obtusis; ascis cylindraceo-clavatis, breviter pedicellatis, 25-35 \approx 4 (p. sporif.); sporidiis subdistichis, fusoideo-elongatis, rectis vel subrectis, hyalinis, 4-6 \approx 1.

Hab. in cortice truncorum et ramorum Betulæ sub libro, et Aceris Pseudoplatani in Fennia, Suecia, Germania, Italia. — Var. *Oxyacanthæ* Sacc. F. ital. tab. 424. A typo differt ascis racemose aggregatis, longeque paraphysatis. In ramis *Oxyacanthæ* in sylva *Montello* aut. 1878 (Italia).

3. **Calosphæria pusilla** (Wahlenb.) Karst. Myc. Fenn. II. 157. *Sphæria* ³⁹³
pusilla Wahlenb. — *Cal. Wahlenbergii* Nits. Pyr. Germ. p. 92. *C. ciliatule* sat similis, differt vero sporidiis majoribus 8-12 \approx 1,5 et sæpius curvulis, ascis majoribus 30-50 \approx 5-6 (p. spor.), peritheciis paullo majoribus collisque vulgo brevioribus.

Hab. in cortice Betulæ in Lapponia, Gallia, Germania, Italia et Alni in Mustiala (Fennia). — *Sph. pusilla* Pers. quoque generi *Calosphæriæ* spectare mihi videtur.

4. **Calosphæria assecla** (Schw.) Sacc. *Sph.* (ceratostomeæ) *assecla* ³⁹⁴
Schw. Syn. Am. bor. n. 1622. Berk North Am. Fungi pag. 182. — Minutissima, fusca; peritheciis globosis; ostiolo triplo longiori inclinato, pro ratione crassiusculo, tereti; ascis 50 μ . long.; sporidiis allantoideis 6-7 μ . longis. Catervis maximis dense aggregatis interdum semiuncialibus circumdat pustulas aliarum Sphæriarum.

Hab. semper in consortio et circum pustulas variarum Valsacearum sub epidermide Castaneæ in Amer. bor. — Vix unquam circinat, sed affinis est *C. pusillæ*.

5. **Calosphæria parasitica** Fuck. Symb. Myc. App. II. p. 41. — ³⁹⁵
Peritheciis subglobosis seu pyriformibus, fuscis, lævibus, minutis, plerumque 3-8 subcircinantibus, decumbentibus, in *Quaternarie*

Persoonii peritheciis adultis aut in superficie aut in interiori parte nidulantibus, collis diametro perithecii semel-ter longioribus, cylindræis, aterrimis, subtilissime perforatis, exsertis, sæpe fasciculatis instructis; ascis oblongo-clavatis, antico obtusis, basi longe, tenuissime acuminatis, 8sporibus, $24 \approx 5$; sporidiis conglobatis in ascis latiori parte, cylindræis, continuis, curvatis, hyalinis, $5 \approx 1$; pseudoparaphysibus longissimis, articulatis, $5-8 \mu$. crass.

Hab. in cortice interiore Fagi, prope Æstrich (Rhenogovia).

6. **Calosphæria corylina** Nits. Pyr. Germ. p. 95. — Peritheciis satis 296
numerosis (8-20), rarius paucioribus, in soris majusculis, ovals, corticis interioris superficiæ, sub peridermio adnatis, nec immer-
sos densissime sociatis, arcte inter se conjunctis, circinatim decum-
bentibus, peridermio, vix pustulato-elevato tectis, minutis, globosis,
ex fusco nigricantibus, glabris, tandem collapsis, in collum plus mi-
nus elongatum, crassiusculum, medio sæpissime ventricoso-inflatum
ac ut perithecia ipsa sæpe collabescens subito constrictis; ostiolis
majusculis, rotundatis, tandem pertusis, in discum minutum, ple-
rumque ellipticum, rarius suborbicularem collectis, per peridermii
rimulas transversim directas erumpentibus; ascis anguste cunei-
formi-clavatis, apice obtusissimis, fere truncatis, in pedicellum lon-
ge attenuatis, octosporibus, $32-36 \approx 6-7$ (p. sporif.), pseudoparaphy-
sibus longissimis, continuis obvallatis; sporidiis subdistichis, cy-
lindricis, curvatis, hyalinis, $10-12 \approx 2$.

Hab. in ramis emortuis Coryli Avellanæ prope Münster
(Germania).

7. **Calosphæria dryina** (Curr.) Nits. Pyr. Germ. p. 94. Sacc. F. ital. 397
tab. 477 (forma submutica). *Sphæria dryina* Curr. — Peritheciis
globosis v. pyriformibus ex fusco tandem aterrimis, majusculis, in
cæspites minutas collectis, subcircinantibus, sæpius solitariis, spar-
sis, decumbentibus, sub peridermio facile solubili liberis, cortici in-
teriori tamquam afflatis, collis perithecii diametro brevioribus, raro
nonnihil longioribus, apice obtusis, immo paullo incrassatis, peri-
dermium poro minutissimo perforantibus instructis; ascis oblongo-
clavatis, obtusis v. truncatis, subsessilibus, octosporibus, pseudopa-
raphysibus simplicibus, septatis, $5-7 \mu$. crassis longissime superatis,
 $50-80 \approx 8-12$; sporidiis in media v. superiore ascis parte laxè
conglobatis, cylindricis, valde incurvatis, hyalinis, $10-12 \approx 2\frac{1}{2}-3$.

Hab. in ramulis Quercus pedunculatæ in Britannia, Ger-
mania et Italia.

8. **Calosphæria microtheca** (C. et E.) Sacc. *Sphæria* (obtectæ) mi- 398

crotheca C. et E. Grevillea V¹, p. 51, t. 80, fig. 14. — Peritheciis subgregariis; tectis, globosis, atris; collo elongato, flexuoso; ascis minutissimis, 25 \approx 10, pyriformibus; sporidiis allantoideis minutissimis.

Hab. in ramis Andromedæ, New Jersey. Am. bor. — Perithecia ligno insidentia et peridermium tegens ostioli elongatis perforantia; cortice secesso, subsuperficialia videntur.

9. **Calosphæria macrospora** Wint. Myk. in Hedw. 1873, p. 130. — 399

Peritheciis in soros orbiculares v. oblongos peridermio tectos dense stipatis, globosis, atris, glabris, circ. 500 μ . diam.; collis longissimis, 500–700 μ . long. flexuosis decumbentibus, apice obtusis, per peridermii rimas minutas vix emergentibus; ascis ventricosoclavatis, longe pedicellatis, apice obtusis, tunica non incrassata, 8-sporis, 70–100 \approx 19, paraphysibus longissimis filiformibus guttulis obvallatis; sporidiis in asci parte sup. laxè conglobatis, allantoideis, curvis, 14–18 \approx 3, hyalinis.

Hab. in ramulis Alni glutinosæ prope Lipsiam (Germania), — A *Cal. obvoluta* peritheciis glabris differt.

10. **Calosphæria cylindrica** (K. et C.) Sacc. *Sphæria* (Ceratostoma) 400

cylindrica Kalch. et Cooke. Grev. 1880, p. 29, tab. 137, fig. 28. — Sparsa; peritheciis globosis, atris, in cortice immersis; ostiolo elongato, cylindrico, tenui, flexuoso; ore fimbriato, erumpente 2 mill. long.; ascis clavatis 18 \approx 8; sporidiis spermatioideis, hyalinis, curvulis, 3.5–4 μ . longis.

Hab. in ramis in Africa australi. — Adest circa perithecia subiculum brunneum, an proprium?

b) *Perithecia villosula* v. *furfurella*.

11. **Calosphæria tædiosa** Sacc. Mich. I. 368. Fungi ital. t. 479. — 401

Peritheciis in acervulos depresso conoideos, epidermide tumidula velatos hinc inde congregatis, globulosis, $\frac{1}{3}$ mill. diam., nigris furfure corticali fulvo sæpe adpersis, tandem basi concavo-collabescentibus; ostioli cylindraceis perithecium sub-æquantibus, in disculum minutum nigrum epidermidem perforantem oblique convergentibus; ascis clavatis, apice tunica crassa integra obtusis, truncatisque, basi breve sed acute attenuatis, 80–90 \approx 14–16, paraphysibus crasse filiformibus, septatisasco duplo longioribus obvallatis; sporidiis octois, di-tri-stichis, ægre maturescentibus, botuliformibus, curvis, utrinque rotundatis, 16–20 \approx 2–3, granulosi, hya-

linis, corpusculis spermatioideis botuliformibus copiosissimis, perexilibus, $3-4 \approx \frac{1}{2}-\frac{3}{4}$, hyalinis undique obrutis.

Hab. in Alni incanæ et glutinosæ ramis emortuis a *Selva* et *Vittorio*, (Italia bor.) autumno, 1873-74, rarius. — Ob sporidia octona majuscula spermatis obruta a speciebus a cl. Nitschke, Fuckel et Karsten descriptis optime distinguenda. Forte *Cal. consobrina* Karst. Fenn. II. 158 huic magis affinis est, sed secundum descriptionem l. c. ascis duplo brevioribus, et tantum spermatio phoris recedit.

12. **Calosphæria villosa** Nits. Pyr. Germ. p. 98. — Peritheciis paucis (4-6) in soris minutis orbicularibus, in cortice interiore omnino superficialibus dense sociatis, circinantibus, villo spisso, ex albedo v. pallide flavido fuscescenti vestitis ac tamquam contextis, exiguis, globosis, in collum brevissimum attenuatis; soris plerumque dense sparsis, immo interdum continuis; raro peritheciis solitariis, concentricis; ostiolis cylindricis nec incrassatis, arcte inter se conjunctis et disculum minutissimum formantibus, peridermium nonnihil elevatum poro v. rimula minutissima perforantibus nec superantibus; ascis anguste clavatis, basin versus sensim attenuatis, sessilibus, octosporis, $56 \approx 5-6$ pseudoparaphysisibus filiformibus, simplicibus v. ramosis, eseptatis, ascos longissime superantibus; sporidiis distinctis, cylindricis, curvatis v. subrectis, subhyalinis, $9-16 \approx 2$ raro crassioribus. — Conidia oriuntur in filamentis ramosis, quæ perithecia vestiunt, spermatioformia, tenuissime cylindrica, 3μ . circ. longa.

Hab. in ramis emortuis Carpini, Nienberge, prope Münster (Germania).

13. **Calosphæria aurata** Nits. Pyr. Germ. p. 99. *C. biformis* Tul. 403 Carp. II, 111 p. p. — Perithecorum soris inordinate sparsis, suborbicularibus, plerumque minutis, in cortice interiore sessilibus, peridermio parum pustulato-elevato tectis; peritheciis in singulo soro 5-15, plus minus dense stipatis, nunc contra subsolitariis, omnino decumbentibus ac circinatis, minutis, globosis, atris, villo aureo vestitis, rigidis, rarius deplanatis v. collabascentibus, subito in collum tenue, cylindricum, perithecii diametrum plerumque longe superans attenuatis; ostiolis exiguis obtusis nec incrassatis, foramine angustissimo pertutis, in disculum minutissimum, ellipticum v. suborbicularem, planum v. concavum, peridermii rimula seu poro exceptum conjunctis; ascis anguste clavatis, basin versus sensim attenuatis, subsessilibus, octosporis, $48 \approx 4-5$; pseudoparaphysisibus

filiformibus, 3 μ . circ. crassis, septatis, simplicibus v. basi ramosis, ascos superantibus obvallatis; sporidiis distichis, cylindricis, curvulis v. subrectis, subhyalinis, 8-10 \approx 1 $\frac{1}{2}$ -2.

Hab. in trunco emortuo Alni glutinosæ prope Münster (Germania) et in Gallia; in Betula alba in Rhenogovia.

14. **Calosphæria affinis** Nits. Pyr. germ. p. 98. — Perithecorum soris cortici interiori impositis nec immersis, majusculis, ovalibus, peridermio avulso adhaerentibus; peritheciis in singulo soro 10-15, inordinate ac densissime stipatis arctaque inter se conjunctis, symmetricis, globosis, atris, villo pallide flavido, adpresso tectis, collo tenui, brevi, cylindrico instructis, tandem collapsis; ostioliis rotundatis nec incrassatis, subjunctis, per peridermii rimas transversim directas erumpentibus, nec exsertis, poro minutissimo tandem apertis; ascis anguste clavatis, subsessilibus, octosporis, 40-48 \approx 5; pseudoparaphysibus longissimis, simplicibus, tenuibus, filiformibus obvallatis; sporidiis in asci parte media v. superiore ordine subdisticho dispositis, cylindricis, subrectis, hyalinis, minutissimis 6-7 \approx 1.

Hab. in ramis Betulæ albæ, Schwerin, Cappenberg Malmedy (Germania). — Var *laxior* Sacc. F. ital. t. 475; peritheciis laxioribus, sporidiis paulo crassioribus. — In ramis corticatis Quercus pedunculatæ in Italia boreali.

15. **Calosphæria obvoluta** Karst. Myc. Fenn. II. 156. — Peritheciis 8-16 in soros orbiculares mediocres dense stipatis, circinantibus, atris, villo fusco obductis tamquam contextis, sphæroideis, collis perithecii diametrum plerumque superantibus ostioliisque per peridermii rimas vel poros emergentibus, plus minus extantibus, plerumque 1 mill. longis, subæqualibus, decumbentibus, flexuosis, obtusis, hispidis instructis; ascis cylindræis, 8-sporis, 62-72 \approx 7 (p. sporif.); sporidiis monostichis, ellipsoideis vel oblongato-ellipsoideis, egutulatis, chlorino-hyalinis, rectis, 8-11 \approx 4-5.

Hab. in cortice truncorum Alni incanæ prope vicum Kytö in parocia Tammela (Fennia) medio mensis Maji. — Sporidiis monostichis, ellipsoideis villoque fusco facillime distinguitur. Pili fusci, ramosi, parce articulati, 3-4 μ . cr.

16. **Calosphæria scabriseta** (Schw.) Sacc. *Eutypa scabriseta* (Schw.) B. et C. North Am. Fungi n. 858. *Sphær.* (Circinata) *scabriseta* Schw. Syn. Amer. bor. n. 1394. — Irregulariter circinans, nudiuscula; peritheciis globosis nigris et fuscis valde tuberculosus; ostioliis longissimis flexuosis, undique scabris, pilis nempe

obsitis minutis fuscis, subpellucidis; sporidiis allantoideis, minutis 5 μ . long.

Hab. in crusta aliarum Sphæriarum sub cortice Castaneæ rarior, Bethlehem. — *Cal. pulchellá*, cui affinis, minor. Interdum ostiola tantum ex epidermide fissa prorumpunt.

B) *Erostella*: peritheciis erostratis.

a) Perithecia glabra.

17. **Calosphæria vasculosa** Sacc. Mich. II. 52. — Peritheciis in acervulos minulos sub peridermio laxè aggregatis, globosis, majusculis, $\frac{1}{3}$ - $\frac{3}{4}$ mill. diam., nigris, levibus, ostiolis obtuse conoideis, subconvergentibus, dein erumpentibus; peritheci contextu pachydermatico, fuligineo; ascis cylindræo-clavatis, deorsum attenuatis, 70-80 \approx 9-10, paraphysibus asco longioribus, filiformibus septulatis obvallatis, octosporis; sporidiis distichis, botuliformibus, curvulis, 10-12 \approx 3, 2-3-guttulatis nubilosisque, hyalinis.

Hab. in ramis corticatis Betulæ albæ, prope Rouen (Gallia). — A speciebus mihi notis probe distincta.

18. **Calosphæria recedens** Niessl in Thuem Contr. Myc. Lusit. n. 515. — Peritheciis in cortice interiore inordinate gregariis, peridermio pustulato tectis, minutis, depresso-globosis, atris, erostratis, ostiolo papillæformi; ascis cuneiformi-clavatis, plerumque longe pedicellatis (pedicellis fasciculatis, interdum ramosis), 18-25 \approx 5-6 (p. sporif.) octosporis; sporidiis subdistichis, in ascorum parte superiore positis, cylindricis, hyalinis, 5 \approx 1.

Hab. in Eucalypti Globuli cortice emortuo, Choupal pr. Coimbra (Lusitania) (MOLLER).

19. **Calosphæria minima** Tul. Fung. Carp. II. 112. Nits. Pyr. germ. 96. Sacc. F. ital. t. 478. — Perithecis minutis $\frac{1}{3}$ - $\frac{1}{4}$ mill. diam., aggregatis v. subsparis, sub epidermide tumidula nidulantibus, nigris, intus nitentibus, globosis, ostiolo vix prominulo; ascis parvis, 25 \approx 5, subclavatis, in basim sensim attenuatis, stipitibus ramosis suffultis, 8spor. pseudoparaphysibus crassiuscule filiformibus, multiseptatis, longissimis, 100-110 \approx 3, obvallatis; sporidiis minimis, 5-6 \approx 1-1 $\frac{1}{2}$, oblongo-cylindræis perparum v. non curvatis, hyalinis, 2-guttulatis, distichis v. sparsis, ægre, ut videtur, diffluentibus.

Hab. in ramis Corni sanguineæ, Salicis, Fagi, Pruni, in Gallia, Germania, Helvetia, Italia.

20. **Calosphæria tumidula** Sacc. Fungi Veneti novi Ser. IV, p. 20, 410

Fungi ital. t. 474. — Acervulis gregariis, discoideis, diam. $1\frac{1}{2}$ – $1\frac{3}{4}$ mill. in cortice pustulatim parum elevato nidulantibus, epidermide primitus tegente dein disculo minute perforata; peritheciis in quoque acervulo paucis (6–10) arcte valsiformiter aggregatis, globosis $\frac{1}{4}$ – $\frac{1}{3}$ mill. diam., atris, nitidulis, glabris, ostioliis brevissimis, obtusis, disculum subrotundum atrum efficientibus; ascis clavatis apice truncato-rotundatis, $42 \approx 6$, deorsum attenuatis basidiisque elongatis suffultis, paraphysibus paulo longioribus guttulatis obvallatis, 8sporis; sporidiis distichis cylindraceo-fusoideis, curvulis, $7-8 \approx 1$, hyalinis.

Hab. in ramulis arcte corticatis Fagi sylvaticæ in sylvâ *Cansiglio* (Treviso, Italia bor.) octobr. 1874.

21. **Calosphæria vibratilis** (Fr.) Nitschke Pyr. germ. p. 97. *Sphæria* ⁴¹¹
vibratilis Fr. — Peritheciis solitariis, sparsis, sphæroideis vel ovoideis, siccis sæpissime collapsis, lævibus glabris, raro primo parce pilosis, nigris, nitidis, diam. 0,3–0,8 mill. collis brevissimis ostioliisque rotundatis, minutissimis, peridermium haud vel vix superantibus; ascis clavatis, $24 \approx 4$ (p. sporif.), paraphysibus longioribus obvallatis; sporidiis subdistichis, fusoideo-elongatis, leniter curvulis vel subrectis, hyalinis $4-6 \approx 1$.

Hab. ad corticem ramorum Padi et Sorbi in Fennia meridionali et media in Germania, Britannia, Italia, Gallia. — Ostiolum tenerrimum, ægre conspicuum, sed epidermis luci obversa pertusa apparet. Supra peridermium nullo modo conspicitur, sed huic soluto sæpissime adhæret. Ascorum pedicelli ramosi.

b) Perithecia hirsuta.

22. **Calosphæria jungens** Nits. Pyr. germ. 101. — Peritheciis 2–4 in ⁴¹²
soros exiguos, orbiculares dense stipatis. parvis, adscendentibus v. fere erectis late ovatis v. subglobosis, collabascentibus, atris, pilis sparsis, patentibus, ex cinereo lutescentibus parce pilosis, deinde glabrescentibus, læviusculis, collo destitutis sed vertice tandem late perforatis, cortici interiori v. affixis tantum v. paullo immersis, peridermio facile solubili ac rimis v. poris minutis perforato, ceterum immutato, nec elevato tectis; ascis late fusiformibus, v. oblongis, rarius clavatis et apice rotundatis, obtusissimis, in pedicellum duplo longiorem subito v. sensim attenuatis, octosporis, 40 , v. rarius $-64 \approx 12$; sporidiis conglobatis, cylindricis, utrimque parum angustatis, curvulis v. subrectis, hyalinis, guttulis, oleosis 2–4 fœtis, $20 \approx 4-5$; rarius $12 \approx 4-5$.

Hab. in ramis dejectis Populi nigræ, Cappenberg (Germania).

CORONOPHORA Fuckel Symb. Mycol. p. 229 (Etym. *corone*, corona, et *fero*, quia asci plerumque apice quasi coronati). — Perithecia 4–6 in soros aggregata, sub peridermio relaxato nidulantia, membranaceo-carbonacea, ventricosa, demum evacuata, perforata, ostiolis brevissimis. Asci ampli obovati, longe abrupte-stipitati, sub apice contracti, multispori. Sporidia minuta, simplicia, cylindracea, curvata, hyalina.

1. **Coronophora gregaria** (Lib.) Fuck. Symb. Myc. 229. *Cal. gregaria* 413
Nits. Pyr. germ. 103. *Sphæria gregaria* Lib. *Cal. verrucosa* Tul. p. p. (in Alno). — Peritheciis circinatim, rarius cæspitose ac densissime sociatis, rarissime solitariis, magnis, suberectis, late ovatis v. subglobosis, plerumque collabescentibus v. mutua pressione angulatis, aterrimis, verrucosis, primitus parce pilosis mox autem glaberrimis, collo destitutis apice tandem late perforatis, sub peridermio varie lacerato v. rimoso cortici interiori impositis, subsymmetricis v. omnino concentricis; ascis late clavatis v. obovatis, apice rotundatis, obtusissimis, in pedicellum longum plerumque pedetentim attenuatis, lumine plus minus constricto, myriosporis, 60–80 = 14–18 (p. sporif.); pseudoparaphysibus crassiusculis, filiformibus simplicibus septatis sæpeque nodoso-articulatis, ascis duplo triplove longioribus; sporidiis numerosissimis, conglobatis, cylindricis, curvulis, subhyalinis, 8–12 = 2–3 («8 = 1,5–1,7, bi-guttulatis»).

Hab. in ramis corticatis Sorbi, Betulæ, Cerasi, Tiliæ in Gallia, Germania, Italia, Belgio.

2. **Coronophora angustata** Fuck. Symb. Myc. 229. *Cal. angustata* 414
(Fuck.) Nits. Pyr. germ. 105. *Sphæria Leveillei* Tul., *Cal. verrucosa* Tul. p. p. (in Ceraso). — Peritheciis nunc numerosis, in soros orbiculares v. ovales, medio steriles dispositis nunc paucis tantum, circinantibus nunc denique omnino solitariis, inordinate sparsis, concentricis v. symmetricis, erectis v. fere decumbentibus, ovatis v. globosis, majusculis, tandem collapsis, plus minus verrucosis, atris, glabris, collo destitutis, vertice pertusis, per peridermium varie fissum sæpe erumpentibus, in corticis interioris superficie sessilibus, rarius ejus strato supremo basi immersis; ascis late obovatis, apice obtusissimis, basi sæpe ventricosis, membrana crassiuscula textis, in pedicellum exiliter filiformem, parte sporifera plerumque quinquies, immo sexies longiorem abrupte attenua-

tis, 32-36 \approx 14-16 (p. sporif.), ascorum lumine rarius ascis ipsis sub vertice angustatis; sporidiis numerosissimis, conglobatis, cylindricis, subrectis, hyalinis, 4-8 \approx 1.

Hab. in ramis Fagi, rarius Juglandis, Cytisi, Pruni, Munster, Baden. — Spermogonia conica aureo-cinerea; conidiis allantoideis, 8 \approx 1, stipitellatis.

3. **Coronophora macrosperma** Fuck. Symb. Myc. App. I. 324. — Peritheciis sparsis vel laxe gregariis totis superficialibus, *Coronoph. gregariae* magnitudine sed magis regulariter ovato-globosis, antice conico-attenuatis perforatisque, demum, sed raro depressis, subtiliter verrucosis, nigris; ascis ut massa hyalina expulsis, longe abrupte stipitatis, clavatis, antice attenuatis, plus minusve coronatis, polysporis, 152 \approx 24; sporidiis cylindræis, curvatis, continuis, hyalinis, utrinque uniguttulatis, 12 \approx 4; pseudoparaphysibus articulatis, latiusculis. 415

Hab. in cortice interiore Quercus, rarius, Eberbach (Rhenogovia). — Stroma prorsus obsoletum.

4. **Coronophora abietina** Fuck. Symb. myc. App. II. 324. — Peritheciis caespitosis, erumpentibus, demum liberis, *Coronophoræ gregariae* forma magnitudineque; ascis abrupte clavatis, coronatis, inferiori parte multo latiori quam in *Coronoph. gregaria*, 80 \approx 16 (in clavula), multisporis; sporidiis cylindræis, curvatis, continuis, 8 \approx 1.5, hyalinis. 416

Hab. in ramis putrescentibus corticatis Abietis excelsae in Rhenogovia.

5. **Coronophora abieticola** (Crouan) Sacc. *Calosph. abieticola* Crn. Finist. p. 23. — Peritheciis solitariis, ellipsoideis, e latere compressis, nigris, astomis («?») corticulis, 4-3 mill. diam. («?»); ascis latis, ovatis, apice subtruncatis, deorsum in stipitem filiformem abrupte desinentibus; sporidiis copiosissimis, botuliformibus, valde curvatis, hyalinis. 417

Hab. in cortice putri Abietis, Finistère (Gallia). — Cellulae perithecii interiores magnaë, ovoideo-hexagonaë.

6. **Coronophora annexa** (Nits.) Fuck. Symb. 229. *Cal. annexa* Nits. Pyr. Germ. 102. *Cal. biformis* Tul. p. p. — Soris e peritheciis 4-8, densissime stipatis, circinantibus, adscendentibus compositis, sparsis, e basi orbiculari depresso conicis, summo corticis interioris strato basi immersis, ceterum liberis peridermio nonnihil elevato, fissis v. perforato tectis; peritheciis majusculis, ovoideis, tandem collapsis ac mutua pressione sepe plus minus compressis, villo 418

sordide fusciscenti, immo nigrescenti dense vestitis, apicibus erostatis, poro pertusis, in disculum orbicularem subjunctis; ascis clavatis v. fere oblongis, pedicellatis, polysporis, 36-48 \approx 8-12 (p. sporif.); sporidiis cylindricis, curvulis v. subrectis, hyalinis, 6-9 \approx 1 $\frac{1}{2}$.

Hab. in ramis Alni glutinosæ, Æstrich, et in Gallia; Salicis cinereæ, Münster.

7. **Coronophora Nitschkei** Sacc. *Cor. myriospora* Nits. Pyr. Germ. 419 p. 10 (nec Dur. et Mont.). — Peritheciis exiguis, globosis, tandem collapsis, villo spisso, brevi, sordide luteo undique tectis, in singulo soro orbiculari, minuto, cortici interiori imposito nec immerso peridermioque parum elevato tecto, paucis tantum (4-6) circinatim dispositis, adscendentibus, subito in colla brevia, e basi angustata plus minus incrassata, fere ovata, sæpe depressa ac rima longitudinaliter exarata attenuatis; ostiolis ex apicibus collorum constrictis formatis, minutis, pertusis, atris, in corpus peridermium perforans, irregulare, conjunctis; ascis clavatis, v. oblongis, subsessilibus, myriosporis, pseudoparaphysibus filiformibus, simplicibus, eseptatis superatis, 75-90 \approx 12-15; sporidiis numerosissimis, globatis, cylindricis, rectis, subhyalinis, 2 \approx 1.

Hab. in ramo Quercus putri, socia *Enchnoa infernali*, prope Münster (Germania).

8. **Coronophora consobrina** Karst. Fung. Fenn. exsicc. 890. Myc. 420 Fenn. II. 158. — Peritheciis circiter 5 in soros orbiculares minutos, materia corticali involutos dense stipatis, circinantibus, glabris, in colla brevissima vel brevia attenuatis, atris, sphæroideis, 0,3-0,4 mill. diam.; ostiolis in corpus minutissimum, peridermium perforans, atrum conjunctis; ascis oblongato-clavatis, paraphysatis apice rotundatis, myriosporis, 40-50 \approx 16-20; sporidiis elongatis, curvulis, simplicibus, hyalinis, 3-4 \approx 1.

Hab. in ramulis Alni glutinosæ exsiccatis in Mustiala (Fennia) mense Aprili unica vice reperta. — «Forte *Ascospora vibratilis* Bon. Abhandl. p. 149 huc spectat».

9. **Coronophora Rosarum** (Crouan) Sacc. *Calosphæria Rosarum* Crn. 421 Finist. p. 33. — Peritheciis subsphæricis, 1-2 mill. diam., nigris, astomis («?») solitariis v. in circulum aggregatis, sub epidermide in cortice nascentibus, dein erumpentibus; ascis ellipsoideis, sursum attenuatis, longe filiformi-stipitatis; sporidiis copiosissimis, cylindricis, curvulis, hyalinis.

Hab. in cortice Rosarum vetusto, Finistere (Gallia).

10. **Coronophora myriospora** (Dur. et Mont.) Sacc. *Sph. myriospora* 422
Dur. et Mont. Fl. Alg. p. 524, Syll. Crypt. n. 846. — Tecta, conferta, subseriata; peritheciis minutis, globosis, collabascentibus, fuscis, ostiolo erumpente, obtuso, poro pertuso, disco nullo; ascis clavatis, polysporis; 60–100 \approx 15; sporidiis linearibus obtusis, 3–4-guttulatis, 15 \approx 2.5.

Hab. in ramis Jasmini fruticantis, Alger (DURIEU).

11. **Coronophora ootheca** (B. et C.) Sacc. *Sph. ootheca* B. et C. North 423
Amer. Fungi n. 899. — Congregata, globosa, glabrescens, nitida, macula nigra insidens; ascis obovatis, sporidiis numerosis, allantoideis faretis.

Hab. in ramis quercinis in Amer. bor. — *Sph. mucida* β . *rostellata* Schw. in Rhoe hue spectat; in hac asci 25 μ . longi: exemplaria in Quercu præbent ascos majores.

12. **Coronophora Broomeiana** (Berk.) Sacc. *Sphæria Broomeiana* 424
Berk. Dec. n. 496. — Peritheciis in cæspitem orbicularem congestis, atris, opacis, setis brevibus exasperatis, ostiolo papilliformi notatis v. omnino astomis; ascis clavatis latis; sporidiis innumeris minutis oblongis curvis, hyalinis.

Hab. in lignis putrescentibus, Ceylon (THWAITES).

QUATERNARIA Tul. Fung. Carp. II. 104 (Etym. *quaternus*, ob perithecia in soris sæpe quaterna). — Perithecia cortice nidulantia, circinatim quaterna-sena, nigrolimitata; ostioliis convergentibus disculum perforantem formantibus. Asci stipitati, octospori, apara-physati. Sporidia botuliformia, olivacea. — Spermogonium sistit *Libertellæ* species.

1. **Quaternaria Persoonii** Tul. Carp. II, 105, t. XII, f. 16–25. *Sphæria quaternata* Pers. Syn. p. 45. — Circinata; peritheciis subquaternis cortice nidulantibus, basi applanatis, nudis decumbentibus, ostioliis brevibus, obtusis lævibus, pertusis, convergentibus, epidermidem æqualem vix superantibus; ascis oblongo-clavatis, longissime stipitatis, 50–80 \approx 8–10 (p. sporif.); sporidiis distichis, cylindræis, curvatis, continuis, dilute-fuscis, 16 \approx 3–4. — Stat. spermonicus *Libertellam fagineam* Desm. sistit.

Hab. in ramis corticatis Fagi sylvaticæ, rarius Castaneæ, Aceris, Carpini. Alni serrulatæ in Britannia, Suecia, Gallia, Italia, Helvetia, Belgio, Amer. bor. — Perithecia 3–6 decumbentia, circinantia, libera, ovata, majuscula. Ostiola brevia, subincurva, epidermidem perforant, sed non prominent, inter se

quidem libera, sed discum minimum convexum tuberculosum plerumque opacum formant.

2. **Quaternaria dissepta** (Fr.) Tul. Fung. Carp. II. 107. *Sphæria dissepta* Fr. S. M. II. 392. *Diatrype stipata* B. Br., *Sph. Saturnus* Sow. — Laxe circumscripta, peritheciis subcutaneis sparsis, excipuliformibus, amplis, ostiolis erumpentibus subjunctis; ascis anguste clavatis, v. subcylindricis, longe pedicellatis p. s. 90–100 = 16–18; sporidiis botuliformibus olivaceis, 2-guttulatis, 22–26 = 4½–5½ mono-distichis. — Spermogonia nota, *Libertellam* sistentia.

Hab. sub epidermide ramorum Ulmi, rarius Salicis, Tiliæ, Amorphæ, in Suecia, Gallia, Germania, Belgio, Amer. bor. — Perithecia globosa, suberecta, in cortice interiori sparse nidulantia, raro solitaria, passim circinantia, sæpius in plagas corticem elevantes aggregata, crustula tecta et in ambitu linea nigra, nunc subrotunda, nunc maxime flexuosa (1 lin. – 2 unc. lata) circumscripta. Stroma corticale, perithecia disseptans; quando perithecia valde conferta nigrescens; quando epidermis facile secedit ab hac coloratum testaceum. Ostiola collo tereti brevi erumpunt, papillæformia, sæpius in discum inæquabilem homogeneous collecta, raro solitaria. — Adest var. ostiolis exertis (ex Gallia).

3. **Quaternaria Morthieri** Fuck. Symb. myc. 229, t. II, fig. 43. — 427 Peritheciis majusculis 4–6 in stromate albo, nigrolimitato in cortice interiore nidulantibus, globosis, atris, ostiolis in disco aterrimo convexo erumpente fisso minutissimis, vix prominulis; ascis cylindræis, stipitatis, 88 = 8 (p. sporif.); sporidiis octonis oblique monostichis, oblongo-lanceolatis, utrinque obtusis, subcurvatis, 16 = 3–4, 1–2-guttulatis, fuscis.

Hab. in ramis corticatis dejectis Quercus in Germania et Helvetia. — «An *Anthostoma*?».

4. **Quaternaria regularis** Nits. Pyr. Germ. p. 89. — 428 Stromate corticali, discreto v. confluyente, atro-limitato; peritheciis in singulo stromate 2–5, minutis, subglobosis, circinantibus denseque stipatis, collo brevissimo et ostiolo rotundato, minuto nec incrassato, per-tuso, in disco nonnihil prominulo, peridermium perforante instructis, ascis cylindricis, pedicellatis, octosporis, membrana crassiuscula textis, 200 = 16 (p. sporif.); sporidiis oblique monostichis, oblongis, utrimque obtusis, rectis v. inæquilateralibus, nigricantibus, 28–32 12–14.

Hab. in ramis emortuis Alni glutinosæ, Cappenberg (Germania).

VALSA Fr. S. Veg. Scand. p. 410 (emend). Sacc. Consp. Gen. Pyr. p. 4 (Etym. *Valsa* est nomen casuale ab Adansonio conditum et a Scopolio adhibitum pro fungis variis, præprimis *Xylaria*. *Hy-poaxylon*. posterius a Friesio ad hodiernas valsaceas limitatum). — Perithecia cortice immersa in acervulos stromaticos aggregata, in circulum simplicem (circinantia) v. compositum (monosticha) disposita stratoque unico, neque polysticha; ostiolis centro convergentibus, integris, erumpentibus et discum efformantibus. Asci octospori, rarius 4-spori, sessiles aparaphysati. — Spermogonia *Cytisporæ* species sistunt.

Subgen. *Euvalsa* Nits. Pyr. Germ. p. 126.

Stroma corticale, infra linea nigra nulla circumscriptum; discus sæpius ater. (Nonnullæ, forte multæ species imperfecte descriptæ hic ad interim locatæ sunt, quæ vero dum melius cognitæ forent ad subg. *Leucostomam* v. *EutyPELLAM* forte transferendæ essent).

A) *Microsporæ*: sporidiis minutis (5-12 μ . long.).

1. **Valsa ceratophora** Tul. Sel. Fung. Carp. II, p. 191, tab. XXII, 429 fig. 1-11. *Sphæria Ceratospermum* Tode?, Fr.!, *Sph. decorticans* Fr. p. p. *Sph. enteroleuca* Fr.? — Stromate minuto, e basi orbiculari, rarius ovali depresso convexo v. subconico, nunc peridermio, plerumque rimose fisso, tecto, nunc contra parum protuberante peridermiique facile resolvendi laciniis cincto et ut corticis interioris superficie ipsa colore fusco tincto; peritheciis in singulo stromate 5-20, monostichis, minutis, densissime stipatis, subglobosis, collis brevibus ostiolisque plus minus longe exsertis, tenuibus, cylindricis, leviusculis, basi plerumque fasciculatim connatis, deinde divergentibus v. varie flexuosis præditis; ascis anguste clavatis, octosporis 32-40 \approx 4-5; sporidiis subdistichis, cylindricis, curvulis v. subrectis, hyalinis, 6-8 \approx 1 $\frac{1}{2}$ -2. — Spermogonia multilocularia *Cytisporam* referentia: spermatiis allantoideis 4 \approx 1, longe stipitatis.

Hab. in ramis corticatis *Quercus*, *Castaneæ*, *Cratægi*, in tota Europa, Amer. bor., Ceylon. — In agro Veneto legi quoque in ramis *Rhois glabræ* (a. 40 \approx 6; sp. 8-11 \approx 1 $\frac{3}{4}$ -2). — *Coryli Avellanæ* (a. 38-40 \approx 5; sp. 8-10 \approx 1 $\frac{1}{2}$ -2, hyalina. — *Fraxini Orni* (a. 30-35 \approx 5; sp. 8-10 \approx 1). — *Mori albæ* (a. 35 \approx 5; sp. 10 \approx 1-1 $\frac{1}{4}$) — *Ulmi campestris* (a. 38 \approx 4-5; sp. 10 \approx 1). — *Carpini Betuli*, *Pruni domesticæ*, *Aceris campe-*

stris, Alni glutinosæ, Photiniæ glabræ, Persicæ vulgaris, formas inter se parum diversas.

Var. *Rosarum* De Not. Sf. ital. p. 37, t. 42. Pustulis minoribus, peritheciis parcioribus, ostioliis abbreviatis. — In ramis Rosarum in Britannia, Germania, Gallia, Italia.

2. **Valsa Rubi** Fuck. Symb. myc. p. 200, Peck. 28 Rep. — Peritheciis 6–10, in cortice interiore, sine stromate proprio nidulantibus, globosis, atris; ostioliis conferte erumpentibus, brevibus, obtusis, umbilicatis perforatisque, aterrimis; ascis lanceolatis, subsessilibus, octosporis, $32 \approx 5$; sporidiis faretis, cylindraceis, continuis, curvatis, hyalinis, $8-9 \approx 2$. 430

Hab. in sarmentis corticatis Rubi fruticosi, rarius Jura (MORTIER) in Italia bor. (Sacc.); in ramis Rubi villosi Amer. bor. — A *Valsa ceratophora* var. *Rosarum* De Not. recedit ostioliis brevioribus, umbilicatis.

3. **Valsa cœnobitica** Ces. et De Not. Schem. sferiac. 33 et sfer. ital. 431 t. 41. — Stromate e basi suborbiculari depresso conico v. convexo, parum v. omnino non emergente rarius nonnihil protuberante et peridermii laciniis cincto, corticis interioris parenchymate quasi composito eique concolore, rarius fucato, ostiolorum fasciculo libero coronato; peritheciis in singulo stromate 7–10, rarius pluribus, monostichis, subglobosis, mutua pressione plerumque angulatis, minutis, in collum breve attenuatis; ostioliis crassiusculis, plus minus elongatis, apicem versus sensim attenuatis, obsolete nodulosis, basi connatis, divergentibus, poro minutissimo pertusis; rarissime abbreviatis et in disculum minutum collectis; ascis clavatis, octosporis, $36-40 \approx 6$; sporidiis subdistichis, cylindricis, hyalinis, parum curvatis v. rectis, $8-12 \approx 2-2\frac{1}{2}$. — Spermogonium *Cytisporam* sistit: spermatis botuliformibus, $5-6 \approx 1$, brevistiptatis.

Hab. in ramis Quercus in Italia bor. et Germania et in radicibus Alni prope Münster (Germ.).

4. **Valsa coacta** Sacc. et Spieg. Mich. I. 20. — Peritheciis in acervulo minutos vix elevatos, cortice interiore hinc inde nidulantes, monostiche aggregatis, globoso-depressis, ostioliis cylindraceis vertice rotundato lævique pertusis, convergentibus, disco minuto nigro, subcirculari (diam. vix $\frac{1}{2}$ mill.) periderma circum circa arcte adhærens perforante, vix exserto; ascis clavatis $30-35 \approx 5$, sessilibus, aparaphysatis, 8sporibus; sporidiis irregulariter distichis, botuliformibus, curvulis, $8-10 \approx 2-2\frac{1}{4}$, hyalinis. 432

Hab. in ramis corticatis Fici Caricæ a Susegana (Italia

bor.). — Cum *Valsa sycina* Mtgn. Syll. 221 (quæ forte forma *Eutypæ heteracanthæ* Sacc.) nullum commune habet. A *Valsa ceratophora* Tul., cui affinior, disco minuto non exserto arcte cincto, pustulis non prominulis, recedit.

5. **Valsa coronata** (Hoffm.) Fr. Summ. Veg. Sc. p. 421. *Sphæria coronata* Hoffm. Veg. Crypt. I. 26, t. 5, fig. 2. — Stromate convexo, depresso, minuto, parum v. vix protuberante, sparso, approximato, basi interdum confluyente; ostiolorum disculo minutissimo, stromati quasi imposito, peridermium plerumque laxè adhærente pertusum nonnihil superante; peritheciis in singulo stromate 4-12, monostichis, immo circinantibus, minutis, subglobosis, in corticis interioris parenchymate haud mutato nidulantibus, confertis, in colum brevissimum attenuatis; ostioliis minutissimis, abbreviatis, atris, nitidis, rotundatis, v. truncatis poroque angustissimo pertusis, in disculum fere planum densissime stipatis; ascis anguste clavatis, octosporis, minutissimis, 24-28 \approx 4; sporidiis subdistichis, cylindricis, curvulis, hyalinis, 6-7 \approx 1½. — Spermogonium *Cytisporam* referens: spermatiis allantoideis 6 \approx 1, hyalinis.

Hab. in ramis Corni albæ Lipsiæ, Reichartshausen (Germania). — Formæ in Castanea, Rosa, Cratægo in Britannia et Amer. bor. dubiæ mihi videntur.

Var. *melanostica* Mont. Syll. Crypt. n. 767. Pustulis epidermide determinate nigricante tectis, ostioliis exsertis subglobosis, conglomeratis, rimulosis; ascis fusiformibus parvis, sporidia 8 recta aut curvula foventibus. — In cortice Tiliæ prope Lemovicem Galliæ (LAMY).

6. **Valsa cenisia** De Not. Sfer. ital. p. 39, t. XLIV. Nits. Pyr. Germ. 185. — Stromate, conico-truncato vel depresso convexo, nunc peridermio arcte adhærente tecto, non contra, peridermio secesso, libero ex fusco nigricante latit. 0,8-2 mill.; peritheciis 3-20 in quovis stromate, subsphæroideis, mutua pressione angulatis, dense stipatis, collis breviusculis ostioliisque nunc in discum subpulveraceum, plerumque planum conjunctis, nunc discretis, abbreviatis vel plus minus exsertis, longiusculis, flexuosis, subcylindræis, crassis, apicibus rotundatis demumque poro pertusis; ascis cylindræo-clavatis 30-40 \approx 5-6; sporidiis conglobatis vel subdistichis, elongatis, 6-12 \approx 1-2. — Spermogonia stromatibus perithecieris similia, disco albido-cinereo, poro vulgo unico pertuso; spermatiis elongatis, curvulis, hyalinis, 5-7 \approx 1-1,5, tandem in cirrhos aquose albidos, siccos flavidos propulsis.

Hab. in cortice Juniperi communis et virginianæ in Italia, Germania, Fennia, Amer. bor. — Affinis *V. Dubyi* Nits.

Var. *invalida* Karst. *V. cenisicæ* extus simillima, sed adhuc fere minor; ascis 25 \approx 3-4; sporidiis subdistichis vel conglobatis, 5-6 \approx 1; spermatis rectis vel subrectis, elongatis, 3-4 \approx 0,5-1 diversa. — In cortice ramulorum Juniperi communis in regione aboënsi Merimasku (Fennia), Junio.

7. **Valsa sabalina** Cooke in Grevill. VII. 52. — Tecta, prominula; 435
pustulis in maculis elongatis nigricantibus insidentibus; ostioliis convergentibus, emergentibus; ascis clavatis; sporidiis linearibus, obtusis, curvulis, 8-9 μ . long.

Hab. in Sabal, Darien, Amer. boreali.

8. **Valsa strobiligena** Sacc. et Roum. Reliq. Lib. II. n. 186. — Acer- 436
vulis minutis, erumpentibus, nigris; peritheciis paucioribus, ostioliis conjunctis, vix excedentibus; ascis tereti-oblongis, sessilibus, 30-35 \approx 6-7, octosporis; sporidiis distichis, allantoideis, curvulis, 8-9 \approx 1 $\frac{1}{2}$ -2, hyalinis.

Hab. Malmedy (Germania) in squamis strobilorum Abietis excelsæ. — An forma deminuta *V. Abietis* Fr.?

9. **Valsa Abietis** Fr. Summ. Veg. Scand. p. 412. *Sphæria Pinastris* 437
Grev. — Stromate exiguo, e basi orbiculari depresse conoideo, peridermio fere integro et ostiolorum fasciculo solum pertuso tecto, corticis interioris parenchymate, specie immutato, composito; peritheciis in singulo stromate 5-15, minutis, monostichis, mutua pressione semper fere angulatis, in colla brevissima attenuatis; ostioliis, incrassatis, atris, lævibus, confertissime stipatis, minimis, sphæroideis, rarissime longius exsertis, subcylindræis; ascis anguste clavatis, sessilibus, 28-36 \approx 4-6; sporidiis, conglobatis, elongatis, curvulis, vel subrectis, 6-9 \approx 1,5. — Spermogonia forma et magnitudine stromatibus perithecigeris simillima, collo crasso rotundato v. truncato, ex griseo vel luteo fuscescente poroque angusto unico, rarius pluribus, aperto instructa, multilocularia; spermatis, exilissimis, 3 \approx 1.

Hab. in ramis corticatis Abietis excelsæ in tota fere Europa. — β . *ceratina* Fr. S. M. II. 398, pustulata, erumpens, ostioliis in discum exsertis tentaculatisque. In ramis abiëgnis.

10. **Valsa microstoma** (P.) Fr. Summ. Veg. Scand. p. 411? Nits. Pyr. 438
Germ. p. 193. *Sphæria microstoma* Pers., an. Fr.? — Stromate e basi rotundato-ovali convexo, rarius conico, in discum ovalem, immo fere ellipticum, rarius orbicularem cylindricum abrupte at-

tenuato, corticis interioris strato supremo tantum immerso, ut ejus superficie, colore castaneo tincto; disco per peridermii leviter adhærentis rimulas, transversim directas erumpente: stromatibus irregulariter sparsis, basi sæpe confluentibus; peritheciis in singulo stromate 6-20, monostichis, minutis, densissime confertis, inde e globoso plerumque angulatis, in collum crassiusculum attenuatis; ostiolis incrassatulis, rotundatis v. fere globosis, abbreviatis, in discum planum stipatis, atris, nitidulis; ascis oblongis v. clavatis, sessilibus, octosporis, 40-48 \approx 6-8; sporidiis conglobatis v. subdistichis, cylindricis, curvulis, hyalinis, plerumque 8-10 \approx 2-2 $\frac{1}{2}$. — Spermogonia cytisporoidea, multilocularia; spermatiis allantoideis 5-6 \approx 1,4 longe stipitatis.

Hab. in ramis crassioribus Pruni spinosæ et domesticæ in Anglia, Gallia, Germania, Italia, Suecia, frequens. — Cl. Currey (Linn. Trans XXII, t. 47, f. 130) exhibet sporidia multo longiora, nempe 13-17 μ . et re vera sec. exempl. Friesii, quæ forte *V. cinctam* spectant.

11. **Valsa mediterranea** De Not. Sfer. ital. n. 43, tab. 43. — Peritheciis sub epidermide nidulantibus, plus minus numerosis, circinantibus, ovoideis siccis collabescentibus; collis longiusculis, fasciculato-emergentibus, ostiolo obtuso, pertuso; ascis oblongis, octosporis, aparaphysatis, 50-55 \approx 9-10; sporidiis allantoideis, hyalinis 12-15 \approx 2-2.3. 439

Hab. in ramis siccis Oleæ europææ, Genova, Padova (Italia boreali).

12. **Valsa Fuckelii** Nits. Pyr. Germ. p. 192. Sacc. Myc. Ven. Spec. t. XIII. fig. 15-18. — Stromatibus plano-convexis, paululum ex corticis interioris superficie editis, approximatis, non raro basi confluentibus, ostiolorum disculo solum peridermium arte adhærens emergente; peritheciis in singulo stromate numerosis (plerumque 10-20), monostichis, minutis, densissime stipatis mutuaque pressione angulatis, collo brevi præditis; ostiolis minutissimis, atris, nitidis, dense in discum planum confertis, haud elongatis, poro angustissimo pertusis; ascis anguste clavatis; sessilibus, octosporis, 36-49 \approx 6; sporidiis conglobatis, cylindricis, curvulis v. subrectis, hyalinis, 6-12- plerumque 10 \approx 2-2,5. 440

Hab. in ramis Coryli Avellanæ in Germania, Italia, Britannia. «Ascus biformes vidi; alios lineari-oblongos 32 \approx 5, alii obovatos, 28 \approx 10; omnes 8sporos; sporidia in primis subdisticha, in postremis polysticha, cylindracea leniter curvata, hyalina, 12 \approx 2».

13. **Valsa affinis** Nits. in Fuck. Symb. myc. p. 199. — Peritheciis 441
 primo spermatiis cylindraceis, curvatis, $4 \approx 1$, in sterigmatum ramorum apicibus repletis, ascophoris circinatis, in discum parvum vix emergentem convergentibus; ascis lineari-oblongis, sessilibus, 8sporis, $30 \approx 4$; sporidiis subdistichis, cylindraceis, parum curvatis, continuis, hyalinis, $8 \approx 2$.

Hab. in ramis Coryli Avellanæ, Æstrich, Rhenog. et Italia bor. — In speciminibus italicis asci oblongo-clavati, 18–22 \approx 6, sporidia botuliformia, minutissima, 5–6 \approx 1½, 2-guttulata, hyalina. — A *Valsa Fuckelii* Nits., cui affinis, ascis sporidiisque conspicue minoribus recedit.

14. **Valsa fallax** Nits. in Fuck. Symb. myc. p. 200. — Pustulis 442
 minutis gregariis, vix prominulis; peritheciis circinantibus corticulis, ostiolis in discum minutum peridermium breviter excedens convergentibus; ascis lineari-oblongis, sessilibus, 8sporis, 36 \approx 4; sporidiis subdistichis, cylindraceis, curvatis, continuis, hyalinis, $8 \approx 2$. — Spermogonium sistit *Cytisporam Corni* West.

Hab. in ramis siccis Corni sanguineæ in Germania, Belgio, Gallia, Italia.

15. **Valsa Pini** (Alb. et Schw.) Fr. Summ. Veg. Scand. p. 412. *Sphæ-* 443
ria Pini A. et S. *Sph. leucophæata* Reb. — Stromate conico-truncato vel hemisphærico, plus minus prominente, nunc peridermio fere integro vel fisso tecto et extus intusque cortici concolori, nunc contra, peridermio mox secesso, libero et ut superficie corticis ipsa ex fusco nigricante, discreto vel rarius confluyente; peritheciis numerosis, 20–30 in quovis stromate, dense confertis, subovoideis, perexiguis, collis breviusculis ostiolisque in discum planum collectis, apice rotundatis vel truncatis, dein pertusis, aterimis, abbreviatis, raro rostellatis, minutissimis; ascis cylindraceo-clavatis, 30–32 \approx 5–6; sporidiis, conglobatis, 5–9 \approx 1,5. — Spermogonia (*Cytispora Pini* Desm.) stromatibus perithecigeris simillima, papillis 1, raro 2–3 instructa, intus griseo-viridula, multilocularia, locellis radiatim dispositis. Spermatia elongata, subrecta, hyalina, $4 \approx 1$, tandem in cirrhos flavidos propulsa.

Hab. in cortice ramorum Pini sylvestris in Suecia, Germania, Belgio, Italia, Fennia, Amer. bor. — *Valsæ decumbenti* affinis.

16. **Valsa leiphæmioides** B. et C. North Am. Fungi n. 868. — Pu- 444
 stulis subcorticalibus, ostiolis congestis tandem expositis; pulvere niveo intermixtis, sporidiis allantoideis, 10 μ . long.

Hab. in ramis *Quercus obtusilobæ* etc., Carolina, New England (Amer. bor.). — «An forma *V. ceratophoræ*?».

17. **Valsa insignis** Nits. Pyr. Germ. p. 188. — Stromate grandiusculo, e basi orbiculari v. late ovali conico-truncato v. sæpius subcylindrico, peridermio facile solubili ac plerumque transversim fissio erumpente, cortici interiori adnato v. basi tantum strato ejus supremo innato; corticis superficie circa stromata nec non stromata ipsa colore sordide et opace fuligineo tincta; discus stromatis basi paullo v. vix angustiore planiusculo, immo excavato, sordide lutescente, ostiolis minutissimis, numquam elongatis, hemisphæricis, deinde poro pertusis, dense ac sine ordine sparsis nigropunctulato; peritheciis in singulo stromate numerosissimis, minutis, monostiche densissimeque stipatis, mutua pressione semper ac varie angulatis, collo pertenui instructis; stromatis substantia expallente v. flavicante; ascis cylindrico-clavatis, sessilibus, octosporis, 36-44 (plerumque 40) \approx 5-6; sporidiis subdistichis v. conglobatis, cylindricis, parum curvatis, hyalinis, 7-9 (plerumque 8) \approx 2.

Hab. in truncis et ramis *Coryli tubulosæ* Willd., Capenberg (Germania).

18. **Valsa decumbens** (Schmidt) Nits. Pyr. Germ. p. 198, *Sphæria* 446 *decumbens* Kunze in Fr. S. M. II. 408. — Stromate per peridermii rimas transversim directas, erumpente, immo, peridermio dejecto, tandem libero, nigricante, variæ magnitudinis, plerumque minuto, conico, rarius forma irregulari, tuberculiformi; stromatibus 2-3 sæpe approximatis, basi v. omnino confluentibus; peritheciis in singulo stromate nunc paucis tantum (4-8), nunc contra numerosissimis, minutis, mutua pressione angulatis, monostichis, in collum longiusculum attenuatis; ostiolis minutissimis, abbreviatis, punctiformibus, rotundatis, atris, nitidulis; ascis anguste clavatis, sessilibus, octosporis, 26-30 \approx 4-5; sporidiis subdistichis, cylindricis, nonnihil curvatis, hyalinis, 6-8 \approx 1½.

Hab. in radicibus defossis *Pini sylvestris* in Lusitania et prope Münster (Germania).

19. **Valsa Schweinitzii** Nits. Pyr. Germ. p. 191. *Sphæria* 447 *corniculata* & *salicina* Alb. et Schw. — Stromate e basi orbiculari truncato-conico, minuto, nonnihil protuberante, peridermio erumpente ejusque laciniis fissis cineto v. peridermio, facile solubili, dejecto in corticis interioris superficie fuscescente libero; peritheciis in singulo stromate 5-12, corticis parenchymati immutato insculptis, monostiche denseque stipatis, majusculis, subglobosis, in collum

breve attenuatis; ostioliis nunc in stromatis disco vix exsertis, minimis, atris, nitidis, poro angustissimo apertis, plus minus dense stipatis, nunc contra (sed multo rarius) elongatis, cylindricis, fasciculatim erumpentibus, flexuosis; ascis sessilibus, anguste clavatis v. oblongis, octosporis, $40-48 \approx 6-7$; sporidiis cylindricis, nonnihil curvatis, hyalinis, $8-12 \approx 2-2\frac{1}{2}$. — Spermogonia cytisporoidea, spurie multilocularia; spermatiis allantoideis $4-5 \approx 1$, longe stipitatis.

Hab. in ramis corticatis Salicis Capreæ et fragilis in Germania et Italia. — «Affinis *V. Verruculæ*».

20. **Valsa Syringæ** Nits. Pyr. Germ. p. 189. — Stromate exiguo, 448

per peridermii rimas minutas ac longitudinaliter directas erumpente, e basi orbiculari late ac depresso conico v. subhemisphærico, in disculum orbicularem v. rarius fere ellipticum subito attenuato, plus minus protuberante et pustulas peridermio plerumque arcte adhærente lateribus obductas, in ramis ramulisque gregatim sparsas formante; peritheciis in singulo stromate plerumque $8-12$, rarius $4-7$ tantum, perexiguis, globosis v. compressis, monostichis et in collum pro situ plus minus longum attenuatis; ostioliis punctiformibus, mox pertusis, abbreviatis, truncatis denseque confertis disculi fuscæscens partem mediam occupantibus; ascis subfusiformibus, sessilibus, octosporis, $40 \approx 6$; sporidiis subdistichis, cylindricis, curvulis v. subrectis, hyalinis, $8-12 \approx 2$. — Spermogonia cytisporoidea multilocularia; spermatiis allantoideis, $5 \approx 1$, longe stipitatis.

Hab. in ramis Syringæ vulgaris in Germania et Italia boreali.

21. **Valsa Vitis** (Schw.) Fuck. Fung. rhen. n. 607. Nits. Pyr. Germ. 449

190, *V. vitigera* Cooke. Cfr. Mich. I. 19, *V. Vitis* Schw. p. p. — Stromatibus alte immersis, e basi orbiculari v. ovata per corticem superiorem fibrosum, ductu lineari longitudinaliter parumque emergentibus; peritheciis monostichis, minutis, in singulo stromate $10-16$, angulatis, collo brevi instructis; stromatis substantia albida; ostioliis abbreviatis, cylindricis, truncatis, poro angustissimo pertusis, atris nitidis, in disculum ovalem v. subrotundum, stromatis substantia fuscæscens plerumque cinctum, planum v. nonnihil convexum stipatis; ascis sessilibus, anguste clavatis, octosporis, $48 \approx 7-8$; sporidiis conglobatis, cylindricis, curvatis v. subrectis, hyalinis, $10-12 \approx 2-3$. — Spermogonia cytisporoidea, multilocularia; spermatiis allantoideis $4-5 \approx 1$, longiuscule stipitatis.

Hab. in sarmentis *Vitis viniferae* in Germania, Italia, Gallia, Amer. boreali.

22. **Valsa Verrucula** Nits. Pyr. Germ. p. 178. — Stromate e basi orbiculari hemisphaerico, verruciformi, intus griseo-flavescente peridermio arctissime adhaerente, hinc inde fisso, tecto, disco libero, suborbiculari, ex ostioliis numerosissimis stipatissimisque formato coronato; peritheciis in singulo stromate numerosissimis submonostiche densissimeque stipatis, minutis, subglobosis v. mutua pressione angulatis, in collum longiusculum attenuatis; ostioliis plerumque plus minus elongatis et in disculi ambitu subdivergentibus, cylindricis, laevibus, obtusis, poro minutissimo perforatis, aterrimis, interdum abbreviatis nec stromam superantibus; ascis anguste oblongis v. clavatis, sessilibus, octosporis, $40-44 \approx 6$; sporidiis subdistichis, curvulis v. subrectis, cylindricis, hyalinis, 10, rarius $12 \approx 2\frac{1}{2}$.

Hab. in ramis *Salicis fragilis*, Nienberge, Germ. et *Salicis vitellinae* in Ital. bor. — Rami fungo invasi dense verrucosi fiunt.

23. **Valsa cristata** Nits. Pyr. Germ. p. 182. — Stromate e basi orbiculari conico, rarius depresso, subhemisphaerico, pustulato, valde protuberante, peridermio arrecto, plerumque haud fisso arctissimeque adhaerente lateribus tecto, ostiolorum fasciculo coronato; peritheciis in singulo stromate 10-20, monostiche confertissimeque stipatis ac mutua pressione angulatis, corticis substantiae, specie immutatae insculpatas, collo longiusculo instructis, in stromatibus minoribus saepe radiatim fere ordinatis; ostioliis plerumque plus minus elongatis, cylindricis, apicem versus parum attenuatis, v. nodulosis, basi conjunctis, ceterum divaricatis, flexuosis (rarius ostioliis omnibus abbreviatis), discum minutum, suborbicularem ac peridermii formam vix superantem, planum, atrum formantibus; ascis anguste clavatis, octosporis, $40 \approx 5$; sporidiis subdistichis, allantoidis, curvulis v. rectis, $5-6 \approx 1$, hyalinis.

Hab. in ramis *Tiliae*, Cappenberg (Germania). — Affinis *V. ceratophorae*.

24. **Valsa Spegazziniana** Sacc. Mich. I. p. 20 et M. V. n. 749. — Peritheciis hinc inde monostiche aggregatis, cortice nidulantibus epidermidemque pustulatim elevantibus, globulosis, atris; collis elongatis convergentibus in ostiola rotundata disculum subcircularem vix exsertum efficientia, desinentibus; ascis fusoidis, $40-50 \approx 7-8$, apographatis, octosporis; sporidiis distichis, botuliformibus, $10-13 \approx$

$1\frac{1}{2}$ -2, 2-guttulatis, perfecte hyalinis. — Perithecorum contextus laxè cellulosus, olivaceo-fuscus.

Hab. in ramis corticatis *Evonymi europæi*, a *Conegliano* (Ital. bor.), (SPEGAZZINI).

25. **Valsa ribesia** Karst. Fung. Fenn. exsicc. 857. Myc. Fenn. II. p. 453

138. — Stromate e basi orbiculari depresso conoideo, peridermio fere integro et ostiolorum fasciculo solum pertuso tecto, corticis parenchymate specie immutato composito; peritheciis in singulo stromate 6-12, monostichis vel subcircinatis, collis elongatis, decumbentibus; ostioliis conferte stipatis, atris, levibus, sphæroideis; ascis cylindraceo-clavatis, 35-42 μ . long.; sporidiis elongatis, distichis, subrectis, 6-9 \approx 1,5.

Hab. in ramis *Ribis alpini* aridis, rara, in Fennia.

26. **Valsa exigua** Nits. Pyr. Germ. p. 196. — Stromate in corticis interioris superficie locum aliquantulum sensimque elevatum sistente ostiolorum disco minimo, tuberculiformi, peridermio erumpente coronato; peritheciis in singulo stromate 5-8, ovatis, monostichis v. circinantibus, in corticis interioris substantia immutata dense nidulantibus, collis brevissimis instructis; ostioliis minutissimis, atris nitidis, rotundatis, poro vix conspicuo pertusis, in corpusculum exiguum, deforme conglomeratis, rarius disculum planum formantibus densissime stipatis; ascis sessilibus, anguste clavatis, octosporis, 40-44 \approx 6; sporidiis cylindricis, nonnihil curvatis, hyalinis, 9-12 \approx 2-2 $\frac{1}{2}$.

Hab. in ramis *Aceris campestris*, prope Münster (Germania). — Affinis *Valsæ coronatæ*, sed peritheciis, sporidiis, ascisque majoribus satis recedit.

27. **Valsa horrida** Nits. Pyr. Germ. p. 176. — Stromate e basi ovata convexo, depresso, subito in disculum minutum, ellipticum, planum, peridermium tandem transversim erumpentem idque vix superantem attenuato, cortici interiori, in superficie, ut stromata ipsa, colore castaneo tincto adnato; peritheciis monostichis, numerosis, minutis, densissime stipatis, mutua pressione angulatis, nunc omnibus stromate omnino inclusis, marginalibus convergentibus, collo longiusculo, ostiolo punctiformi, hemisphærico, poro minutissimo perforato instructis, nunc contra pro parte subliberis, collis longis, subcylindricis, apicem versus sensim attenuatis, nodulosis v. sulcatis, liberis, plerumque radiatim divergentibus et horizontaliter directis peridermioque tectis; peritheciis paucis hujus indolis sæpe in spermogonii basi oriundis et ab eo coronatis; ascis cla-

vatis v. oblongis, sessilibus, octosporis, 36-48 \approx 8-12; sporidiis conglobatis v. subdistichis, cylindricis, curvulis v. subrectis, hyalinis, 10-12 \approx 3. — Spermogonia cytisporoidea; spermatiis allantoideis, 5 \approx 1, longe stipitatis.

Hab. in ramis dejectis Betulæ albæ, prope Münster (Germania).

28. **Valsa Hoffmanni** Nits. Pyr. Germ. p. 145. Sacc. M. V. Spec. t. 456

XIII. f. 11-14. *Sphæria coronata* Hoffm. p. p. in Cratægo? — Stromate e basi ovali depresso convexo, in parte superiore abrupte conico-attenuato v. omnino truncato-conico, transversim erumpente cortici interiori parum immerso, colore pulchre castaneo tincto; ostiolorum disculo minuto, suborbiculari, per peridermii facile resolvendi rimas, transverse directas erumpente; peritheciis in singulo stromate 15-25, monostichis, minutis, angulatis, in stromatis substantia albida confertissime nidulantibus in collum breviusculum attenuatis; ostioliis minutissimis, atris, nitidis, poro angustissimo pertusis, abbreviatis, in disculum planum densissime stipitatis; ascis anguste clavatis, sessilibus, octosporis, 40 \approx 5; sporidiis conglobatis, cylindricis, curvulis v. rectis, hyalinis 7-10 \approx 1.5-2.5. — Spermogonia cytisporoidea: spermatiis allantoideis, 5-6 \approx 1, longe stipitatis.

Hab. in ramis corticatis Cratægi Oxyacanthæ, Münster, Æstrich, (Germania), Rouen (Gallia), Treviso (Italia).

29. **Valsa oxystoma** Rehm Ascom. n. 270. Diagn. p. 70. — Stromatis 457

tibus e basi elliptica conicis compressis, mill. 1,5 \approx 1, in cortice interiore immutato nidulantibus, nigrescentibus, per rimas peridermii transversas erumpentibus; peritheciis in singulo stromate 8-12, globosis, dense stipitatis, monostichis, in collum longum attenuatis; ostioliis elongatis tenerrimis, in stromatis superficie nigra monostiche erumpentibus et plus minusve extantibus; ascis clavatis, 8-sporis, 45 \approx 8; sporidiis allantoideis, hyalinis 9 \approx 2; paraphysibus filiformibus 6 μ . cr.

Hab. ad ramos Alni viridis in Alpibus Tyrolensibus.

30. **Valsa Friesii** (Duby) Fuck. Symb. Myc. p. 108. Nits. Pyr. Germ. 458

p. 203. *Sphæria Friesii* Duby. — Stromate minuto, e basi orbiculari conico-truncato, depresso, cortici omnino insculpto, nec protuberante, peridermio integro, salvo disco, tecto; peritheciis in singulo stromate 6-10 (raro 3 tantum), subcircinantibus, globosis, minutulis, in corticis parenchymate immutato nidulantibus, collis brevissimis instructis; ostioliis incrassatis, minutis, globosis, rarius

ovoideis, acutiusculis v. truncatis, atris, poro minimo pertusis, in disculi cinerei, fuscescentis margine emergentibus, confertis, rarius discum integrum occupantibus; ascis anguste clavatis, sessilibus, octosporis, $40 \approx 6$; sporidiis conglobatis, cylindricis, nonnihil curvatis, hyalinis, $10 \approx 2$. — Spermogonia phyllogena, exigua, pauciloculata, cytisporoidea; spermatis allantoideis, $4-5 \approx 1,5$, breve stipitatis.

Hab. in ramulis Abietis pectinatae, in Gallia, Germania, Belgio.

31. **Valsa incrustata** (Kunze) Nits. Pyr. Germ. p. 208. *Sphæria in-* 459
crustata Kunze in herb. — Stromatibus exiguis, e basi suborbiculari convexis, valde depressis, dense sparsis, peridermio immutato, ostiolorum disculo minutissimo solum perforato nec pustulato-elevato, arce adhærente omnino tectis; peritheciis in singulo stromate 4-8, in circulum simplicem dispositis, parum confertis, globosis, sæpe depressis v. collapsis, pro ratione majusculis, corticis interioris parenchymati semiimmersis et ab ejus strato supremo immutato, stromatis vicem præbente obductis, decumbentibus, collo perithecii diametro plerumque breviori, tenui, cylindrico, ostiolisque minutissimis, punctiformibus, aterrimis, nitidulis, rotundatis, in disculi margine tantum v. confertim erumpentibus ac vix exsertis; ascis clavatis, sessilibus, octosporis $30 \approx 4-5$; sporidiis subdistichis, cylindricis, nonnihil incurvis v. subrectis, hyalinis, $9-11 \approx 1\frac{1}{2}$.

Hab. in ramis Alni in Lusatia, rarius (SCHMIDT). — A. V. *stenopora* certe diversa.

32. **Valsa intermedia** Nits. Pyr. Germ. p. 199. — Stromate e basi 460
orbiculari depresso convexo, minuto, peridermio plerumque arcte adhærente tecto, inde pustulato, disculo minimo, peridermium pertusum paullo superante, coronato; pustulis dense gregatis basi sæpe confluentibus; peritheciis in singulo stromate plerumque 3-8, rarius pluribus (-25), majusculis, globosis v. compressis, subcircinantis v. monostichis, in collum brevissimum attenuatis; ostiolis subglobosis v. truncatis, rarissime modice elongatis, e basi incrassata ovoideis, atris, nitidis, poro pro ratione majusculo pertusis, nunc tantum in disculi ex cinereo fuscescentis margine, nunc — si plura adsunt perithecia — in ejus superficie integra erumpentibus; ascis anguste clavatis v. oblongis, sessilibus, octosporis, $64 \approx 8$; sporidiis subdistichis, curvulis v. subrectis, hyalinis, $10-16 \approx 2-3$. — Spermogonia cytisporoidea; spermatis allantoideis $5-6 \approx 1,5$, longe stipitatis.

Hab. in ramis tenuioribus Quecus prope Münster, rarius. — Nonnullis notis cum *V. ceratophora*, habitu vero cum *V. ambiente* convenit.

33. **Valsa sordida** Nits. Pyr. Germ. 203. Sacc. M. V. Spec. t. XIII. 461
fig. 8-10. *V. ambiens* Auct. p. p., *V. deplanata* Nees sec. Fuck.
— Stromate majusculo, e basi orbiculari v. ovali obtuse conico, nunc depresso, parum v. vix protuberante, nunc contra pustulato, peridermio integro v. stellatim. rarius rimose fissio, arcte adherente tecto: peritheciis in singulo stromate plerumque 6-12, irregulariter circinantibus, globosis in majoribus magisque protuberantibus multo numerosioribus (15-25), monostichis, densissime stipatis, compressis, in corticis substantia immutata nidulantibus et in collum nunc breve, nunc longiusculum attenuatis; ostiolis incrassatulis, fere globosis v. truncatis, atris, poro angusto pertusis, plerumque in disci ex albedo-cinereo mox sordide fuscescentis margine tantum emergentibus; ascis anguste clavatis v. oblongis, sessilibus, octosporis, 48-60 \approx 8; sporidiis conglobatis, cylindricis, curvulis v. subrectis, hyalinis, 12 \approx 1½-2. — Spermogonia cytisporioidæ, radiatim multilocellata; spermatis allantoideis 4 \approx 1, longe stipitatis, dein in cirrhos luteos longissimos protrusis.

Hab. in ramis Populi nigræ, *P. italicæ* in Germania, Italia, Gallia, California.

34. **Valsa præstans** B. et C. in Curtis Catal.? Cooke Vals. of Un. 462
St. 117. — Peritheciis..... ostiolis non sulcatis; ascis octosporis; sporidiis allantoideis, hyalinis 10-12 \approx 3.

Hab. in cortice Nyssæ, New Jersey, Am. bor. — A *V. Nyssæ* C. et E. differt sporidiis longioribus; ad speciem Curtisianam parum notam dubitanter cl. Cooke refert hunc fungillum.

35. **Valsa haustellata** Fr. Cooke Valsei of Un. St. 115. *Sphæria* 463
haustellata Fr. S. M. II. 383. Schw. Syn. Am. bor. n. 1320. — Tecta, basi innata, late conica, stromate tenui pallido, ostiolis distantibus, cylindricis, pertusis non sulcatis; ascis octosporis; sporidiis allantoideis, valde curvatis, 6-8 \approx 2, subsuccineis (Cooke l. c.).

Hab. in ramis in Suecia et in ramis Alni serrulatæ et *Ostryæ virginicæ*, Carol. inf., Santee Swamp, N. York. (Amer. bor.). — Pustulæ basi cortici profunde immersæ, lineaque tenui nigra ad lignum penetrante laxius circumscriptæ; perithecia profunde demersa, collis longis convergentibus stromate conjunctis, unde discus prominens convexus angustatus, ostiolis brevibus distinctis lævibus, subinde apice dilatatis.

36. **Valsa mendax** Mont. Syll. Crypt. n. 755 et Fl. Alg. p. 473, sub 464
Sphæria — Pustulata; peritheciis paucis, amplis, sphaericis, cortici immersis, collis stromate corticali nigrescente tectis, ostioli in discum erumpentem minutum convexum connexis, perithecia ovato-globosa subpapillata mentientibus; ascis fusiformibus 40 μ . long., sporidiis linearibus brevibus rectis aut curvulis 10 μ . long.
Hab. in caulibus *Atriplicis* Halimi, Pointe-Pescade, Alger (DURIEU).
37. **Valsa multiplex** C. et E. New Jersey Fungi in Grey. VII. 14. — 465
 Pustulis magnis, erumpentibus, elevatis; disco brunneo; ostioli numerosis, nigris, congestis; ascis clavatis; sporidiis biserialis, allantoideis, hyalinis 10 μ . long.
Hab. in ramis *Quercus coccineæ*, New Jersey (Am. bor.). — Pustulæ seu stromata, quasi *Diatrypes*; ostiola minuta, copiosissima, stipata.
38. **Valsa Terebinthi** H. Fab. Sphér. Vaucl. p. 70. — Peritheciis mi- 466
 nimis 5–15 in singulo acervulo, corticis parenchymati immutato infossis, globosis, atris, ostioli brevibus, apice nitidis, in discum punctiformem conferte erumpentibus; ascis clavatis, sessilibus, 8-sporis, 20–34 \approx 5–6; sporidiis distichis, hyalinis, continuis, cylindraceis, curvulis, utroque polo 1-guttulatis, 9 \approx 2.
Hab. in ramis exaridis *Pistaciæ Terebinthi*, socia *Cytispora* olivaceo-cirrhosa Vaucluse (Gallia).
39. **Valsa rhamnicola** H. Fab. Sphér. Vaucl. p. 69. — Peritheciis in 467
 singulo acervulo 8–20, corticis parenchymati immutato infossis, globosis, minutis, ostioli in discum atrum conoideum pustulatim peridermium infantem atque transversim erumpentem collectis, totam superficiem disci papillis atris, nitidis et minutissimis exasperantibus; ascis clavatis, sessilibus, 8-sporis, 25–27 \approx 4–5; sporidiis subdistichis, hyalinis, cylindraceis, curvulis, continuis, 6–7 \approx 2.
Hab. ad ramos mortuos et corticatos *Rhamni infectorii* Vaucluse (Gallia). — Julio.
40. **Valsa perfodiens** Nits. in Fuck. Symb. myc. p. 200. — Perithe- 468
 ciis Ascis oblongo-ellipticis, sessilibus, 8-sporis, 28 \approx 4; sporidiis farctis, cylindraceis, curvatis, continuis, hyalinis, 8 \approx 2.
Hab. in ramis siccis *Viburni Lantanæ*, Æstrich, Rhenogovia.
41. **Valsa accedens** Sacc. Fungi Ven. Ser. V. p. 179. — Peritheciis 469
 circinantibus, in cortice nidulantibus et epidermide tumidula tectis, e globoso-depressis, olivaceis, ostioli in centrum radiatim convergentibus, longis, in ostiola rotundata atra, epidermidem perforan-

tia et vix excedentia desinentibus; peritheciis contextu distincte laxe parenchymatico olivaceo-fusco; ascis clavatis, 60-70 \approx 8.10, breve crassiuscule (sæpe incurvo) stipitatis, apice crasse tunicatis, aparaphysatis, 8sporis; sporidiis distichis, botuliformibus, 10-14 \approx 3, initio pluriguttulatis, dein utrinque guttulatis, hyalinis. — Spermatogoniis sub epidermide nidulantibus, astomis, nucleo griseo-olivaceo farctis, spermatia in sterigmatibus simpliciter verticillato-ramosis, filiformibus acrogena, botuliformia, 6 \approx 1, hyalina foventibus.

Hab. in ramis corticatis *Quercus pedunculatæ* in sylvâ *Montello* (Ital. bor.) Sept. 1875. — Ob ascos apice crassiuscule tunicatos, stipitatos, basidiisque sæpe suffultos species hæc ad *Calosphæriam* vergit.

42. **Valsa subcuticularis** C. et E. N. Jers. Fungi in *Grevillea* VIII. 470 p. 13. — Circinata. Peritheciis globosis, decumbentibus, sub epidermidem nidulantibus, ostioliis elongatis tenuibus, convergentibus; ascis clavatis; sporidiis allantoideis, hyalinis 6-7 μ . long.

Hab. in ramis *Ilicis*, New Jersey, Am. bor. — Peridermium ab ostioliis leniter inflatum et punctulatum, sed pustulæ parum conspicuæ; peridermio secesso, perithecia libro hærent, quasi *Calosphæria*.

43. **Valsa pulchelloidea** C. et E. New Jersey Fungi in *Grevillea* VI, 471 p. 92. — Peritheciis globosis, decumbentibus, in circulum dispositis; ostioliis elongatis convergentibus; ascis clavatis 25 μ . long. sporidiis minutis, allantoideis, hyalinis 5-6 μ . long.

Hab. in cortice *Quercus*, New Jersey, Amer. bor. — Perithecia minuta, copiosa 10-20, collis longis convergentibus, quasi *Calosphæriæ principis*, sed perithecia majora.

44. **Valsa querneæ** Curr. Linn. Trans. XXII, p. 279, t. 48, fig. 141, 472 Cooke Handb. n. 2480. — Peritheciis valseis.; ascis clavatis, apice rotundatis, deorsum attenuatis; sporidiis prope ascis apicem stipitatis, allantoideis, hyalinis, 5-7 μ . long.

Hab. in ramis *quercinis*, Weybridge (Britannia). — « An *Calosphæriæ* species? »

45. **Valsa cornicola** Cooke in Grey, VII. 83. — Disco erumpenté, orbiculari, brunneo; peritheciis minutis, nigris, collis convergentibus; ostioliis circulum plus v. minus regularem efformantibus; ascis clavatis; sporidiis botuliformibus, 12 μ . long.

Hab. in ramis *Corni*, Darenth (Britannia). — Prorsus diversa a *V. fallaci* Nits.

46. **Valsa demissa** Nits. Pyr. Germ. p. 197. — Stromate basi ovali 474

corticis strato supremo immerso, superne protuberante et in disculum late ellipticum v. rarius suborbicularem sensim attenuato, exiguo, peridermio facile solubili, transversim fissis v. lacerato erumpente lateribus sordide fusciscentibus; stromatibus sine ordine, sed plerumque dense sparsis, basi haud raro connatis; peritheciis in singulis stromate paucis tantum 4-10, monostichis v. radiatim dispositis, minutissimis, subglobosis v. angulatis in collum pro ratione longum, tenue attenuatis; ostioli abbreviatis semper ac per exiguis, plus minus dense confertis in disculi ex cinereo sordide lutescentibus, immo fusciscentibus medio erumpentibus nec exsertis, truncatis, poro pertusis; ascis anguste clavatis v. subfusiformibus, sessilibus, octosporis, $32 \approx 5$; sporidiis conglobatis v. subdistichis, subrectis v. parum curvatis, cylindricis, hyalinis, $5-7 \approx 1-1\frac{1}{2}$, rarius $8 \approx 2$.

Hab. in ramis crassioribus Carpini prope Münster, Germania. — A *Valsa decorticante* sporidiis ascisque minoribus differt.

47. *Valsa Dubyi* Nits. Pyr. Germ. p. 187. *Valsa coronata* Duby p. 475
 p. — Stromate e basi orbiculari depresso convexo, parum protuberante peridermio arcte adhærente tecto; peritheciis in singulis stromate 10-20, monostichis, mutua pressione varie angulatis, densissime stipatis, majusculis, in collum breve attenuatis; ostioli plerumque parum exsertis, abbreviatis, cylindricis, aterrimis, nitidis, poro pro ratione lato pertusis, laxiuscule in disculum a stromatis substantia cincto, confertis, rarius plus minus elongatis, crassiusculis, subcylindricis, nonnihil flexuosis; ascis anguste clavatis, sessilibus octosporis, $36 \approx 6$; sporidiis subdistichis, cylindricis, curvulis v. subrectis, hyalinis, $7-10 \approx 2$. — Spermogonia cytisporiidea: spermatiis allantoideis, $5 \approx 1$, breve stipitatis.

Hab. in ramulis et foliis Juniperii communis in Helvetia et Germania.

48. *Valsa decorticans* Fr. Summ. Veg. Scand. p. 412 pr. p. Nits. 476
 Pyr. Germ. p. 194, *Sphæria decorticans* Fr. S. M. II. 396 p. p.
 — Stromate e basi suborbiculari v. sæpius ovali depresso conico v. convexo, in ostiolorum discum abrupte attenuato, majusculo, peridermio facile solubili erumpente ejusque laciniis fissis cincto, fusciscentibus immo tandem nigrescentibus; peritheciis in singulis stromate, cortici interiori parum tantum immerso 6-22, monostichis dense stipatis mutuaque pressione e globoso angularibus, in collum longiusculum attenuatis; ostioli plus minus exsertis, cylindricis, tenuibus, atris, nitidis, discum orbicularem v. stromate transver-

sim erumpente, ellipticum formantibus, plerumque dense stipatis, apice nunc rotundatis, v. truncatis poroque magis perspicuo per-tusis nunc attenuatis, conicis, rarissime longius exsertis, cylindri-cis, parum flexuosis; ascis anguste oblongis v. clavatis, sessilibus, octosporis, 44-50 \approx 6; sporidiis conglobatis, cylindricis, nonnihil cur-vatis v. rectis, hyalinis, 10-12 \approx 2 $\frac{1}{2}$. — Spermogonia cytisporoidea: spermatis allantoideis 4-5 \approx 1, mediocriter stipitatis.

Hab. in ramis exsiccatis Fagi sylvaticæ et Carpini in Suecia, Germania, Gallia, Italia, Belgio.

49. **Valsa Liquidambaris** (Schw.) Cooke Valsei of Un. St. 115. Grev. 477
t. 75, fig. 16. *Sphæria Liquidambaris* Schw. Syn. Carol. n. 103.
— Pustulata, minor, peritheciis decumbentibus, ostiolis minutis sti-patis, teretibus, brevibus; ascis clavatis; sporidiis (sec. exempl. Cur-tisii) allantoideis, hyalinis, 12 μ . longis.

Hab. in ramis Liquidambaris in Carolina, New Jersey (Am. bor.). — Media inter *S. coronatam* et *S. decortificantem*. Pustulæ lineam vix latæ, subinde vero plures confluant, prominentes, con-ceptaculo a cortice interiori formato brunneo, epidermidem radia-to-fissam demum excutientes. Stroma cinereum, in quo nidulan-tur spherulæ nigræ flexuosæ. Discus nullus, sed ostiola in cen-tro exserta, minuta, conferta, lævia, nitida.

50. **Valsa sorbicola** Nits., Fuck. Symb. Myc. 198. *S. decorticans* Fr. 478
S. M. II, 396 p. p. in Sorbo. — Pustulata, peritheciis subdifformi-bus, aggregatis, ostiolis minutis, confertis, globosis, umbilicatis; ascis oblongo-ellipticis, sessilibus, 8spor. 24 \approx 4; sporidiis faretis, cylindraceis, curvatis, continuis, hyalinis, 8 \approx 2.

Hab. in ramis exsiccatis Sorbi aucupariæ in Suecia, Ger-mania, Helvetia.

51. **Valsa excorians** C. et E. New Jersey Fungi in Grev. VIII, p. 14. 479
Pustulis in cortice immersis, elevatis, erumpentibus et epidermi-dem ramorum excutientibus; disco primo sordido; ascis clavatis; sporidiis allantoideis, minimis, hyalinis, 5-6 μ . long.

Hab. in ramis Pyri arbutifoliæ, New Jersey (Amer. bor.).
— Habitus *Valsee decorticans* Fr.; a qua sporidiis dimidio mi-noribus statim distinguitur.

52. **Valsa concamerata** Curr. Linn. Trans. XXII, t. 48. fig. 134. — 480
Peritheciis corticem elevantibus, conceptaculum concameratum ef-ficientibus, inter se filis albis fibrosis connexis; sporidiis stipatis, hyalinis, curvulis, 10 μ . long.

Hab. in ramis quercinis in Britannia. — Præeunte ipso Curreyo, mera forte *T. ceratophoræ* varietas.

53. **Valsa stephania** Pass. Funghi Abiss. p. 187. t. V. fig. 9. — Stromate fusco subgloboso, pustulato, protuberante, peridermio lacero non adhærente cincto, ostiolis fasciculatis v. dissitis adscendentibus v. varie flexis coronato; peritheciis in stromate singulo numerosis, stipatis, subglobosis in collum longum cylindricum flexuosum apicem versum sensim incrassatum productis; ascis innumeris coacervatis, exiguis, 16–18 \approx 4 (ex ic.), fusiformi-clavatis, 8–sporis, membrana tandem evanida; sporidiis subdistichis, minimis, oscillantibus simplicibus, cylindricis, rectis v. curvulis, hyalinis, 5 \approx 1 (ex icone); paraphysibus nullis. 481

Hab. in cortice crassiore Acaciæ, Keren, Abyssinia. — Affinis *V. ceratophoræ*, a qua stromatis crassitie et ostiolis crassioribus et longioribus differt. «Sec. icones citatas dimensiones ascorum et sporidiorum sunt duplo majores quam in textu Passeriano citatæ; sed probabiliores sunt eæ, quas supra indicavi.

54. **Valsa Nyssæ** Cooke. Rav. Fung. Amer. n. 194, et in Grev. VI. p. 145. — Pustulis cortice tectis; peritheciis ovatis, in collum longum attenuatis, atris; ascis clavatis; sporidiis linearibus curvulis, hyalinis 8 μ . long. Adsunt sæpe spermogonia majora in centro circuli perithecorum. 482

Hab. in ramis Nyssæ, Aiken, Carolina inf. (Am. bor.).

55. **Valsa præclara** Mont. Syll. Crypt. n. 760 et Fl. Alg. p. 469, sub *Sphæria*. — Lentiformis, in rimis caulium seriata; stromate niveo; peritheciis ovoideis, membranaceis, erectis, conceptaculo hemisphærico tectis, ostiolis erumpentibus crassiusculis rugosis; sporidiis elongato-subreniformibus. 483

Hab. in caulibus Cirsii gigantei elapsis, La Calle (DURIÉU).

56. **Valsa parasitica** C. et E. New Jersey Fungi in Grevillea VII, p. 9. — Circinata. Peritheciis globosis, parvulis, decumbentibus, ostiolis elongatis, subflexuosis, supra fuscis; ascis clavatis; sporidiis allantoideis, minimis, 6 μ . longis. 484

Hab. in Massaria sudante vetusta, New Jersey, Am. bor.

57. **Valsa Nepalensis** (Berk). Sacc. *Sphæria Nepalensis* Berk. Dec. n. 487. — Pustulis depressis, 1–2 mill. lat.; peritheciis decumbentibus circinantibus; collis longis, ostiolis obsoletis; ascis angustis, sporidiis biseriatis, allantoideis, 7–8 μ . long. 485

Hab. in ramis emortuis Betulæ, East Nepal, India (HOOKER). — Matrix inter perithecia flavicat.

58. **Valsa anomia** (Schw.) Cooke Vals. Un. St. 116. *Sphæria ano-* 486
mia Schw. Syn. Fung. Am. bor. n. 1316, an Fr. — Convexo-dif-
formis, libera, rugosa, stromate ligneo cinereo-nigricante, ostiolis
exsertis distantibus magnis lævibus; sporidiis botuliformibus 8-
10 μ . long.

Hab. in ramis Robiniaë in Carolina et Virginia, Am. bor. —
Species homonyma Auct. europæorum ad *Aglaosporam* potius
spectat.

59. **Valsa ligustrina** Cooke New Jersey Fungi in Grev. VIII. p. 14. — 487
Peritheciis paucis, ostiolis abbreviatis; ascis clavatis; sporidiis al-
lantoideis, hyalinis 8 μ . long.

Hab. in ramis Andromedæ ligustrinæ, New Jersey (Am.
bor.). — Affinis *Valsæ delicatulae* C. et E.

60. **Valsa juniperina** Cooke. Rav. Fung. Amer. n. 193 et in Grev. VI, 488
p. 144. — Pustulis epidermide tectis; disco farinaceo, pallido; pe-
ritheciis atris, paucis; ostiolis elongatis, cylindricis, leniter stria-
tis; ascis subclavatis; sporidiis linearibus, obtusis, hyalinis, 8 μ .
long.

Hab. in cortice Juniperi virginianæ, Aiken. Carol. inf.
(Am. bor.).

61. **Valsa delicatula** C. et E. New Jersey Fungi in Grev. VI, p. 10, 489
t. 95, fig. 11. — Pustulis minimis, circularibus v. oblongis, erum-
pentibus; peritheciis phialiformibus, membranaceis, brunneis, tectis,
in acervulum brunneum collectis; ostiolis convergentibus, gracilibus,
ad apicem tumidis perithecium æquantibus; ascis clavatis;
sporidiis allantoideis, hyalinis, 7,5 μ . long.

Hab. in ramis Andromedæ et Vaccinii, New Jersey (Am.
boreali).

62. **Valsa subclypeata** C. et Peck. 27 Rep. p. 109. — Peritheciis ter- 490
natis vel quaternatis, pustulas epidermide atro-nitidula denique
lacerata velatas, efformantibus circumcirca tandem dealbatos; ostio-
lis convergentibus epidermidem perforantibus; ascis anguste fusoi-
deis; sporidiis linearibus minutis, utrinque rotundatis, leniter cur-
vis, hyalinis.

Hab. in Amer. bor. Forestburgh, in ramulis quercinis et
Rhododendri, New Jersey in ramis Rubi.

63. **Valsa conscripta** C. et E. New Jersey F. in Grev. VII, p. 8. — 491
Epidermide tecta; peritheciis subglobosis, ostiolis demum rimose
erumpentibus; ascis clavatis; sporidiis cylindricis, obtusis, curvulis,
hyalinis, 20 \approx 4.

Hab. in ramis *Caryæ* et *Comptoniæ*, New Jersey (Amer. boreali).

64. **Valsa clausa** C. et E. New Jersey Fungi in Grev. VIII, p. 13. 492
 Cæspitulis in cortice nidulantibus, supra tectis; peritheciis 4-6 subglobosis; ostioliis brevibus, convergentibus; ascis clavatis; sporidiis biseriatis, allantoideis, hyalinis, 16-18 μ . long.

Hab. in ramis *Quercus coccineæ*, New Jersey, Am. bor. — Peridermium leviter inflatum, vix tamen ab ostioliis convergentibus perforatum.

65. **Valsa rhoophila** C. et E. in Grev. VII, p. 9. — Pustulis orbicularibus; peritheciis globosis, congestis; ostioliis in discum brunneum, dein atrum, erumpentibus; ascis clavatis; sporidiis hyalinis, allantoideis, circa 10 μ . long.

Hab. in ramis *Rhois venenatæ*, New Jersey, Amer. bor.

66. **Valsa glandulosa** Cooke in Grevill. VII. 52. — Pustulis epidermide tectis, ostioliis convergentibus, erumpentibus, nigris, nec stellatis; ascis clavatis 30 \approx 10; sporidiis minimis, spermatioideis, 5 μ . long.

Hab. in ramis *Ailanthi*, Aiken, Carolina inf. (Amer. bor.).

67. **Valsa campospora** Mont. Syll. Crypt. n. 757. — Stromate corticali nigro immersa; peritheciis aggregatis inæqualibus ovoideo-sphæricis; ostioliis in discum superficiali-erumpentem minutum planum conjunctis, poroso-apertis; sporidiis linearibus lunato-curvatis 10-12 μ . longis.

Hab. in cortice *Quercus Suberis*, Philippeville, Algeria (DURIEU).

68. **Valsa gossypina** Cooke Valsei of Un. St. 115. — Peritheciis subquaternato-circinantibus, tectis, disco erumpente, ostioliis non sulcatis; ascis octosporis; sporidiis allantoideis, minutis hyalinis, 5-6 μ . long.

Hab. in ramis *Gossypii*, Carolina inf. (RAVENEL). — Habitus *Quaternariæ Persoonii*.

69. **Valsa Eucalypti** Cooke et Harkn. Grevill. IX, 1881, p. 85. — 497
 Erumpens, subrotunda, convexa, nigra; peritheciis oblongis; ostioliis elongatis, cylindricis, levibus, rectis; ascis clavatis, sessilibus; sporidiis rectis v. leniter curvis, utrinque obtusis, 8-9 \approx 1,5, hyalinis.

Hab. in ramis *Eucalypti Globuli*, California, Amer. bor. — Pustulæ minutæ ex 5-6 peritheciis constantes.

70. **Valsa echidna** Cooke Grevill. IX, 1880, p. 4. — Erumpens; peritheciis 10-20, in stromate niveo pulverulento nidulantibus; ostio-

lis cylindricis elongatis, flexuosis, exsertis; ascis numerosissimis, clavatis minimis, 20-25 \approx 6; sporidiis tenuibus curvulis hyalinis, 4 μ . long.

Hab. in corticibus in Australia (MÜLLER). — *Habitus Valsæ Salliæ* Berk.

71. **Valsa monadelpha** Fr. Summa V. S. 411, Cooke Valsei of Un. 499 St. 117. *Sphæria monadelpha* Fr. S. M. II, 382. — Lentiformis, libera, basi adnata, stromate cinereo-nigro, ostiolis exsertis, stipatis in discum convexum connexis; ascis octosporis; sporidiis allantoideis 10 μ . long.

Hab. in ramis Prunorum etc. in Suecia, Gallia, Amer. bor. — Perithecia 5-6, circa centrale circinantia, cum stromate proprio arcte inclusa, collis brevibus, ostiolis confertissimis brevibus in nodum quasi collectis. Supra ligna denudata variat effusa ostiolis distinctis. — *Sphæria monadelpha* Rabh. D. Crypt. pag. 212, in Rhamno et Syringa, sporidiis ovoideis majusculis speciem et genus absque dubio aliena sistit.

72. **Valsa microspora** (Crouan) Sacc. *Diatrype microspora* Crouan 500 Finist. p. 33. — Peritheciis 2-8 aggregatis, 1-2 mill. diam., nigris, sphaericis, ostiolo elongato præditis; ascis minutis, octosporis; sporidiis subcylindricis curvulis biguttulatis, hyalinis.

Hab. in ramis Populi, Viburni, Cratægi, Finistère (Gallia).

73. **Valsa Macluræ** C. et E. New Jersey Fungi in Grev. VIII, p. 14. 501 — Pustulis sub-corticalibus; ostiolis congestis, tandem expositis, brunneo-cinctis; ascis clavatis; sporidiis minimis, allantoideis, hyalinis, 5 μ . long.

Hab. in ramis Macluræ aurantiacæ, New Jersey, Amer. boreali.

74. **Valsa Pseudoplatani** (Fr.) Nits. Pyr. Germ. p. 205. *Sphæria* 502 *Pseudoplatani* Fr. in Myc. Heft II, 47. *Sph. stilbostoma* β . *umbilicata* Fr. S. M. II, 404. — Stromate minuto, e basi orbiculari conico-truncato, salvo disco, peridermio integro tecto, nonnihil protuberante, tandem disparente, peritheciis liberis, peridermio detracto adherentibus; peritheciis in singulo stromate 2-10, plerumque vero 5-6, circinantibus, globosis, vix umquam angulatis, majusculis, collo brevissimo instructis; ostiolis minutis, vix exsertis, atris, poro pro ratione majusculo, pertusis, in disculi minutissimi, ex dilute ochraceo tandem fusciscentis margine emergentibus; ascis anguste clavatis, v. oblongis, sessilibus, octosporis, 40-80 \approx 8; sporidiis subdistichis, oblique monostichis v. in ascis parte media disti-

chis, in inferiore et superiore contra monostichis, cylindricis v. obtuse fusiformibus, nonnihil curvatis v. rectis, hyalinis, 5-15- (plerumque 8-10) \approx 2 $\frac{1}{2}$ -4. — Spermogonia cytisporoidea; spermatiiis allantoideis, 5 \approx 1,5, longe stipitatis.

Hab. in ramis Aceris Pseudoplatani, Cappenberg, Germania et in Suecia.

75. **Valsa decidua** C. et E. New Jersey Fungi in Grevillea VII, p. 9. 503
— Pustulis elongatis, erumpentibus; peritheciis minimis, atris, stromate furfuraceo brunneo exceptis (12-20), ostiolis elongatis, demum partim deciduis; ascis clavatis; sporidiis allantoideis, minimis, hyalinis, 10 μ . long. curvatis.

Hab. in ramis Azaleæ in New Jersey (Am. bor.).

76. **Valsa subscripta** (Fr.) Cooke Vals. Un. St. 116. *Sph. tessella* β . 504
S. subscripta Fr. S. M. II. 395, nec Wallr. — Peritheciis circinantibus, linea cingente subobliterata, ostiolis in disculo erumpente solitariis; ascis minutis; sporidiis allantoideis, minutis.

Hab. in ramis Robiniæ in Carolina infer. — Affinis *Valsæ salicinæ*.

77. **Valsa stenopora** Tul. Sel fung. Carp. III. — Circinata, epidermide pustulata tecta, ostiolis in disculum minutum atrum erumpentem convergentibus, minute pertusis; ascis tereti-clavatis, 40-50 \approx 4-5, octosporis; sporidiis allantoideis, hyalinis, 10 \approx 1,5-2. — Spermogonia *Cytisporam* sententia, frequentissima. 505

Hab. in ramis languidis Alni glutinosæ in Gallia et Italia boreali.

78. **Valsa Alni** Peck. 25 Rep. p. 103. — Peritheciis cortice interiore nidulantibus, nigris; ostiolis brevibus, nigris, obtusis, discum parvum nigricantem, sæpe transverse erumpentem punctulantibus; sporidiis sparsis aut distichis, allantoideis, 10-13 μ . long. hyalinis. 506

Hab. in Amer. bor., Center, in truncis et ramis Alni, qui tunc longe lateque asperuli fiunt.

79. **Valsa americana** B. et C. North Amer. Fungi n. 872, Cooke 507
Valsei of Un. St. 114. — Pustulis epidermide tectis; ostiolis congestis nec stellatis; ascis clavatis; sporidiis allantoideis, 10-12 \approx 2.

Hab. in ramis arborum variarum v. g. Alni serrulatae in Amer. bor. frequens æque ac *E. stellulata*. Vix forte diversa a *V. Alni* Peck.

80. **Valsa truncata** C. et Peck. 25 Rep. of St. Mus. p. 103, Cooke 508
Valsei U. S. p. 117. — Erumpens, prominens, truncata; peritheciis 6-8, cortice interiore nidulantibus, globosis, nigris, collis in

discum ellipticum v. circularem nigrum ostiolis punctulatum, margineque pruinose desinentibus; ascis minutis lanceolatis; sporidiis allantoideis, hyalinis, 8-10 μ . long. — Spermogonia cytisporoidea, truncata, medio pulverulenta et subrimosa; spermatiis allantoideis, coacervatis succineis, 3-5 μ . long.

Hab. in ramis Alni, Johnsburch, Warren c., Amer. bor.

81. **Valsa punica** S. et S. Michel. I. p. 367, Fungi ital. 403. — Acer- 509
 vulis sparsis, cortice nidulantibus, e peritheciis paucis, laxe coherentibus monostichis efformatis; peritheciis globulosis $\frac{1}{4}$ mill. diam., nigris, nitidis, ostiolis cylindraceis perithecium subæquantibus, modice convergentibus erumpentibusque; perithecii contextu sinuoso parenchymatico fuligineo; ascis cylindraceis sessilibus, 45-50 \approx 8, utrinque obtusiusculis, aparaphysatis, octospororis; sporidiis distichis botuliformibus, 12-14 \approx 3, utrinque obtusis 1-guttulatisque perfecte hyalinis.

Hab. in ramulis corticatis Punicæ Granati a Conegliano, aut. 1877, socia *Cytispora punica* Sacc., ejus spermogonio, sic definienda: peritheciis subcutaneis, globulosis, laxe congregatis, ostiolis vix convergentibus cylindraceis, perithecio sublongioribus; contextu regulariter parenchymatico, fuligineo; spermatiis botuliformibus, 5 \approx 1, hyalinis, basidiis bacillaribus duplo triplo longioribus suffultis.

82. **Valsa acclinis** Fr. Summ. Veg. Scand. p. 412. Nits. Pyr. Germ. 510
 p. 207. De Not. Sf. ital. n. 39, f. 39. — Stromate convexo, depresso, minuto; peritheciis sub peridermio fere liberis, corticis interioris strato supremo parum v. vix immersis, in orbem v. rarius in soros oblongos dispositis, decumbentibus, globosis, minutis, ex fusco nigricantibus, in colla perithecii diametrum æquantibus v. brevioribus subito attenuatis, apicibus obtusis nec incrassatis, ascendentibus, perforatis, subjunctis, peridermium perforantibus; ascis clavatis, basim versus breviter attenuatis, octosporis 60 \approx 6-8; sporidiis conglobatis, cylindricis, parum curvatis v. subrectis, hyalinis, 7-9 \approx 2 (sec. De Not. sp. 12-14 μ . long.).

Hab. in ramis exsiccatis Pyri Mali, Driesen (Germania), in Ital. bor., Suecia. — Species homonyma Schweinitzii Syn. f. Amer. bor. n. 1389 aliena est. teste Cooke, et hic sub nomine *Valsæ inclinis* exhibetur.

83. **Valsa syngenesia** Fr. Summa V. S. 411. Cooke Handb. n. 2462, nec 511
 Curr. — Conica, basi adnata ceterum sublibera; stromate cinereo-nigro, ostiolis exertis; sporidiis cylindricis, curvulis, minutis, hyalinis.

Hab. in ramis Sambuci in Britannia et Rubi in Carolina. — Sec. Berk. hæc est genuina species Friesiana; e contra Currey, Nitschke, Fuckel etc. ad hanc ducunt *Diaporthes* speciem, et revera descriptio Friesii ad hanc postremam potius pertinet. Exemplaria homonyma anglica Plowrightii et Cookei *Eutypæ heteracanthæ* meæ peraffinia sunt.

B) *Macrosporæ*: sporidiis majoribus (14-28 μ . long.).

84. **Valsa ambiens** (Pers.) Fr. Summ. Veg. Scand. p. 412. Sacc. Myc. 512
 Ven. Sp. t. XIII, f. 5-7. *Sphæria ambiens* Pers. *Sph. capsularis* Pers. *Sph. deplanata* Nees (p. p. in Pyro) *Sph. sphinctrina* Fr. p. p. — Stromate conico, truncato, depresso, plus minus protuberante, peridermio vulgo fisso adhærentè tecto; peritheciis 4-20 in singulo stromate, fere monostichis, sphæroideis vel mutua pressione angulatis, majusculis, collis tenuissimis ostiolisque incrassatis, subsphæroideis vel subovoideis, depressis, lævibus, majusculis, atris, discum primo albidum, dein cinereum, demum fuscescentem vel atrum ambientibus vel cingentibus instructis; ascis elongatis vel clavatis, 8-sporis, rarius 4-sporis, 40-88 \approx 10-16; sporidiis conglobatis vel subdistichis, curvulis vel subrectis, octonis, 16-18 \approx 3-4; quaternis 20-26 \approx 5-6. — Spermogonia (*Cytispora carphosperma* Fr. etc.) stromatibus perithecigeris sat similia, disco rotundato sordido, papilla vulgo unica, atra, pertusa instructo, multilocularia; spermatis elongatis, curvulis, 5-7 \approx 1, tandem in cirrhis albolutescentes propulsis.

Hab. in ramis corticatis arborum plurimarum, Pyri, Aceris, Carpini, Coryli, Alni, Pruni, Ulmi, Quercus, Cratægi, Populi, Castaneæ, Rosæ, Tiliæ in tota Europa. — Cfr. quoad formas varias Nits. Pyr., Sacc. Mich. etc. (*Pl. ...*)

85. **Valsa populina** Fuck. Symb. Myc. App. I, p. 314. — Fungus spermogonicus *Nœmaspora populina* Pers. Syn. F. p. 109. Cirrhis flavis; spermatis cylindræis, curvatis, 8 \approx 1 $\frac{1}{2}$. Fungus ascophorus *Valsæ salicinæ* valde similis; ostiolis punctiformibus, in disco sordide albo, pulveraceo, aterrimis; ascis oblongis, substipitatis, 4-sporis, 54 \approx 8; sporidiis cylindræis, parum curvatis, continuis, 20 \approx 4. 513

Hab. in ramis exsiccatis Populi nigræ, Æstrich, Rhenogovia. — Præcipue ob spermogonia a *Valsa sordida*, *salicina* et *ambiente* tute dignoscitur.

86. **Valsa salicina** (P.) Fr. Summ. Veg. Scand. p. 412. Nits. Pyr. 514

Germ. p. 212. *Sphæria salicina* Pers. — Stromate e basi orbiculari conico, depresso, truncato, paullo protuberante, pustulato, salvo disco, peridermio adhærente, integro tecto; peritheciis in singulo stromate 6-12, circinantibus, globosis, collis brevissimis ac tenuissimis instructis, corticis parenchymati immutato insculptis; ostiolis in disci erumpentis, minimi, albidi margine v. in ejus superficie ordine vario ac sero emergentibus vix exsertis, minutissimis, atris, globosis, poro angustissimo pertusis; ascis anguste oblongis v. clavatis sessilibus octo- v. tetrasporis, 44-68 \approx 8; sporocylindricis, curvulis, unicellularis, hyalinis, in ascis octosporis subdistichis, 12-18 \approx 2 $\frac{1}{2}$ -4; in ascis tetrasporis vero duabus asci medium et e reliquis altera ejus partem superiorem altera inferiorem occupantibus, 20-32 \approx 5-7. — Spermogonia (*Cytispora fugax* Fr.), radiatim multilocellata; spermatis allantoideis 4-5 \approx 1, longe stipitatis tandem in cirrhos rubellos v. pallidos protrusis.

Hab. in ramis Salicis albæ, vitellinæ, triandræ, fragilis, babilonicæ in tota fere Europa et Amer. bor. — Ad sunt in Amer. bor. formæ parum diversæ in Viburno, Liquidambar, Platano.

87. **Valsa boreella** Karst. Myc. Fenn. II. p. 141. — Peritheciis 12-20 in quovis stromate, circinantibus, sphæroideis, sat minutis, ostiolis incrassatis, subsphæroideis, lævibus, atris, sat minutis, in margine disci confertissimis; sporidiis octonis cylindræis, curvulis vel subrectis, conglobatis, 7-10, raro -12 \approx 1,5-2; spermatis elongatis, curvulis, 4-6 \approx 1. 515

Hab. in ramis Salicum in Lapponia orientali passim v. c. Sasheika, Rasnavolok, Kola. Etiam prope Mustiala, ad Salicem capræam.

88. **Valsa Curreyi** Nits. Pyr. Germ. 202. *Sphæria Abietis* Curr. Linn. 516
Trans. XXII, pag. 279, fig. 147, nec Fr. — Stromate e basi orbiculari, rarius ovali conico-truncato v. fere hemisphærico, protuberante, lateribus peridermio stellato-fisso, adhærente tecto: peritheciis in singulo stromate 3-15, plerumque 5-8, in corticis parenchymate immutato circinatim, rarius monostiche nidulantibus, majusculis, subglobosis v. compressis, collis brevibus instructis; ostiolis incrassatis, globosis, papilla minima, atra, nitidula, poro angustissimo pertusa superposita, nunc in disco ex albido-fuscescente dispersis vel in ejus margine emergentibus, nunc contra dense confertis, discum integrum occupantibus; ascis anguste clavatis, membrana apice crassiuscula textis, octosporis, 68-76 \approx 8-9; spo-

diis subdistichis, curvulis v. rectis, cylindricis, hyalinis, 12-16 (rarissime-20) \approx 2 $\frac{1}{2}$ -3. — Spermogonium sistit *Cytisporam*: spermatis allantoideis, 3-5 \approx 1, longe stipitatis.

Hab. in ramis Laricis, Abietis excelsæ et Pini sylvestris in Britannia, Gallia, Germania, Italia. — Sporidia duplo majora quam in *V. Abietis*.

89. **Valsa Cypri** Tul. Fung. Carp. II, 194, t. XXV, fig. 10-20. Nits. 517

Pyr. Germ. 206. — Peritheciis 3-8 minutis, circinantibus, cortice interiore nidulantibus, globosis, dein collapsis, in ostiola brevicolle disculum truncatum vix emersum formantia desinentibus; ascis subclavatis, 44-54 \approx 7, octosporis; sporidiis allantoideis, hyalinis 11-12 \approx 2 (14-18 \approx 3, Nits.). — Spermogoniis unilocularibus; spermatis allantoideis 5-6 \approx 1-1,5 in cirrhis olivaceis exsistentibus.

Hab. in ramis Ligustri vulgaris in Germania, Gallia, Italia, Fennia. — Spermogonium est *Cytispora* (Phoma?) *pruinosa* Fr.

90. **Valsa betulina** Nits. Pyr. Germ. p. 210. — Stromate majusculo, 518

e basi ovali in discum late ellipticum attenuato, valde protuberante, peridermii rimis, transversim directis, erumpente; peritheciis in singulo stromate numerosis, 20-35, circa stromatis partem mediam, sterilem, serie plerumque subtriplici circinantibus, dense stipatis globosis v. compressis, corticis parenchymati alte immersis, collis crassiusculis instructis; ostiolis in disci ex albido fuscescentis margine emergentibus, exsertis, confertissimis, valde incrassatis, grandibus, e basi rotundata apicem versus conico-attenuatis, pyriformibus, poro pro ratione angusto tandem pertusis; ascis anguste clavatis, sessilibus, octosporis, 60 \approx 8-9; sporidiis subdistichis, cylindricis, curvulis v. subrectis, hyalinis, 14-20 \approx 3.

Hab. in ramis crassioribus Betulæ albæ prope Schwerin (Germania). — Affinis *V. ambienti*, fabrica ostiolorum tamen diversa.

91. **Valsa germanica** Nits. Pyr. germ. p. 215. *Sphæria tessella* β *de-* 519

cedens Alb. et Schw. — Stromate vix ullo; peritheciis 3-9 in quovis circulo, in cortice interiori immutato libere nidulantibus, peridermio omnino tectis discum medium sterilem ex cinereo pallide fuscescentem vel spermogonium cingentibus, concentricis, sphaeroideis, minutis, collis brevissimis ostiolisque rotundatis, lævibus, atris, minutis, peridermium perforantibus, plus minus distantibus, poro angustissimo pertusis; ascis e basi tenuata elongatis, periete superne crassiuscula, 8- vel 4-sporis, 72 \approx 8; sporidiis conglobatis

vel subdistichis, cylindræis, curvulis vel rectis, octonis 10-20, plerumque 14-16 \approx 2,5-4; quaternis 24 \approx 6-7. — Spermogonia conico-truncata, disco ex albido cinereo et papilla minutissima, atra, centrali, pertusa instructa, multilocularia, locellis radiatim dispositis. Spermata cylindrica, curvula, 4-6 \approx 1,5.

Hab. in ramis putrescentibus Salicis triandræ, pentandræ, fragilis nec non Betulæ et Populi tremulæ in Germania et Fennia. — An eadem ac *V. tessella* Fr., sed hæc sporidiis brevioribus prædita, sec. Cooke.

92. **Valsa oblecta** C. et E. New Jersey Fungi in Grevillea VI, p. 11. 520
— Pustulis minimis, ovatis; peritheciis 3-5 globosis; ostiolis sursum attenuatis, erumpentibus; sporidiis allantoideis, 14-15 \approx 3,5.

Hab. in ramis Clethræ alnifoliæ, New Jersey, Amer. bor. bor. — Affinis *Valsæ Cypri*, sed ostiola discreta.

93. **Valsa olivacea** Fuck. Symb. Myc. App. I, 305. — Spermogoniis 521
sparsis, globosis, 1 mill. lat., atro-olivaceis, simplicibus, sub epidermide pustulato-inflata nidulantibus, tectis, ostiolo vix prominulo, minutissimo, punctiformi, obtuso, perforato; cirrhis plerumque confluentibus, olivaceis; spermatis cylindræis, curvatis, continuis, hyalinis, 8-9 \approx 2 $\frac{1}{2}$. Peritheciis ascigeris demum in spermogoniorum vicinis ortis, 5-10, sub stromate late conico seu elliptico circumantibus, decumbentibus, spermogoniorum magnitudine coloreque, in collum attenuatis, ostiolis in disco olivaceo, sed a corticis epidermide alba tectis, distincte exsertis, atris, primo conicis, demum perforatis; ascis stipitatis, oblongis, 8-sporis, 68 \approx 12; sporidiis distichis, cylindræis, parum curvatis, continuis, hyalinis, 18 \approx 5.

Hab. in ramis exsiccatis tenuioribus Lonicæræ Xylostei, Schloss Vollrads, Rhenogovia. — Affinis *Valsæ Cypri*, a qua spermatis crassioribus, ostiolis longioribus etc. mox dignoscitur.

94. **Valsa sepincola** Fuck. Symb. Myc. App. II, p. 35. — Spermogoniis 522
sparsis, in cortice interiori nidulantibus, late conicis, labyrinthiformi-loculatis, epidermidem fusce colorantibus, disco convexo planove, orbiculari, sordide albo, poro communi perforato; spermatis cylindræis, curvatis, 6 \approx 1 $\frac{1}{2}$. Peritheciis ascigeris in cortice interiore sine conceptaculo proprio nidulantibus, circumantibus, 10-15, pro ratione majusculis, globoso-ovatis, decumbentibus, atris, disco minuto, orbiculari, candido, ab ostiolis non exsertis, minutissimis, punctiformibus, atris punctulato; ascis lanceolatis, 4-sporis, 50 \approx 8; sporidiis cylindræis, curvatis, continuis, 20-22 \approx 4.

Hab. in ramis exsiccatis Rosæ rubiginosæ et Rubi fruticosi, Œstrich (Rhenogovia). — Affinis *Valsæ salicinæ*.

95. **Valsa pustulata** Aw. in Nits. Pyr. germ. p. 211. *Sphæria am-* 523
biens Auct. p. p. — Stromate e basi orbiculari v. ovali conico, truncato v. centro depresso, plus minus protuberante, pustulato, peridermio plerumque arete adhærente, integro, rarius stellatim fissotecto; peritheciis in singulo stromate 3–8, rarius pluribus, circinantibus, rarissime submonostichis, majusculis, subglobosis, collis brevibus, instructis; ostioliis in disci emersi, minuti, ex cinereo fuscescentis margine erumpentibus vel omnino non v. paullo tantum incrassatulis, cylindricis, rarius subglobosis, truncatis, poro pro ratione majusculo pertusis, atris, nitidulis; ascis anguste clavatis, sessilibus, octosporis, 44–60 \approx 6–8; sporidiis subdistichis, cylindricis, nonnihil curvatis v. rectis, hyalinis, 15 \approx 3, rarius 10–20 \approx 2 $\frac{1}{2}$ –4. — Spermogonia cytisporoidea; spermatiis allantoides, 4–5 \approx 1, longiuscule stipitatis.

Hab. in ramis Fagi sylvaticæ in Germania, Gallia, Italia. 524

96. **Valsa Taxi** Fuck. Symb. Myc. App. I. 316. — Spermogoniis pustulatis, 2–3 mill. lat., convexis seu lato-obtuso-conicis, sæpe confluentibus, poro centrali minuto in disco orbiculari, plano, sordido, intus multicellularibus, corneis, griseis; cirrhis longissimis, pili-formibus, contortis, aureis; spermatiis cylindræis, curvatis, continuis, 8 \approx 1 $\frac{1}{2}$. Peritheciis ascigeris 12–20, demum circum spermogonia in cortice interiori inordinate nidulantibus, decumbentibus, globosis, atris, in collum perithecium dimidium æquans attenuatis, ostioliis in disco sordido, punctiformibus, planis plicatisque, atris, demum discum totum occupantibus; ascis stipitatis, oblongis 8-sporis, 72 \approx 8; sporidiis distichis, cylindræis, curvatis, continuis, 16 \approx 3.

Hab. in ramis siccis corticatis Taxi baccatæ in Rhenogovia, Reichartshausen. — Affinis *V. Friesii*, a qua sporidiis majoribus etc. differt.

97. **Valsa pauperata** C. et E. New Jersey Fungi in Grevillea VIII, 525
p. 14, M. U. n. 1954. — Gregaria, tecta, erumpens; peritheciis 2–3 in pustulas minutas congregatis, atris; ostioliis majusculis epidermidem perforantibus; ascis clavatis 60 \approx 12; sporidiis allantoides, hyalinis, confertis, 14–17 \approx 3.

Hab. in ramis Aceris, New Jersey, Am. bor. — Pustulæ copiosæ, quandoque in lineas flexuosas digestæ. — Spermogonia pustulis ascigeris intermixta.

98. **Valsa cooperta** Cooke Valsei of Un. St. p. 118. — Peritheciis 526

valseis..... collis abbreviatis, ostioliis integris; sporidiis octonis, allantoideis, majusculis, 16-18 \approx 4, hyalinis.

Hab. in ramis Ulmi campestris, New York, Am. bor. — «Forte *Valsa ambienti* affinis».

99. **Valsa dolosa** (Fr.) Nits. Pyr. Germ. p. 200. *Sphæria dolosa* Fr. 527
S. M. II. 405, p. p. — Stromatibus majusculis e basi suborbiculari plus minus convexis protuberantibus, peridermio arctissime adherente, fisso v. subintegro, salvo disco v. ostioliis, tectis, gregariis, plerumque approximatis v. basi confluentibus; peritheciis in singulo stromate 6-12, rarius, 3-4, majusculis, subcircinantibus v. sine ordine stipatis, globosis, in corticis parenchymate haud mutato nidulantibus; ostioliis maxime incrassatis, globosis v. ovoideis, immo e basi incrassata fere conicis, grandiusculis, atris, nunc confertis, fasciculatim v. sine ordine erumpentibus nunc contra in disci albidii, deinde fusciscentis margine tantum emergentibus, poro angustissimo pertusis; ascis anguste oblongis, sessilibus, octosporis, 64 \approx 10; sporidiis subdistichis, cylindricis, curvulis, hyalinis, 14-18 \approx 3-5. — Spermogonia cytisporidea, intus viridula: spermatii allantoideis 6-7 \approx 1.5, longissime pedicellatis.

Hab. in ramis Salicis capræ prope Münster; in ramis Cestri in Carolina (an eadem species?).

100. **Valsa laurina** C. et E. New Jersey Fungi in Grev. VII. p. 9. — 528
Epidermide nigrificata tecta; pustulis convexis; ostioliis convergentibus; ascis clavatis; sporidiis cylindricis, utrinque obtusis; curvulis, hyalinis, 20 \approx 4.

Hab. in ramis Lauri Sassafras, New Jersey (Am. bor.).

101. **Valsa rhodophila** Berk. et Br. Ann. and Mag. of. nat. Hist. ser. 529
III, vol. III, (1859) p. 367 (?) Nits. Pyr. Germ. p. 209. — Stromate minuto, basi orbiculari, parum tantum v. vix protuberante peridermio integro, rarius fisso, arcte adherente tecto; peritheciis in singulo stromate 4-6, corticis parenchymati haud mutato insculptis, in circulum simplicem, rarius ordine haud perspicuo gregarieque dispositis, minutis, globosis; ostioliis in disculi minutissimi, nigrescentis margine v. sæpius, disco oblitterante, fasciculatim fere erumpentibus, e basi valde incrassato conicis v. ovoideis, rarius globosis, atris, nitidulis, poro raro perspicuo, angustissimo pertusis; ascis clavatis, v. oblongis, sessilibus, octosporis, membrana apicem versus incrassata textis, 84 \approx 9-10; sporidiis subdistichis, cylindricis, nonnihil curvatis v. rectis, hyalinis, plerumque 16- ra-

rius 12-14 \approx 3-4. — Spermogonia conico-truncata, spurie paucilocularia; spermatis allantoideis 5-7 \approx 1, breve pedicellatis.

Hab. in ramis siccis Rosæ caninæ in Germania et Britannia. Sec. B. et Br. sporidia tantum 10 μ . longa; an diversa species?

102. **Valsa Fabreana** Sacc. *Valsa Macluræ* H. Fabr. Sphér. Vaubl. 530
p. 70 (Oct. 1879), nec *V. Macluræ* C. et E. (Sept. 1879). — Peritheciis 10 vel minus in quoque acervulo, cortice immutato infossis, globosis, atris, ostiolis brevibus, obtusis, atris, confertim erumpentibus; ascis clavatis, breviter stipitatis, 4-sporis, 45-50 \approx 9-10; sporidiis hyalinis, continuis, cylindræis, curvatis, utrinque obtusis, 18-20 \approx 5-6.

Hab. in ramis resectis Macluræ aurantiacæ, Autumno, Orange, Vaucuse. — In iisdem ramis adest fungus spermogonius. Spermogonia minima, mono- vel pauci-cellularia, poro in medio disci albicantis perforata; spermatis cylindræis, rectis vel curvatis, continuis, hyalinis, 5-6 \approx 1-1,2

103. **Valsa inclinis** Sacc. *V. acclinis* Schw. Syn. Fungi Amer. bor. 531
n. 1389. Cooke Valsei U. S. p. 116, nec Auct. Europ. — Circinata, minuta, peritheciis subquinis, globosis, erectis, ostiolis parallelis stipatis incrassatis prominentibus; sporidiis in apice ascorum globatis, allantoideis, 20-25 μ . long.

Hab. in ramis Lauri Sassafras prope Bethlehem, Am. bor.

104. ? **Valsa Mahaleb** C. et Ellis New Jersey Fungi Grev. VI, p. 11. 532
— Pustulata; peritheciis 3-4; ascis clavatis; sporidiis majusculis.

Hab. in ramis Pruni Mahaleb, New Jersey. — Specimina immatura ergo species dubia.

Subgen. *Leucostoma* Nits. Pyr. Germ. p. 221.

Stroma corticale, infra linea nigra circumscriptum; discus sæpius albus v. cinereus v. flavidus. — Nonnullæ species mihi imperfecte cognitæ forte ad *Euvalsas* transferendæ.

105. **Valsa nivea** (Hoffm.) Fr. Summ. Veg. Scand. p. 411, Nits. Pyr. 533
Germ. p. 224. *Sphæria nivea* Hoffm. — Stromate conico-truncato vel fere cylindræo, leviter protuberante peridermio adnatis, cortici leviter immersis, 1-1,5 mill. diam., disco orbiculari, farinaceo, niveo; peritheciis 4-12 in singulo stromate, monostichis vel spermogonio centrali circumpositis, subsphæroideis, minutis, collis tenuibus ostiolisque subprominulis, sparsis, raro confertis vel in circulo dispositis, subsphæroideis, atris, minimis; ascis elongatis,

8-sporis, 48-60 \approx 8-9; sporidiis subdistichis, cylindræis, curvulis, 12-14 \approx 3. — Spermogonia (*Cytispora nivea* (Pers.)) disco niveo, poro plerumque unico, multilocularia, spermatiis fusoido-elongatis, curvulis, 6 \approx 1, tandem in cirrhos rubro-hyacinthinos expulsis.

Hab. in cortice ramorum Populi tremulæ, P. nigræ, P. fastigiatæ, P. canescentis in tota fere Europa et Amer. boreali. — Var. *tetraspora*: ascis fusoidis, 40 \approx 6-7; sporidiis quaternis distichis, 15-17 \approx 2 $\frac{1}{2}$, allantoideis, hyalinis. Cum specie frequens.

106. **Valsa Auerswaldii** Nits. Pyr. Germ. 225. *Sphæria leucostoma* 534

Auct. p. p. — Stromate conico-truncato vel fere hemisphærico, pustulato, plus minus protuberante, cortice interiore vix immerso, peridermio adnato disco suborbiculari, albido, deinde fuscescente; peritheciis in quovis stromate 3-8, monostichis vel circinantibus, substantiæ stromatis sordide luteæ vel pallidæ insculptis, sphæroideis, minutis, collis longiusculis ostiolisque rotundatis vel truncatis, plerumque haud exsertis, sparsis, atris, minutis, tandem poro latiusculo pertusis; ascis elongatis, 8- vel 4-sporis, 40-80 \approx 8-12; sporidiis conglobatis vel subdistichis, elongatis, valde curvatis vel subrectis, 12-22 \approx 2,5-3, rarius -5. — Spermogonia (*Cytispora personata* Fr. p. p.) stromatibus perithecigeris similia, sed paulo minora, disco orbiculari, albido, poro vulgo unico, spurie plurilocularia; spermatiis elongatis, curvulis 6-8 \approx 2, tandem in cirrhos rubro-hyacinthinos expulsis.

Hab. in ramis Rhamni Frangulæ, rarius in Fago, Betula, Malo et Salice caprea in Germania, Fennia, Italia bor. — In forma *tetraspora salicicola* asci 28-36 \approx 8; sporidia 16-20 \approx 3-4.

107. **Valsa Massariana** De Not. Sfer. ital. cent. I, p. 34, n. 37, t. 37, 535

Nits. Pyr. Germ. pag. 221. *Sphæria leucostoma* Auct. p. p. — Stromate e basi late ovali in discum ellipticum, rarius subrotundum attenuato, peridermio adnato per peridermii rimas, transversim directas, erumpente; peritheciis in singulo stromate 8-10 v. pluribus, spermogonio centrali circumpositis, densissime stipatis, mutuaque pressione angulatis, in collum crassiusculum attenuatis; ostiolis in disco ex cinereo fuscescente marginalibus, incrassatis, globosis, atris, poro pertusis; ascis oblongis, sessilibus, tetra- v. octosporis 48-60 \approx 9-12; sporidiis conglobatis, cylindricis, curvulis, hyalinis, 20-26 \approx 4. — Spermogonia cytisporoidea; spermatiis allantoideis 6-7 \approx 1, breve stipitatis.

Hab. in ramis Sorbi Aucupariæ in Gallia, Germania, Italia.

108. **Valsa excipienda** Karst. Myc. Fenn. II. p. 144. — Forma quasi 536
media inter *V. Massarianam* et *V. leucostomam*, ab illa sporidiis minoribus, ab hac stromatibus majoribus, ostiolis marginalibus majoribus, spermogoniis centrum stromatis perithecigeris ut plurimum occupantibus, et spermatiis longioribus differens; ascis 50-60 \approx 9-12, octosporis, sporidiis 9-12-14 \approx 3-4; spermatiis 5-8 \approx 1.

Hab. in ramis Sorbi aucupariæ per totam Fenniam et Lapponiam, frequens.

109. **Valsa leucostoma** (Pers.) Fr. Summ. Veg. Scand. p. 411. *Sphæ-* 537
ria leucostoma Pers. Syn. p. 39. *Valsa Persoonii* Nits. Pyr. Germ. 222. — Stromate conico-truncato, erumpente, plus minus protuberante, peridermio adhærente, 1,5-2 mill. cr.; disco rotundato vel subellipsoideo, niveo-pulverulento; peritheciis 3-10, rarius- 20 in quovis stromate, monostichis vel circinantibus, sphæroideis, majusculis, collis longis ostiolisque rotundatis, raro oblongatis, atris parum vel nonnihil exsertis, sparsis; ascis fusoideo-elongatis, 8-sporis, 48-56 \approx 6-8; sporidiis subdistichis, cylindræis, curvulis, chlorino-hyalinis, 10-18 \approx 2,5-3,5. — Spermogonia (*Cytispora leucostoma* (P.) Sacc. *C. nivea* Fuck.) stromatibus perithecigeris similia, plerumque multilocularia, poro in disco ut plurimum unico; spermatiis fusoideo-elongatis, curvulis, 4-5 \approx 1, demum in cirrhos rubros expulsis.

Hab. in ramis Pruni Cerasi, Padi, domesticæ (etiam Persicæ, Oxyacanthæ sec. Fabr.) Sorbi Aucupariæ in tota fere Europa et Amer. boreali.

110. **Valsa Kunzei** Fr. Summ. Veg. Scand. p. 411, *Sphæria Kunzei* 538
Fr. *Sph. Pini* α Schm. et Kunz. — Stromate minuto, e basi ovali in discum ellipticum, rarius subrotundum planiusculum sensim attenuato, per peridermii rimas, transversim directas, erumpente, protuberante, ex substantia e luteo tandem expallente composito; peritheciis in singulo stromate 8-15, monostiche v. fere radiatim nidulantibus, minutis, confertis, subglobosis, collis breviusculis instructis; ostiolis exiguis, atris, nitidulis, nonnihil exsertis, rotundatis v. truncatis et poro angustissimo pertusis, in disco mox fuscescente confertim sparsis; ascis anguste clavatis v. oblongis sessilibus, octosporis, 28 \approx 4-5; sporidiis conglobatis, cylindricis, curvulis, hyalinis, 7-8 \approx 1½. — Spermogonia cytisporoidea; spermatiis allantoideis 5 \approx 1, longiuscule stipitatis.

Hab. in ramis corticatis Abietis pectinatæ et excelsæ in Germania, Gallia, Helvetia et Britannia.

111. **Valsa Strobi** Pass. Erb. critt. ital. Ser. II, n. 947. — Stromate 539
e basi orbiculari discoideo, protuberante, 2 mill. diam. disco griseo fusco pustulato, peridermio integro vel stellatim fisso, arcte adhærente, tecto; peritheciis numerosis in parenchymate non mutato nidulantibus; ascis lanceolatis, clavatis, $25 \approx 3$; sporidiis octonis distichis, cylindricis, rectis vel curvulis, hyalinis, $6-7 \approx 1-1,5$.

Hab. in cortice Pini Strobi prope Parmam (Ital. bor.). — A *Valsa Kunzei* stromate crassiore et peritheciis numerosioribus præ ceteris differt, Pass. — «An tamen satis diversa a *V. superficiali* Nits.?».

112. **Valsa superficialis** Nits. Pyr. Germ. pag. 232. — Stromatibus 540
grandiusculis, basi orbicularibus, in pustulas plerumque dense sparsas immo confluentes, convexas sed circa discum medium majusculum deplanatas v. sæpius impressas protuberantibus, peridermio tenui, disco tantum pertuso, ceterum integerrimo et arcissime adhærente tectis; disco suborbiculari, planiusculo, stromati tamquam imposito, basi constricto, ostioliis minutis, arcissime stipatis, aterimis, opacis v. nitidulis, rotundatis pæne ex integro formato, hinc inde stromatis substantia parca, ex sulphureo fuscescente peridermiique laciniis arrectis cincto; peritheciis in singulo stromate numerosis 10–30, minutis, submonostichis, confertissimis sæpeque mutua pressione angulatis, in collum longiusculum, tenuissimum abrupte attenuatis; ascis oblongis v. subclavatis, sessilibus, octosporis, $24-26 \approx 5$; sporidiis conglobatis, tenuiter cylindricis, parum curvatis v. subrectis, subhyalinis, $8-9 \approx 1\frac{1}{2}$.

Hab. in ramis dejectis levibus Pini Strobi, prope Münster, Germania, rarius.

113. **Valsa duriuscula** Otth, in Nits. Pyr. Germ. p. 234. — Stromate 541
e basi orbiculari in conulum sensim attenuato, plus minus protuberante, peridermio arcissime adhærente poroque exiguo, rotundo tantum pertuso, ceterum integerrimo tecto; peritheciis in singulo stromate 4–8, densissime stipatis valde depressis ac plerumque angulatis, minutis, monostichis v. subcircinantibus, in collum tenuissime cylindricum abrupte attenuatis; stromatis substantia olivascenti-cinerea, parca; ostioliis aterimis, perexiguis, disculum orbicularem v. rarius ovalem, planum, pulverulento-niveum haud superantibus et in ejus regione centrali gregatim, rarius sparsim ac sine ordine erumpentibus; ascis anguste oblongis v. cylindrico-cla-

vatis, membrana crassiuscula textis, tetrasporis (v. octosporis?), 29-33 \approx 5; sporidiis subdistichis, cylindricis, parum curvatis, subhyalinis, in ascis tetrasporis 10-12 \approx 2. — Spermogonia cytisporoidea: spermatis allantoideis 3 \approx 1, sterigmatibus ramosis suffultis; cirrhis rubellis.

Hab. in ramis corticatis Fagi sylvaticæ, Heimberg (Helvetia) ubi legis Оттн. — Affinis *Valsæ Auerswaldi*.

114. **Valsa diatrypa** Fr. Summ. Veg. Scand. p. 411, Nits. Pyr. Germ. 542 p. 226, *Sphæria diatrypa* Fr. *V. nivea* Fabr. (p. p. in Alno?). — Stromate minuto, e basi orbiculari v. ovali conico-attenuato, truncato, protuberante, pustulato, disculo minutissimo peridermium, poro v. rimula, perforatum, vix superante; peritheciis in singulo conceptaculo 3-7, sæpe spermogonio centrali circumpositis rarius stroma integrum, ordine monosticho, occupantibus, globosis, collis tenuissimis instructis; ostiolis minutissimis, punctiformibus, rotundatis, atris, nunc in disci orbicularis, exigui, albid margine, nunc contra dense stipatis erumpentibus, vix exsertis; ascis oblongis v. clavatis, sessilibus, octosporis, curvulis, hyalinis, 16-18- rarius -24 \approx 3-6. — Spermogonia cytisporoidea; spermatis allantoideis 6 \approx 2, longe stipitatis; cirrhis rubellis.

Hab. in ramis Alni glutinosæ et incanæ in Suecia, Germania, Gallia et Fennia. — In exemplaribus fennicis, sec. Karst. asci 32-40 \approx 7-8 (p. sporif.); sporidia 15-22 \approx 2,5-4,5; spermata 4-6 \approx 1.

Var. *Hippophaës* Rehm Ascom. n. 270. — Peritheciis in singulo stromate 2-4, spermogonio centrali deficiente, ostiolis in disco minutissimis vix perspicuis; ascis 50 \approx 9; sporidiis octonis 15 \approx 3; paraphysibus articulatis. — In ramis Hippophaës in Tyrolia.

115. **Valsa Aquifolii** Nits. Pyr. Germ. p. 231. — Stromatis parte superiore protuberante, e basi suborbiculari, ovali v. angulari sensim in disculum minutum, planissimum, subrotundum conico-attenuata, per peridermium facile solubile, laceratum erumpente, pustulata, lateribus fucata, inferiore in conceptaculo tenui, nigrescente, convexo v. basi deplanato, corticis parenchymati immerso eique arctissime adhærente inclusa; peritheciis in singulo conceptaculo, integrum semper occupantibus, 6-20 ordine monosticho v. radiatim dispositis, minutis, varie compressis, membrana tenui textis, in collum tenuissimum attenuatis, stromatis substantia lutescente stipatis; ostiolis minutissimis, punctiformibus, truncatis, perforantibus,

stipatissime confertis disculum plerumque integrum occupantibus, rarius stromatis substantia parca, sordide lutescente disjunctis v. cinctis; ascis anguste clavatis, apice sæpe truncatis, sessilibus, octosporis, 48-60 \approx 6; sporidiis distichis v. oblique monostichis, cylindricis, curvulis v. subrectis, fuscidulis, 9-12 \approx 2-2 $\frac{1}{2}$, rarius 3. — Spermogonia cytisporoidea; spermatis 6-8 \approx 1, longe stipitatis.

Hab. in ramis emortuis Ilicis Aquifolii, prope Münster (Germania).

116. **Valsa translucens** De Not. Schema Sfer. pag. 208, Nits. Pyr. 544

Germ. pag. 227, *Sphæria translucens* De Not. Microm. ital. — Stromate conico-truncato, protuberante, pustulato 0,5-1 mill. cr., peridermio arete adhærente velato; peritheciis in singulo conceptaculo 2-8, plerumque monostichis, sphæroideis, minutis, collis tenuissimis ostiolisque punctiformibus, rotundatis atris plerumque in centro disci confertis, minutissimis; ascis elongatis, sessilibus, 8-sporis, 40-44 \approx 8; sporidiis conglobatis, cylindræis, curvulis, 9-14 \approx 2. — Spermogonia pauci-locularia, disculo albido, fusco-marginato, poro vulgo unico centrali; spermatis elongatis, curvulis, 4-5 \approx 1.

Hab. in ramulis Salicis babylonicæ, rarius S. fragilis, albæ, pentandræ, purpuræ etc. in Germania, Fennia, Italia et Amer. bor.

117. **Valsa cincta** Fr. Summ. Veg. Scand. p. 411, Nits. Pyr. Germ. 545

p. 228, *Sphæria cincta* Fr. S. M. II, 542. — Stromate majusculo, e basi ovali v. suborbiculari in discum subrotundum v. sæpius ellipticum sensim attenuato, protuberante, pustulato, disco per peridermii rimas, transversim directas, erumpente ceterum peridermio aretissime adhærente tecto, basi nonnunquam linea nigra circumscripto; peritheciis in singulo stromate 6-12, rarius paucis tantum v. numerosis, circa spermogonium centrale circinantibus, raro, spermogonio compresso v. extincto, submonostichis, globosis, majusculis, in stromatis substantia, corticis parenchymate pallidiore v. fere concolore nidulantibus, collis crassis, longiusculis instructis; ostiolis spermogonii centralis discum sordide albidum, immo fuscescentem cingentibus, nonnihil exsertis, globosis v. truncatis, poroque pertusis, majusculis, atris; ascis clavatis v. oblongis, deorsum plus minus attenuatis, octosporis, 52-88 \approx 9-14; sporidiis conglobatis, subdistichis, rarissime monostichis, cylindricis, curvulis, rectis, hyalinis, 16-20 \approx 5-6, raro 8-32 \approx 6-8. — Spermogonia cytisporoidea simplicia v. multilocularia; spermatis allantoideis, 6-8 \approx 1,5-2, longiuscule stipitatis.

Hab. in ramis Pruni spinosæ, Armeniacæ, Cerasi in Suecia, Germania, Gallia. — Var. *Mali*: ascis clavato-fusoideis, 70–80 \approx 18, subsessilibus, octosporis; sporidiis allantoideis, 20–30 \approx 5–6, hyalinis. In cortice Pyri Mali, Malmedy. — Var. *Pruni domesticæ* (Cfr. Fuck. Symb. Myc. App. I, 316): ascis 40 \approx 5; sporidiis 9–10 \approx 2; disco candido etc. In ejusdem ramis in Rhénogovia.

118. **Valsa Lauro-cerasi** Tul. Carp. II, 196, Fuck. Symb. Myc. App. 546 II, 315. — Affinis *V. cinctæ*, a qua differt sporidiis in eodem asco allantoidis et subovoideis; cirrhis spermatorum 6 μ . long. rubescentibus (*Cytispora Lauro-cerasi* Fuck.).

Hab. in ramis Pruni Lauro-cerasi, spermogonia vero etiam in petiolis foliorum, in Gallia, Germania, Italia.

119. **Valsa Ceuthosporæ** Cooke Grevill. VII, 113. — Peritheciis 6–8, 547 circinantibus, epidermidem circumcirca sæpe nigrificatam elevantibus; ascis clavatis 40 μ . long.; sporidiis anguste ellipticis minutis, hyalinis, rectis 10–12 μ . long. — Spermogonium refert *Ceuthospora Lauri*.

Hab. in ramis Pruni Lauro-cerasi, Forden (Britannia). — Sec. Cooke differt a *V. Lauro-cerasi*.

120. **Valsa abrupta** Cooke in Grev. VII, 83. — Pustulis orbicularibus, applanatis; peritheciis stromate brunneo-pulverulento immersis; collis brevibus; disco erumpente annulo corticali nigro cincto; ascis clavatis; sporidiis allantoideis, circa 12 μ . long. 548

Hab. in ramis Salicis capreæ, Shere (Britannia).

121. **Valsa crocina** Mont. Syll. Crypt. n. 758 et Fl. Alg. p. 472, sub 549 *Sphæria*. — Minuta, subpustulata; peritheciis globosis, cortici immersis, ostiolis stromate cinereo junctis et in discum pulvere crocino suffusum prominulis; ascis perexiguis, 25 μ . long. clavatis, sporidiis 5 \approx 2, linearibus, rectis aut curvulis.

Hab. in cortice ramulorum Oleæ, Aigeria (DURIÉU).

122. **Valsa caryogena** B. et C. North Am. Fungi n. 872. — Pustulis 550 minutis seriatis, epidermide levi tectis; disco albo; ostiolis materia alba intermixtis; sporidiis allantoideis, 10 μ . long.

Hab. in ramis Caryæ, Pennsylvania, Am. bor.

123. **Valsa orbicula** B. et C. North Amer. Fungi n. 867. — Minuta, 551 orbicularis, nigro-cincta; ostiolis albo-cinctis; ascis lanceolatis; sporidiis allantodeis, 10 μ . long.

Hab. in ramis Salicis, Carol. inf., Am. bor. — Perithecia per epidermidem non nigrificatam transparentia, linea nigra circumdata.

124. **Valsa chlorodisca** C. et E. New Jersey Fungi in Grev. VIII, 552
p. 13. — Pustulis cortice tectis; disco sordide luteo, ostiolis nigris, cylindricis, punctato; ascis clavatis; sporidiis biseriatis, allantoideis, hyalinis 10 μ . longis.
Hab. in ramis *Caryæ* albæ (Hickory), New Jersey, Amer. bor. — Disco lutescente facile dignoscenda species.
125. **Valsa fulvella** B. et Rav. North Amer. Fungi n. 870. — Pustulis cortice arcte inclusis; disco fulvello ostiolis nigris punctato; sporidiis allantoideis. 553
Hab. in ramis *Platani* occidentalis in Carol. infer. — Pustulæ tumidulæ.
126. **Valsa Linderæ** Peck. 29 Rep. on the St. Mus. — Pustulis minutis, prominulis, sparsis v. gregariis, arcte epidermide cinctis, linea nigra circumscriptis; ostiolis stipatis, brevibus, nigris discum nigricantem oblitterantibus; peritheciis sæpius 4-6, cortice interiore nidulantibus; ascis minutis, clavatis; sporidiis octonis, botuliformibus, curvis, 8-12 μ . long. e hyalino luteolis. 554
Hab. in ramis *Linderæ* Benzoin, Albany (Am. bor.).
127. **Valsa infinitissima** Kalch. et Cooke. Grev. 1880, p. 28. — Innata; stromate corticali circumscripto; peritheciis lageniformibus; ostiolis cylindricis, rectis, sub-elongatis, in stromate fusco exsertis; ascis clavatis, 25 \approx 5; sporidiis spermatioideis, curvulis 4 μ . long. 555
Hab. in ramis corticatis in Africa australi. — Asci et sporidia profusa et minutissima.
128. **Valsa munda** B. et C. North Amer. Fungi n. 864. — Subcuticularis, disco parvo, albo-cincto erumpente; ascis lanceolatis; sporidiis allantoideis. 556
Hab. in ramis levibus Corni, Alabama, Am. bor. — Pustulæ ab epidermide infuscata prorsus, salvo disco, tectæ.
129. **Valsa mesoleuca** B. et C. North Amer. Fungi n. 879. — Disco albo, ostiolis nigris cincto vel consperso; sporidiis allantoideis, hyalinis, 20 μ . long. 557
Hab. in ramis *Viburni* dentati, Pennsylvania, Am. bor.
130. **Valsa Viburni** Fuck. Symb. myc. p. 201. — Peritheciis 8-10, circumcinctis, sine stromate proprio in cortice interiore nidulantibus, ostiolis ovato-conicis, in disco plano et eundem demum totum occupantibus, prominulis, albido-furfuraceis, perforatis; ascis oblongis, sessilibus, 8sporis; sporidiis fartis, cylindræis, curvatis, simplicibus, utrinque obtusis, 12 \approx 2 $\frac{1}{2}$. 558

Hab. in ramis exsiccatis Viburni Lantanæ, rarius in Jura (Germania et Helvetia) et in Cadore (Ital. bor.).

131. **Valsa tessella** Fr. Summa V. S. 411. Cooke Valsei Un. St. 117 559

(nec *Crypt. tessella* (Pers.) Karst.). — Laxe circumscripta; peritheciis circinantibus globosis, ostiolis erumpentibus solitariis determinate distantibus (sæpius in quincuncem dispositis) convexis, nitidis, dein umbilicatis, linea nigra epidermidem penetrante cinctis (Fr.); ascis fusoideis; sporidiis allantoideis 10–12 μ . long.

Hab. in ramis corticatis Salicum in Suecia et Amer. bor. — Sporidia sec. specimina Friesiana a cl. Cooke descripta.

132. **Valsa Welwitschii** Berk. Enum. Fungi collect. Portugal. p. 10. 560

— Pustulis parvis circumscriptis; stromate pallido; peritheciis globosis immersis, albo-farctis, collis longiusculis; ostiolis convexis subpunctiformibus; ascis tenellis, sporidiis curvulis.

Hab. in cortice levi Ulmi, Cintra, Lusitania. — Asci breves, delicatissimi; sporidia octona, minuta, elongata, curva.

133. **Valsa macrostoma** Rehm Ascom. n. 173. Diagn. p. 45. — Stro- 561

matibus ellipticis, 3 mill. long. 1–1,5 lat., peridermio transversim fisso perspicuis; ostiolis in disco lutescente punctiformibus atris; non v. parum extantibus, subcircinantibus; peritheciis in stromate infra nigrolimitato, corticali, usque 20, subglobosis; ascis 8sporis, clavatis, 50 \approx 7–8; sporidiis elliptico-oblongis, vix curvatis, 6–8 \approx 3; paraphysibus filiformibus.

Hab. in ramis siccis Pruni spinosæ in Franconia bavarica.

134. **Valsa Colliculus** (Wormsk.) Cooke Valsei of. U. S. p. 115. *Sphæ-* 562

ria Colliculus Worms. Fr. S. M. II. 389. — Convexa, pustulata; peritheciis in orbem stipatis, incusis; ostiolis conjunctis in disco minuto punctiformi atro; ascis minutis; sporidiis allantoideis hyalinis exiguis, 5–6 μ . long.

Hab. in ramis Pini pygmææ in Kamtschatka (Asia); in cortice Pini, New York (Am. bor.). — *V. pustulatae* similis. Pustulæ orbiculatæ, hemisphæricæ, eumorphæ, ex epidermide tegente cinereæ, magnitudine seminis cannabini: dissectæ monstrant perithecia circinantia, atra, stromate tenui tantum tecta quorum colla brevia, valde convergentia, juncta in discum minutum, orbiculatum, planum ex ostiolis minutissimis confertis papillæformibus compositum. An potius e sect. *Euwalsæ*?

EUTYPELLA Nits. (ut subgen.) Pyr. Germ. p. 163. Sacc. Consp. Gen.

Pyr. p. 4 (Etym. ab *Eutypa*, quam confer.). — Stroma valseum

in cortice duriore v. ligno immersum, nigrolimitatum. Perithecia monosticha v. polysticha, numquam simpliciter circumstantia; ostiola sulcata. Asci longe stipitati, 8-spori. Sporidia luteola v. hyalina. Status conid. (in *Scoptria*) et spermog. in plerisque noti.

Subg. *Scoptria* Nits. Pyr. Germ. p. 83 (ut gen.).

Status conidicus superficialis isarioideus. Spermogonia nulla nota.

1. **Eutypella isariphora** (Nits.) Sacc. *Scoptria isariphora* Nits. Pyr. 563
 Germ. p. 84. — Stromatibus peritheciigeris maturis alte protuberantibus, forma plus minus irregulari, verruciformi, peridermii laciniis cinctis, maxima vero ex parte liberis, rugosis, sordide nigricantibus, intus albidis, haud raro confluentibus ac deformibus; peritheciis in singulo stromate 10-12, rarius-20, sine ordine ac polystiche stipatis, minutis, subglobosis, in collum longum attenuatis; ostioliis longissime exsertis, crassiusculis, cylindricis, obtusis v. apicem versus incrassatulis obscureque quadrisulcatis, flexuosis, nunc in stromatis vertice fasciculatim erumpentibus, nunc marginalibus, radiatim divergentibus v. secundis; ascis minutis, anguste clavatis, pedicellatis, octosporis, $36 \approx 5$ p. sporif.; pseudoparaphysibus crassis ac tenerrimis, articulato-septatis, longissimis; sporidiis in asci parte superiori distichis, in inferiori monostichis, cylindricis, nonnihil curvatis v. subrectis, dilute fusciscentibus $8-10 \approx 2\frac{1}{2}$. — Conidia in stromate conico-elevato subsuperficiali, in sterigmatibus isarioideo-fasciculatis viridulo-griseis, penicillatim divergentibus acro-pleurogena, fusiformia, recta $8-10 \approx 2-3$, hyalina.
Hab. in ramis *Cratægi Oxycanthæ* prope Münster, Germ. (NIRSCHKE), sociis conidiis.

Subg. *Eutypella* Nits. Pyr. Germ. 163.

Status conidicus nullus notus. Spermogonia *Cytisporæ* species sistencia.

2. **Eutypella cerviculata** (Fr.) Sacc. *V. cerviculata* Fr. Summ. Veg. 564
 Scand. p. 411. Nits. Pyr. Ger. p. 174. Sacc. Myc. Ven. Sp. t. XIII. f. 1-4. De Not. Sfer. ital. t. 33. *Sph. cerviculata* Fr. — Stromate valseo, e basi suborbiculari v. irregulari sæpeque angustata subcylindrico v. conico-truncato, cortici omnino immerso et ab ejus parenchymate expallente v. specie immutato formato, sed strato extimo, nigricante limitato, ligno adnato; peritheciis in singulo stro-

mate numerosis, submonostichis, dense stipatis, minutis, subglobosis mutuaque pressione angulatis, collo longiusculo instructis; ostiolicis abbreviatis, valde incrassatis, globosis, rugosis, aterrimis, sulcis plerumque 5-6 subtiliter ac radiatim striatis, in discum v. crustulam aterrimam, tuberculatam, suborbicularem v. sæpius irregularem, peridermium arcte adhærens, perforatum paullo tantum superantem confertissime stipatis; ascis anguste clavatis, longe pedicellatis, octosporis, $30 \approx 4-5$, p. sporif.; sporidiis in ascis lumine utrimque attenuato subdistichis v. conglobatis, cylindricis, incurvatis, pallide fuscescentibus, $6-7 \approx 1\frac{1}{2}-2$; «stromate spermogonico forma et dimensione ascophoris subsimili, extus nigro, rugoso (non vero ostiolato) intus fusco-rubescente, minute pluriloculari, oculis subglobosis; spermatiis filiformibus, arcuatis $20-22 \approx \frac{3}{4}$, sterigmatibus cylindræis sursum attenuatis $20 \approx 1$ fasciculatis suffultis, tandem in cirrhos rubellos protrusis».

Hab. in ramis crassioribus Carpini Betuli in Germania, Helvetia, Italia boreali.

3. **Eutypella Padi** (Karst.) Sacc. *V. Padi* Karst. Fung. Fenn. n. 355. 565
Myc. Fenn. II. 134. *V. padina* Nits. Pyr. Germ. p. 172. — Stromate conico, disco orbiculari, ellipsoideo vel angulato, latit 1-2 mill.; peritheciis 6-40 in singulo stromate, densissime stipatis, sphæroideis, exiguis, collis longiusculis ostiolicisque basi connatis, oblongatis, brevibus, obtusis, alte 4-5-sulcatis, atris instructis; ascis cylindræo-clavatis, $24-34 \approx 4$ p. sporif.; sporidiis subdistichis, elongatis, curvulis, dilutissime fuscescentibus, $6-8 \approx 1-1,5$.

Hab. in ramulis Padi in Fennia meridionali usque in mediam et prope Driesen, Germania.

4. **Eutypella Prunastri** (Pers.) Sacc. *V. Prunastri* (Pers.) Fr. Summ. 566
Veg. Scand. p. 411. Nits. Pyr. Germ. 170. An De Not. Sf. ital. t. 35 (ostiola enim non sulcata), *Sphæria Prunastri* Pers. — Stromate valseo, e basi suborbiculari v. elliptica pulvinato, lentiformi v. subconico, atro, ligno adnato, ætate juniore corticis parenchymate velato, peridermium fissum plerumque transversim erumpente; peritheciis in singulo stromate numerosis, sine ordine stipatis, subinde polystichis, centralibus erectis, concentricis, marginalibus, adscendentibus, conniventibus, subglobosis v. mutua pressione angulatis, in collum, pro situ variæ longitudinis attenuatis; ostiolicis incrassatis, sulcis 3-5, plerumque 4, alte exaratis, nunc brevibus, erectis confertissimis, nunc contra longioribus, divergentibus v. secundis, flexuosis; ascis anguste clavatis, longe pedicellatis, octo-

spor. 20-32 \approx 3-4 p. sporif.; sporidiis in asci lumine, apice angustato, subdistichis, cylindricis, curvulis, pallidis v. nonnihil fusciscentibus, 6-8 \approx 1 $\frac{1}{2}$. — Spermogonia sistunt *Cytisporam rubescentem* Fr. p. p.

Hab. in ramis emortuis Pruni spinosæ, P. Cerasi, P. Armeniacæ, P. insititiæ, Amygdali Persicæ in tota Europa et America boreali.

5. **Eutypella ventricosa** (Fuck.) Sacc. *V. ventricosa* Fuck. Symb. mycol. pag. 125. — Omnium maxima! Conceptaculis sparsis aggregatisque, erumpentibus, demum liberis, ventricosis, irregulare globosis conicisve, atro-fuscis, lævibus, 2-5 mill. diam., apicem versus conicis; spermatiferis inordinato-multicellularibus, cellulis oblongis, verticalibus, griseis, cirrhis per ostiolum commune expulsis, pallide-flavis; spermatii cylindræcis, curvatis, 3 \approx 1; peritheciis ascigeris demum in iisdem conceptaculis nidulantibus, subglobosis, ostiolis e conceptaculi vertice exsertis, cylindræcis, atris; ascis ellipticis, subsessilibus, 8spor. 32 \approx 6; sporidiis farctis, cylindræcis, curvatis, continuis, 8 \approx 2, hyalinis.

Hab. in truncis corticatis vetustis Ulmi campestris et Quercus, rarius prope Usingen et Hattenheim, Germania.

6. **Eutypella Sorbi** (Schm.) Sacc. *V. Sorbi* (Schmidt) Fr. Summ. Veg. Scand. p. 411. Nits. Pyr. Germ. pag. 168. De Not. Sf. it. tab. 34. *Sphæria Sorbi* Schm. Myc. Heft. I. 59. — Stromate valseo, e basi orbiculari, rarius ovali, pulvinato, depresso subgloboso, ostiolorum fasciculo, basi constricto, coronato, sub peridermio, mox relaxato, ostiolis erumpentibus perforato varieque fisso, ligno insidente, cortice interiore primitus velato, deinde libero, atro; peritheciis in singulo stromate numerosis, sine ordine, immo polystiche denseque stipatis, circa centralia erecta concentricis, convergentibus, globosis, collo pro situ plus minus longo, ostiolis longiusculis, crassis, sulcatis, tri-pentagonis, basi connatis, apice liberis sæpeque divergentibus instructis; ascis anguste clavatis, longe ac tenuiter pedicellatis, octosporis, 40-48 \approx 4-6 p. sporif.; sporidiis in asci lumine et apicem versus attenuato conglobatis, cylindricis curvulis, dilute fusciscentibus, 7-8 \approx 2-2 $\frac{1}{2}$. — Spermogonia cytisporoidea (*Cytispora rubescens* Fr. p. p.); spermatii allantoideis 4 μ . long., aliisque 35-45 μ . long.; cirrhis rubescentibus.

Hab. in ramis Sorbi aucupariæ, S. domesticæ in Suecia, Belgio, Gallia, Italia, Helvetia, Lapponia, Fennia.

7. **Eutypella pentagona** (Pers.) Sacc. *S. pentagona* Pers. Syn. p. 42. 569

Fr. S. M. II. 407. — Circinata, ostiolis rectis teretibus rugosis ut plurimum pentagonis.

Hab. in ramis Sambuci Ebuli? in Germania (PERS.), in ramis Lauri Sassafras in Amer. bor. (SCHWEIN.). « Ad majores et elegantiores hujus familiæ pertinet; perithecia tota corticis substantia tecta; ostiola atro-nitida, in cylindrum crassum obtusum approximata, primo sulcato-angulata, demum distinctius 4-5-gona. Pers. l. c. — Species mihi ignota et a *S. Sorbi* non diversa videtur; distinctas tamen varii statuunt. Ad hanc vero v. ad *S. prunastri* juvenilia specimina mihi missa pertinent. *Speciem tam evolutam in mollibus Ebuli caulibus eniti posse*, Thomas totus sum! Sed Schweinitzii stirps, a me non visa, forsitan melior et sic restituenda hæc species! Fr. l. c. — Revera vix v. non diversa ab *E. Sorbi*.

8. **Eutypella rhizophila** (Nits.) Sacc. *Valsa rhizophila* Nits. Pyr. 570 Germ. pag. 175. — Stromate valseo, irregulari, e basi suborbiculari vel angulata, nunc angustata nunc contra dilatata, plerumque subcylindrico et vix verticem versus attenuato, cortici interiori innato et ab ejus parenchymate immutato v. tandem expallente formato, nigro-limitato, ligno adfixo, peridermium cum cortice duro connato, varie fissum erumpente et ab ejus laciniis lateribus cincto, haud raro confluyente; peritheciis in singulo stromate 5-20, erectis v. adscendentibus, sine ordine ac densissime stipatis, exiguis, globosis v. compressis, collo, pro situ perithecorum, plus minus longo instructis; ostiolis brevibus, nonnihil incrassatis, sulcis 3-4 alte exaratis, plerumque confertissimis, immo in corpus irregulare, tuberculatum connatis; ascis anguste clavatis, longe pedicellatis, octosporis, 30-40 \approx 5-6 p. sporif.; sporidiis conglobatis, cylindricis, plus quam solito curvatis, subhyalinis, 5-6 \approx 1.

Hab. in radicibus Fagi sylvaticæ p. Münster (NITSCHKE) et Aceris p. Neuchâtel (MORTIER).

9. **Eutypella stellulata** (Fr.) Sacc. *V. stellulata* Fr. Summ. Veg. Scand. 571 p. 311. Nits. Pyr. Germ. p. 165, *Sphæria stellulata* Fr. *S. fascicularis* Wallr. *S. monadelphæ* Fr. p. p.? — Stromate obtuse conoideo vel subsphæroideo, raro subeffuso, latit. plerumque 1-2 mill.; peritheciis paucis vel numerosis in quovis stromate, plerumque dense stipatis, symmetricis vel rarius concentricis, subsphæroideis, e mutua pressione angulatis, minutis, collis convergentibus ostiolisque nunc brevibus, exiguis, nunc plus minus elongatis, rugosis, sulcatis vel 3-6-gonis, omnino vel basi tantum connatis instructis;

ascis cylindraceo-clavatis, 40-60 \approx 5-6 p. sporif.; sporidiis conglobatis vel subdistichis luteolis, fusoido-elongatis, curvulis vel subrectis, 8-12 \approx 1,5-2. — Spermogonia multilocularia, stromate majore inclusa; spermatiis filiformibus curvatis, 20-25 μ . longis, tandem in cirrhis aureos protrusis.

Hab. in ramis Ulmi campestris et U. effusæ in Suecia, Fennia, Britannia, Gallia, Germania, Italia, Belgio, Amer. bor. (ubi sec. auct. quoque in Fraxino, Moro, Liquidambar, Xanthoxylo).

10. **Eutypella angulosa** (Nits.) Sacc. *V. angulosa* Nits. Pyr. Germ. 572 p. 173. *Sphæria Prunastri* β . *Betulæ* Somm. — Stromate conico, disco plerumque ellipsoideo vel triangulari, latit. 2-4 mill.; peritheciis in quovis stromate plerumque numerosis, monostichis, ovoideis, minutis, collis longiusculis, crassis ostiolisque nunc brevibus, erectis, confertissimis, nunc contra longioribus (interdum 1 mill. longit. æquantibus), divergentibus vel secundis, flexuosis, apice obtusiusculis vel leniter attenuatis, atris, rugosis vel leviter 3-5-sulcatis; ascis cylindraceo-clavatis, longe pedicellatis, 28-40 \approx 4-5 p. sporif.; sporidiis subdistichis, elongatis, curvulis vel subrectis, subhyalinis, 6-8 \approx 1,5-2.

Hab. in cortice *Betulæ* albæ in Lapponia orientali, Germania et Italia boreali.

11. **Eutypella similis** (Karst.) Sacc. *Valsa similis* Karst. Myc. Fenn. II. 573 p. 134 (nec Nits.). *V. alnifraga* Nits. Pyr. Germ. 171. nec Wahl. — Stromate valseo, e basi orbiculari hemisphærico v. obtuse conico, ligno adnato, corticis parenchymate tecto, minuto, nigricante, ostiolorum fasciculo peridermium perforatum v. varie fissum superante; peritheciis in singulo stromate 4-12 (plerumque 5-8), monostichis, conniventibus, exiguis, stipatis, globosis, collis brevibus, ostioli in crassatis, elongatis, in fasciculum, basi valde constrictum connatis, sulcis 2-4 alte exaratis instructis; ascis cylindrico-clavatis, longe pedicellatis, octosporis 24-30 \approx 4 p. sporif.: sporidiis in asci lumine utrinque attenuato conglobatis, cylindricis, plus quam solito incurvis, subhyalinis, 5-6 \approx 1.

Hab. in ramis emortuis *Alni* glutinosæ prope Driesen, Germania.

12. **Eutypella alnifraga** (Wahl.) Sacc. *V. alnifraga* (Wahlenb.) Fr. 574 Summa V. S. 411, Karst. Myc. Fenn. II. p. 133 (nec Nits.) *V. similis* Nits. Pyr. Germ. p. 171. — Stromate valseo, e basi orbiculari v. ovali depresso conico, obtuso, ligno adnato, corticis pa-

renchymate tecto, per peridermium, plerumque arecte adhærens, perforatum v. rimis minutis, trasversim directis, fissum erumpente, minuto, nigricante, subinde confluyente; peritheciis in singulo stromate paucis tantum (4-9), circa centrale, erectum circinantibus ac convergentibus v. sine ordine densissimeque stipatis minutis, subglobosis, collis brevibus, ostioliis incrassatis, rotundatis v. oblongis, brevibus, obtuse tri-quadrissulcatis, aterrimis, basi connatis, apice divergentibus instructis; ascis oblongo-clavatis, longe pedicellatis, octosporis, 33-40 \approx 5 p. sporif.; sporidiis in asci lumine apicem versus attenuato subdistichis, cylindricis, nonnihil curvatis v. rectis, dilute fuscescentibus, 8-10 \approx 1½-2.

Hab. in ramis crassioribus Alni glutinosæ et incanæ Driesen, Germ.; Belluno, Ital. bor., Jakobstad, Fennia. — *E. Sorbi* affinis.

13. **Eutypella Brunaudiana** Sacc. Mich. I. p. 505. — Acervulis erumpentibus, prominulis, 1-1¼ mill. diam. corticis laciniis arecte cinctis; peritheciis monostichis, stromate albido immersis, globulosis, ⅓ mill. diam., nigris; ostioliis assurgentibus, cylindricis, apice rotundato integro pertusis, discum nigrum verruculosum formantibus; contextu perithecii sinuoso-parenchymatico, olivaceo-fuligineo; ascis clavato-fusoides, sursum parum angustatis, apice, tunica incrassata, rotundatis, filiformi-stipitatis, aparaphysatis, octosporis, p. s. 70-80 \approx 12, stipite 60 lgo; sporidiis distichis, botuliformibus 10-12 \approx 2, 2-guttulatis, e hyalino lutescentibus. 575

Hab. in ramis corticatis Ribis rubri prope Saintes (Gallia). 576

14. **Eutypella ventriosa** (C. et E.) Sacc. *V. ventriosa* C. et E. New Jersey Fungi in Grevill. VI. p. 23 (nec *V. ventricosa* Fuck.) — Convexa, gregaria; pustulis cortice tectis, ostioliis congestis, leniter sulcatis; peritheciis paucis, magnis, nigro cinctis; ascis clavatis; sporidiis allantoideis, fuscidulis, 10 μ . longis.

Hab. in cortice Ailanthi, New Jersey, Amer. bor. — Cum conceptacula dilabuntur, linea nigra circumscribens in matrice manet. — « An eadem ac *E. Ailanthi* Sacc. ? ».

15. **Eutypella Ailanthi** (Sacc.) *V. Ailanthi* Sacc. Mycol. Ven. Spec. 577 p. 130, t. XII, fig. 51-56. — Conceptaculis plerumque oblongis inæqualibus e 30-50 peritheciis constantibus, epidermide rupta cinctis, cortice duriore immersis; stromate lignescente zona nigra limitato; peritheciis ovato-subrotundis, vix ½ mill. diam., atris extus albido-furfuraceis, collo cylindræo plus minus brevi, ostioliis capitellatis, 3-5-sulcato-rugosis, discum parum scabrosum plano-

convexum efformantibus, non prominentibus; ascis crassiuscule clavatis, longissime stipitatis, $100 \approx 6$, parte sporifera $50 \approx 6$, 8sporis; sporidiis inordinate distichis, cylindraceis, parum curvatis, utrinque rotundatis, 1-guttulatisque, luteolis, $12 \approx 2\frac{1}{2}$ -3. — Status spermogonicus *Cytisporam* referens: spermogoniis plurilocularibus nigris stromate lignescente nigro-limitato insidentibus; spermatiis filiformibus, incurvis, hyalinis, $15 \approx 1\frac{1}{2}$, demum in cirrhos aureos intricatos, capillares protrusis.

Hab. in cortice ramorum *Ailanthi glandulosæ* Patavii et *Selva* (It. bor.). — Affinis *E. cervicullatæ* et *E. stellulatæ*, a quibus forma et magnitudine ostiolorum et sporidiorum satis differt.

16. **Eutypella grandis** (Nits.) Sacc. *V. grandis* Nits. *Pyr. Germ.* p. 164. 578

Sacc. *Myc. Ven. Sp. t. XII, f. 57-59. Sph. Radula* Pers. *Syn.* p. 37 (?), *V. Radula* (Pers.) Cooke *Valsei U. S.* p. 114. — Stromate valseo, grandi, forma valde irregulari v. fere diatrypeo, cortici crasso, durissimo, ligneo immerso, parte immersa corticis substantia parum v. vix mutata, nigro-limitata formata, erumpente, strati corticalis supremi laciniis, plerumque irregulariter fissis cincto, immo pro parte tecto, superficie inæquali verrucoso-rimoso, ostioliis exasperato; peritheciis in singulo stromate numerosis, magnis, ovatis, subglobosis v. mutua pressione angulatis, irregulariter monostichis v. fere distichis, collis plerumque longis, ostioliis incrassatis, validis, nunc elongatis ac longitudinaliter sulcatis nunc abbreviatis, depresso conicis v. rotundatis et sulcis plerumque 6 leviter ac radiatim exaratis, tandem poro latiusculo perforatis instructis; ascis cylindrico-clavatis, longe pedicellatis, octosporis, $30 \approx 7$; sporidiis in asci lumine utrimque maxime angustato subdistichis, cylindricis, curvulis v. subrectis, fuscis, 9-10, rarius $13 \approx 2\frac{1}{2}$ -3.

Hab. in cortice duriore *Quercus* in Germania et *Aceris*, *Padova* (Ital. bor.), *Populi*, *Carolina* (Amer. bor.). — *Sec. Schw. Syn. Amer. bor. n. 1369* stromata intus albicantia, sed non nigro-circumscripta; ostiola sæpe seriato-fasciculata. An ergo species *Caroliniana* diversa ab europæa?

17. **Eutypella elegans** Niessl in Thuem. *Contr. Myc. Lusit. n. 524.* 579

— Stromate valseo, ligno immerso, peritheciis sine ordine confertis, di-tristichis, globosis vel mutua pressione angulosis, numerosis, majusculis, ostioliis fasciculatis crassiusculis, radiatim quatuor-sex sulcatis, atris, nitidis; ascis clavatis, longe pedicellatis, 30-35 \approx 6-7 p. sporif., octosporis; sporidiis subdistichis, cylindraceis, curvulis vel subrectis, fusciscentibus, 7-9 \approx 2,5.

Hab. in *Castaneæ sativæ* cortice, Matta d'Alcarraque prope Coimbra, Lusitania (MOLLER).

18. **Eutypella extensa** (Fr.) Sacc. *V. extensa* Fr. Summ. Veg. Scand. 580 p. 411, Nits. Pyr. Germ. p. 166, Sacc. M. V. n. 180, *Sphæria extensa* Fr. S. M. II. 381. p. p. — Stromate valseo, depresso subgloboso, ligno adnato, per peridermium plerumque facile solubile et rimis, transversim directis, fissum erumpente, sæpe, peridermio nec non cortice interiore fibroso atroinquinato secesso, in ramo nudato, superficie nigrificato libero, aterrimo; peritheciis in singulo stromate 5–18, dense stipatis, minutis, subglobosis, plerumque mutua pressione angulatis, monostichis, circa centrale circinantibus, in collum breve attenuatis; ostiolis in fasciculum, basi plerumque constrictum, connexis, incrassatis, liberis, nunc brevibus, nunc elongatis, obsolete v. evidenter tri- v. quadrigonis; ascis cylindrico-clavatis, longe pedicellatis, octosporis, 32–36 \approx 5–6 p. sporif.; sporidiis in asci lumine utrimque attenuato subdistichis, cylindricis, curvulis v. subrectis, dilute fusciscentibus, 5–6 \approx 2–2½.

Hab. in ramis *Rhamni cathartici* prope Niemberge (Germania), prope Treviso (Italia bor.) et in Suecia.

19. **Eutypella confluens** (Nits.) Sacc. *V. confluens* Nits. Pyr. Germ. 581 p. 167. — Stromatibus e basi maxime dilatata, ovali, rarius orbiculari depresso conicis v. convexis, confertis sæpissime in series longitudinaliter directis, v. sine ordine dispositis et basi v. omnino confluentibus ligni superficie, tandem atroinquinatæ, adnatis nec immersis, per corticem erumpentibus, v. in ramis nudatis liberis, ex fusco tandem aterrimis; peritheciis in singulo stromate 3–12, minutis, stipatis, subglobosis, monostichis, collis brevibus, ostiolis nunc satis elongatis, nunc brevioribus, in fasciculum, basi plerumque constrictum, collectis, confertissimis, incrassatis, tri- v. quadrigonis instructis; ascis anguste clavatis v. oblongis, apice sæpe truncatis, longissime pedicellatis, octosporis, 32–48 \approx 4–5 p. sporif.; sporidiis in asci lumine utrimque angustato conglobatis, cylindricis, vehementer curvatis v. rarius subrectis, subhyalinis, 7–9 \approx 1,5–2.

Hab. in ramis siccis quercinis, Æstrich, Rhenogovia.

20. **Eutypella Atropæ** (Mont.) Sacc. *V. Atropæ* Mont. Syll. Crypt. 582 n. 762. Fl. Alg. n. 464, sub *Sphæria*. — Innata, stromate corticali ligneo albicante conceptaculo nigro tandem cupulari aperto cincto; peritheciis paucis globosis, collis oblongis conjunctis exsertis; ostiolis rugosis; ascis tenuissimis fusiformibus 8-sporis, sporidiis linearibus curvulis, hyalinis.

Hab. in cortice *Atropæ frutescentis*, Mostaganem (DURIEU). — Affinis *E. cerviculata*.

21. **Eutypella juglandina** (C. et Ell.) Sacc. *V. juglandina* C. et Ell. 583
New Jersey Fungi in Grevill. V. p. 92, Cooke Valsei of Un. St. 113. — Peritheciis paucis (3-5) ad basim niveo-pulverulentis; ostioliis prominentibus, profunde sulcatis; ascis lanceolato-clavatis; sporidiis allantoideis, 10-12 \approx 3.

Hab. in ramis *Juglandis regiæ*, New Jersey, Amer. bor. — Certe diverse a *Sph. juglandicola* Schw., pustulæ enim nunquam lineares.

22. **Eutypella fraxinicola** (C. et P.) Sacc. *V. fraxinicola* C. et P. 584
29 Rep. of New Jersey St. Mus., Cooke Valsei U. S. p. 112. — Pustulata peridermium perforans; peritheciis ovoideis, nigris, circumstantibus; ostioliis longiusculis, convergentibus, interdum quadrisulcatis; ascis clavatis; sporidiis minutis in ascorum apice conglobatis, leniter curvis, 8-12 μ . long., succineis.

Hab. in ramis *Fraxini americanæ*, Tyre, New Jersey (Amer. bor.).

23. **Eutypella Leaiana** (Berk.) Sacc. *Sphaeria* (Valsa) *Leaiana* Berk. 585
Dec. of Fungi n. 97, Cooke Valsei of U. S. 113. — Innata, circumcinnata; stromate pallido, laxo e cortice et ligno linea circumscripto; peritheciis ellipticis; ostioliis subconfertis elongatis lineolatis, granulatis; ascis lanceolatis, octosporis; sporidiis minimis, curvulis, 7-8 μ . long. pallide olivaceis.

Hab. in ramis *Carpini*, Carol. inf. (RAV.), Ohio (LEA), Amer. boreali.

24. **Eutypella Berchemiæ** (Cooke) Sacc. *V. Berchemiæ* Cooke Valsei 586
of U. St. 112. *V. syngenesia* v. *Berchemiæ* Curt. in litt. — Peritheciis valseis ostioliis sulcatis, collis abbreviatis; ascis octosporis; sporidiis allantoideis 8-10 μ . long., pallide olivaceis.

Hab. in ramis *Berchemiæ* in Carol. inf., Amer. bor. — A *Valsa syngenesia* et *V. monticulosa*, quibus affinis etiam habitu recedit.

25. **Eutypella goniostoma** (B. et C.) Sacc. *Valsa goniostoma* B. et 587
C. in Curtis Cat. p. 142 (?) Cooke Valsei of Un. St. 113. — Peritheciis valseis; collis abbreviatis, ostioliis sulcatis; ascis octosporis; sporidiis allantoideis, dilute olivaceis 8-11 μ . long.

Hab. in ramis, Carolina, Amer. bor. (CURTIS).

26. **Eutypella exanthemoides** (Mont.) Sacc. *V. exanthemoides* Mont. 588
Syll. Crypt. n. 756 et Fl. Alg. p. 372, sub *Sphaeria*. — Pustula-

ta; peritheciis globoso-ovoideis erectis circinantibus stromate corticali nigro tectis, ostioliis in disco minuto pulverulento approximatis subtetragonis; ascis cylindraceo-clavatis, $100 \approx 10$, sporidiis linearibus, curvulis, 10μ . long.

Hab. in cortice *Anagyridis fætidæ*, Alger (DURIÉU).

27. **Eutypella microspora** (C. et E.) Sacc. *Valsa microspora* Cooke 589 et Pl. in Grev. VII. 82 (nec Crouan). — Disco erumpente orbiculari, furfuraceo, brunneo, ostioliis circinantibus sulcatis punctulato; peritheciis 12–20; ascis subclavatis 30–40 μ . long.; sporidiis minutissimis, hyalinis, allantoideis, circ. 5 μ . long.

Hab. in ramis *Betulæ* in Britannia (PLOWRIGHT). — Ascii et sporidia e minoribus generis.

28. **Eutypella Myricæ** (C. et C.) Sacc. *Valsa Myricæ* C. et E. New Jersey Fungi, in Grev. VII. p. 8. — Peritheciis globosis, linea nigra varia circumscriptis, ostioliis cylindricis, in disco plano atro subjunctis; ascis cylindrico-clavatis; sporidiis minutis, allantoideis, 10–12 μ . longis.

Hab. in ramis *Myricæ* in Amer. bor., New Jersey — Habitus potius *Diatrypes*.

29. **Eutypella monticulosa** (B. et C.) Sacc. *Valsa monticulosa* B. et C., Cooke Valsei of Un. St. 112. — Peritheciis valseis, collis abbreviatis, ostioliis sulcatis; ascis octosporis; sporidiis allantoideis 8–10 μ . long.

Hab. in ramis *Magnoliæ glaucæ*, Carol. Am. bor. (CURTIS).

30. **Eutypella Platani** (Schw.) Sacc. *V. Platani* (Schw.) Cooke Vals. U. S. 113. *Sph.* (circumscript.) *Platani* Schw. Syn. Am. bor. n. 1372. — Pustulata in plagas maximas aggregata sub epidermide, sed pustulis singulis multo minoribus quam in prioribus, non rêvera confluentibus; arete tecta epidermide circum ostiola stellatim fissa; ostioliis sulcatis in fuscescenti disco, primum punctiformibus, demum subprominulis, tum disco obliterato; stromate albescente multo crassiori quam in prioribus et interdum in disco prorumpente; peritheciis aterrimis splendentibus per stroma quidem assurgentibus sed subtus in ipso cortice, absque stromate nidulantibus, vix nigro-circumscriptis; ascis octosporis; sporidiis allantoideis $10-12 \approx 3$, subhyalinis.

Hab. frequentissima erumpens ex epidermide *Platani*, Bethlehem (Americæ borealis).

31. **Eutypella tumidula** (C. et P.) Sacc. *Valsa tumidula* C. et Peck. 593 in New. York Museum Rep. Cooke Valsei of Un. St. 113. — Erum-

pens, peridermium decoloratum et inflatum perforans, denique discum nigrum exerens; peritheciis 4-6, ligno semiimmersis, linea nigra circumscriptis; ostiolis obtusis, 4-sulcatis; ascis clavatis; sporidiis linearibus, rectis curvulisve obtusis, olivaceo-hyalinis, 10-12 μ . long.

Hab. in ramis Cratægi et Platani, New York et New Jersey.

32. **Eutypella Tosquetii** (West) Sacc. *Valsa Tosquetii* West., 594

Lamb. Fl. Myc. Belgiq. II, p. 375. — Pustulis elevatis, angulosis, nigro-fuscis, superficie inæqualibus, epidermide rupta cinctis; peritheciis sphaericis, nigris, 8-15, stromate albo exceptis; ostiolis plus minus elongatis, teretibus, discum paululum excedentibus et verruculosum reddentibus; ascis fusoides, longe stipitatis; sporidiis biseriatis cylindricis, rectis curvulisve, hyalinis.

Hab. in ramis emortuis Aceris Pseudo-platani, Mirwart (Belgio). — «An *Diatrype*?»

33. **Eutypella tetraploa** (B. et C.) Sacc. *Valsa tetraploa* B. et Curt. 595

Cooke Handb. n. 2478. — Peritheciis aggregatis; ostiolis 20-30, subquadrisulcatis, in fasciculum compactum conjunctis; sporidiis minutis, allantoideis, 10 μ . long.

Hab. in ramis Pruni Mahaleb, Macluræ etc. in Britannia, Carolina, New Jersey in Amer. boreali. — *Eutypellæ stelulatae* paraffinis.

34. **Eutypella rugiella** (C. et E.) Sacc. *Valsa rugiella* C. et E. in 596

Grev. V. p. 92. — Peritheciis (10-20) minutis, in pustulas orbiculares congestis; ostiolis leniter sulcatis; ascis minutis lanceolatis; sporidiis exiguis, allantoideis, 5-6 μ . long., pallide succineis.

Hab. in ramis Aceris rubri, New Jersey, Am. bor. — Habitus *V. tetraploæ*, sed sporidia minora.

35. **Eutypella corynostoma** (B. et R.) Sacc. *Valsa corynostoma* B. 597

et Rav. North. Amer. Fungi n. 871. — Pustulis cortice abditiis minutis, et vix eum infantibus; ostiolis fasciculatis, sulcatis, clavatis; sporidiis allantoideis, 6-8 \approx 1,5.

Hab. in cortice Aceris rubri in Carolina inf., Am. bor.

36. **Eutypella innumerabilis** (Peck.) Sacc. *Valsa innumerabilis* Peck. 598

30 Rep. on. the St. Mus. — Pustulis minutis, numerosis, sæpius dense gregariis seriatisque; peritheciis 4-10, cortice interiore nidulantibus; ostiolis brevibus, stipatis, 4-sulcatis, nigris; sporidiis stipatis cylindricis, curvis, obtusis, succineis, 10 μ . long.

Hab. in ramis Ulmi, Greenbush (Amer. bor.). — In ramis tenellis perithecia potius sparsa quam seriata.

37. **Eutypella Bonariensis** Speg. Fung. Arg. I. p. 181. — Stromati- 599
bus nigrescentibus, subrotundis vel elongatis, 3-6 mill., inæqualibus, nunc primo tectis, dein erumpentibus, nunc ligno vel cortice duriori immersis; peritheciis 15-40 in eodem stromate ovato-subrotundis $\frac{1}{3}$ mill. extus atris, intus cinerascentibus in colla cylindracea e stromate longiuscule exserta; ostiolo ruguloso donatis et discum spinuloso-hirtum efformantibus; ascis clavatis, minutis, part. spor. 15 \simeq 3, pedic. 15-20 \simeq 1; octosporis aparaphysatis; sporidiis distichis, valde curvatis, arcuato-falciformibus 5-6 \simeq $\frac{3}{4}$ -1, utrinque 1-guttulatis, dilute olivaceis (ut in *Diatrypella quercina*).

Hab. ad ramos dejectos Celtidis Talæ et Salicis Humboldtianæ, Barracas del Sur, Argent. (Amer. merid.). — Interdum stromata fere eualsea.

38. **Eutypella anthracina** Speg. F. Arg. Pug. IV, n. 124. — Stroma- 600
tibus orbiculari-ellipticis, 1-1,5 mill. diam., erumpentibus, densiuscule sparsis, prominulis, intus extusque aterrimis, ex ostioliis concoloribus undique prominulis, dense verrucosis; peritheciis paucis, monostichis, globosis sæpe e mutua pressione ellipsoideis 200-250 μ . diam., membranaceis, atro-olivaceis; ascis clavatis sursum obtuse rotundatis p. spor. 35-40 \simeq 6, deorsum in pedicellum parte sporifera longiorem attenuatis, octosporis, paraphysibus mucosis, fluxilibus obvallatis; sporidiis distichis, allantoideo-curveis, utrinque obtusiusculis 8-9 \simeq 2, ac 1-guttulatis, subchlorinis.

Hab. in ramis dejectis putrescentibus Scutiæ buxifoliæ in sylvis australioribus «Montes largos» dictis (Argent. Am. austr.).

39. **Eutypella paradisiaca** Speg. F. Arg. Pug. IV, n. 125. — Stro- 601
matibus primo tectis dein erumpentibus prominulo-exsertis, extus atris intus candidis, minutis 1-1,5 mill. diam., irregulariter suborbicularibus, sæpe ob confluentiam difformibus, densiuscule sparsis; peritheciis subglobosis v. subellipticis 250-300 μ . diam., atris extus griseolis, 4-11-gregariis, monostichis, ostioliis quandoque vix exsertis, quandoque longiusculis, crassiusculis, atris, nitidis, levibus v. anulatim rugulosis, apice rotundato-umbilicatis; ascis clavatis sursum rotundato-subtruncatis deorsum longiuscule attenuato-pedicellatis p. spor. 30-35 \simeq 5-6, ped. 35-40 \simeq 2-3; octosporis, aparaphysatis; sporidiis distichis, cylindraceo-allantoideis, utrinque obtusiusculis, ac 1-guttulatis, 7-8 \simeq 2, dilute chlorinis. — Cum *Eutypa ludibunda* Sacc. etsi affinis, non comparanda.

Hab. in ramis emortuis Meliæ Azedarach in dumetis, Bañado S. José de Flores, Arg. Amer. austr.

VALSELLA Fuck. Symb. Myc. p. 203 (Etym. a *Valsa*, quam cfr.). — Stroma valseum corticale, plerumque nigrolimitatum; ostiola integra; discus sæpius pallens; asci sessiles, polyspori; sporidia allantoidea, hyalina. — Spermogonia, si adsunt, cytisporea.

1. **Valsella amphoraria** (Nits.) Sacc. *V. amphoraria* Nits. Pyr. Germ. p. 236. — Stromatibus exiguis, peridermium superpositum in pustulas minutas, vertice poro angusto pertusas protrudentibus, cortici interiori basi tantum insculpatis v. adnatis ac, peridermio avulso, superficialibus, raro peridermio adhærentibus, dense ac sine ordine sparsis, forma exacte regulari, ampullaceis, infra nigrolimitatis; ostiolis in disculum orbicularem v. angularem, planum dense stipatis, minutissimis, punctiformibus, rotundatis, atris angustissime perforatis; peritheciis pro ratione majusculis monostiche v. subcircinatis ordinatis, subglobosis in quoque acervulo 3-6; ascis anguste clavatis v. subcylindricis, sessilibus, apice rotundatis v. truncatis, myriosporis, 60-68- multo rarius 48-80 \approx 8-10; sporidiis numerosissimis, conglobatis, cylindricis, parum curvatis v. rectis, hyalinis v. dilute fuscescentibus, 6-7 \approx 1 $\frac{1}{2}$.

Hab. in trunco et ramis Fagi sylvaticæ prope Münster, Germania.

2. **Valsella furva** (Karst.) Sacc. *V. furva* Karst. Mycol. Fenn. II., p. 603 149. — Stromate conico-truncato, plus minus protuberante peridermio adhærente, 0,7 mill. cr. disco orbiculari vel subellipsoideo, sordide fuscescente, minutissimo; peritheciis in singulo stromate 2-7, subcircinantibus, subsphæroideis, majusculis collis brevibus ostiolisque rotundatis, atris, exiguis, confertis vel sparsis, poro lato pertusis; ascis cylindraco-clavatis, 48-54 \approx 6-7; sporidiis conglobatis, rectis vel leniter curvulis, cylindracois, 5-8 \approx 1-1,5.

Hab. in ramulis Alni incanæ exsiccatis in Mustiala (Fennia).

— A *V. melastoma* disco mox sordide fuscescente, ostiolis dein poro lato pertusis sporidiisque paullo majoribus recedens. Conceptacula subinde per peridermium tenuius translucet.

3. **Valsella Laschii** (Nits.) Sacc. *Valsa Laschii* Nits. Pyr. Germ. p. 604 235. — Stromatibus minutissimis, basi exacte orbicularibus, peritheciophoris in discum perexiguum, punctiformem, orbicularem ac sordide albicantem sensim conico- v. rarius abrupte attenuatis, peridermio tenuissimo, translucido, nitido, poro centrali, discum excipiente pertuso, ceterum arctissime adhærente tectis; peritheciis in singulo stromate 2-4, subcircinatis dispositis, perexiguis, globosis v. depressis; ostiolis oculo armato solum perspicuis, in di-

sculo medio plerumque dense gregata, vix prominentibus, rotundatis, aterrimis, nitidis; ascis cylindrico-clavatis, sessilibus, polysporis, $42 \approx 7-8$; sporidiis conglobatis, pallide lutescentibus, parum curvatis v. subrectis, tenuiter cylindricis, $11-13 \approx 2\frac{1}{2}$. — Spermogonia cytisporea consociata.

Hab. in ramulis Corni sanguineæ pr. Driesen, Germania (LASCH).

4. **Valsella Cydoniæ** Rehm, in Thuem. Contr. Myc. Lusit. n. 283. — 605
Peritheciis 10-12 in cortice interiore nidulantibus, monostichis, ostiolo poro conspicuo, pertuso, crasso peridermium diffidente, majusculis, fusco-atris; ascis sessilibus, oblongis, hyalinis, $50-58 \approx 8$; sporidiis 32 in asci superioris parte, distichis, cylindraneo-curvatis, utrinque acutatis, continuis, fuscidulis, $6-7 \approx 2,5-3$.

Hab. ad ramos aridos Cydoniæ vulgaris, Alpenduradas pr. Coimbra, Lusitania, raro (MESNIER).

5. **Valsella minima** Niessl Not. Kr. Pyr. p. 53. — Stromatibus mi- 606
nutissimis 0,5-0,8 mill. vix æquantibus, lentiformibus, cortici interiori adnatis et penitus immersis, duris, sordide atris; disculo exiguo niveo coronatis; peritheciis paucis 3-5 in singulo stromate, circinantibus, vel stipatis, globosis vel compressis, membranaceis; ostiolis brevissimis haud distinctis, punctiformibus, vix superantibus; ascis anguste clavatis $36-44 \approx 6-7$, polysporis; sporidiis fartis, cylindricis, curvatis, subyalinis, $8-10 \approx 2$.

Hab. in ramis emortuis Viburni Lantanæ, Voitsberg, Morav. (NIESSL). — A V. *Laschii* disculo niveo, ascis sporidiisque minoribus recedit.

6. **Valsella Salicis** Fuck. Symb. myc. p. 203, t. II, fig. 36 a. b. — 607
Spermogonium; Cytisporam multicellularem referens; cirrhis pallidis, angustissimis; spermatis cylindræis, curvatis, triplo minoribus quam ascosporis; peritheciis 8-10 majusculis, in conceptaculo scutiformi, vel hemisphærico, demum sublibero, lineam lato, atro, extus griseo-pulveraceo, conceptaculis demum vertice lacertatis, laciniisque extus pallidioribus circumdatis, ostiolo aterrimo, prominulo, globoso, disco minutissimo, vix ullo, primo albicante, demum evanescente; ascis oblongis, stipitatis, $56 \approx 8$; sporidiis fartis, cylindræis, curvatis, $8 \approx 1\frac{1}{2}$, hyalinis.

Hab. in ramis corticatis Salicis auritæ, prope Æstrich, Rhénogovia. — Affinis *V. fertili*.

7. **Valsella adhærens** Fuck. Symb. myc. App. II. p. 36. — Conce- 608
ptaculis immersis, minutis, $1-1\frac{1}{2}$ mill. lat., depressis, irregulari-

ter orbicularibus, semper peridermio adhærentibus, stromate fusciscente, peritheciis 3-5, stipatis, minutis, atris, ostioliis in disculis valde elevatis, transverse erumpentibus, semper ellipticis, fuscis emersis, ovatis, papillatis, atris; ascis oblongis, sessilibus, polysporis, $54 \approx 6-7$; sporidiis cylindræis, continuis, parum curvatis, hyalinis, $6 \approx 1$.

Hab. in ramis corticatis *Betulæ albæ*; prope *Æstrich*, *Rhenogovia*. — A *V. polyspora* tute distinguenda.

8. **Valsella nigro-annulata** Fuck. *Symb. myc. App. I*, pag. 317. — 609

Conceptaculis gregariis, sæpe confluentibus, minutis, vix 1 mill. lat., distincte orbicularibus, nigro-annulatis, quandoque annulo prominulo, plano-depressis, sub corticis epidermide nidulantibus, stromate albo-cinereo; peritheciis plerumque 4, minutis, globosis, collo brevi; ostioliis in disco minutissimo, sordido, quandoque coronato, punctiformibus, atris; ascis oblongis, 12-16sporis, $28 \approx 8$; sporidiis faretis, cylindræis, curvatis, simplicibus, hyalinis, $10 \approx 2\frac{1}{2}$.

Hab. in ramis siccis corticatis *Salicis capræ*, raro, prope *Æstrich*, *Rhenogovia*.

9. **Valsella Rosæ** Fuck. *Symb. myc. App. I*, p. 317. — *Conceptaculis* 610

spermatiferis atris, suborbicularibus, subdepressis, poro communi albo apertis, multicellularibus; spermatiis cylindræis, curvatis, continuis, $6 \approx 1\frac{1}{2}$; *conceptaculis* ascigeris gregariis, raro confluentibus, 1 mill. diam., orbicularibus oblongisque, obtuso-conicis ventricosisque, aterrimis, perithecia 6-8, globosa, dense stipata, nigra includentibus, ostioliis in disco minuto, orbiculari ellipticove, niveo, punctiformi-prominulis, atris; ascis oblongis, polysporis, $32 \approx 8$; sporidiis cylindræis, curvatis, continuis, hyalinis, $10 \approx 3$.

Hab. in ramis tenuioribus siccis *Rosæ rubiginosæ*, prope *Æstrich*, *Rhenogovia*.

10. **Valsella clopima** (Fr.) Sacc. *V. clopima* Fr. *Summ. Veg. Scand.* 611

p. 412? *Karst. Myc. Fenn. II*, 138. — *Stromate* hemisphærico, depresso, pustulato, fere superficiali, peridermio tenui nigrefacto, disco minutissimo, suborbiculari tantum pertuso, arctissime adhærente tecto; peritheciis 4-16 in quovis stromate, monostichis vel subcircinantibus, subsphæroideis, fuscis, ostioliis sparsis, rotundatis vel suboblongatis, atris, nitidulis vel opacis, poro latiusculo pertusis instructis; ascis cylindræo-clavatis, sessilibus, $40-46 \approx 6$; sporidiis cylindræis, curvulis vel subrectis, hyalinis, $5-8 \approx 1-1.5$.

Hab. in cortice *Pyri sylvestris* vetusto in *Fennia australi* passim et in *Suecia*.

11. **Valsella fertilis** (Nits.) Sacc. *V. fertilis* Nits. Pyr. Germ. p. 238. — 612

Stromatibus minutis, e basi ovali v. suborbiculari, conico-attenuatis, truncatis, protuberantibus, pustulatis, dense gregariis, basi non raro confluentibus; peritheciis conceptaculum integrum occupantibus, plerumque 5-6, rarius 4-10 singulo stromate inclusis, monostichis, sæpe radiatim dispositis v. circa centrale circinantibus, confertis, globosis v. mutua pressione angulatis, minutis, in collum tenuissimum attenuatis; ostiolis minutissimis, punctiformibus, atris in disci albo-pruinosi, orbicularis, rarius ovalis medio confertim emergentibus maculamque aterrimam efficientibus, nec exsertis; ascis oblongis v. fere cylindricis, sessilibus, polysporis, 56-64 \approx 7-9; sporidiis conglobatis, cylindricis, curvulis v. subrectis, hyalinis, 6-7 \approx 2-2 $\frac{1}{2}$. — Spermogonia cytisporæ; spermatis allantoideis, 5-7 \approx 2, stipitatis; cirrhis rubentibus.

Hab. in ramis et trunco Salicis capreæ prope Münster, Germania.

12. **Valsella leptostroma** Fuck. Symb. Mycol. App. I, 317. — Con- 613

ceptaculis sub epidermide sparse nidulantibus, 1 mill. lat., orbicularibus, planissimis, nigris, intus albidis, perithecia minutissima, globosa, 2-4 includentibus, ostiolis 2-4, in disco orbiculari, minutissimo, albedo, punctiformibus, nigris; ascis oblongo-ovatis, sessilibus, 12-16 sporis, 32 \approx 8; sporidiis farctis, cylindræis, curvatis, continuis, hyalinis, 12 \approx 3.

Hab. in ramis tenuioribus exsiccatis Loniceræ Xylostei, raro, Johannisberg et Hallgarten, Rhenog.

13. **Valsella clypeata** Fuck. Symb. mycol. 203 et App. I. 317. — 614

Conceptaculis clypeatis, oblongis, 1 $\frac{1}{2}$ mill. long., 1 mill. lat., corticis parenchymati immersis, atris, epidermidem pustulato-inflantibus, intus olivaceis, disco orbiculari sed plerumque elliptico, per epidermidem fissam prominulo, albo; peritheciis 4-8 in conceptaculo dense stipatis, globosis, minutis, atris, ostiolis in disco demum punctiformi papillæformibus, non exsertis, atris; ascis sessilibus, oblongis, polysporis, 52 \approx 7 $\frac{1}{2}$. — Spermogonia multicellularia, deplanata, poro albo; spermatis allantoideis, 6 \approx 1.

Hab. in ramis siccis corticatis Rubi fruticosi prope Cëstrich, Rhenog. — *Habitus Clypeosphæriæ!*

14. **Valsella myriotheca** Pass. Funghi Abiss. p. 187 t. V, fig. 8. — 615

Pustulis sparsis v. interdum confluentibus, tandem erumpentibus, disco orbiculari plano stuppeo fulvo-lurido; peritheciis membranaceis parenchymate corticali immersis, stipatis, stromateque stup-

peo obvolutis, perpendicularibus copiosis, ovato-oblongis in collum longiusculum attenuatis, ostioliis clavato subcapitatis, non extantibus; ascis copiosis aparaphysatis obovato-lanceolatis, subsessilibus, 50 = 6, polysporis; sporidiis stipatis, allantoideis, curvis, 6 = 1-1,3 hyalinis.

Hab. in ramis aridis Acaciæ, Keren, Abyssinia (BECCARI).

15. **Valsella polyspora** (Nits.) Sacc. *Valsa polyspora* Nits. Pyr. Germ. 616
p. 238. — Stromate exiguo, e basi orbiculari, depresso conico, omnino immerso nec erumpente v. pustulato, disco rotundo peridermium perforante idque paullo tantum v. vix superante, primo cinereo-albido, deinde fuscescente; peritheciis in singulo stromate 2-8, circa spermogonium circinantibus, globosis, minutis, in collum tenuissimum attenuatis; ostioliis minutissimis, punctiformibus, atris, discum non superantibus; ascis anguste clavatis, sessilibus, polysporis, 56 = 8-10; sporidiis conglobatis, cylindricis, curvatis v. subrectis, hyalinis, 9-12 = 2½.

Hab. in ramis Betulæ prope Münster, Germ. (FÜSTING).

16. **Valsella melastoma** (Fr.) Sacc. *Sph. melastoma* et *V. melastoma* 617
Fr. S. M. et Summ. Veg. Scand. p. 411. — Stromate conico-atenuato, plus minus protuberante, peridermio plerumque adhærente, circ. 1 mill. diam., disco orbiculari vel subellipsoideo, minutissimo, primam cinereo-albido, demum fuscescente; peritheciis in siugulo conceptaculo 2-6, subcircinantibus, subsphæroideis, majusculis collis brevibus, tenuissimis ostiolisque perexiguis, rotundatis, atris, confertis, raro sparsis; ascis cylindræo-clavatis, 30-50 = 6; sporidiis conglobatis, cylindræis, leniter curvulis vel subrectis, 4-7 = 1.

Hab. in ramulis Pyri Mali in Suecia, Germania, Fennia.

EUTYPA Tul. Sel. Fung. Carp. II. p. 52 (Etym. *ev* bene et *typos* in-sculpo, ob perithecia matrice profunde insculpta). — Stroma late effusum ex matrice (ligno v. cortice duriore) plus v. minus mutata, sæpius atroinquinata efformatum, initio hyphis conidiophoris vestitum. Perithecia stromati immersa v. semiimmersa plerumque dense et late gregaria. Ascii octospori, stipitati, aparaphysati. Sporidia subhyalina. — Spermogonia, ubi adsunt, cytisporoidea.

A) Ostiola radiatim sulcata.

1. **Eutypa Acharii** Tul. Carp. II. 53, t. VII, f. 8-20. *Sph. eutypa* 618
Fr. *Sph. decomponens* Sow. *Sph. astroidea* Fr. *V. eutypa* (Ach.)
Nits. Pyr. Germ. p. 130, Sacc. Myc. Ven. Sp. p. 129, t. XIV, f. 32-34.

— Stromate longe lateque effuso ramosque decorticatos sæpe ambiente, ligno alte immerso idque non solum in superficie, sed intus quoque nigrificante, primo pilis atrobrunneis, simplicibus, septatis, breviusculis, conidiferis dense villosis, deinde glabro, aterrimo, ostiolis numerosissimis, plus minus prominulis exasperato; conidiis lineari-cylindricis, curvulis, hyalinis, in pilis conidiferis solitarie v. fasciculatim acrogenis; peritheciis monostichis dense sparsis, globosis, minutis, ligno, plerumque alte immersis, collis longis v. brevibus, cylindricis, tenuibus ostiolisque paullo incrassatis, minutis, nunc nonnihil elongatis, conicis, nunc omnino obtusis, depressis sed semper rimis 2-5 (plerumque 4) plus minus alte exaratis, angulatis tantum v. radiatim partitis instructis; ascis anguste clavatis, longissime pedicellatis, octosporis 21-28 = 4-5 p. sporif.; sporidiis in asci lumine, utrimque angustato subdistichis, cylindricis, curvulis, dilute fuscescentibus, 5-7 = 1. — Spermogonia in stromate recenti convexa unilocularia; spermatis allantoideis.

Hab. in ramis crassioribus decorticatis Fagi, Psedoplata ni, Populi, Carpini, Pruni, in tota Europa et Amer. bor.

2. **Eutypa tuyutensis** Speg. Fungi Arg. IV, n. 123. — Stromate per ramos corticatos late ambiente, lignum superficie atro-inquinante lineaque stromatica fere, usque ad medullam producta, nigro-limitato; peritheciis, globosis, majusculis 0,5-0,8 mill. diam., ligno immersis, solitariis v. 3-5 valsatim aggregatis, membranaceis, atro-olivaceis, contextu sinuose parenchymatico, olivaceo, ostiolo parvo corticem perforante ac vix exserto, levi, atro-carbonaceo donatis; ascis numerosissimis, elliptico-subobovatis, parvulis 10-15 = 2,5-4, octosporis, aparaphysatis; sporidiis distichis v. polystichis, allantoideis, leniter v. vix curvulis 3,5-4,5 = 0,7, utrinque obtusiusculis et 1-guttulatis, dilute chlorinis.

Hab. in ramis emortuis dejectis Sambuci australis in sylvâ australiore «Monte de Pila» dicta, (Argent. Amer. austr.).

3. **Eutypa aspera** (Nits.) Fuck. Symb. Myc. pag. 214. *V. aspera* Nits. Pyr. p. 132. *Sphæria eutypa* β . *aspera* Fr. *E. polycoeca* β . *aspera* Karst. — Stromate effuso, in ramis decorticatis maculas ambientes sæpeque confluentes efficiente ac ligni superficiem, colore ex fusco v. cinereo tandem sordide nigricante tingentes, ostiolis exasperato, ceterum lævi, immo nitidulo; peritheciis, stromatis plagis sterilescentibus interjectis, gregarie ac sine ordine sparsis, monostichis summo ligni strato haud fucato immersis, exiguis, depresse globosis, collo brevissimo, ostiolo incrassato, conico, acuti-

sculo v. subhemisphærico, rimis plerumque 4 exarato instructis; ascis anguste clavatis, longissime pedicellatis, octosporis, 44-48 \approx 5 p. sporif.; sporidiis in asci lumine, utrimque attenuato subdistichis, cylindricis, curvulis, dilute fuscescentibus, 8-12 \approx 2.

Hab. in ramis *Lonicerae Xylostei*, nigræ, etruscæ et *Sorbi Aucupariæ* in Britannia, Fennia, Germania, Gallia, Italia.

4. **Eutypa cyclospora** (Nits.) Sacc. *V. cyclospora* Nits. Pyr. Germ. 621
p. 128. — Stromate longe lateque effuso, ligno omnino innato ejusque superficiem inquinante; peritheciis ligni strato supremo, haud fucato omnino immersis, monostichis, laxè distributis, globosis, minutis, in collum brevissimum abrupte attenuatis ostioloque incrassato, elongato, cylindrico-conico, acutiusculo v. truncato-obtusato, rugoso, angulato ac longitudinaliter rimoso v. a latere compresso instructis; ascis anguste clavatis, longissime pedicellatis, octosporis, 28-32 \approx 6-7 p. sporif.; sporidiis in asci lumine utrinque attenuato, conglobatis, cylindricis, maxime curvatis et annulum fere integrum plerumque formantibus, dilute fuscescentibus 6 \approx 2.

Hab. in ligno vetusto *Fagi sylvaticæ*, Schwerin, Germ.

5. **Eutypa crustata** (Fr.) Sacc. *Fungi Ven. Ser. IV. p. 16. Sphæria 622*
crustata Fr. S. M. II. 376. *Valsa crustata* (Fr.) Nits. Pyr. Germ.
p. 135. — Stromate effuso. ramos sæpe ambiente, eorumque cortici innato et cum eo in crustam superficie tandem nigricantem; peritheciolorum ostiolis valde protuberantibus asperrimam, immo fere spiculosam concreescente; peritheciis in corticis interioris parenchymate monostiche nidulantibus, grandiusculis, globosis, nunc densissime ac sæpe gregatim stipatis, nunc pro parte, præsertim in stromatis ambitu, sparsis, subsolitariis, peridermio arctissime adhærente, plus minus emergentibus, depresso, rimis 3-4 plus minus alte exarato, immo tri- v. quadricocco, aterrimo et primo pilis conidiferis, fuscis, brevibus, simplicibus, septatis sæpe circumdato instructis; ascis anguste clavatis, longissime pedicellatis, octosporis, 32 \approx 4-5 p. sporif.; sporidiis in asci lumine utrinque attenuato subdistichis, cylindricis v. subrectis, pallide fuscescentibus, 8-10- rarius 6-12 \approx 2.

Hab. in ramis crassioribus *Aceris Pseudoplatani* in Scania et Germania, *Fagi sylvaticæ* in Italia boreali.

6. **Eutypa subtecta** (Fr.) Fuck. *Symb. mycol. p. 214. Sphæria subtecta 623*
Fr. S. M. II. 376. *V. subtecta* (Fr.). Nits Pyr. p. 134. — Stromate effuso, maculæformi, brevi, forma varia, irregulari, sæpe confluyente, rarius in ramis decorticatis ligno elevato innato, plerumque cum corti-

ce coalito eumque plus minus elevante et in superficie mox atroinquinante, primum pilis fusco-atris, conidiferis, simplicibus, septatis, subrectis dense villosis; conidiis cylindricis, utrinque acutiusculis, curvulis, unicellularibus, hyalinis, 30-34 \approx 3; peritheciis in corticis interioris parenchymate nidulantibus, monostichis, plerumque dense stipatis, majusculis, globosis v. nonnihil depressis, collo subnullo, ostiolo minuto, hemisphærico, aterrimo, nitidulo, tandem rimis 4 leviter sulcato, prominulo instructis; ascis angustissime clavatis, immo subcylindricis, longissime pedicellatis, octosporis, 28-44 \approx 5-7 p. sporif.; sporidiis in asci lumine utrinque valde attenuato, subdistichis, cylindricis, curvulis, dilute fuscescentibus v. subhyalinis, 8-12 \approx 2.

Hab. in ramis corticatis *Aceris campestris*, *A. Pseudoplatani* (et *Salicis*, t. Cooke), in Suecia, Germania et America boreali.

7. **Eutypa subcutanea** (Wahl.) Sacc. *S. subcutanea* Wahl. Lapp. 520. 624
Fr. S. M. II. 371. Conf. Nits. Pyr. Germ. p. 148. — Effusa, tecta, emergens, peritheciis in stromate fuliginoso-atro nidulantibus; ostioliis prominulis convexis distantibus quadri-sulcatis; sporidiis allantoideis, 12-14 \approx 3-3,5, fusco-olivaceis.

Hab. sub epidermide ramorum *Salicis phylicifoliæ* per omnem Lapponiam. — Tumores sistit usque ad pollicem latos, sed sæpius minores, determinatos fere, supra corticem interiorem nidulantes, superne cum epidermide vix mutata connatos; stroma crassiusculum, fuscum, non circumscriptum; perithecia subglobosa, erecta, in centro confertiora et fere polysticha, ostioliis majusculis æqualiter distantibus. — Affinis *E. nitidæ* et *E. subtectæ*.

8. **Eutypa polycocca** (Fr.) Karst. Myc. Fenn. II. 127. *Sph. lata* β . 625
polycocca Fr. S. M. II, 370. *Valsa polycocca* Nits. Pyr. Germ. p. 129. — Stromate longe lateque effuso, sæpe ramos decorticatos ambiente ligno haud vel parum elevato innato ejusque superficiem æqualem, lævem, colore ex fusco vel cinereo nigricante tingente; peritheciis monostichis, ligno haud mutato omnino immersis, subsphæroideis, latit. 0,5 mill., collis brevibus vel brevissimis ostiolisque incrassatis, grandiusculis, obtusissimis, primo hysteriiformibus, tandem 3-5-, plerumque 4-coccis; ascis clavatis, longissime pedicellatis, 40-50 \approx 5-6, p. sporif.; sporidiis subdistichis, fusoideo-elongatis, vel subrectis, dilute fuscescentibus, 8-12 \approx 2-3.

Hab. in ramis corticatis *Pruni spinosæ*, Münster, Germ., *Salicis* et *Betulæ* in Fennia et Lapponia.

9. *Eutypa polymorpha* (Nits.) Sacc. *V. polymorpha* Nit. Pyr. Germ. 626
p. 128. — Stromate plus minus effuso, plerumque brevi, maculæ-
formi, ligno v. cortici crassiori omnino immerso et hæc, ceterum
immutata, plus minus atroinquinante; peritheciis in substrato haud
fucato nidulantibus, monostichis nunc gregarie sociatis, stipatissi-
mis, nunc contra laxè sparsis, collo brevissimo, ostiolo incrassato,
cylindrico, truncato, rarius conico, recto v. incurvo, immo flexuo-
so, rugoso ac rimis 2-4 per longitudinem plerumque evidenter exa-
rato instructis; ascis anguste clavatis, longissime pedicellatis, octo-
sporis, 40-52 \approx 6-10 p. sporif.; sporidiis in asci lumine utrinque
angustato conglobatis, cylindricis, in arcum curvatis, dilute fusce-
scentibus, 8-10 \approx 2-2 $\frac{1}{2}$.

Hab. in cortice et ligno Platani et Ulmi, Schwerin et Mün-
ster, Germania.

10. *Eutypa maura* (Fr.) Sacc. *Sphæria maura* Fr. S. M. II. 370. *Val-* 627
sa maura (Fr.) Nits. Pyr. Germ. p. 133. — Stromate late effu-
so, ligno vetusto plus minus elevato profunde immerso extus in-
tusque nigrificante superficie lævigata tandem expallente, ostiolis
numerosissimis, densissime sparsis nigropunctato; peritheciis alte
immersis, monostichis, globosis, majusculis, plerumque confertissi-
me nidulantibus, collo longiuseculo, crasso, ostiolis haud incrassatis,
hemisphæricis, immo subglobosis, raro longius extantibus, tunc fere
conicis, aterrimis, lævibus, nitidulis, tandem leviter quadrisulcatis
instructis; ascis anguste clavatis, longissime pedicellatis, octosporis,
30 \approx 5-6 p. sporif.; sporidiis in asci lumine utrinque angusta-
to subdistichis, cylindricis, nonnihil curvatis, pallide fuscescenti-
bus, 8-10 \approx 2.

Hab. in ligno Pruni spinosæ etc. in Suecia et Germania. 628

11. *Eutypa aulacostoma* (Kunze et Fr.) Sacc. *Sphæria aulacosto-*
ma Kunze et Fr. in Linnæa 1830, p. 545. — Peritheciis inæquali-
bus, in stromate tenui contiguo tecto fuliginoso stipatis, ostiolis in
tuberculis discretis erumpentibus, sulcatis, 4-5-gonis.

Hab. in ramis siccis, Surinam (WEIGELT). — Affinis *E. lata*,
sed perithecia magis irregularia, confertiora, tubercula erum-
pentia.

12. *Eutypa tetragona* (Duby) Sacc. *Sph. tetragona* Duby Bot. Gall. 629
p. 703. Mont. in Fl. Alg. p. 460. *Cryptosphæria tetragona* C. et
De Not. — Effusa interrupta, tecta; peritheciis gregariis aut ag-
gregatis, globosis, cortice lignoque nigrificato immersis, fuscis intus
albidis; ostiolo prominulo crasso primatico-conico acute 4-costato;

ascis cylindrico-clavatis; sporidiis octonis, cylindrico-subreniformibus, pellucidis, 2-guttulatis.

Hab. ad ramos Sarothamni, Calycotomes, Anthyllidis, Genistæ, in Gallia, Hispania, Algeria. — *Eutypæ latæ* affinis ex Mont.

13. **Eutypa referciens** (Nits.) Sacc. *V. referciens* Nits. Pyr. Germ. 630
p. 137. — Stromate effuso, inæquali, tumido, sub peridermio summoque corticis strato evoluta, eisque dejectis libero v. pro parte corticis parenchymate tecto, extus intusque nigricante, ligno adnato; peritheciis in stromatis partibus magis tumentibus confertissime stipatis, subpolystichis, majusculis, globosis rarius depressis v. mutua pressione angulatis, collo pro situ, nunc longiusculo, nunc subnullo, ostiolo minuto, depresso, rotundato, rarius obtuse conico, tandem rimis 3-5 leviter ac radiatim exarato instructis; ascis angustissime clavatis, longissimeque pedicellatis, octosporis, 32-40 = 5-7 p. sporif.; sporidiis in asci lumine utrinque longe attenuato subdistichis, immo fere monostichis, cylindricis, curvatis v. subreticis, subhyalinis, 8-10- rarius 12 = 2-2½.

Hab. in ramis Pruni Padi prope Münster, Genistæ Scorpii, Vacluse Galliæ.

14. **Eutypa leprosa** (Pers.) Sacc. *Sph. leprosa* Pers. in Fr. S. M. II. 631
365. ? *Eut. uberrima* Tul. sec. Nits., *Valsa leprosa* (Pers.) Nits. Pyr. Germ. p. 136. — Stromate effuso, cum cortice crassiore, cui innato, coalito et ab ejus substantia tamquam formato, sed strato extimo, atro cincto; peritheciis corticis interioris parenchymati immutato v. in peritheciolorum ambitu dealbato immersis, submonostichis, irregulariter sparsis, hinc inde congestioribus, majusculis, globosis v. mutua pressione nonnihil angulatis, sæpe plus minus protuberantibus, tunc peridermio arcte adhærente, interdum fisso tectis, collo brevi, ostiolo minuto, obtusissimo, rotundato, tandem quadrisulcato instructis; sæpissime ostiolis 2-5 subjunctis per peridermii rimam, late ellipticam, communem erumpentibus ac parum v. vix prominentibus; ascis anguste clavatis, longissime pedicellatis, octosporis, 30-36 = 8-10 p. sporif.; sporidiis in asci lumine plerumque subito angustato subdistichis v. conglobatis, subcylindricis curvulis, fuscescentibus, 10-13 = 2½-3.

Hab. in cortice Tiliæ europææ in Suecia, Germania et Gallia, rarius.

15. **Eutypa ludibunda** Sacc. Mich. I. p. 15 et 501. *V. referciens* Sacc. 632
Myc. Ven. 128 p. p. et *V. cerviculata* Erb. critt. ital. ser. II. 641,

(non Fr.) *Valsa lata* Sacc. Myc. Ven. 128 p. p. (non Pers.) tab. XIV. f. 21-28. *V. Vitis* Hazl. Ban. 1873 t. I. f. 4. — Stromate late effuso ex cortice v. ligno immutato vel sæpius nigrificato formato; peritheciis globulosis, nigris, extus initio albo-furfuraceis, in ostiolla sæpius brevia conoidea v. obtusata plus minus profunde 4-5-sulcata productis; ascis clavatis longissime stipitatis, 35-55 \approx 6-8 p. sporif.; sporidiis distichis allantoides, utrinque rotundatis, curvulis, luteolis 9-14 \approx 2-3. — Spermogonia sistit *Cyrtispora ludibunda* Sacc. Mich. I. 519.

Hab. in ramis corticatis, in cortice duriore truncorum, immo, cortice secedente, in ligno denudato arborum fere omnium in tota Italia bor., nec non in Gallia, Germania et Amer. merid. Cfr. Mich. I. 15, ubi nutrices 38 notavi et formarum characteres ex quibus notabiliores sequentes: 1. *Juglandis regie*, quaternariæformis; corticola, acervulis parvis gregariis; ostiolis leviter 3-4-rimosis; ascis p. s. 55-60 \approx 8; sporidiis 11-15 \approx 2 $\frac{1}{2}$ -3. — 2. *Aceris campestris*; peritheciis ligno immersis v. semimmersis, in series longitudinales parallele stipatis; ostiolis obsolete rimosis; a. p. s. 55-60 \approx 8; sp. 11-14 \approx 2 $\frac{1}{2}$ -3. — Species maxime ludibunda; perithecia submonosticha, nunc subsparsa ad instar *Cryptosphæriæ*, nunc in ligni superficie denigrata, densissime stipata ut vera *Eutypa*, nunc in acervulos quasi *Eutypellæ* hinc inde aggregata, initio extus albo-furfuracea; stroma modo latum nigrumque, modo tenue et vix percipiendum; ostiolla plerumque brevia, rarius vero longiuscula, non tamen exserta, vertice conoideo vel obtusato, modo profunde 4-5-sulcato, modo leviter rimoso, neutiquam levi, ut *V. lata* (Pers.). A *V. referencie* Nke Pyr. germ. 137 differt præcipue stromate in cortice interiore plerumque nigrolimitato, peritheciis extus albo-furfuraceis, monostichis, sed et hæc forte ejusdem speciei formam rariorem sistit. *Valsa leprosa* (P.) Nits. Pyr. 136 et *V. confluens* Nits. ib. 167 verisimiliter a *V. ludibunda* specificè non differunt. *V. leprosa* perfecte congruit cum forma quam in Mycoth. Ven. n. 200 edidi.

16. **Eutypa arundinacea** Sacc. Fungi Ven. Ser. IV. p. 15. — Stromate serialiter extenso, oblongo, sublineari, sæpe confluyente in cortice atroinquinato et hinc inde parum elevato nidulante, zona nigricante per lignum sæpe excurrente limitato; peritheciis minutis, diam. $\frac{1}{4}$ - $\frac{1}{2}$ mill., spheroides v. e mutua pressione subangulosis atris, extus albido-furfuraceis, ostiolis cylindræis longiusculis, retis v. raro subvalsiformiter conniventibus, corticem perforantibus

exertisque, apice subrotundatis leviter 3-4-radiatim exaratis; ascis copiosis longissime stipitatis p. s. $50 \approx 6$, stipite 50 micr. lg., pseudoparaphysibus nucleolatis obvallatis, 8sporis; sporidiis distichis cylindraceutis, utrinque obtusis $12 \approx 2\frac{1}{2}$ -3, curvulis, 2-guttulatis, luteolis.

Hab. in culmis Arundinis Donacis putrescentibus a Vittorio (Treviso) Oct. 1873, sociis spermogoniis (?) globosis, immersis unilocularibus, atris, spermata minutissima oblonga, $3 \approx 1$, hyalina sterigmatibus cylindraceutis crassiusculis fulta, foventibus. — Stromatibus parallele seriatis facile dignoscitur.

17. **Eutypa alsophila** (Dur. et Mont.) Sacc. S. (Valsa?) *alsophila* D. 634 et M., Mont. Syll. Crypt. n. 828. — Concretescens, effusa; peritheciis sparsis aut aggregatis, ligno semmiimmersis, crusta atra subcorticali tectis ostioliis erumpentibus striatis, ascis tenuissimis cylindricis, sporidiis subreniformibus.

Hab. in ramis Salsolæ oppositifoliæ, Mostaganem Algeriæ (DURIEU).

18. **Eutypa spinosa** (Pers.) Tul. Fung. Carp. II, 59. *Sph. spinosa* 635 Pers. Syn. 34, *Sph. limæformis* Schw., *Valva spinosa* (Pers.) Nits. Pyr. Germ. p. 127, *Diatrype Berengeriana* De Not. Sf. ital. 27, t. 26, Sacc. Myc. Ven. Sp. t. XV, fig. 21-23. — Stromate latisime effuso, in ligno, sæpius in cortice crassiore et sub ejus strato supremo, mox secedente nato, deinde libero, substrato atroinquinato v. demum in superficie expallenti omnino immerso, crasso, aterrimo, primum pilis septatis simplicibus v. ramosis, conidiferis dense obsito; conidiis (*Trichosporium Berengerianum* Sacc.) obovatis, basi truncatis, $7 \approx 5$, fuliginosis, guttulatis (cylindricis, hyalinis, sec. Nits.) solitarie v. verticillatim acrogenis; peritheciis monostichis, grandiusculis, globosis v. ovatis, densissime stipitatis ac mutua pressione plerumque tandem angulatis, in matrice nigricante nidulantibus, ostioliis maximis, crassis, pyramidatis, alte quadrisulcatis, rugosis prominentibus; ascis anguste clavatis, longissime pedicellatis, octosporis, $32-40 \approx 5-6$ p. sporif.; sporidiis in asci lumine utrinque acutissimo subdistichis, cylindrico-navicularibus, curvulis v. subrectis, pallide fuscescentes, $8-10 \approx 2$.

Hab. in cortice duriore, rarius in ligno Fagi sylvaticæ in tota fere Europa et Amer. bor. — Cl. Berk. distinguit *E. limæformem* (Schw.) in Quercu et Liquidambar ex Amer. bor. sed specimen in Rav. F. A. n. 92 a typo non differt.

19. **Eutypa anomala** (De Not.) Sacc. *Sphæria spinosa anomala* De Not. 636

Micr. ital. Dec. VII, p. 108, fig. III. — Corticola, stromate nigrescente, sub epidermide effuso, hinc inde verticaliter descendente, nigro: peritheciis acervulatim confertis, stipatisque, globosis v. angulosis, nigris, quandoque substantia albicante tectis; ostioliis erumpentibus subpyramidatis, sulcatis v. teretibus, discretis v. coalitis; ascis clavatis, stipitatis $45 \approx 8-9$ (p. sporif.), octosporis, paraphysibus genuinis nullis; sporidiis allantoideis hyalino-luteolis, curvulis, $8-10 \approx 2-2.4$.

Hab. in cortice ramorum Fici Caricæ, Genuæ (Italia). — *Eutypa ludibundæ* Sacc. affinis.

B) Ostiola non sulcata.

20. *Eutypa lata* (Pers.) Tul. Sel. Fung. Carp. p. 56, *Sphæria lata* Pers., ?*Sph. papillata* Hoffm., *Valsa lata* (Pers.) Nits. Pyr. Germ. p. 141. — Stromate longe lateque effuso, contiguo, ligno vel cortici crassiori innato, superficie e peritheciis irregulariter emergentibus inæquabili, e fusco vel cinereo demum nigricante; peritheciis monostichis, ligno vel cortici haud nigrificato immersis, plus minus protuberantibus, sphæroideis, latit. circiter 0,5 mill., collis brevissimis vel fere nullis ostioliisque obtuse conoideis vel subhemisphæricis, integris, rarissime obscure rimosis; asci cylindræo-clavatis, longissime pedicellatis, $48 \approx 4-5$ p. sporif.; sporidiis subdistichis, elongatis, curvulis v. subrectis, pallide fuscescentibus, $8-12 \approx 1.5-2$. — Spermogonia hemisphærica vel subconoidea, simplicia, stromati juniore immersa; spermatidis exiliter cylindræis, varie curvatis, subsessilibus, hyalinis, tandem in cirrhos pallide roseos propulsis, $18-22 \approx 1$.

Hab. in ligno et cortice Quercus, Fagi, Carpini, Pyri, Pistaciæ, Cratægi, Fici, Aceris, Pruni, Rhamni, Ulmi, Salicis, Corni, Coryli, Ulicis, in tota fere Europa et Amer. bor. — Var. *abscondita* Dur. et Mont. Alg. p. 461: peritheciis immersis epidermide atrata tectis crassiusculis, ostioliis punctiformi-umbilicatis, conicis aut radiatis. In caule Ferulæ, Ricini, Dauci in Algeria. — Var. *Arundinis* Dur. et Mont. Alg. p. 461: peritheciis minoribus ovatis basi subapplanatis culmo immutato aut denigrato colliculoso immersis. In culmis Arundinis Donacis et A. mauritanicæ in Algeria.

21. *Eutypa lejoplaca* (Fr.) Cooke Handb. n. 2400, *Sph. lejoplaca* Fr. S. M. II, 370, V. *lejoplaca* (Fr.) Nits. Pyr. Germ. p. 151. — Stromate latissime effuso, raro brevior, maculæformi v. interrupto,

tenuissimo, ligno plerumque omnino non, multo rarius parum elevato immerso, lævi, ex dilute fusco tandem sordide nigricante; peritheciis monostichis, globosis, minimis, dense stipatis, sub ligni strato superiore, haud nigrefacto, supremo stromate fucato tecto, in matricis substantia mox nigricante nidulantibus, alteque immersis, in collum tenuissimum, cylindricum, longiusculum abrupte attenuatis ostioloque minutissimo, punctiformi, nec incrassato, medio perforato, vix prominulo instructis; ascis anguste clavatis, longissime pedicellatis, octosporis, 36-40 \approx 5-6 p. sporif.; sporidiis in asci lumine utrinque attenuato subdistichis, cylindricis, curvulis, dilute ex viridulo fuscescentibus, plerumque 8-12- rarius 6-16 \approx 1 $\frac{1}{2}$ -3 (plerumque 2).

22. **Eutypa luteobasis** (Ellis) Sacc. *Sphæria luteobasis* Ellis North Amer. n. 99. Bull. Torr. Cl. 1877, p. 134. — Peritheciis ligno superficie infuscato immersis, globosis, dense gregariis, stromate flocculoso luteo exceptis, ostioliis emergentibus, rotundis, levi bus dein umbilicatis; ascis clavatis longe stipitatis p. s. 50 \approx 6, octosporis; sporidiis distichis allantoideis, curvis, 10 \approx 2, olivaceis. 639

Hab. in ligno pineo (et quercino?) putri, New Jersey Americæ borealis.

23. **Eutypa scabrosa** (Bull.) Fuck. Symb. mycol. p. 215. *Sph. scabrosa* Fr. *Hypoxylon scabrosum* Bull. *Valsa scabrosa* (Bull.) Nits. Pyr. Germ. p. 138. — Stromate perithecigero plerumque tubercula formante suborbicularia v. ovalia, convexa, confluentia v. subdiscreta, rarius late effuso, subæquali rimis diffracto v. undulato, in ligno, rarissime in cortice crassiore superficiali v. sub peridermio nato moxque erumpente, extus intusque nigricanti, ostioliis numerosissimis, exiguis scabroso; peritheciis ordine valde inæquali, immo polystichis in stromate proprio semper nidulantibus densissimeque stipatis, globosis, exiguis, collo pro situ brevissimo v. longiore ostioloque hemisphærico v. subconico, integro, minutissimo instructis; ascis cylindrico-clavatis, longissime pedicellatis, octosporis, 40-48 \approx 4-5 p. sporif.; sporidiis in asci lumine utrinque maxime attenuato subdistichis, cylindricis, nonnihil curvatis, dilute fuscescentibus 6-12 (plerumque 8-10) \approx 1 $\frac{1}{2}$ -2. 640

Hab. in ligno Fagi, Quercus, Coryli, Mori, Aceris, in tota fere Europa et Amer. boreali.

24. **Eutypa lævata** (Nits.) Sacc. *V. lævata* Nits. Pyr. Germ. p. 144. 641
Sph. eutypa β . *platycrinia* Fr. in herb. Kunze. — Stromate latissime effuso, ambiente, ligno, rarissime cortici innato eaque in

superficie colore ex brunneo mox aterrimo tingente, tenui, tuberculoso, ceterum omnino levi, nitidulo; peritheciis monostichis, globosis, minutis, rarius dense stipatis, plerumque plus minus laxe sparsis v. gregatim sociatis, substrato haud fucato immersis, singulis parte superiore, plus minus exstante, tuberculo ligneo, e basi orbiculari v. elliptica hemisphærico v. depresso conico inclusis, in collum brevissimum attenuatis, ostiolo nec incrassato, minutissimo, obtuso, integro, nitido, perforato, in tuberculi vertice prominulo instructis; ascis anguste clavatis, longissime pedicellatis, octosporis, minimis, 23-28 \approx 5 p. sporif.; sporidiis in asci lumine utrinque angustato subdistichis v. conglobatis, cylindricis, curvulis v. subrectis, pallide fuscescentibus, 7-8 \approx 1½.

Hab. in ramis et ligno Salicum et Corni sanguineæ in Germania, et Italia.

25. **Eutypa prorumpens** (Wallr.) Sacc. V. *prorumpens* (Wallr.) Nits. 642

Pyr. Germ. p. 143, *Sph. prorumpens* Wallr., Fr. — Stromate effuso, maculæformi, in ramis corticatis corticis parenchymati haud fucato immerso sed ligno tandem in superficie nigricante adnato lineaque atra, flexuosa circumscripto; peritheciis cortici insculptis, monostiche atque irregulariter sparsis, in greges minutos, sæpius in series elongatas, irregulares, interruptas densius stipatis et erumpentibus, peridermio immaculato, nunc rimose fisso, nunc peritheciis singulis, globosis v. depressis, minutis, protuberantibus arctissime adherente; perithecorum collis brevissimis v. nullis, ostiolis pro ratione majusculis, hemisphæricis v. depressis, obtusissimis, rugulosis; ascis anguste clavatis, longissime pedicellatis, octosporis, 38 \approx 5 p. sporif.; sporidiis in asci lumine utrimque attenuato subdistichis, cylindricis, curvulis v. subrectis, subhyalinis, 8-9 \approx 1½-2.

Hab. in ramis emortuis Viburni Opuli in Thuringia, raro.

26. **Eutypa flavo-virescens** (Hoffm.) Tul. Sel. Fung. Carp. II, p. 57, 643

t. VII, f. 1-7, *Sphæria flavo-virescens* Hoffm., *Valsa flavo-virens* Nits. Pyr. p. 139. — Stromate nunc plus minus effuso, superficiali, crustiformi, æquali vel e tuberculis difformibus composito, rarius innato, nunc obsoleto, scabroso, atro, intus primo flavo, mox flavo-virente, tandem sæpe olivaceo-atro; peritheciis plerumque monostichis, in stromate nidulantibus, haud stipatis, spheroides, minutis, collis brevissimis ostiolisque prominulis, lævibus vel rugosis, obtuse conoideis; ascis cylindræo-clavatis, longissime pedicellatis, 30-50 \approx 4-7 p. sporif.; sporidiis distichis, elongatis, curvulis, dilute fuscescentibus, 6-10 \approx 2-3. — Spermogonia

stromati immersa, depresso conoidea, parietibus carnosis, stromati concoloribus; spermatis cylindricis, curvatis, hyalinis, sessilibus adglutinatis, denique cirrhose protusis.

Hab. in corticibus et ligno Fagi, Quercus, Carpini, Salicis, Aceris, Pruni, Rhamni, Ribis, Populi, Rosæ, Betulæ, etc. in tota Europa. — Plurimæ formæ adsunt inter quas var. *multiceps* Sow. Engl. Fung. III, t. 394, f. 8, stromate tuberculis discretis composito a typo recedens, maxime notanda est. Colore interno stromatis flavovirente facillime dignota species.

27. **Eutypa enteroxantha** (Berk.) Sacc. *Sphæria enteroxantha* Berk. 644
Dec. of fung. n. 110. — Inæqualis suborbicularis, rugosa, nigra, intus pulverulenta, aurea; peritheciis oblongis; ostiolis prominulis punctiformibus; ascis anguste clavatis; sporidiis minimis allantoideis.

Hab. in ramis emortuis, Guiana britannica (SCHOMBURGK). — *E. flavo-virenti*, cui sporidiis quoque analoga, stromate aureo mox dignoscitur.

28. **Eutypa macrospora** (Nits.) Sacc. *V. macrospora* Nits. Pyr. Germ. 645
p. 145. — Stromate effuso, in ramis decorticatis, rarius in cortice, maculas efficiente fuscas v. sordide nigricantes, irregulares, interruptas v. ambientes, læves, opacas; peritheciis minutis, globosis v. depressis, matricis substantiæ immaculatæ leviter immersis, plerumque plus minus protuberantibus, in collum brevissimum subito attenuatis ostioloque conico, acutiusculo v. obtuso, integerrimo, nitidulo instructis, nunc sine ordine sparsis, nunc contra in greges minutos densius stipatis, lignique tuberculo communi tectis; ascis clavatis, pedicellatis, octosporis, 80-100 \approx 10 p. sporif.; sporidiis distichis, cilindricis v. obtuse fusiformibus, curvulis v. subrectis, fuscis, 18-21 \approx 4-5. — Spermogonia cytisporoidea, sed unilocularia: spermatis allantoideis 7-10 \approx 2, breve stipitatis.

Hab. in ramis crassioribus Sarothamni vulgaris prope Münster Germaniæ.

29. **Eutypa mauroides** (Nits.) Sacc. *Valsa mauroides* Nits. Pyr. Germ. 646
p. 151. — Stromate longe lateque effuso, ramos decorticatos sæpe ambiente, ligno, haud elevato omnino immerso ejusque superficiem æqualem, lævem, immo fere nitidulam, ostiolis punctulatam colore, tandem aterrimo tingente; peritheciis monostichis, ligno haud fucato satis alte immersis dense stipatis, plerumque valde depressis, minutis, in collum tenue, longiusculum, cylindricum subito attenuatis ostiolisque perexiguis, haud incrassatis, subglobosis vel hemisphæricis, lævibus, nitidulis, omnino integris, poro angustissimo

pertusis instructis; ascis anguste clavatis, longissime pedicellatis, octosporis, 30-34 \approx 5 p. sporif.; sporidiis in asci lumine utrinque attenuato subdistichis, cylindricis, parum curvatis v. subrectis, subhyalinis, 8-10 \approx 2.

Hab. in ligno et ramis decorticatis Salicis, Coburg, Münster (Germania).

30. **Eutypa nitida** (Nits.) Sacc. *Valsa nitida* Nits. Pyr. Germ. p. 147. 647

— Stromate effuso, in ramis corticatis maculas elongatas, oblongas v. ovales ac vix elevatas efficiente, matrici haud inquinatæ innato sed strato nigricante et ad lignum suppositum descendente v. in id penetrante circumscripto, primo peridermio tecto, deinde nudato ac pilis conidiferis breviusculis, simplicibus, septatis, fuscis vestitum, denique glabro, superficie ex fusco mox aterrimo; peritheciis corticis interioris parenchymati, specie immutato immersis, ordine monosticho, subæquali denseque stipatis, minutis, globosis, varie angulosis v. depressis, parietibus crassis, collo brevi, tenui ostioloque exiguo, hemisphærico, papillæformi, integerrimo, poro anguste tandem pertuso instructis; ascis cylindrico-clavatis, longissime pedicellatis, octosporis, 40 \approx 5 p. sporif.; sporidiis cylindricis, curvulis, hyalinis, in asci lumine utrinque attenuato conglobatis, 6-7 \approx 1.

Hab. in ramis Salicis caprea, prope Münster, Germ., raro.

31. **Eutypa Fraxini** (Nits.) Sacc. *V. Fraxini* Nits. Pyr. Germ. p. 145, 648

Sphæria Fraxini Curr.? — Stromate brevi, maculæformi, raro latius effuso ramosque ambiente, rarissime ligno nigrescenti, elevato, plerumque corticis interioris parenchymati, fungi stromate mox nigrificato, tumescenti immerso lignoque atroinquinato adnato, peridermio arctissime adhærente, nunc incolorato nunc contra cinerascete v. tandem nigricante tecto, rarius, peridermio secesso, denique libero, atro; peritheciis monostichis, majusculis, globosis v. depressis, plus minus alte immersis ac plerumque densissime stipatis, rarius sparsis, erectis v. in stromatum minorum ambitu, collis nonnihil convergentibus, fere symmetrica, collo brevi v. pro situ longiori, crasso, ostiolo incrassato, majusculo, hæmisphærico v. subconico, ruguloso, integro, prominulo instructis; ascis anguste clavatis, in pedicellum prælongum attenuatis, octosporis, 32-40 \approx 5-6 p. sporif.; sporidiis in asci lumine, utrinque attenuato subdistichis, cylindricis, nonnihil incurvis v. subrectis, fusciscentibus, 5-10, rarius, 12 \approx 2-3.

Hab. in ramis emortuis tenuioribus Fraxini excelsioris,

Münster, Cappenberg, Germania. — f. *Arbuti*: sporidiis allantoidis, 9–11 \approx 1 $\frac{3}{4}$ –2, dilute olivaceis. — In ramis corticatis *Arbuti Unedonis*, in Gallia.

32. **Eutypa milliaria** (Fr.) Sacc. *Valsa milliaria* (Fr.) Nits. Pyr. Germ. 649 p. 149, *Sphæria milliaria* Fr. — Stromate nunc late effuso, nunc brevi, maculæformi ac plerumque longitudinaliter expanso sæpeque confluyente, ligno, semper elevato, primum immutato v. in superficie æquali, cinereo, deinde extus intusque plus minus atroinquinato immerso, ostiolis nigro-punctulato, ceterum lævi opaco; peritheciis substrato, plus minus fucato omnino immersis, monostichis, dense stipatis, globosis, in collum breve attenuatis ostiolisque subglobosis integris v. spurie ac radiatim sulcatis instructis; ascis cylindrico-clavatis, longissime pedicellatis, octosporis, 27 \approx 5 p. sporif.; sporidiis in asci lumine utrinque angustato subdistichis v. in asci parte inferiore monostichis, cylindricis, parum curvatis, subincoloratis, 7–9 \approx 1 $\frac{1}{2}$ –2. — Spermogonia unilocularia: spermatis filiformibus curvis, 24 \approx 1.

Hab. in ligno duriore *Quercus*, *Fagi*, *Staphyleæ* in Suecia, Italia, Germania et America boreali.

33. **Eutypa aneirina** (Somm.) Sacc. Mich. I, 18, 574, *Diatrype aneirina* Fr. De Not. Sf. ital. p. 29, t. 29, *Sph. aneirina* Somm. Lapp. 208. — Effusa, tecta, peritheciis confertis in stromate flavescente nidulantibus (peridermio denique denigrato tectis), ostiolis sparsis convexis, parum excedentibus, lævibus; ascis clavatis longe stipitatis, p. sporif. 35–40 \approx 6–7, octosporis; sporidiis allantoidis, 9–10 \approx 1,6–2, luteolis.

Hab. in cortice *Populi tremulæ* et *Populi nigræ* in Lapponia et Italia boreali. — Tumores sistit ultra pollicem latos, ad 4 poll. longos determinatos inter epidermidem et corticem nidulantes. — A *Cryptosphæria millepunctata* præsertim stromate evidentiori dignoscitur.

34. **Eutypa leucostroma** (Mont.) Sacc. *Valsa leucostroma* Mont. Syll. 651 Crypt. n. 759. — Conica aut placentæformis, atra, impolita; peritheciis paucis nigris in stromate albo nidulantibus conceptaculoque cinctis, ostiolis vix conspicuis; ascis subclavatis 45 μ . long.; sporidiis 9–10 μ . long. brevibus linearibus.

Hab. in ramis *Smilacis mauritanicæ*, Alger (DURIEU), *Smilacis Alpini* in horto Patavino. — «Acervuli corticales, prominuli, epidermide a disco pertusa cincti, quandoque confluentes macula stromatica nigra inter acervulos varie diffusa; ostiola

rotundata lævia; asci clavati, longe stipitati, p. sporif. 35-40 \approx 7-8, 8spori; sporidia disticha, 9-11 \approx 2-2 $\frac{3}{4}$, botuliformia, luteola, 2-guttulata [Michelia]».

35. **Eutypa Rhodi** (Nits.) Fuck. V. *Rhodi* Nits. Pyr. Germ. p. 148. 652
 — Stromate effuso, maculæformi, determinato lineaque atra sæpe circumscripto, ligno nudato, multo sæpius cortici interiori immerso, matricem plerumque nonnihil elevante atque nigrificante, peridermio aretissime adhærente, ostiolis tantum pertuso, nigropunctato, translucido, incolorato tecto; peritheciis minimis, globosis v. depressis, corticis parenchymati tandem plus minus atroinquinato monostiche denseque immersis, haud raro ordine lineari dispositis, in collum breve v. longiusculum, tenue subito attenuato ostioloque minutissimo, punctiformi, hemisphærico, integro, lævi, prominulo, poro, minimo denique pertuso instructis; ascis anguste clavati, longissime pedicellati, octospori, 40-44 \approx 5-6 p. sporif.; sporidiis in asci lumine et apicem versus attenuato subdistichis, cylindrincis, curvulis v. subrectis, dilute fusciscentibus, 10-12 \approx 2.

Hab. in ramulis Rosæ caninæ et tomentosæ in Britannia, Gallia. — Var. *Corni sanguinea*, ascis p. sporif. 40-45 \approx 5-6; sporidiis 8 \approx 1 $\frac{1}{2}$, hyalinis. — In ramulis Corni, Saintes (Gallia).

36. **Eutypa ambigua** J. Kunze Fungi sel. exsicc. n. 152 (sine diagnosi). 653
 — Stromate late effuso ramulosque totos subinde ambiente, corticem adhærentem infuscante; peritheciis dense gregariis v. hinc inde aggregatis, globulosis, cortice immersis, prominulis, ostiolis tantum perforantibus, globulosis, pertusis, integris, parum extantibus; ascis longe stipitatis, clavatis, aparaphysatis, apice obtusis, p. sporif. 52 \approx 5-6, octosporis; spordiis distichis allantoideis, curvis, e hyalino chlorinis, 7-9 \approx 1,5-2.

Hab. in truncis emortuis Spiræe ulmifoliæ in hortis prope Eisleben (Germania). — Affinis *E. Rhodi*.

37. **Eutypa velutina** (Wallr.) Sacc. Fungi Veneti Ser. IV, p. 16, Fungi 654
 ital. t. 472. *Sph. velutina* Wallr. Fl. crypt. n. 4066. — Stromate late extenso plano; peritheciis globosis nigris sparsim confertis ligno insculptis latitantibus, in colla brevia tenuatis ostiolo conico-rotundato levi nitido vix emergente; ascis fusoides longe stipitatis p. sporif. 35 \approx 4,5; sporidiis allantoideis, dilute olivaceis, 7-9 \approx 2, leniter curvis. — Status conidicus *Trichosporium velutinum* sistens et matricis superficiem fusco velutinam reddens; conidiis obovoideis fuligineis 6 \approx 4,5-5.

Hab. in trunco decorticato Aceris campestris in Ital. bor.

et Germania. — Var. *quercina* Michel. II, 374; ascis minoribus, nempe 22–26 \approx 3 $\frac{1}{2}$ –4 (p. sporif.); sporidiis etiam minoribus, 5–6 \approx 1, subhyalinis. — In ligno quercino, Newfield, (ELLIS).

38. **Eutypa dimorpha** (Berk. et Curt.) Sacc. *Diatrype dimorpha* Berk. 655
et Curt. Exot. fungi Schwein. p. 287. — Effusa, nigra, ligno immersa; peritheciis majoribus globosis, ostiolo elongato spiniformi; sporidiis minimis, oblongis, curvis, 4–5 μ . long.

Hab. in ramis decorticatis, Surinam. — Tumores format ligno plus minusve immersos, constantes e pustulis, in quibus 1–2 globosa perithecia rostellata nidulantur. — *Eutypæ late* affinis, a qua differt peritheciis majoribus et sporidiis minoribus.

39. **Eutypa comosa** Speg. Fungi Arg. Pug. IV. n. 21. — Stromate 656
late ambiente per lignum corticatum v. decorticatum denigratum profunde et tortuose excurrente, linea nigra limitato; peritheciis dense gregariis, immersis, globosis 350–400 μ . diam., atris, membranaceo-carbonaceis, nucleo olivaceo gelatinoso-fluente farctis, in ostiolum exertum, filiforme, sæpius prælongum 5–15 \approx 0,8–0,1 mill. atrum, carbonaceum productis; ascis clavato-obovatis 25–30 \approx 6–9 mox a pedicello longo ac fluxili secedentibus, aparthysatis(?), octosporis; sporidiis inordinate 2–3–stichis, elliptico-navicularibus, leniter curvulis 5–7 \approx 2–2,5, utrinque obtusiusculis ac 1–guttulatis, dilute chlorino-fumosis.

Hab. ad caudices putrescentes vetustos (nec non ramos) Celtidis Talæ prope Buenos-Aires, et in sylvis australioribus (Amer. australis) per annos 1880–81. — Species pulcherrima mox distinguenda, matricem horride hirtam, v. longe atro-comatam efficiens.

40. **Eutypa heteracantha** Sacc. Mich. I, p. 504, V. *heteracantha* Sacc. 657
Mycol. Ven. Spec. p. 129, tab. XIV, f. 35–42. — Stromate corticali, subepidermico tandem liberato, ramos late ambiente, nigerimo, primitus hyphis, fuscis, ramoso-intricatis, articulatis conidiophoris velutino, tandem ligni superficiem atroinquinante; conidiis obovoideis 6 \approx 5–6, 1–guttulatis, fuligineis; peritheciis cortici immersis lignoque adnatis, nunc in acervulos valsiformes per (4–6) aggregatis, nunc subsparis, sphaericis, majusculis, atris, intus nitidis, $\frac{3}{4}$ –1 mill. diam., ostiolis crasse cylindræis v. subconicis, perfecte lævibus, epidermidem fasciculatim erumpentibus alteque exertis, superne divergentibus, apice rotundatis et tandem pertusis, circa basim constanter hypharum fasciculis, rigidis spiniformibus, elongatis, patulisque cinctis, tandem subdenudatis; ascis copiosis-simis crassiuscule clavatis, longissime stipitatis, parte sporifera 18–

25 \approx 4 $\frac{1}{2}$, stipite 15-20 long., 8sporis; sporidiis subdistichis v. inordinatis, cylindraceis, curvulis, utrinque rotundatis, 5-6 \approx $\frac{3}{4}$ -1 $\frac{1}{4}$, dilute luteolis, 2-guttulatis. — Status spermogonicus: spermogoniis subunilocularibus, intus pallidis, sub epidermide elevata nidulantibus, globulosis, sursum fasciculos hypharum (ut perithecia ascophora) eminentibus; spermatiiis filiformibus, 20 \approx 1, arcuatis, hyalinis sterigmatibus brevibus fasciculatis fultis. — St. macroconidicus (fasciculi prædicti hypharum) sistit *Graphium fasciculatum* Sacc.

Hab. in ramis corticatis arborum fruticumque variorum in Italia bor., Germania, Gallia, Lusitania, Amer. merid. frequens, vere. Hucusque lecta in Salice alba, Sambuco nigra, Moro alba, Ailantho, Hibisco Syriaco, Hedera, Smilace, Rhoe Salice, Vite, Pruno, Celtide Tala, Melia, Bauhinia, Broussonetia papyrifera, Robinia Pseudacacia, Carpino Betulo, Weigelia, Coronilla Emero, Vitalba, Evonymo, Tilia, Lauro, Alno, Acere. — Species distinctissima, sed n. 41 et 43 forte affinis, quæ, dum provectior fit, dejecto rami cortice, ostiolis elongatis et hyphis delapsis, valde, habitu, *Diaporthem* spiculosam v. fasciculatam æmulatur. Dixi heteracantham quia perithecia spinas dimorphas proferre videntur, nempe crassiores seu ostiola, tenuiores seu fasciculos hypharum. — *Valsa atomospora* Ellis North Amer. Fungi n. 690 (in *Corno*) vix differre videtur.

41. **Eutypa bellula** (Desm.) Sacc. *Sphæria bellula* Desm. Not. 1840. 658
p. 186. — Ligno immersa, sparsa, raro confluens; peritheciis nigris, glabris, magnis, globoso-depressis, in parte lignosa culmi nidulantibus, ostiolo longissimo rugoso obtuso; ascis minimis, hyalinis, pyriformi-subclavatis; sporidiis 5-6 oblongis, 2-guttulatis, 5-6 μ . long.

Hab. in Gallia, Caes., in culmis Arundinis Donacis. — «*Eul. heteracanthæ* affinis».

42. **Eutypa sepulta** (B. et C.) Sacc. *Sphæria sepulta* B. et C. North 659
Amer. Fungi n. 954. — Peritheciis sepultis ostiolo emergente; sporidiis allantoideis minutis.

Hab. in ramis Smilacis. Carolina infer., Amer. bor. — Perithecia immersa, fere ut in *Diaporthe Berkeleyi*.

43. **Eutypa sycina** (Mont.) Sacc. *V. sycina* Mont. Syll. Crypt. n. 769 660
et Fl. Alg., I, p. 474, sub *Sphæria*. — Peritheciis cortici interiori innatis amplis sparsis aut aggregatis sphæricis, evacuatis intus atro-

nitentibus, crusta atra furfurosa inæquabili tectis, ostiolis erumpentibus subjunctis; ascis diffluentibus fusiformibus $40 \approx 5$; sporidiis 5μ . long. reniformibus tenuissimis.

Hab. in cortice Fici Caricæ, Alger (DURIÉU). — *E. heteracanthæ* affinis videtur.

44. **Eutypa Julii** H. Fab. Sphér. Vaucl. p. 71. — Stromate corticali, subepidermico, tandem liberato, ramos late ambiente, atro; peritheciis in matrice nigricante nidulantibus, dense stipatis, $\frac{1}{3}$ mill. latis, globosis, atris, subtiliter rugulosis, in rostrum cylindricum, strictum, sinuosum, deflexum, sexies peritheci altitudinem æquans abrupte attenuatis, rostris fasciculatim erumpentibus secundisque; ascis fusiformibus 8-sporis, $45-50 \approx 5$; sporidiis distichis, cylindraceis, utrinque obtusis, rectis vel curvulis, continuis, hyalinis $8-10 \approx 2$.

Hab. ad basim putrescentem Punicæ Granati, semel autumnino obvia, Vaucluse (Gallia).

C) Species quoad ostiola incertæ.

45. **Eutypa microcarpa** (Fr. et M.) Sacc. *Valsa* (Sphæria) *microcarpa* Fr. et Mont. Ann. Sc. nat. 1834, I. 299. — Stromate late effuso tomentoso fusco-atro-obtecta; peritheciis minutissimis globosis; ostiolis disco nigro prominulis; ascis sporidiis fusoidis curvis pellucidis, globoso-guttulatis.

Hab. in ramis ignotis Lyon, Gallia. Perithecia stromate corticali profunde immersa; ostiola supra discum nigrum, epidermide rupta cinctum vix prominula; stromatis substantia sæpe pallens extus nigra velutina «(conidiophora?)». An *E. velutinæ* analogæ?

46. **Eutypa penes** (B. et Br.) Sacc. *Sph.* (Obvallatæ) *penes* B. et Br. Fungi of Ceyl. n. 1112. — Cortici immersa; ostiolis minimis congestis, tandem emergentibus; ascis clavatis; sporidiis minimis allantoidis.

Hab. in cortice, superficie nigro-maculato, Ceylon.

47. **Eutypa phaselina** (Mont.) Sacc. *Sph. phaselina* Mont. Syll. Crypt. n. 855 et Guy., mss. n. 565, t. 6, f. 2. — Seriata, erumpens, lineari-lanceolata, elevata, nigra; stromate pallido; peritheciis pluriserialibus connatis, oblongis, ostiolis crassis prominulis scutelliformibus atris; ascis octosporis, clavatis; sporidiis minutissimis phaseoliformibus hyalinis, $7,5 \approx 2,5$.

Hab. in Cayenna (LEPRIEUR).

48. **Eutypa micropuncta** Cooke in Rav. Fung. Amer. n. 187 et in Grev. 665

661

662

663

VI. p. 144. — Effusa, atra, undulata; peritheciis minimis; ostioliis punctiformibus, dense stipatis, vix elevatis, nec sulcatis, convexulis; sporidiis allantoides, hyalinis, minutis.

Hab. in ramis quercinis in Florida, Amer. bor.

49. **Eutypa micromeria** (Mont.) Sacc. *Diatr. micromeria* Mont. Syll. 666

Crypt. n. 752. — Immersa, oblonga, prorumpens, longitrorsum confluentis, extus intusque atra; peritheciis minutis globosis, ostioliis teretibus gracilibus longis; ascis 15–20 μ . long. sporidiis 4 = 1, leviter curvis, exilissimis.

Hab. in cortice arborum, Cayenna (LEPRIEUR).

50. **Eutypa rhyodes** (B. et C.) Sacc. *Hypoxyylon rhyodes* B. et C. 667

North Amer. Fungi n. 849. — Linearis; peritheciis congestis minutis albo-pulverulentibus; sporidiis allantoides.

Hab. in ligno quercino, Pennsylvania. — Perithecia secundum ligni fibras disposita, minuta, connata, albo-furfuracea.

51. **Eutypa Ulicis** (Fr.) Sacc. *Sphæria* (Versatilis) *Ulicis* Fr. Linnæa 668

1830. p. 544. *Diatrype Ulicis* Berk., Cooke Handb. n. 2453. — Verruciformis, sublibera, extus intusque carbonacea, atra; peritheciis membranaceis, amplis, ostioliis tuberculosiis; sporidiis (ex Cooke ms.) allantoides.

Hab. ad ramos Ulicis in Britannia et in Europa australi (DUFUR), — Stroma a cortice formatum, subcarbonaceum, fragile; verrucæ erumpentes inæquales, subconfluentes. — *Eutypa scabrosa* affinis.

52. **Eutypa viticola** (Schw.) Sacc. *S. viticola* Schw. Syn. Car. n. 64. 669

Mont. in Fl. Alg. p. 463. V. *Vitis* Schw. sec. Cooke. Valsei U. S. p. 113. — Tecta, emersa, in series parallelas crescens, fusco-nigra, stromate brunneo, peritheciis paucis globosis, ostioliis latentibus; crassis rugulosis; ascis tenuibus cylindrico-clavatis, octosporis; sporidiis allantoides, curvulis, biseriatis, 12–14 μ . long.

Hab. in sarmentis *Vitis rotundifoliæ* et viniferæ in Amer. bor. (Schw.), Gallia et Algeria (Mont.). Series sparse, cum epidermide assurgente prominentes, non vero erumpentes; perithecia magna, globosa, crassa, rariora, 1–3 in singula verruca, stromate brunneo splendente cincta. — Ob stroma brunneum splendens ab *E. ludibunda* mea differre videtur. *Diatrype viticola* (Schw.) Berk. North Am. Fungi n. 854, ob sporidia didyma 15 μ . longa a *Valsaria insitiva* forte non differt.

53. **Eutypa Crouani** Sacc. *Eutypa viticola* Crouan Finist. p. 35 nec 670

Schw. — Peritheciis 2–3 in series digestis, sphericis, nigris, ostiolo

cylindrico, elongato, apice obtuso, transverse striato; ascis clavatis, minutissimis, octosporis; sporidiis cylindræcis, parum curvis.

Hab. in sarmentis emortuis *Vitis viniferæ*, Finistère (Gallia). 671

54. **Eutypa urticaria** (Mont.) Sacc. *S. urticaria* Mont. Syll. Crypt. n. 840. — Pustulæformis, epidermide adnata demum nigrata oblecta; peritheciis subsphæricis atris; stromate concolori in series parallelas dispositis, intus albis, ostiolis minutis prominulis; ascis clavatis 40 μ . long.; sporidiis octonis, lineari-oblongis, curvulis, hyalinis, 10 \simeq 2.

Hab. in petiolis *Palmarum*, Cayenna (LEPRIEUR).

ENDOXYLA Fuck. Symb. Myc. App. I. p. 321 (1871), *Eutypopsis* Karst. Symb. myc. Fenn. (1877). (Ety. *endon*, intus, *xylon* lignum, quia perithecia ligno infossa). — Stroma ligneum, sed vix manifestum; perithecia in greges plerumque seriales v. subsparsa, ligno tota immersa, ostiolis non sulcatis, sæpe majusculis; asci stipitati, octospori, (spurie?) paraphysati; sporidia allantoidea, dilute fusca. — Spermogonia, sec. Fuck., *Phomæ* species sistientia.

1. **Endoxyla parallela** (Fr.) Sacc. *Sph. parallela* Fr. S. M. II. 373. 672
Curr. Linn. Trans. XXII, t. 47, fig. 100. *Valsa parallela* (Fr.) Nits. Pyr. Germ. p. 154. *Eutypa* (*Eutypopsis*) *parallela* Karst. mycon fenn. II, p. 130. — Stromate ligno innato, spurio; peritheciis substrato omnino non fucato v. in superficie cinerascenti immersis majusculis, globosis, in cæspites exiguos, seriatim dispositos, ellipticos v. suborbiculares, hinc inde confluentes seriesque breves, parallelas, interruptas formantes dense stipatis, in collum breve ac tenue subito attenuatis; ostiolis exiguis, incrassatulis, subglobosis, atris, integris, lævibus in cæspitulum superficiale densissime confertis poroque tandem pertusis; ascis anguste clavatis, longe pedicellatis, octosporis, 60 \simeq 6-7 p. sporif.; sporidiis distichis v. in asci parte inferiore monostichis, cylindricis, curvulis v. subrectis, fusciscentibus 10-15 \simeq 3-4.

Hab. in ligno decorticato putrido *Pini* in Suecia, Fennia, Germania, Scotia. — Sporidia non septata, ut in Grev. I. 174, nec talia pingit l. c. Curr. ex Scler. Suec.

2. **Endoxyla operculata** (Alb. et Schw.) *Sphæria operculata* Alb. et Schw. Consp. Nisk. p. 40, Curr. Trans. Linn. XXII, t. 58, fig. 75. 673
Valsa operculata (Alb. et Schw.) Nits. Pyr. Germ. p. 173. — Stromate substrato omnino innato, spurio; peritheciis ligno, superficie dealbato, ceterum intus extusque non mutato immersis, magnis,

globosis v. ovatis, irregulariter sparsis, nunc singularibus, discretis, nunc contra plus minus confertis, serie simplici v. rarius duplici ligni rimas occupantibus v. sine ordine gregatim stipatis in collum crassum, breviusculum sensim attenuatis; ostiolis grandiusculis, prominentibus, primitus rotundatis, dein medio depressis poro angusto perforatis, postremo excavatis, subpezizoideis fuscis; ascis anguste clavatis, subsessilibus, octosporis, membrana tenui textis, $60 \approx 6-7$; sporidiis distichis, cylindricis, nonnihil curvatis v. subreticis, saturate fuscescentibus, $12-14 \approx 3$.

Hab. in ligno Abetis in Lusatia et Suecia, rarius.

3. **Endoxyla macrostoma** Fuck. Symb. myc. App. I. 322. — Sper- 674
mogoniis ut generis, in series lineares, longas dispositis; spermatiiis circ. $4 \approx 1$. — Peritheciis ascigeris in greges plerumque biseriales, raro uniseriales et sparsas dispositis, majusculis in collum, perithecium subæquans attenuatis; ostiolis prominulis majusculis, $\frac{1}{4}$ mill. lat., sphaerulæformibus, globosis seu late ventricoso-conicis, vertice parum umbonatis, papillatis, numquam cupulæformibus, atris, lignum inquinantibus, sed quandoque mycelio (stromate?) byssino, albo vel fusco circumdati; ascis $58 \approx 6-7$ p. sporif.; stipite $40-50 \mu$. longo; sporidiis $10-12 \approx 3$; spermatiiis $4 \approx 1$.

Hab. in ramis putrescentibus et humi dejectis Quercus, rarius, Bachweg Rhenogovia. — Ab *E. parallela* et *operculata* forma ostiolorum præcipue differt.

CRYPTOSPHERIA Grev. Sc. Crypt. t. 201 pro min. parte. De Not. Schema sf. p. 231 p. p. Fuck. Symb. myc. 211 (Etym. *cryptos* abditus, et *sphæria*, quia perithecia peridermio tecta). — Stroma corticale, sed vix manifestum. Perithecia æqualiter et densiuscule gregaria cortici immutato immerse, numquam ligno adnata. Asci stipitati, octospori, aporaphysati. — Spermogonia cytisporoidea.

1. **Cryptosphæria millepunctata** Grev, Crypt. Scot. t. 201, De Not. 675
Sfer. ital. p. 40, t. 47, nec Auct. plur. *Sph. Corticis* Curr. *Valsa eunomia* (Fr.) Nits. Pyr. Germ. p. 160. *Sph. eunomia* Fr. S. M. II. p. 377. — Stromate effuso, plerumque brevi, maculæformi, rarius ambiente, cortici innato, spurio; peritheciis monostichis, dense gregatis, cortici interiori immutato immersis, globosis, majusculis, peridermio haud colorato v. nonnihil expallente, plerumque parum elevato tectis, in collum brevissimum attenuatis ostioloque minutissimo, punctiformi, nigro, hemisphærico, vix prominulo instructis; ascis clavatis, longissime pedicellatis, octosporis, $60-80 \approx 8-$

10 p. sporif; sporidiis in asci lumine, apicem versus attenuato subdistichis v. conglobatis, cylindricis, curvulis, dilute fuscescentibus, 14-18 \approx 3. — Spermogonia unicellularia; spermatis filiformi-curvatis, 40-48 \approx 1; cirrhis roseis v. luteis.

Hab. in ramis emortuis Fraxini excelsioris in Suecia, Germania, Italia, Britannia, Lusitania et Gallia.

2. **Cryptosphæria populina** (Pers.) Sacc. *Sph. populina* Pers. Ic. Fung. 676
p. 52, t. 21, f. 5. *Sph. Corticis* Fr. nec auct. Angl. *Sphæria*,
Valsa et *Cryptosphæria millepunctata* Nits. Pyr. Germ. p. 161,
Fuck., Karst., Sacc. etc. nec Grev. — Stromate effuso, nunc bre-
vi, nunc contra longe lateque effuso, ramosque ambiente, cortici
innato, spurio; peritheciis corticis interioris parenchymati incolo-
rato v. tandem atroinquinato immersis, peridermio contiguo, omni-
no non mutato, rarius parum elevato v. obscurato, ostiolis atro-
punctato tectis, monostichis, dense confertis v. laxe ac sine ordi-
ne sparsis, majusculis, globosis, collo brevissimo, ostiolo minuto,
prominulo, hemisphærico, ruguloso, immo obscure sulcato instru-
ctis; ascis anguste clavatis, longissime pedicellatis, octosporis 40 \approx
5-8 p. sporif.; sporidiis in asci lumine apicem versus attenuato
subdistichis, cylindricis, curvulis, fuscescentibus, 8-12 \approx 2.

Hab. in ramis emortuis Populi tremulæ, P. nigræ, P. albæ in Suecia, Germania, Belgio, Italia, Sibiria, Lusitania, Fennia.
— Var. *Prunorum*; sporidiis minoribus, 7-9 \approx 1-1,5, subolivaceis.
— Malmedy. — An hæc potius ad *E. myriocapam* referenda?

3. **Cryptosphæria vicinula** (Nyl.) Karst. Mycol. Fenn. II. 101. *Sphæ-* 677
ria vicinula Nyl. in Flora 1863, p. 322. — Stromate effuso, ple-
rumque brevi, maculiformi, discreto vel confluyente cortici interio-
ri incolorato vel tandem atroinquinato innato; peritheciis immer-
sis, peridermio plus minus elevato, lævigato, primum immutato,
dein cinerascente, tandem in crustam tenuem, continuam, æqualem,
atram mutato tectis, sphæroideis vel mutua pressione angulatis,
collis brevissimis ostiolisque prominulis, hemisphæricis vel subsphæ-
roideis, rugosis, tandem plus minus sulcatis et rudibus, minutis;
ascis cylindræo-clavatis, longissime pedicellatis, 43-60 \approx 7-9 p.
sporif.; sporidiis subdistichis, rectis, inæquilateralibus vel leniter
curvulis, oblongatis, subfuscis, 9-14 \approx 3-5.

Hab. ad corticem Salicum et Alni in Fennia et Lapponia
passim. — Habitu, e stromatibus minoribus atque elevatioribus
pendente, sporidiis et ascis majoribus a *C. millepunctata* diversa.

4. **Cryptosphæria myriocarpa** (Nits.) Sacc., *Valsa myr.* Nits. Pyr. Germ. 678

p. 159. — Stromate corticis parenchymati plus minus elevato innato, nunc longe effuso ramosque ambiente et eorum corticem in crustam continuam, æqualem, superficie punctulato-asperulam mutante, nunc varie interrupto undulato v. maculæformi, cum peridermio immutato v. rarius tandem nigrescente concrecente; peritheciis corticis strato supremo, haud nigrificato immersis, monostichis, densissime stipatis, globosis sed plerumque mutua pressione angulatis, collo brevissimo, ostiolo minuto, punctiformi, hemisphærico, peridermium perforatum parum superante instructis; ascis anguste clavatis, longissime pedicellatis, octosporis, 40-48 \approx 5 p. sporif.; sporidiis in asci lumine utrimque angustato subdistichis, cylindricis, parum curvatis v. subrectis, pallide fuscescentibus 8-10 \approx 1 $\frac{1}{2}$ -2. — Spermogonia simplicia; spermatii cylindricis, curvis, 24 \approx 1.

Hab. in ramis exsiccatis Fagi sylvaticæ, prope Münster, Germania.

5. **Cryptosphæria sepulta** (Nits.) Sacc. *Valsa sepulta* Nits. Pyr. Germ. 679

p. 162. — Stromate longe lateque effuso, indeterminato, contiguo v. hinc inde interrupto, cortici crassiori innato, spurio; peritheciis corticis parenchymati immutato alte immersis, monostichis, dense stipatis, globosis, peridermio expallente tectis, collo brevi, ostiolo minimo obtusissimo, applanato, punctiformi, atro, ruguloso v. obscure quadrisulcato, peridermium perforante ac vix extante instructis; ascis clavatis v. oblongis, longissime pedicellatis, octosporis, 80-90 \approx 8 p. sporif.; sporidiis in asci lumine utrinque maxime attenuato subdistichis v. conglobatis, cylindricis, curvulis, fuscentibus, 18-22 \approx 2 $\frac{1}{2}$ -3 $\frac{1}{2}$.

Hab. in trunco *Evonymi europæi* in Westphalia. — *C. millepunctatæ* affinis, peritheciis profundius infossis, minoribus, densioribus, ascis sporidiisque majoribus etc. differt.

6. **Cryptosphæria ocellata** (Fr.). Ces. et De Not. Schema Sfer. p. 57. 680

Sph. et *Halonis ocellata* Fr. S. M. II. 480, *Sph. brevis* Sow. — Sparsa, peritheciis immersis globosis persistentibus nigris, ostiolis in disco truncato albo exsertis solitariis umbilicatis; ascis octosporis; sporidiis biseriatis, allantoideis, curvulis, hyalinis, 10 μ long.

Hab. in ramis Fraxini, Salicis in Suecia, Belgio, Britannia, Germania, Italia. — *Stictis* speciem primo obtutu refert; discus erumpens minutus ceraceus albus, demum vero nigrescens, in cujus centro adest ostiolum depressum opacum nigrum, fere ut in *V. leucostoma*, sed perithecia in cortice interiore nidulantia omnino simplicia, solitaria, glabra, nuda (nec pruinosa) atra, ple-

rumque evacuata, intus cinerascens nec collabens. Est quasi Sphæria simplex stromate instructa; structura ad Cytisoporas accedente.

7. **Cryptosphæria rimulosa** Pass. Funghi Abiss. p. 187, t. V, fig. 10. 381
Peritheciis corticis parenchymati nigrificato immersis, subæqualiter dense sparsis, hinc inde confertioribus, peridermio crebre pustulato-rimoso tectis, ovoideis v. mutua pressione angulatis, collo brevi et ostiolo vix per rimas perspicuo instructis; ascis anguste clavato-fusoideis longe stipitatis, octosporis 20-25 \approx 4 (ex icone); sporidiis subdistichis curvatis simplicibus e luteo fuscidulis 8 \approx 2; paraphysibus nullis v. spuriiis.

Hab. in ramis exsiccatis Acaciæ, Keren, Abyssinia.

8. **Cryptosphæria ligniota** (Fr.) Auersw. in Rabh. F. E. n. 1269 (non 682
vidi). *Sph. ligniota* Fr. S. M. II. 376. — Tecta, immersa, peritheciis stromate fuliginoso tectis, ostiolis erumpentibus depressis subtuberculosis.

Hab. in cortice Populi tremulæ in Suecia et Germania. — Specimina n. 1269 Rabh. F. E. sec. Rehm Asc. n. 433 spectant ad *C. populinam*. — *Eut. subcutaneæ* non absimilis, sed plagas elevatas non format. Perithecia globosa, valde obscura et stromate concoloria, quare nudis oculis in conspectum non veniunt, tenuia, parte inferiori in cortice demersa, superiore stromate floccoso-furfuraceo oblecta; intus evacuata tantum vidi; collis brevissimis, sed ostiola admodum distincta, in superficie corticis prominula, depressa, subrotunda, tuberculosa, nitidula.

9. **Cryptosphæria? rubrocincta** (Schwein.) Sacc. *Sphæria rubrocincta* Schw. B. et C. Exot. fungi Schwein. p. 290. — Sublecta, peritheciis subglobosis brunneis, pruinosis, ostiolo brevissimo pulvere aurantiaco cincto; sporidiis breviter oblongis, curvulis, 6-5 μ . longis, 2-3-guttulatis. 683

Hab. in corticibus, Surinam.

10. **Cryptosphæria fissicola** (C. et E.) Sacc. *Sphæria* (oblectæ) *fissicola* C. et E. New Jersey Fungi in Grevillea, VI, p. 94, t. 100, f. 32. — Tecta, epidermide rimoso-fissa; peritheciis globosis, atris; ostiolis obtusis, erumpentibus; ascis pyriformibus; sporidiis allantoideis, minutis, hyalinis, 8 μ . long. 684

Hab. in ramis Rosæ, New Jersey, Amer. borealis.

11. **Cryptosphæria vexata** (C. et E.) Sacc. *Sphæria* (oblectæ) *vexata* C. et E. New Jersey Fungi in Grevill. V. p. 94. — Subgregaria, subimmersa tecta; peritheciis ovatis, atris; ascis clavatis; sporidiis 685

hyalinis, allantoideis 10 μ . long.; spermatis rectis, linearibus minutis, 5 μ . longis.

Hab. in ramis corticatis *Andromedæ ligustrinæ*, New Jersey, Am. bor. — *Perithecia* gregarie effusa v. seriata, ostiolis conicis erumpentibus. — *Spermogonia* longius ostiolata.

12. **Cryptosphæria inordinata** (B. et C.) Sacc. *Sphæria inordinata* 686
B. et C. North Amer Fungi n. 928. — Epidermide tecta, prominens; ascis clavatis; sporidiis allantoideis.

Hab. in ramis *Rosæ lævigatæ*, Carol. inf., Amer. bor. — *Perithecia* peridermio, dense et minute ab iisdem exasperato, tecta.

13. **Cryptosphæria propagata** (Plow.) *Sphæria propagata* Plow. in 687
Grev. VII, 73. — *Peritheciis* seriatis, erumpentibus subsuperficialibus, mediocribus, quandoque confluentibus; ostiolis distinctis, papillatis; ascis cylindræis 50–60 \approx 8–11, octosporis; sporidiis allantoideis, 8–10 \approx 2–3.

Hab. in racemis (pedunculis) *Vitis*, in California, Am. bor. — Sec. ipsum Plow. (Grev. VIII. 73) est forma *Eutypæ viticolæ*, quam conferas.

14. **Cryptosphæria secreta** (C. et E.) Sacc. *Sphæria* (obtectæ) *secre-* 688
ta C. et E. New Jersey Fungi in Grev. V. p. 94. — Sparsa, epidermide tecta; peritheciis brunneis, globosis, demum applanatis; ascis clavatis; sporidiis allantoideis, hyalinis 10–12 μ . longis.

Hab. sub cortice *Viburni*, New Jersey, Amer. bor. — *Perithecia* omnino tecta, nec conspicienda nisi cortex secedat.

CRYPTOSPHERELLA Sacc. *Valsa* II. †† Nits. Pyr. Germ. 163. (Etym. a *Cryptosphæria*, cujus est analoga). — Stroma et perithecia *Cryptosphæriæ*. Asci polyspori, stipitati. Sporidia allantoidea, hyalina. — Genus fructificatione *Cryptovalsæ*, stromate *Cryptosphæriæ*.

1. **Cryptosphærella Nitschkei** (Auersw.) Sacc. *Valsa Nitschkei* (Awd.) 689
Nits. Pyr. Germ. p. 163. *Sphæria Nitschkei* Auersw. — Stromate latissime effuso, indeterminato, ramosque, quorum cortici innato, ambiente, spurio; peritheciis corticis parenchymati immutato immersis, monostichis, exiguis, subglobosis, remote sparsis, collo brevissimo, ostiolo minutissimo, punctiformi, peridermium perforante. vix prominulo, atro, obtusissimo, integro instructis; ascis cylindrico-clavatis, longissime pedicellatis, polysporis, 44–56 \approx 9–10 p. sporif.; sporidiis numerosissimis, conglobatis, exilissime cylindricis, curvulis v. subrectis, hyalinis, 8–10 \approx 1.

Hab. in ramis emortuis Salicis e sectione Caprææ cultæ in horto botanico, Münster, Germania.

CRYPTOVALSA Ces. et De Not. Schema Sfer. it. p. 29 (Etym. *cryptos* abditus, et *Valsa*). — Stroma effusum, eutypeum plerumque corticale, rarius ligneum, intus sæpius atroinquinans. Perithecia immersa, ostiolo parum emergente, sæpius exarato. Asci stipitati, polyspori, aparaphysati. Sporidia allantoidea, hyalino-luteola. Sperogonia in nonnullis nota, cytisporoidea.

1. **Cryptovalsa protracta** (Pers.) De Not. p. p. Sfer. ital. p. 40, t. 46, 690
Sacc. Myc. Ven. Spec. p. 134, t. XIV, f. 11-13, *Valsa protracta*
(Pers.) Nits. Pyr. Germ. p. 155. — Stromate longe lateque effuso, corticis crassioris, in superficie immutatæ, substantiam interiorem lignique suppositi superficiem atroinquinante; peritheciis cortici immersis lignoque adnatis monostichis, plus minus dense stipatis, rarius sparsis, sæpissime sub corticis rimis seriatim dispositis, atris, majusculis, ovatis, adscendentibus, in collum breve, crassum, cylindricum sensim attenuatis ostioloque nonnihil incrassato, parum prominulo, rotundato ac rimis 4 leviter exarato, tandem perforato instructis; ascis cylindrico-clavatis, longissime pedicellatis, polysporis, 75-100 \approx 9 (p. sporif.); sporidiis in asci lumine apicem versus maxime attenuato conglobatis, cylindricis, curvulis, dilute fuscescentibus, 10-12 \approx 2 $\frac{1}{2}$ -3.

Hab. in ramis corticatis *Aceris campestris* in Germania, Gallia, Italia, frequens. — Cl. Fabre, Sphér. Vaubl., ad hanc speciem forte non immerito ducit *C. ampelinam*, *C. Nitschkei* etc.

2. **Cryptovalsa ampelina** (Nits.) Fuck. Symb. 312, *C. protracta* De 691
Not. p. p. *Echusias Vitis* Hazl., *Valsa ampelina* (Fuck.) Nits.
Pyr. Germ. p. 156. — Stromate nunc longe lateque effuso *Vitis* sarmenta continue ambiente, nunc contra brevi, maculæformi, cortici immerso ejusque substantiam nec non ligni suppositi superficiem tandem atroinquinante, corticis strato supremo immaculato tecto, haud raro elevato-protuberante; peritheciis ligno adnatis, monostichis, dense confertis, nunc ordine æquali dispositis nunc seriatim ordinatis, majusculis, erectis, atris, exacte globosis, in collum breve, crassum, cylindricum subito attenuatis, ostiolo plus minus prominulo, rotundato v. conico-truncato, ruguloso, vix umquam conspicue sulcato instructis; ascis cylindrico-clavatis, longissime pedicellatis, polysporis, 75-90 \approx 8-9 (p. sporif.); sporidiis in asci lumine apicem versus plerumque vehementer attenuato con-

globatis, cylindricis, curvulis v. subrectis, pallide fuscescentibus, 9-10 \approx 2 $\frac{1}{2}$; peritheciis spermatiiferis seriatis, peritheciis ascigeris plane æqualibus; spermatiis copiosis, cylindræis, utrinque obtusis, rectis, continuis, hyalinis, 16 \approx 2 $\frac{1}{2}$.

Hab. in sarmentis Vitis in Gallia, Italia, Germania. — *Sph. insitiva* Tode, Fr. forte huic spectat.

3. **Cryptovalsa Nitschkei** Fuck. Symb. Myc. 212 (sensu ampl.), Sacc. 692 Myc. Ven. 134, t. XIV, f. 14, *Valsa Mori* Nits. Pyr. Germ. p. 157, *Crypt. protracta* var. Fabr. — Stromate effuso, corticis parenchymati innato, peridermio adhærente, immaculato ac peritheciolorum ostiolis solum perforato tecto, crustam irregularem, sæpe interruptam, brevem, inno stroma valseum imitantem, plus minus elevatam, crustæformem formante; peritheciis ligno adnatis, majusculis, irregulariter monostichis v. fere distichis, plerumque dense stipatis, globosis v. mutua pressione angulatis, rarius laxè sparsis, atris, in collum crassum, cylindricum, breve subito attenuatis, ostiolo valde incrassato, subgloboso, majusculo, tandem leviter quadrisulcato, parum prominenti instructis; ascis anguste clavatis, longissime pedicellatis, polysporis, 60-66 \approx 9 (p. sporif.); sporidiis conglobatis, cylindricis, curvulis, dilute fuscescentibus, 8-10 \approx 2 $\frac{1}{2}$.

Hab. in ramis corticatis Mori, Corni, Cratægi, Carpini plurimarumque arborum in Germania, Gallia, Italia, Amer. austr. — Cfr. Mich. pag. 22-23 et Fabr. Sphæ. Vaucl. pag. 71-74 ubi formæ et nutrices quam plurimæ adnumerantur. — A *Crypt. Rabenhorstii* præcipue differt peritheciis constanter minoribus ($\frac{1}{3}$ - $\frac{1}{2}$ mill. diam.), ascis sporidiisque dimidio angustioribus. — An a præsentis specie rite separandæ sint *C. protracta* (Nits.), *C. ampelina* (Nits.) et *C. effusa* Fekl. dubitare licet.

4. **Cryptovalsa Pruni** Fuck. Symb. Myc. App. I, p. 321. — Stromate 693 diatrypeo, latissime effuso, subcorticali, nigro; peritheciis sub stromate in cortice interiori nidulantibus, plerumque dense stipatis, globoso-ovatis, majusculis, ostiolis ut in *Crypt. Nitschkei* formatis, corticis rimis erumpentibus; ascis longissime stipitatis, clavatis, antice subobtusis, polysporis, 74 \approx 8; sporidiis cylindræis, sed utrimque parum attenuatis, curvatis, continuis, pallide fuscescentibus (in ascis), 10-12 \approx 4.

Hab. in ramis siccis corticatis Pruni spinosæ, rarius prope Æstrich, Rhenogovia. — A *C. Nitschkei* et *C. effusa* ascis et sporidiis crassioribus recedit.

5. **Cryptovalsa effusa** Fuck. Symb. Mycol. p. 212. — Stromate sub- 694

corticali, late effuso; peritheciis in stromate irregulariter nidulantibus, majusculis, globosis, nucleo sordido; ostiolis prominulis, obtuso-conicis, opaco-atris; ascis longissime stipitatis, clavatis, polysporis, $56 \approx 8$ (p. sporif.); sporidiis farctis, cylindraceis, utrinque obtusis, curvatis, continuis, dilute fuscis, $8 \approx 2\frac{1}{2}$.

Hab. in ramis exsiccatis Rosæ caninæ, quos sæpius omnino obducit, prope Æstrich (Germania).

6. **Cryptovalsa uberrima** (Tul.) Sacc. *Eutypa uberrima* Tul. Sel. 695
Fung. Carp. II, 64. — Stromate corticali late ramos ambiente; peritheciis in acervulos minutos quaternariæ-formes digestis denique aggregatis, linea nigra varie excurrente circumscriptis; ostiolis vix extantibus, minutis, obtusis, rimosis; ascis clavatis, 10μ . cr., polysporis; sporidiis allantoideis exiguis $6,5-8 \approx 2$.

Hab. in ramis Tiliæ europææ in Gallia. — Spermogonia: spermatis filiformibus, valde curvatis in cirrhos aureos denique propulsis foeta. — Habitus, sec. Nits., *Eutypæ leproscæ*.

7. **Cryptovalsa platensis** Speg. Fung. Arg. I, p. 181. — Peritheciis 696
in acervulos valsiformes, parvulos, $\frac{3}{4}-1$ mill., digestis cortice immersis totos fere ramulos ambientibus minutis, globulosis $\frac{1}{5}-\frac{1}{6}$ mill., atris, contextu parenchymatico-sinuoso, olivaceo-fuligineo; ostiolis fasciculatis, superficiem matricis attingentibus, sed numquam exsertis, atris; ascis cylindræo-clavatis p. sporif. $60-65 \approx 10-12$, stip. $20-25 \approx 5$, sursum obtuse rotundatis, deorsum in pedicellum desinentibus, polysporis, aparaphysatis; sporidiis botuliformibus, eguttulatis, $6 \approx 1-1\frac{1}{2}$, dilute olivaceis.

Hab. ad ramulos emortuos Salicis Humboltianæ a San José de Flores, Mart. 1880 (Amer. merid.). — *Crypt. uberrimæ* (Tul.) videtur affinis.

8. **Cryptovalsa extorris** Sacc. Fungi Ven. Ser. IV, p. 17 et Fungi 697
ital. tab. 160. — Stromate late ramos ambiente et ligni superficiem infuscante; peritheciis ligno adnatis v. parum infossis, nunc dense valsiformiter stipitatis, nunc discretis, e globoso conoideis, $\frac{1}{2}-\frac{3}{4}$ mill. diam., e mutua pressione quandoque angulosis, atris, hyphis conidiophoris brevibus dense articulato-nodulosis, fuligineis, præcipue ætate juvenili, vestitis; conidiis ovoideis dilute fuligineis, $5 \approx 3$; ostiolis breve cylindræo-conoideis, vertice rotundato, $2-4$ radiatim exaratis, minuteque pertusis; ascis crebris, clavatis, longe stipitatis p. sporif. $70-80 \approx 12-14$, stipite $70-80$ long., myriosporis; sporidiis dense conglobatis, minutissimis, cylindraceis, curvulis, $6-8 \approx 1$, lutescenti-viridulis, 3-guttulatis.

Hab. in ramis tandem decorticatis Mori albæ, Vittorio (Italia bor.) rarius. — Characteribus conidiorum et sporidiorum statim a ceteris speciebus mihi notis dignoscitur, neque cum *Diatrypella* genere ullo modo conjungi potest.

9. **Cryptovalsa Rabenhorstii** (Nits.) Sacc. Myc. Ven. 135, tab. XIV, 698 fig. 47-20, *Valsa Rabenhorstii* Nits. Pyr. Germ. pag. 158. *Sph. spiculosa* v. *Robinia* Rabh. — Stromate effuso, plerumque brevi, maculæformi, immo valsæformi, peridermio, haud nigrefacto tecto, corticis parenchymati immerso ejusque substantia, specie immutata formato, ligno rimoso-verrucosam; peritheciis submonostichis, densissime stipatis, subglobosis v. mutua pressione angulatis, immersis, atris, collo brevissimo cylindrico, crasso, ostiolo nonnihil incrassato, obtusissimo, rotundato, tandem obscure quadrisulcato, parum exserto, rarissime elongato, cylindrico instructis, hinc inde, peridermio secesso, tandem liberis; ascis clavatis v. fere oblongis crassiusculis, longissime pedicellatis, polysporis, 70-80 \approx 14-16 (p. sporif.); sporidiis conglobatis, cylindricis, curvulis, fuscescentibus, 14-16 \approx 3-4.

Hab. in ramis corticatis Robinia, Mori, Coryli, Fici, plurimumque arborum in Germania et Italia. — Cfr. Michel. I, p. 21 ubi matrices et formas 22 descripsi. — Perithecia globosa, intus, nitida, $\frac{3}{4}$ mill. diam., nunc subsolitaria, nunc *Valsæ* vel *Eutypæ* ad instar acervata, nunc seriatim disposita, modo corticola, modo ligni basi insculpta; stroma nigrescens inter perithecia excurrentis plus minus manifestum; ostiola vertice rotundata, pertusa, levia v. rugulosa, numquam vere sulcata.

10. **Cryptovalsa arundinacea** Sacc. Fungi Ven. Ser. IV, p. 17, et F. 699 ital. tab. 159. Mycoth. Ven. III. n. 210. — Stromate serialiter longe effuso sed linea nigra nullo circumscripto; peritheciis in series parallelas longiuseculas plus minusve dense stipatis, in culmi substantia extima omnino immersis, corticeque lineatim rimoso et elevato tectis, majusculis, globosis, subdepressis, $\frac{2}{3}$ mill. diam., atris, extus albido-furfurceis; ostiolis breve cylindræis crassiusculis corticem parum excedentibus, vertice rotundatis subincrassatis, levibus v. obsolete rimosis, tandem late pertusis; ascis copiosis crasse clavatis, longissime stipitatis, apice rotundatis, p. s. 60 \approx 12-13, stipite 50 lg., polysporis; sporidiis dense conglobatis cylindræis, curvulis 12-16 \approx 3, guttulatis, hyalino-lutescentibus.

Hab. in culmis Arundinis Donacis, Vittorio (Ital. bor.).

11. **Cryptovalsa depressa** (Fr.) Sacc. *S. depressa* Fries, in Mont. 700

Syll. Crypt. n. 819. Notice etc., in Ann., 2, 1, p. 297, t. 13, f. 1, Ces. et De Not. Schema Sf. 203. — Effusa, immersa; peritheciis extus intusque nigris, sphaericis, confertis, nunc cortici interiori, nunc et ligno inquinato immersis, ostiolis maximis superficialibus demum cupulæformibus; ascis fusiformi-subclavatis sporidia copiosa oblonga incurviuscula inordinate foventibus.

Hab. in ramis Carpini, Sedan (Gallia). — An var. *Cryptovalsa Nitschkei*?

12. **Cryptovalsa Citri** Catt. Arch. Bot. Critt. II. 379, t. XXIII, f. 1-4. 701

— Stromate longe lateque extenso v. valsiformi-interrupto, cortice secedente, emergente, lignum penetrante lineolisque nigris circumscripto; peritheciis ligno immersis confertis non vero coalitis, ostiolis brevibus, papillatis cum stromatis superficie concretis; ascis crasse clavatis stipitatis, p. sporif. 74 μ . longa, polysporis; sporidiis allantoideis, curvis, hyalinis, 12 \approx 3.

Hab. in radicibus crassioribus, cortice sæpe orbatis, Citri Limonii, Brindisi, Ital. merid. et Sicilia.

13. **Cryptovalsa elevata** (Berk.) Sacc. *Sphæria elevata* Berk. Decad. 702

of fung. n. 71, Curr. Linn. Trans. XXII, t. 47, f. 109, *Eutypa elevata* Cooke Handb. n. 2404, *Crypt. Rabenhorstii* v. *Fici Caricæ* Mich. I. 22. — Elongata, emergens, nigra v. grisea; peritheciis gregariis, globosis, mediocribus, ligno immersis; ostiolis conicis, vertice punctiformi; ascis clavatis, polysporis; sporidiis allantoideis, olivaceis, 15-17 μ . long. (Curr.).

Hab. in ramis emortuis Evonymi in Britannia, Fici Caricæ, in Italia. — Sec. Berk. sporidia 7,5-8,5 μ . long. — Lecta quoque in Tasmania.

DIATRYPE Fr. p. p. Nits. Pyr. Germ. p. 64. (Etym. a *diatrypao*, perforo). — Stroma a matricis substantia heterogeneum, erumpenti-subsurfaceiale, effusum v. disciforme. Perithecia stromate immersa, collis v. ostiolis non v. vix convergentibus. Asci octospori, stipitati, aparaphysati; sporidia allantoidea, minuta, subluteola. — In nonnullis spermogonia et conidia nota (*Cytispora* et *Libertella*). — Genus, speciebus primariis prædistinctis, rite definitum: quibus additæ sunt plurimæ species, imperfecte descriptæ, quarum pars forte ad *Eutypam* v. *Eutypellam* aptus transferenda videtur.

1. **Diatrype disciformis** (Hoffm.) Fr. Summ. Veg. Scand. p. 385. Nits. 703

Pyr. Germ. p. 67. Sacc. Myc. Ven. Spec. p. 150, t. XV, f. 15-17 et Fungi ital. t. 462. *Sph. disciformis* Hoffm. Veg. Crypt. I, p. 15.

Sph. depressa Sow. — Stromate perithecigero orbiculari, disciformi, plano v. nonnihil convexo, primo hypophlœode, ligno adnato, deinde erumpente peridermioque tegente secesso, superne nudato, libero, fuscescente ac tenuiter albido-pruinoso, tandem glabro, superficie nigricante intus albido, parte insculpta nigro-limitata; stromate conidifero orbiculari, magnitudine stromatis perithecigeri, conico-depresso, saturate aurato leviterque sulcato, deinde nigrescente; conidiis lineari-cylindricis, filiformibus, tenerimis, vehementer curvatis, in sterigmatibus brevibus acrogenis; peritheciis in singulo stromate 25-50, monostiche denseque stipatis, ovatis v. fere angulatis, collis brevissimis ac tenuibus ostiolisque minimis, obtusissimis, vix prominulis, integris v. radiatim quadrisulcatis instructis; ascis anguste oblongis, longissime pedicellatis, tenerrimis, octosporis, 25-40 \approx 3-5 p. sporif.; sporidiis subdistichis, cylindricis, curvatis, dilute fuscescentibus, 6-8 \approx 1 $\frac{1}{2}$ -2. — Status conidicus *Libertellæ* speciem sistit.

Hab. in ramis corticatis Fagi sylvaticæ, rarius Viburni, Pruni, Betulæ, Alni, Rhamni, Quercus, in tota Europa et Amer. bor. — Var. *umbonata*: stromate duplo majori quam in forma normali, medio 1-3 umbonibus colliculoso; ascis et sporidiis non diversis. In ramis Pseudoplatani, Jura (FUCK.). — Var. *Magnoliæ*, Thüm. Differt disco vix convexulo, minore, atro, ostiolis indeterminatis; ascis, sporidiaque non diversa sunt. In ramis Magnoliæ glaucæ, New Field, Amer. bor. (ELLIS). — Var. *xanthostroma*: stromate tandem citrino. In ramis Salicis Capreæ, Œstrich, Rhenogovia (FUCK.).

2. **Diatrype bullata** (Hoffm.) Fr. Summ. Veg. Scand. p. 385, Sacc. Myc. 704 Ven. Spec. t. 15, f. 10-20, *Sphæria bullata* Hoffm. Veg. Crypt. I. p. 5, *Sph. depressa* Bolt., *Sph. Placenta* Tode. — Stromate subperidermio nato lignoque adnato, deinde erumpente, superne nudato, orbiculari v. ovali, plano-convexo v. fere disciformi, haud raro confluyente, nigricante, intus albido, parte immersa nigro-limitata; peritheciis monostichis, numerosissimis, dense stipatis, ovatis v. mutua pressione angulatis, collis brevibus ostiolisque punctiformibus, immersis v. nonnihil prominulis, integris, pertusis instructis; ascis anguste clavatis, longissime pedicellatis, octosporis, 40-50 \approx 4-6 p. sporif.; sporidiis subdistichis v. in ascis parte inferiore sæpissime monostichis, cylindricis, curvatis, dilute fuscescentibus, 6-10 \approx 1 $\frac{1}{2}$ -2 $\frac{1}{2}$.

Hab. in ramis emortuis Salicum et Populorum (Quer-

cus, Coryli) in tota Europa et Amer. bor., sed parce. — Ascis et sporidia præcedentis, nisi paulo majora; sed in *Diatrype bulbata* acervuli plerumque irregulares, latiores, perithecia in quoque acervulo numerosiora, subsphærica nec ovoidea, et paulo minora.

3. **Diatrype Stigma** (Hoffm.) Fr. Summ. Veg. Scand. p. 385. Nits. Pyr. 705
 Germ. p. 65. *Sph. Stigma* Hoffm. *Sph. undulata* Fr. et *Sph. decorticata* DC. (vix var.) — Stromate per peridermium erumpente, demum nudato, longe lateque effuso, sæpe ambiente, applanato, primo pallescente, dein fusciscente, albido-pulverulento, demum atro, crassit. circiter 1 mill.; peritheciis ovoideis ostiolis subimmersis vel nonnihil prominentibus, planiusculis, integris vel quadrigonis præditis; ascis longissime pedicellatis, 30-50 ≈ 4-6 p. sporif.; sporidiis 6-12 ≈ 1,5-2. — Stromata conidifera (*Nemaspora microspora* Desm.) perithecigeris superposita vel propinqua, suborbicularia, plerumque confluentia lateque extensa, reticulatim exarata, læte aurata, deinde ex cinereo nigrescentia; conidiis cylindræcis, curvulis 4-5 ≈ 1,5 vel filiformibus, 24-28 ≈ 1,5.

Hab. in ramis corticatis Fagi, Carpini, Castaneæ, Quercus, Pruni, Tiliæ, Pyri, Cratægi, Betulæ, Coryli, Mespili, Rhamni, Rosæ etc. in tota Europa, Sibiria et Amer. bor.

4. **Diatrype rimosa** Fuck. Symb. myc. p. 231. — Stromate erumpente, semper convexo et subhemisphærico, 1-2 lineas lato, demum libero, intus albo, epidermidis laciniis patulis cincto, in superficie atro-fusca, opaco, multi-rimoso, exasperato, ostiolis punctiformibus, non prominulis, obscuris; ascis fusoideis, 25-35 ≈ 4; sporidiis allantoideis, 6-7 ≈ 1,5, dilute luteolis. 706

Hab. in ramis corticatis Cratægi Oxyacanthæ, rarius, Æstrich, Rhenogovia. — Affinis *D. disciformi*, sed certe diversa.

5. **Diatrype platystoma** (Schw.) Berk. N. Am. Fungi p. 164, Ellis in M. U. n. 63, *Sphæria platystoma* Schw. Syn. Car. n. 43, Fr. S. M. Myc. II, 351. — Late effusa, rimosa, nigro-marginata, atra, intus concolor, peritheciis confertis globosis, ostiolis sparsis explanatis; «ascis clavatis, longe stipitatis, 30-32 ≈ 3,5-4; sporidiis allantoideis, 7-7,5 ≈ 1,5, subhyalinis». 707

Hab. in ramis Hamamelidis, Aceris rubri etc. in Carolina, New York, Pensylvania (Amer. bor.). — Similis *D. Stigmati*, longissima, unciam lata, rimosa, margine nigro tenuissimo (sterili) in epidermide exarata cincta; perithecia cinerea, polysticha; Præcipue distinguitur ostiolis latis, Pezizæ formam æmulantibus et defectu stromatis albi.

6. *Diatrype hypoxyloides* De Not. Sfer. ital. 26, t. 24. — Epider- 708
mide decedente demum denudata; stromate oblongo, ambitu marginato, disco levi plumbeo, vix rimoso, ostiolis impressis punctato, carbonaceo, fragili, intus atro; peritheciis contiguïs, obtuse prismaticis; ascis elongato-clavatis, p. s. 24-28 \approx 3-4; sporidiis allantoidis, curvulis, 5 μ . longis, hyalinis.

Hab. in trunco humi strato Juglandis regiæ, prope lacum Verbanum (Ital. bor.). — Affinis *D. Stigmati*, a qua differt disco plumbeo, sporidiis minoribus, peritheciis magis stipatis.

7. *Diatrype macrothecia* Speg. Fungi Arg. Pug. III. n. 51. — Stro- 709
matibus laxè gregariis, ellipticis v. elliptico-elongatis v. confluen- do difformibus, horizontalibus, primo epidermide tectis, dein erumpenti-liberis, parum prominulis, atris, magnitudine ludentibus 2-10 (sæpius 4-5) mill. long., 1-4 (sæpius 2) mill. lat., subcupulato-depressis, atris, levibus, ex ostiolis prominulis punctato-asperulis; peritheciis dense monostiche stipatis 15-50, globosis, atris, primo intus albis, dein nucleo hyalino-fuscescente farctis, $\frac{1}{3}$ - $\frac{1}{4}$ mill. diam., in ostiola conica, apice obtusiuscula, integra vix prominulo-exerta elongatis, coriaceo-membranaceis; ascis cylindræo-clavatis, sursum truncato-rotundatis, ac crassissime tunicatis, luce refracta unifoveolatis, deorsum in pedicellum prælongum desinentibus p. sp. 30 \approx 6-7, ped. 100-120 \approx 2-3, fasciculatim ex hyphis proligeris oriundis, octosporis, aparaphysatis; sporidiis distichis v. subdistichis cylindræo-elongatis, curvulis utrinque obtuse rotundatis, et 1-guttulatis, 7-8 \approx 1-1,5, granuloso-farctis, hyalinis v. sub-chlorinis.

Hab. in palo corticato vetusto Pruni Cerasi, in hortis a la Boca del Riachuelo, (Amer. austr.). Jun. 1880. — Primo visu forma parvula v. junior *D. Stigmati* videtur, sed stromatibus horizontaliter erumpentibus, matrice semper arte corticata, cæterisque characteribus fructificationis non comparanda. Obturaculus minutus ascorum iodi ope cærulescit!

8. *Diatrype asterostoma* B. et C. North Amer. Fungi n. 853. — Pu- 710
stulis elevatis; ostiolis stellatis; stromate albo; sporidiis allantoidis, majoribus, octonis.

Hab. in ramis dejectis Betulæ, Mori etc. in Carolina, Oneida, New Jersey.

9. *Diatrype Hystrix* (Tod.?) Fr. Summa V. S. 385, Berk. et Br. Ann. 711
N. II. n. 840 (nec Curr., nec De Not.) *Sph. Hystrix* Tode F. M. fig. 127, sec. Berk. — Transverse erumpens, depressa, ovalis, sa-

tis plana, nigra, intus brunnea, ostiolis rostellatis, interdum sursum incrassatis; ascis sporidiis allantoideis, minutis, 5-7 \approx 1-2.

Hab. in ramis *Aceris Pseudoplatani* in Britannia et Amer. bor. (etiam in *Benzoin* odorifera).

10. **Diatrype fibrifecta** C. et Ellis New Jersey Fungi in Grevillea n. 33. 712

— Pustulis longitudinaliter erumpentibus, subseriatis; ostiolis prominulis exasperata, stromate atrobrunneo; ascis minimis, clavatis, 40 μ . long.; sporidiis allantoideis, hyalinis, 5 μ . longis.

Hab. in cortice *Juniperi virginianæ* in New Jersey, Am. bor. — Pustulæ minutæ, fibris corticalibus partim velatæ; ostiola sæpe elongata, breviora tamen quam in *D. Hystrice*.

11. **Diatrype Aurantii** (De Not.) Sacc. *Sphæria Aurantii* De Not. 713

Micr. ital. Dec. VIII, p. 119, fig. III. — Acervulis corticulis, erumpenti-superficialibus, disciformibus, colliculosis, 2-2,5 mill. diam.; peritheciis globosis, nigris monostichis, ostiolis parum eminentibus, breve cylindraceo-truncatis; ascis fusoideis, sessilibus, apapophysatis, 50 \approx 8-9; sporidiis allantoideis hyalinis, curvulis, 12 \approx 3-3,5.

Hab. ad ramos dejectos *Citri Aurantii*, Milis (Sardinia). 714

12. **Diatrype corniculata** (Ehrh.) B. et Br. Cooke Handb. n. 2438.

Sphæria corniculata Ehrh., Fr. S. M. II, 584. — Innata, stromate albido, conceptaculo nigro tecto, peritheciis decumbentibus, ostiolis confertis subcylindricis distinctis lævibus; ascis clavatis, octosporis; sporidiis allantoideis, 10-12 μ . longis.

Hab. in ramis exiccatis *Salicis*, *Fraxini*, *Quercus* in Suecia, Germania, Britannia, Amer. bor. — Peridermio velata, exceptis ostiolis longe exertis, umbilicatis.

13. **Diatrype chlorosarca** B. et Br. Fungi of Ceylon n. 1080. — Parva, 715

pustulata, orbicularis, intus viridis, supra plana, ostiolis abditis; ascis clavatis; sporidiis allantoideis 7-9 μ . long.

Hab. in ramis in ins. Ceylon. — Multo minor quam *Eutyropa flavo-virens*, cui stromate viridulo affinis.

14. **Diatrype collariata** C. et Ellis New Jersey Fungi in Grevillea 716

n. 33. — Pustulis longitudinaliter erumpentibus, sæpe seriatis, maxime elevatis; ostiolis nitidis longissimis, cylindraceis, in collaria brunnea congestis; sporidiis allantoideis, 8-10 μ . long.

Hab. in ramis *Caryæ albæ* in New Jersey, Am. bor. — Ostiola usque ad medium in collarium coalita. Species prædistincta.

15. **Diatrype capensis** Kalch. et Cooke. Grev. 1880, p. 28. — Erumpens, 717

elliptica, atra, convexa; peritheciis paucis, magnis; ostiolis,

pertusis; ascis clavatis; sporidiis linearibus, curvulis pallide fuscis, 10 \approx 2.

Hab. in ramis *Cassinopsis capensis* et *Rubi pinnati* in Africa australi.

16. **Diatrype caminata** Kalch. et Cooke. Grev. 1880, p. 28. — Erumpens, suborbicularis, convexa, nigrescens; ostiolis exsertis, cylindricis, obtusis, truncatis; ascis clavatis; sporidiis linearibus, curvulis, hyalinis, 12 \approx 3.

Hab. in ramis in Africa australi. — Ostiola exerta abrupte truncata.

17. **Diatrype leucocreas** Mont. Syll. Crypt. n. 745 et Fl. Alg. I, p. 457, sub *Sphæria*. — Effusa, confluens, convexo-plana, rugoso-colliculosa, nigra, opaca, intus alba, linea atra circumscripta; peritheciis oblongo-ovatis in collum breve attenuatis, ostiolis vix prominulis radiatis; ascis crasse clavatis, 60 \approx 6-7; sporidiis allantoideis, minutis, ut *D. Stigmatis*.

Hab. ad caudicem vetustum, Birmandreis Algeriæ (DURIÉU).

18. **Diatrype consobrina** Mont. Syll. Crypt. n. 747 et Fl. Alg. p. 462, sub *Sphæria*. — Tecta, lineari-oblonga, confluens, atro-inquinans; peritheciis membranaceis seriatis, stromati fuliginoso immersis evacuatis intus albis, ostiolis globosis minutis erumpenti-prominulis; sporidiis allantoideis, minutis, ut *D. Stigmatis*.

Hab. in culmis *Arundinis mauritanicæ* putredine fere consumptis, Alger (DURIÉU).

19. **Diatrype Mac-Owaniana** Thüm. F. Austro-Afric. VI. n. 117. — Stromate orbiculari, elevato-subdisciformi, convexo, erumpente, epidermide subinfecto, aterrimo, intus homogæneo albo; ostiolis crasse punctiformibus, atris, rotundis; peritheciis numerosis; ascis gracilibus cylindricis, subcurvatis, apice basive angustatis, hyalinis octosporis, longissime stipitatis, 32-36 \approx 6; sporidiis cylindricis, utrinque rotundatis, binucleatis, simplicibus, arcuatis, hyalinis, vel dilute flavescentibus, 5-7 \approx 1,5-2; paraphysibus numerosissimis, cylindricis, simplicibus, apice acutatis, hyalinis.

Hab. in ramulis emortuis *Cassineos capensis* in sylvis montis « Boschberg » p. Somerset-East, Promont. bonæ spei. Africa (MAC OWAN).

20. **Diatrype laurina** Rehm., Thüm. Contr. ad Myc. Lusit. n. 280. — Stromate irregulari, erumpente, plerumque rotundo, nigro, 1 mill. d., 0.8 mill. alto, hemisphærico-convexulo, duodecim perithecia in stromate albido includente, ostiolis haud conspicue prominulis; ascis

longestipitatis, cylindrico-clavatis, subrectis vel minime arcuatis, hyalinis, vertice rotundatis, $40 \approx 7$; sporidiis octo, cylindræco-curvatis vel fusiformibus, utrinque rotundatis, ad polos guttulis, continuis, achrois, $6-7 \approx 2,5$.

Hab. in Lauri nobilis ramis emortuis, Cerco dos Jesuitas pr. Coimbra (Lusitania). (MESNIER).

21. **Diatrype ruficarnis** B. et C. Cuban Fungi n. 842. — Peritheciis 723
aggregatis hic illic in pustulas irregulares minutas erumpentibus; ostiolis papillatis; stromate rufo; sporidiis allantoideis, 12μ . long.

Hab. in ramis Diptericeis odoratæ (Tonka) in Cuba. — Perithecia nunc pustulatum congesta, nunc effusa, ut in *Eutypa lata*.

22. **Diatrype russodes** B. et Br. Fungi of Ceylon n. 1079. — Gre- 724
garia, pustulata; peritheciis ellipticis collo brevi cylindrico, ostiolo obtuso; sporidiis octonis, allantoideis; $8-10 \mu$. long.

Hab. in corticibus in Ceylon. — Affinis *D. Duricæi*, ostiolis tamen differt.

23. **Diatrype polycocca** Fuck. Symb. Myc. p. 231. — Stromate or- 725
biculari, disciformi, parum convexo, erumpente, corticis peridermio cincto, atro-fusco, intus nigro, $1-2$ lineas lato; ostiolis valde prominulis, crassis, $4-6$ sulcatis, obtuso-conicis, atris, peritheciis globosis, numerosis; ascis longissime stipitatis, acuminatis, parte sporifera elliptica, $44 \approx 8$, 8sporibus; sporidiis cylindræcis, curvatis, dilute flavis, $16 \approx 4$.

Hab. in ramis corticatis Aceris opulifolii, vere, in Jura (Helvetia) ubi legit MORTIER.

24. **Diatrype plagia** B. et C. Cuban Fungi n. 854. — Pustulis trans- 726
versim erumpentibus; ostiolis substellatis; stromate parvo fusco; sporidiis octonis allantoideis.

Hab. in ramis Liriodendri, in Carolina inf., Amer. bor.

25. **Diatrype orthosticha** Mont. Syll. Crypt. n. 750 et Fl. Alg. p. 520, 727
sub *Sphæria*. — Tecta; peritheciis gregariis ovoideis, globoso-depressis, stromate subcorticali immersis, longitrossum seriatis, ostiolis per cuticulam obtritam seorsim aut conjunctim erumpentibus, eumorphis, dein applanato-rugulosis, tandem elabentibus; ascis clavatis, octosporibus; sporidiis allantoideis (ut in *Eutypa lata*).

Hab. in trunco Ricini communis, Alger (DURIEU).

26. **Diatrype theloides** B. et Br. Fungi of Ceylon n. 1082. — Pu- 728
stulata; ostiolis lævibus in disco parvo erumpente collectis; sporidiis allantoideis, $7-8 \mu$. longis.

Hab. in ramis, Central province in Ceylon. — Pustulæ peridermio arcuæ adnatæ, idemque subinde mere elevantes.

27. **Diatrype tenuissima** Cooke, Rav. Fung. Amer. Cent. III, et in Grev. VI, p. 144. — Tenuissima, effusa, cinerea; ostiolis minutis, punctiformibus, vix elevatis; ascis subcylindraceis; sporidiis linearibus, vix curvulis, hyalinis, 7 μ . longis. 729

Hab. in cortice Perseæ, Aiken, Carol. austr., Am. bor.

28. **Diatrype discostoma** Cooke, Rav. Fung. Amer. Cent. III. Grevill. VI, p. 144. — Elongato-effusa, nigra; ostiolis vix elevatis, discoideis, applanatis; ascis clavatis; sporidiis minimis, linearibus, curvulis, 6 μ . longis. 730

Hab. in ramis Carpini, Aiken in Carolina infer. (Amer. bor.). 731

29. **Diatrype Durieui** Mont. Syll. Crypt. n. 748 Fl. Alg. p. 405, t. 25, f. 7, sub *Sphæria*. — Innata, pustulata, confluens; conceptaculo integro atro, stroma corticale crassum ciugente; peritheciis confertis oblongis erectis in ostiola discum planum epidermide fissa obvallatum oblitterantia hemisphærica rugoso-rimulosa, sicca collapsa cupulæformia productis; «ascis octosporis, 30–40 \approx 7; sporidiis allantoides minutis, flavidulis, 7–9 \approx 1,5; sec exempl. americana».

Hab. in cortice Quercus Mirbeckii, La Calle (DURIEU), Quercus, Magnoliæ, Aceris, New Jersey, Connecticut, Carolina. — Sec. Cooke *D. Durieui* in Thuem. M. U. n. 275, eadem est ac *D. albopruinosa* Schw.; sed exempl. americana, quæ vidi ex Thuem. Raven. et Ellis, eandem speciem sistunt. Hæc ad *Eutypellas* nutat, e. g. *E. cerviculatam*.

30. **Diatrype Eucalypti** Cooke et Harkn. Grevill. IX 1881, p. 85. — Stromatibus suborbicularibus, convexis, nigris; ostiolis conicis sulcatis; ascis clavatis, longe stipitatis; sporidiis leniter curvis, utrinque obtusis, hyalinis, 10 \approx 1,5. 732

Hab. in ramis Eucalypti Globuli, in California, America boreali (HARKNESS).

31. **Diatrype Caricæ** De Not. Sf. ital. p. 28, t. 28. — Peritheciis parvis gregibus matrici (ligno) insculptis, stratoque stromatico atro velatis exceptisque; peritheciis monostichis in quoque acervulo paucis v. subsolitariis, spheroides, v. irregularibus, in collum breve attenuatis; ostiolis emergentibus papillatis; ascis subclavatis, deorsum attenuatis, octosporis; p. s. 40 \approx 7; sporidiis cylindraceis, curvulis, hyalinis, 12 μ . longis. 733

Hab. in ligno denudato Fici Caricæ, prope Genuam, Italia boreali.

32. **Diatrype acericola** De Not. Sfer. ital. 28, tav. 27. — Stromati- 734
bus verruciformibus, innato-erumpentibus, scabris, atris, rotundis
v. oblongis, 3-4 mill. long.; peritheciis in quoque acervulo nume-
rosis, ovoideo-oblongis, stipatis monostichis, raro superimpositis,
mutua pressione sæpe angulatis; ostioliis emergentibus, 3-4-sul-
catis, v. rugosis, obtusis; ascis elongato-clavatis, 8-sporis, p. s.
20-22 \approx 4-5; sporidiis allantoideis, curvulis, hyalinis, 10 μ . longis.
Hab. in ramis corticatis *Aceris campestris* prope lacum
Verbanum (Ital. bor.).
33. **Diatrype Daldiniana** De Not. Recl. Pirenom. p. 481. — Acervu- 735
lis eminentibus, pulvinatis, peridermio arcte cinctis, aterrimis, ver-
ruculosis, 2 $\frac{1}{2}$ mill. diam. intus pallidis; peritheciis grossis submo-
nostichis, ovoideis; ostioliis emergentibus, crassiusculis; ascis te-
reti-clavatis, stipitatis, apice truncatis p. s. 50 \approx 8; sporidiis disti-
chis, allantoideis, 12-15 \approx 2 $\frac{1}{4}$, flavidis.
Hab. in ramis crassioribus *Mori albæ* in Italia boreali et
Gallia.
34. **Diatrype tristicha** De Not. Recl. Piren. ital. p. 481. — Ligno in- 736
nascens, demum denudata; stromatibus subhemisphæricis, atris, ob
ostiola emergentia scabridis, extus atris, intus pallidis; peritheciis
membranaceis subtristichis, rotundatis v. obtuse angulatis; collis
elongatis; asci octosporis; sporidiis allantoideis, pallide luteolis.
Hab. in ramis *Rosarum sylvaticarum*, Valsesia (Ital. bor.).
35. **Diatrype radulans** Berk. et Curt. Exot. Fung. Schwein. p. 287. 737
— Pustulata, minor, circumscripta; peritheciis paucis, pruinosis;
ostioliis elongatis, sulcatis, demum deciduis; ascis octosporis; spori-
diis allantoideis, 6-6,5 μ . longis.
Hab. in ramulis emortuis, Surinam. — Affinis *D. Duricæi*, sed
ostiola longiora.
36. **Diatrype prominens** Cooke et Harkn. Grevill. 1881, p. 85. — Erum- 738
pens, oblonga, convexa, nigra, elevata; ostioliis prominulis sulca-
tis; ascis clavatis, sessilibus; sporidiis leniter curvis, utrinque ob-
tusis, 12-13 \approx 2, hyalinis.
Hab. in ramis *Arbuti Menziesii* et *Mimuli* («?») in Ca-
lifornia, Am. bor. (HARKNESS).
37. **Diatrype smilacicola** (Schw.) Berk. North Amer. fungi, pag. 165. 739
Sphæria smilacicola, Schw. in Fr. Elench. Fung. II, 71. — Or-
bicularis, hemisphærica, fragilis, lævis, atra, stromate pulverulen-
to fuligineo, ostioliis prominulis; sporidiis allantoideis (Berk.)-
Hab. in ramis *Smilacis rotundifoliæ* in Carolina et Pen-

sylvania. — Ab *Hypox. fusco*, cujus formas minores refert, peritheciis immersis recedit. Orbicularis, lineam vix lata, depresso-hemisphærica, basi applanata, opaca, atra, facie Sphæriæ cujusdam simplicis e tribu Sph. pertusæ; intus vero peritheciis plurimis immersis tenuibus fragilibus instructa. Stroma tenue, fragile, demum subpulverulentum. Ostiola minuta, punctiformia, primo latentia. — Ab *Hypox. smilacicolo* Howe prorsus diversa.

38. **Diatrype glomeraria** Berk. in Fl. N. Zel. II, 205, t. CVI, fig. 13. — 740
Erumpens, angulata vel confluenta elongata, stromate parco, pallido, peritheciis ovatis, collo brevi; ostiolis obscuris; ascis clavatis, subsessilibus; sporidiis octonis curvis, allantoideis, majusculis, 14-15 μ . long.

Hab. in ramis levioribus Rhipogoni parviflori, Dunedin in Nova Zelandia. — Pustulæ 1 mill. crassæ quandoque stromate brunneo connexæ. In exempl. a Cl. Cooke communicatis asci 28-30 \approx 8-8,5; sporidia 12 \approx 2-3, olivacea.

39. **Diatrype?? tinctor** (Berk.) Sacc. *Sphæria tinctor* Berk. Decad. 741
n. 96. — Effusa, innata, plana, superficie sculpturam matricis e mycelio miniatæ referens, intus atra; peritheciis elongatis, collo brevi, ostiolo inconspicuo.

Hab. in ligno emortuo Platani occidentalis, Ohio (LEA). — Stroma 1 mill. crassum; ostiola externe inconspicua, sub lente depressa. Analoga *D. Stigmati*; sed fructificatio a Berk. non descripta.

40. **Diatrype? pachyloma** (Lév.) Sacc. *Sphæria (lignosa) pachiloma* 742
Lév. Ann. scienc. nat. V, 1846, pag. 259. — Receptaculo effuso applanato orbiculari vel ovato intus extusque nigro margine prominulo cincto; peritheciis ovatis immersis, ostiolis depressis.

Hab. in Chili ad cortices (A. GAY in herb. Mus. Par.). — Affinis *Diatrypi Stigmati* sec. Lév. Cl. Spegazzini ad *Hypoxylon* (cfr.) ducit, an res eadem?

DIATRYPELLA Ces. et De Not, Schema Sf. ital. p. 28. (Etym. a *Diatrype*). — Stroma a matricis substantia heterogeneum, erumpenti-subsuperficiale effusum v. disciforme. Perithecia stromate immersa collis v. ostiolis non v. vix convergentibus. Asci crassi, polyspori, stipitati. Sporidia allantoidea, minuta, hyalina v. sæpius e hyalino olivacea. — Conidia nota in nonnullis (*Libertella*).

1. **Diatrypella verruciformis** (Ehrh.) Nits. Pyr. Germ. p. 76, *Sph.* 743

verrucæformis Ehrh., *Sph. Avellane* Pers. — Stromate perithecigero per peridermium arctissime adhærens varieque laceratum erumpente, plus minus irregulari, verruciformi, grandiusculo, crasso, fusco-atro vel atro-ferrugineo, dein atro intus albido, discreto, connato vel in crustam inæqualem, rugosam, crassam confluyente, 1-6 mill. latit.; peritheciis 6-50 in quovis stromate, distichis vel monostichis dense stipatis, ovoideis vel subsphæroideis, fuligineis, ostiolis prominulis vel latentibus, obtuse conicis, integris vel subradiato-stellatis; ascis cylindræo-clavatis, longe pedicellatis, 100-120 \approx 10-15 p. sporif.; sporidiis curvulis vel subrectis, dilute fuscescentibus, 5-8 \approx 1-2.

Hab. in ramis crassioribus Coryli, Alni, Carpini, Cratægi, Fagi, Betulæ, Salicum, Frangulæ, Aceris, Fici, Mori, in tota Europa, Amer. bor., Amer. austr. — Var. *Spegazziniana* Sacc. Myc. Ven. n. 771. — Acervulis sæpius longitudinaliter seriatis; ascis clavatis, deorsum maxime attenuatis, 80 \approx 14 parte sporif., apice obtusiusculo, myriosporis; sporidiis botuliformibus, minutis, 6 \approx 1, curvulis ex olivaceo hyalinis. — In culmo putri Arundinis Donacis, Conegliano, Ital. bor. Junio 1876 (SPEGAZZINI).

2. **Diatrypella favacea** (Fr.) Ces. et De Not. Schem. Sfer. p. 28, Nits. 744

Pyr. Germ. p. 77, *Sph. favacea* Fr. *Sph. grossa* et *variolosa* Pers. *Sph. betulina* Chev. — Stromate transversim erumpente, peridermium sæpissime valvatim fisso arete cincto, vertice nudo, planiusculo, ellipsoideo, rarissime suborbiculari, primo albido, demum atro, intus albido, ruguloso, discreto, rarius connato, 3-6 mill. longit., 2-4 mill. latit.; peritheciis 6-30 in quovis stromate, ovoideis, obovoideis vel oblongatis, e mutua pressione variis, mono- vel distichis, ostiolis parum vel vix prominulis, leviter sexsulcatis, stellæformibus, aterrimis, majusculis; ascis clavatis, longissime pedicellatis, 60-80 \approx 9-12, p. sporif.; sporidiis curvulis, dilute fuscescentibus, 6-8 \approx 1.5. — Stromata conidifera obtuse conica, aurata, sulcis varie exarata, perithecigeris juvenilibus plerumque imposita; conidiis exilissime cylindricis curvatis, filiformibus, 40 μ . longis.

Hab. in ramis et truncis Betulæ albæ in tota fere Europa. — Var. *Coryli* Sacc. Myc. Ven. Spec. t. XV, f. 33-36. Acervuli majusculi, 3-5 mill. lati, tumiduli, disco verruculoso sed levigato; perithecia grandiuscula, $\frac{3}{4}$ -1 mill. diam., in quoque acervulo parum numerosa, sæpe monosticha; asci clavati longissime stipitati, 70 \approx 12 pars sporif., myriospori; sporidia dense conglobata, cylin-

dracea, curvula. 7-8 \approx 1-1 $\frac{1}{2}$, dilute flavida, utrinque 1-guttulata.
— In ramis corticatis Coryli, Treviso (Italia boreali).

3. **Diatrypella nigro-annulata** (Grev.) Nits. Pyr. Germ. p. 81, *Sphæria* 745
nigro-annulata Grev., *Sphæria* et *Valsa angulata* Fr., *Diatrypella angulata* Ces. et De Not. — Stromate erumpente, lateribus peridermio varie lacerato, interdum substellatim fisso vestito, vertice nudato, convexo, demum nigro. verruciformi, truncato-conico, subhemisphærico, suborbiculari vel subangulato, subinde ellipsoideo, discreto vel confluyente, 1,5-3 mill. latit.; peritheciis mono- vel distichis, 2-25 in singulo stromate, ovoideis vel subsphæroideis, mutua pressione angulatis, ostioliis plus minus prominulis, conico-rotundatis, integris vel subradiato-stellatis, tandem sæpe cupuliformibus et pertusis; ascis anguste clavatis, longissime pedicellatis, 90-180 \approx 9-13, p. sporif.; sporidiis nonnihil curvatis, dilute fuscescentibus, 5-8 \approx 1,5.

Hab. in ramis Betulæ, Fagi, Ilicis, Cytisi Laburni, Coryli in Germania, Fennia, Belgio, America boreali, Britannia et Italia.

4. **Diatrypella circumvallata** (Nees) Fuck. Symb. Myc. App, I. 325, 746
Sph. angulata β . *circumvallata* (Nees) Fr. Syst. myc. II, p. 391. — Stromatibus quam in *D. nigro-annulata* majoribus et magis depressis (usque 6 mill. lat.), circulo stromatico crassiore; disco minuto, conico; peritheciis in quoque stromate intus albo, 3-5, majusculis, ostioliis minutissimis; ascis sporidiisque ut in *D. nigro-annulata*, sporidiis vero sec. Nitschke paulo longioribus, nempe 9 μ . longis.

Hab. ad ramos Coryli, raro in Germania. — Stromata peridermio circum circa infosso seu vallato cineta.

5. **Diatrypella Tocciana** De Not. Sfer. ital. p. 30. t. XXXI, *D. verruciformis* var. Auct. nonnul. — Stromate perithecigero erumpente, subhemisphærico vel obtuse conico, vertice convexiusculo fuscescente vel demum nigricante, exiguo demum denudato, cæterum peridermio vix fisso aretissime tecto, 1-2,5 mill. latit.; peritheciis submonostichis, subsphæroideis fuscescentibus, 3-8 in singulo stromate, collis brevissimis, ostioliis latentibus vel parum prominulis, rotundato-conicis, integris vel subradiato-stellatis, interdum cupuliformibus; ascis anguste clavatis, 100-150 \approx 12 p. sporif.; sporidiis leviter curvulis, 5-8 \approx 1,5-2. — Stroma conidiferum forma plerumque irregulari, conico-depressum, varie sulcatum, dilute auratum, deinde nigricans; conidiis lineari-cylindricis, filiformibus, cur-

vatis, 28–32 μ . longis, in sterigmatibus brevissimis, parce ramosis, solitarie acrogenis.

Hab. in ramis Alni incanæ et A. glutinosæ in Britannia, Fennia, Germanialia, Italia, Amer. bor. — Sec. cl. Karsten *D. favacea, verruciformis, nigro-annulata* et *Toccicæana* non satis specificè differunt. — Forte a *D. Toccicæana* non differt *D. alnifraga* Ces. Hedw 1856, p. 104, t. XIV, fig. D.

6. **Diatrypella protrusa** (Pr.) *Sphærosperma protusum* Pr. Fungi 748
Hoyersw. n. 30. — Peritheciis globosis, magnis, cum collis ostiolatis, sublageniformibus, convergentibus, lineam nigram variam circumscribentibus, basi in stromate e matre formato, immersis, in disco albo, minuto tectum, prominulis; ascis clavatis, longis, tum apice perviis, inter paraphyses; sporidiis fusiformibus, utrinque rotundatis curvatis, minutis, albis, plurimis.

Hab. in cortice Alni, Hoyerswerda (Germania). — An diversa a *D. Toccicæana*?

7. **Diatrypella decorata** Nits. Pyr. Germ. p. 79, *Microstoma vulgare* 749
Auersw. — Stromate transversim erumpente, peridermio valvatim vel varie fisso cincto, vertice nudo, planiusculo vel convexulo, ellipsoideo, subinde fere orbiculari, ex fusco sordide nigricante, intus albido, discreto, raro confluyente, minuto, 2–2,5 mill. lat.; peritheciis 6–12 in singulo stromate, monostichis, ovoideis vel subsphæroideis, dense stipatis mutuaque pressione angulatis, ostioliis parum vel vix prominulis, quadrisulcatis, stelliformibus, exiguis instructis; ascis cylindræo-clavatis, longissime pedicellatis, 40–50 \approx 5 p. sporif.; sporidiis curvulis vel subrectis, dilute fuscescentibus, 4–6 \approx 1.

Hab. in ramis corticatis putrescentibus Betulæ albæ in Germania, Gallia, Fennia. — Cum *D. verruciformi* multum commune habet; differens tamen stromatibus minoribus, mox fuscescentibus, ascis sporidiisque multo minoribus.

8. **Diatrypella exigua** Wint. Myk. Not. Hedw. 1874, p. 133. — Stro- 750
matibus minutissimis, e basi subcirculari v. elliptica verruciformibus, erumpentibus, peridermio fisso cinctis, intus pallidis; peritheciis in quoque stromate 2–10, subglobosis; collis brevibus; ostioliis papillatis, non exsertis, 4–6-sulcatis, 300 μ . diam.; ascis teretivulvatis, longe stipitatis, totis 110–150 \approx 12, myriosporis; sporidiis globatis allantoides, curvulis, 8 \approx 1,5, fuscidulis.

Hab. in ramulis Salicis, prope Halle (Germania). — *D. decoratæ* affinis, sed multo minor.

9. **Diatrypella pulvinata** Nits. Pyr. Germ. p. 72, *Sphæria* v. *Dia-* 751

trype quercina Auct. p. p. — Stromate perithecigero erumpente, primitus nonnihil conico-attenuato, mox autem irregulariter prismatico, truncato, obtusissimo, planiusculo, ex fusco nigricante, ostiolisque prominulis, minutissimis elevato-punctato, lateribus peridermio fesso, erecto arctissime cincto; peritheciis in singulo stromate 15-30, monostichis v. distichis, minutis, densissime stipatis, oblongis v. ovatis, mutuaque pressione plerumque angulatis, in collum breve subito attenuatis, ostiolo obtuse conico punctiformi, subintegro, prominulo instructis; ascis anguste oblongis, longe pedicellatis, paraphysibus filiformibus, simplicibus obvallatis, myriosporis, 60-80 = 8-12 p. sporf.; sporidiis conglobatis, cylindricis, leviter curvatis, immo subrectis, dilute fusciscentibus, 6-7 = 1½.

Hab. in ramis *Quercus*, prope Æstrich, Münster et Waldheim, Germania, rara.

10. **Diatrypella intermedia** Karst. Fung. Fenn. 782, Myc. Fenn. II, 752 p. 152. — Stromate perithecigero erumpente, laciniis peridermii stellatim fissi lateribus cincto, pulvinato, orbiculari vel angulato, disco plano-convexo, e fusco nigro, discreto, subinde connato, 2-4 mill. latit.; peritheciis in quovis stromate 20-40, distichis vel monostichis, densissime stipatis, ovoideis, mutua pressione angulatis, in collum longiusculum attenuatis, ostiolis plus minus prominentibus, crassis, alte quadrisulcatis, sæpius 0,3-0,4 mill. longit.; sporidiis leniter curvulis, vel subrectis, dilute fusciscentibus, 5-7 = 1-1,5.

Hab. in ramis *Quercus* exsiccatis in insula Runsala sat frequens. — Inter *D. quercinam* (Pers.) et *D. pulvinatam* Nits. fere intermedia, differens ab illa sporidiis minoribus, minus curvatis, peritheciisque in stromate singulo pluribus, ab hac ostiolis majoribus, crassioribus, alte quadrisulcatis.

11. **Diatrypella aspera** (Fr.) Nits. Pyr. Germ. p. 74, Sacc. Fung. it. t. 561. *Sph. aspera* Fr. S. M. II. 354. — Stromate e basi plerumque suborbiculari prismatico v. subcylindrico, erumpente, corticem quam in afflinibus altius superante, lateribus arduis peridermii erecti laciniis arctissime adhærentibus cincto haud raro confluyente, intus albido, vertice nudato, mox aterrimo, planiusculo v. convexo, ostiolis crassis, rugosis, ceterum integris, conicis v. fere cylindricis longe exsertis exasperato; peritheciis in singulo stromate 4-12, monostichis, circa centrale sæpe circinantibus, majusculis, subglobosis v. nonnihil compressis, in collum brevissimum, angustum subito attenuatis; ascis subcylindricis, longe pedicellatis, pa-

raphysibus filiformibus, simplicibus stipatis, myriosporis, 112-120 \approx 10-12 p. sporif.; sporidiis numerosissimis, conglobatis, cylindricis, curvulis, dilute fuscescentibus, 6-7 \approx 1 $\frac{1}{2}$.

Hab. in ramis Fagi sylvaticæ, rarius, Quercus, Corni, Alni in Britannia, Germania, Suecia, Gallia, Italia et Amer. bor.

12. **Diatrypella sordida** (Pers.) Nits. Pyr. Germ. p. 73, *Sphæria sordida* Pers. Syn. p. 25, nec Fr. — Stromate forma eximie regulari, e basi orbiculari hemisphærico-conico v. subcylindrico, emergente ac peridermio arctissime adhærente nec fisso lateribus tecto, in disco nudato, convexiusculo, omnino lævi v. ostiolis prominulis punctulato-exasperato sordide nigricante, intus ex cinereo fuscescente; peritheciis in singulo stromate 10-18, minutis, subglobosis, ordine inæquali denseque stipatis, in collum breve attenuatis, ostiolisque punctiformibus tri- v. quadrigonis, parum v. vix prominulis instructis; ascis anguste oblongis, longe pedicellatis, paraphysibus simplicibus, filiformibus, tenerrimis obvallatis, myriosporis, 60 \approx 8-10 p. sporif.; sporidiis conglobatis, cylindricis, nonnihil curvatis, subhyalinis, minimis, 5-6 \approx 1-1 $\frac{1}{2}$.

Hab. in ramis Fraxini, Lipsiæ, Germania (AVERS WALD).

13. **Diatrypella lævigata** Fuck. Symb. Mycol. p. 232. — Stromate erumpente, pulvinate, convexo, demum sublibero, 1-2 lineas lato, $\frac{1}{2}$ lineam crasso, inferiore parte epidermide laciniata cincto, nigro, nitido, intus sordido; ostiolis non prominulis, nonnisi orbiculari-umbilicatis, immersis, nudo oculo non conspicuis, peritheciis 6-10, magnis, globosis; ascis longissime stipitatis multisporis, parte sporifera oblonga, 86 \approx 8; sporidiis cylindræis, valde curvatis, dilute flavis, 8 \approx 2.

Hab. in ramis corticatis Quercus, rarius, Dombresson (Jura), ubi legit MORTIER.

14. **Diatrypella eutypoides** Niessl Not. Kr. Pyr. p. 55. — Stromatibus, tubercula formantibus, nunc suborbicularibus (in cortice) nunc ellipsoideis vel elongatis (in ligno), convexis, demum confluentibus, stipatis, gregariis vel seriatim dispositis, interdum effusis, superficialibus vel parum immersis, rugulosis, extus intusque nigris; peritheciis 2-10, mox in stromate proprio mox in ligni vel corticis parte extima, plerumque irregulariter monostiche nidulantibus denseque stipatis, globosis, majusculis 300-450 μ . diam., rostro perithecii diametrum vix æquante sæpe stromatis superficiem haud superante, crasso, ostiolo obscure sulcato vel integro; ascis anguste clavatis longe pedicellatis 130-180 \approx 10-12 (p. sporif. 80-100 lg.);

sporidiis numerosis, cylindræcis, curvatis, obtusis, dilute fusciscentibus, 7-10 \approx 11½; paraphysibus filiformibus ascos superantibus.

Hab. in ramis partim decorticatis Ulmi, Lautschitz, Moravia.
— Ad *Cryplovalsas* nutat.

15. **Diatrypella minuta** Nits. Pyr. Germ. p. 75, Fuck. Symb. Mycol. 757
p. 232. — Stromate minuto parumque extante, conico-attenuato, orbiculari v. angulato, superne truncato, plano v. convexiusculo, nigricante, intus albido, peridermio fisso, arrecto areteque adhærente cincto; peritheciis in singulo stromate 10-12, monostichis, minutis, dense confertis, in collum breve et angustum attenuatis, ostioliis conicis, obtusis, tri- v. quadrisulcatis, prominentibus instructis; ascis oblongis v. subelavatis, angustis, longissime pedicellatis, paraphysibus simplicibus, filiformibus superatis, myriosporis, 48 \approx 6-8 p. sporif.; sporidiis conglobatis, cylindricis, nonnihil curvatis, dilute fusciscentibus, 5-7 \approx 1.

Hab. in ramis emortuis Castaneæ vescæ, Hallgarten, Nassovia (FUCKEL).

16. **Diatrypella malaleuca** (Kunze) Nits. Pyr. Germ. p. 80, *Sphæria* 758
malaleuca Kunze in Herb. — Stromate minuto, e basi suborbiculari, conico-truncato, subcylindrico, forma fere regulari v. varie angulato, peridermii laciniis stellatim fissis aretissimeque adhærentibus cincto, vertice nudato, planiusculo, albido peritheciolorum ostioliis pulchre nigro-punctato, interdum confluyente; peritheciis in singulo stromate plerumque 5-9, monostichis, subglobosis, majusculis, dense stipatis, collis crassis, brevibus ostioliisque stromatis superficiem vix superantibus, sulcis levibus 4-6 pulchre ac stellatim exaratis instructis; ascis lineari-oblongis, longe pedicellatis, polysporis, paraphysibus filiformibus, simplicibus, tenuissimis, eseptatis stipatis, membrana apicem versus paullo incrassata textis, 50-60 \approx 7-8 p. sporif.; sporidiis conglobatis, lineari-cylindricis, curvulis, pallide fusciscentibus, 6-8 \approx 1.

Hab. in ramis crassioribus corticatis Fagi in Lusatia (SCHMIDT).

17. **Diatrypella quercina** (Pers.) Nits. Pyr. Germ. p. 71, *Sphæria* 759
quercina Pers., *D. Rousselii* De Not. Sfer. ital. t. 32. — Stromate erumpente, lateribus laciniis peridermii stellatim fissi cincto, pulvinato, subregulari, orbiculari vel angulato, ruguloso, crasso, disco plano-convexo, demum nigro, ut plurimum discreto, 2-4 mill. lat.; peritheciis in quovis stromate 2-15, distichis vel monostichis, dense stipatis, ovoideis, mutua pressione angulatis, in collum longiusculum attenuatis, ostioliis plus minus exstantibus, crassis, alte

quadrisulcatis; ascis fusoideis, longissime pedicellatis, 80-120 \approx 10-12 p. sporif.; sporidiis valde curvatis, dilute fusciscentibus, 8-12 \approx 2-3; paraphysibus parce articulatis, gracilibus. — Stromata conidifera obtuse conica, sulcata, peritheciigeris haud raro superposita, conidiis auratis, innumeris, filiformi-cylindricis, tenuissimis, maxime curvatis obruta.

Hab. in ramis corticatis *Quercus* in tota Europa et Amer. boreali.

18. **Diatrypella opaca** Cooke Fungi of Texas 143. — Erumpens, suborbicularis, atro-brunnea; ostiolis depressis, sulcatis, vix distinctis; ascis clavatis, longe stipitatis; sporidiis leniter curvulis, numerosissimis, subluteolis. 760

Hab. in ramis *Ilicis opacæ*, Texas, Florida, Amer. bor. — Nonnullis notis cum *D. quercina* convenit, sed minor, nitidior, etc.

19. **Diatrypella discoidea** Cooke et Peck. 28 Rep. on St. Mus., Myc. 761 univ. n. 864. — Stromate suborbiculari vel elliptico, transverse erumpente, peridermio rupto arcte cincto, vertice nudato, e griseo nigricante; ostiolis parvis, vix exsertis, quadrisulcatis vel fere lævibus; peritheciis 6-12, ovatis; ascis parvis, anguste clavatis, longissime pedicellatis, polysporis; sporidiis cylindricis, rectis curvisve; paraphysibus filiformibus.

Hab. in Amer. septentr., Albany, New-York, in cortice emortuo *Betulæ populifoliæ*, Majo (Ch. H. Пекк.). — Affinis *D. quercinæ*. Adest forma stromate minuto, angusto, aliaque stromate latiore et suborbiculari. — Var. *Alni* Rav. Fung. Amer. n. 188. In ramis *Alni serrulatae*, in Carolina infer.

20. **Diatrypella olivacea** C. et E. New Jersey Fungi in Grevill. VI. 762 p. 9. — Erumpens, convexa, primum olivacea, demum atra; peritheciis magnis, paucis; ostiolis obtusis; ascis clavatis, subsessilibus; sporidiis numerosis, flavis, linearibus, obtusis, leniter curvulis 10-12 μ . long.

Hab. in ramis *Nyssæ*, New Jersey, Amer. bor. — Habitus *D. quercinæ* sed initio olivacea, dein atra, levior.

21. **Diatrypella irregularis** C. et E. New Jersey Fungi in Grev. VI. 763 p. 92. — Erumpens, angulata, convexa, nigrescens, intus subconcolor, ostiolis prominulis, sulcatis; ascis clavatis, longe stipitatis; sporidiis numerosissimis, allantoideis, flaveolis, 8 μ . longis.

Hab. in ramis *Pyrî communis*, New Jersey, Amer. bor. — Affinis *D. quercinæ* sed stromata magis angulosa ostiolaque minus distincta.

22. **Diatrypella subfulva** (B. et C.) Sacc. *Diatrype subfulva* B. et C. 764
 Not. North Amer. Fungi n. 856. — Pustulis parvis apice fulvo-pulverulentis; ostioliis nigris pertusis, demum emergentibus; ascis clavatis, longe stipitatis; sporidiis allantoideis plurimis, 10 μ . long.
- Hab.* in ramis Nyssæ, in Carolina inf., Amer. boreali.
23. **Diatrypella Frostii** Peck. Bot. Gaz. 1878. — Stromate verruciformi, prominulo, convexo v. hemisphærico, vix 2 mill. diam., interdum confluyente, partim peridermio arcte cincto, nigro, intus virescente, maculam albam in ligno relinquente; peritheciis subglobosis, ut plurimum 10-15; ostioliis obsoletis; ascis cylindræis, breve stipitatis, polysporis; sporidiis allantoideis; sub-olivaceis, 6-8 μ . long., curvulis. 765
- Hab.* in ramis emortuis Aceris, Brattleborough, Vermont (Amer. bor.) legit. C. C. Frost. — A *Diatr. verruciformi* differt stromate intus viridulo, a *D. betulina* stromate minori, verrucoso.
24. **Diatrypella betulina** (Peck.) Sacc. *Diatrype betulina* Peck 25 766
 Rep. p. 101. — Stromate transverse erumpente, elliptico, prominulo, ligno insculpto, ibique areolas albas nigro-marginatas efformante, intus virente, extus nigricante, superne appanato, ostioliisque numerosis, prominulis, stellatis punctulato; peritheciis sparsis monostichis, ellipticis, nigris; ascis elongatis, polysporis; sporidiis allantoideis, luteolis, 5 μ . long.
- Hab.* in Amer. bor. Greig, in ramis emortuis Betulæ luteæ. — Mox dignoscitur stromate virescente.
25. **Diatrypella melasperma** (Fr.) Sacc., *Sph. melasperma* Fr. S. M. 767
 II. p. 389. Sec. Curr. Linn. Trans. XXII, fig. 123, t. 47 (nec West., cfr. *Melanconis*). — Elliptica, aterrima, peritheciis erectiusculis ovatis stromate proprio pulveraceo cinctis, disco erumpente rugoso; ascis clavatis, stipitatis, polysporis; sporidiis polystichis, allantoideis, 5-7,5 μ . long., luteolis.
- Hab.* in cortice vetusto betulino in Suecia (Fr. Sci. Suec. n. 157). — In ætate juvenili pustulæ cortici omnino innatæ, linea fusca circumscriptæ, stromate lutescenti-pallido absque peritheciis; disco erumpente lineari jam atro; in adulta pustulæ ellipticæ, 2 lin. longæ, depressæ, cortici interiori innatæ; conceptaculum subliberum, tenue, fragile, opacum, atrum, epidermide adnatum, ut hæc sublata dimidiatum persistit scutelliforme; stroma pulveraceum, ex olivaceo fuligineo-nigricans; perithecia reliquorum majora, pauca, aggregata, erectiusculo-convergentia, ovata, fragilia; discus

erumpens, ellipticus, minutus, niger, ostiolis obsolete prominulis, sparsis.

26. **Diatrypella Liriodendri** (Schw.) Sacc. *Sph. Liriodendri* Schw. 768

Syn. Car. n. 60, Curr. in Linn. Trans. XXII, t. XLVI, fig. 72. — Obovata, rugosa, nigrofusca, intus candida, peritheciis amplis monostichis, ostiolis subprominulis; ascis clavatis, breve stipitatis, polysporis; sporidiis allantoideis, luteolis, 5-6 μ . long.

Hab. gregaria in cortice *Liriodendri* *Tulpiferæ* in Carolina, Amer. bor. — Erumpens, prominens, subconfluens, 2-3 lin. longa et lata, cortici usque ad basim nigrescenti insidet et junior ab eodem circumdatur; superficies pulverulenta, ostiolis indistinctis variolosa; sed in nostro specimine valde adulto nuda, atra, ostiolis prominulis, intus nigrescens; perithecia 3-6, subglobosa, collo brevi. Fr. S. M. III. 356. — Peraffinis *D. asperæ*, sec. Curr. l. c.

27. **Diatrypella Caphalanthi** (Schw.) Sacc. *Sph. Cephalanthi* Schw. 769

Syn. Carol. n. 59, Fr. S. M. II, p. 356. — Subrotunda, verrucæformis, extus intusque atra, basi circumscripta, stromate oblitterato ostiolis crassis crenatis confluentibus; ascis clavatis polysporis; sporidiis allantoideis.

Hab. in ramis *Cephalanthi* occidentalis emortuis, Carolina, Buffalo, Alabama (Amer. bor.). — Sec. exempl. a cl. Farlow accepta sporidia 8-10 \approx 1,5, subhyalina, sed plantæ habitus vix *Diatrypellæ*, potius vero *Cryptovalsæ*. — Minor, gregaria, lineam lata, confluens, per epidermidem stellatim v. radiatim ruptam erumpens, prominens, rimas corticis infestans; perithecia aggregata, conica, cortice tenui tecta. Fr. l. c.

28. **Diatrypella melæna** Nits. Pyr. Germ. p. 78. — Stromate plerumque majusculo, crasso, e basi ovali per peridermii rimas transversim directas erumpente alteque protuberante, elliptico vel forma plus minus irregulari, verruciformi v. confluendo deformati, verticem versus vix v. omnino non attenuato, lateribus arduis peridermii laciniis fissis arrectisque vestito, mox aterrimo, disco nudato, planiusculo v. convexo ostiolis crassis, conicis, leviter striatis, exsertis exasperato, ceterum læviusculo; peritheciis in singulo stromate 3-20, ovato-subglobosis, monostichis, magnis, collo brevi, crasso instructis; ascis cylindrico-clavatis, longissime pedicellatis, paraphysisibus filiformibus simplicibusque stipatis, myriosporis, 120 \approx 18 p. sporif.; sporidiis numerosissimis, conglobatis, cylindricis, curvulis, fusciscentibus, 6-7 \approx 1½.

Hab. in ramis *Betulæ* albæ prope Driesen, Germania.

REPERTORIUM

SPHÆRIACEARUM ALLANTOSPORARUM

SECUNDUM MATRICES *)

Obs. C. indicat *Cælosphæriam*. — Ca. *Calosphæriam*. — Co. *Coronophoram*. — Cl. *Cryptosphærellam*. — Cr. *Cryptosphæriam*. — Cv. *Cryptovalsam*. — D. *Diatrypem*. — Dl. *Diatrypellam*. — E. *Enchnoam*. — En. *Endoxylam*. — Et. *Eutypam*. — Eu. *Eutypellam*. — F. *Fracchiæam*. — M. *Massalongiellam*. — P. *Pleurostoma*. — Q. *Quaternariam*. — V. *Valsam*. — Vl. *Valsellam*.

Abies — C. 378. — Co. 416. 417. — V. 436. 437. 458. 516. 538. — Eu. 570. — En. 674.	Et. 657. — Cr. 677. — D. 703. — Dl. 743. 747. 748. 753. 761.
Acacia — V. 481. — Vl. 615. — Cr. 681.	Amorpha — Q. 426.
Acer — C. 377. — F. 384. — Ca. 392. — Q. 425. — V. 429. 454. 502. 512. 525. — Eu. 578. 594. 596. 597. — Et. 618. 622. 623. 632. 637. 638. 640. 643. 657. — Eu. 690. — D. 703. 707. 711. 725. 731. 734. — Dl. 743. 765.	Anagyris — Eu. 588.
Æsculus — F. 384.	Andromeda — Ca. 398. — V. 487. 489. — Cr. 685.
Ailanthus — V. 494. — Eu. 576. 577. — Et. 657.	Anthyllis — Et. 629.
Alnus — E. 376. — F. 384. — Ca. 393. 399. 401. 403. 405. — Co. 418. 420. — Q. 425. 428. — V. 429. 431. 457. 459. 463. 505. 506. 207. 508. 512. 542. — Eu. 573. 574. — Vl. 603. —	Arbutus — Et. 648. — D. 738.
	Arundo — Et. 633. 637. 658. — Cv. 698. — D. 720. — Dl. 743.
	Atriplex — V. 464.
	Atropa — Eu. 582.
	Azalea — V. 503.
	Bauhinia — Et. 657.
	Benzoin — D. 711.
	Berchemia — Eu. 586.
	Betula — E. 374. — C. 379. — Ca. 392. 393. 403. 404. 407. — Co. 413.

*) Ad *Eutypam lejioplucam*, n. 638, pag. 160, sequentia typoscripta omisit:

Hab. in ramis decorticatis *Aceris campestris*, *Hederæ*, *Fraxini*, *Pyri* in Suecia, Britannia, Gallia, Germania, Italia, Belgio et Amer. bor. — *Sph. immersa* Sow. Fr. S. M. II. 358, in ramis *Coryli*, vix v. non differt.

- V. 455. 485. 518. 519. 534. —
 Eu. 572. — VI. 616. — D. 705. 710.
 — Dl. 743. 744. 475. 749. 761. 766.
 767. 770.
 Broussonetia — Et. 657.
 Buxus — F. 384.
 Calycotome — Et. 629.
 Carpinus — C. 377. — F. 388. — Ca.
 402. — Q. 425. — V. 429. 474. 476.
 512. — Eu. 564. 585. — Et. 618.
 637. 643. 657. — Cv. 692. 700. —
 D. 705. 730. — Dl. 743.
 Cassines — D. 721.
 Cassinopsis — E. 717.
 Carya — V. 491. 550. 552. — D. 716.
 Castanea — Ca. 394. 406. — Q. 425.
 — V. 429. 433. 512. — Eu. 579. —
 D. 705. — Dl. 757.
 Celastrus — V. 527.
 Celtis — Eu. 599. — Et. 656. 657.
 Cephalanthus — Dl. 769.
 Cirsium — V. 483.
 Citrus — Cv. 701. — D. 713.
 Clematis — Et. 657.
 Clethra — V. 520.
 Comptonia — V. 491.
 Cornus — C. 379. — F. 388. — Ca.
 409. — V. 433. 472. 556. — VI. 604.
 Et. 637. 641. 652. — Cv. 692. —
 Dl. 653.
 Coronilla — Et. 657.
 Corylus — C. 378. — Ca. 396. — V.
 429. 440. 441. 445. 552. — Et. 637.
 638. 640. — Cv. 698. — D. 704. 705.
 Dl. 743. 744. 745. 746.
 Cratægus — Ca. 392. — V. 429. 433.
 456. 500. 512. 537. — Eu. 563. 593.
 — Et. 637. — Cv. 692. — D. 705.
 706. — Dl. 743.
 Cydonia — VI. 605.
 Cytisus — Co. 414. — Dl. 745.
 Daucus — Et. 637.
 Dipteryx — D. 723.
 Erythrina — F. 385.
 Eucalyptus — F. 384. — Ca. 408. —
 V. 497. — D. 732.
 Evonymus — V. 452. — Et. 657. —
 Cr. 679. — Cv. 702.
 Fagus — C. 378. — Ca. 395. 409. 410.
 — Co. 414. — Q. 425. — V. 476.
 523. 634. 541. — Eu. 270. — VI.
 602. — Et. 618. 621. 622. 635. 637.
 643. 649. — Cr. 678. — D. 703. 705.
 Dl. 743. 745. 753.
 Ferula — Et. 637.
 Ficus — V. 432. — Et. 636. 637. 660.
 Cv. 698. 702. — D. 733. — Dl. 743.
 Fraxinus — C. 377. — V. 429. — Eu.
 571. 584. — Et. 648. 638. — Cr.
 675. 680. — D. 714. — Dl. 754.
 Genista — Et. 629. 630.
 Gleditschia — C. 377.
 Gossypium — V. 496.
 Hamamelis — D. 707.
 Hedera — Et. 638. 657.
 Hibiscus — Et. 657.
 Hippophaë — V. 542.
 Iasminum — Co. 422.
 Ilex — V. 470. 543. — Dl. 745. 760.
 Juglans — Co. 414. — Eu. 583. — Et.
 632. — D. 708.
 Juniperus — V. 434. 475. 488. — D.
 712.
 Iussieua — M. 371.
 Larix — V. 512.
 Laurus — V. 528. 531. — Eu. 569. —
 Et. 657. — D. 722.
 Ligustrum — V. 517.
 Lindera — V. 554.
 Liquidambar — C. 383. — V. 477. 514.
 — Eu. 571. — Et. 635.
 Liriodendron — D. 726. — Dl. 768.
 Lonicera — F. 384. — V. 521. — VI.
 613. — Et. 620.
 Maclura — V. 501. 530.

- Magnolia — Eu. 591. — D. 703. 731.
 Massaria — V. 484.
 Melia — Eu. 601. — Et. 657.
 Mespilus — D. 705.
 Mimulus — D. 738.
 Morus — V. 429. — Eu. 571. — Et.
 640. 657. — Cv. 692. 697. 698. —
 — Dl. 743. — D. 735.
 Myrica — F. 387. — Eu. 590.

 Nyssa — V. 462. 482. — Dl. 762. 764.

 Olea — V. 439. 549.
 Ostrya — V. 463.

 Paliurus — F. 384.
 Palmaceæ — Et. 671.
 Persea — D. 729.
 Persica — V. 429. — Eu. 566,
 Photinia — V. 429.
 Pinus — V. 443. 466. 516. 539. 540.
 562. — Et. 539. — En. 672.
 Pistacia — V. 566. — Et. 637.
 Platanus — V. 514. 533. — Eu. 592.
 593. — Et. 626. — D. 741.
 Populus — C. 379. — Ca. 412. — V.
 461. 500. 512. 513. 519. 533. — Eu.
 578. — Et. 618. 643. 650. — Cr.
 676. 682. — D. 703.
 Prunus — C. 377. 379. — Ca. 391. 409.
 411. — Co. 413. 414. — V. 429.
 438. 499. 512. 532. 537. 545. 446.
 547. 561. — Eu. 565. 566. 595. —
 Et. 618. 625. 627. 630. 637. 643. 657.
 Cr. 676. — Cv. 693. — D. 703. 705.
 709.
 Punica — V. 509. — Et. 661.
 Pyrus — C. 380. — V. 479. 510. 512.
 534. — Vl. 611. 617. — Et. 637.
 638. — D. 705. — Dl. 763.

 Quercus — E. 372. — C. 379. 382. —
 P. 390. — Ca. 397. — Co. 415. 419.
 423. — Q. 427. — V. 431. 444. 460.
 465. 469. 471. 472. 580. 490. 492.
 512. — Eu. 478. 581. — Et. 635.
639. 640. 643. 649. 654. 665. 667.
 — Eu. 674. — D. 703. 705. 714.
 731. — Dl. 751. 752. 753. 755. 759.

 Rhamnus — V. 467. 534. — En. 580.
 — Et. 637. 643. — D. 705. — Dl.
 743.
 Rhipogonum — D. 740.
 Rhododendron — V. 490.
 Rhus — V. 429. 493. — Et. 657.
 Ribes — V. 453. — Eu. 575. — Et.
 643.
 Ricinus — Et. 637. — D. 727.
 Robinia — C. 377. — V. 486. 504. —
 Et. 657. — Cv. 698.
 Rosa — Co. 421. — V. 433. 522. 529.
 Vl. 610. — Et. 643. 652. — Cr. 684.
 686. — Cv. 694. — D. 705. 736.
 Rubus — F. 384. — V. 430. 511. 522.
 Vl. 514. — D. 717.

 Sabal — V. 435. — C. 379. — Ca. 409.
 Co. 418. — Q. 426. — V. 447. 450.
 514. 515.
 Salix — V. 519. 527. 534. 544. 548.
 551. 459. — Eu. 599. — Vl. 606.
 609. 612. — Et. 623. 524. 625. 637.
 641. 643. 646. 647. 657. — Cr. 677.
 680. — Q. 989. — Cv. 696. — D.
 803. 704. 714. — Dl. 743. 750.
 Salsola — Et. 634.
 Sambucus — E. 373. 375. — V. 511.
 Eu. 569. — Et. 619. 657.
 Sarothamnus — Et. 629. 645.
 Scutia — En. 600.
 Smilax — Et. 651. 657. 659. — D. 739.
 Sorbus — Ca. 411. — Co. 413. — V.
 478. 536. 537. — Eu. 568. — Et.
 620.
 Spiræa — Et. 653.
 Staphylea — Et. 649.
 Syringa — C. 377. — V. 448.

 Taxus — V. 524.
 Tilia — C. 377. — Cr. 413. — Q. 426.

- V. 451. 512. — Et. 631. 657. —
Cv. 695. — D. 705.
Ulex — Et. 737. 668.
Ulmus — C. 377. — Q. 426. — V. 429.
512. 626. 560. — Eu. 567. 571. 598.
Et. 626. 637. — Dl. 756.
Vaccinium — V. 489.
Viburnum — C. 478. — V. 500. 414.
- Vl. 606. — V. 468. 557. 558. —
Et. 642. — Cr. 688. — D. 703.
Vitis — C. 378. — V. 500. 514. — Vl.
606.
Weigelia — Et. 657.
Weinmannia — F. 389.
Xanthoxylum — Eu. 571.
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Sect. 2. Phaeosporæ Sacc.

Sporidia continua ovoidea v. subnavicularia, fusca v. fuliginea.

Clavis analytica generum.

A) Simplicēs v. cæspitosæ.

a) Superficiales v. subsuperficiales.

1. Perithecia longe rostrata.

Ceratostoma. Perithecia carbonacea v. membranacea atra; asci ovoidei v. teretes.

2. Perithecia erostrata.

§ Perithecia submembranacea.

* Sporidia circulo mucoso v. caudâ carentia.

Chaetomium. Perithecii setæ ramosæ v. uncinatæ v. spirales; asci diffluentes.

Helminthosphæria. Perithecii fungicoli setæ simplices apice conidiophoræ; asci persistentes.

** Sporidia circulo mucoso v. caudâ instructa.

(Perithecia glabra v. setulosa, plerumque fimicola; asci persistentes).

† Sporidia octona, rarius quaterna.

Sordaria. Perithecia subsparsa. Sporidia hyalino-caudata.

Hypocopa. Perithecia subsparsa. Sporidia ecaudata, hyalino-obvoluta.

Coprotepa. Perithecia dense (quasi stromate) aggregata. Sporidia hyalino-obvoluta.

†† Sporidia numerosiora.

Philocopa. Perithecia subsparsa. Sporidia sæpius caudata.

§§ Perithecia typice carbonacea.

Rosellinia. Perithecia glabra v. setulosa, ut plurimum phytogena; asci persistentes; sporidia mutica, rarius appendiculata.

§§§ Perithecia coriacea, tenacia.

Bombardia. Perithecia adscendenti-elongata; sporidia diu vermicularia hyalina, dein ovoidea, fusca, caudataque.

b) Epidermide v. peridermio tectæ.

Anthostomella. Perithecia epidermide adhærente et nigrificata tecta.

Astrocytis. Perithecia initio tecta dein cum volva stellata (epidermica?) erumpentia.

B) Stromaticæ, compositæ.

a) Stroma matrice immersum, subligneum; perithecia membranacea.

Anthostoma. Stroma effusum (eutypeum) v. limitatum, subvalseum.

b) Stroma superficiale carbonaceum v. coriaceum; perithecia carbonacea eo immersa v. extantia.

1. Stroma teres v. fruticulosum v. filiforme.

Xylaria. Stroma fruticulosum, clavatum v. filiforme; perithecia stromate lateraliter subimmersa.

Camillea. Stroma verticale teres apice truncatum; perithecia annulatim circa apicem stromatis verticaliter immersa.

2. Stroma effusum v. cupulatum, adnatum v. substipitatum.

§ Conidia in stromate juniore superficialia.

Poronia. Stroma cupuliforme, brevissime stipitatum; plerumque fimicolæ.

Ustulina. Stroma repando-pulvinatum, crassum, senio intus subcavum.

Bolinia. Stroma effusum, solidum; perithecia immersa collis longiusculis.

Hypoxylon. Stroma effusum v. subglobosum, solidum; perithecia in stromate innato-prominula, collis subnullis.

Daldinia. Stroma subglobosum, intus concentricè zonatum; perithecia stromate immersa, collis subnullis.

§§ Conidia sub strato supremo stromatis nascentia.

Nummularia. Stroma disciforme v. cupuliforme, adnatum, marginatum.

CERATOSTOMA Fr. S. Veg. Scand. p. 392, p. min. parte, Sacc. Consp.

Gen. pyr. p. 7. (Etym. *ceras*, cornu et *stoma*, ostiolum). — Perithecia erumpenti-superficialia, simplicia, atra, subcarbonacea, ostiolo longo, teretiusculo instructa, glabra v. fibrillosa; asci ovoidei v. cylindracei, breve stipitati; sporidia ovoidea, ovoideo-oblonga, v. subcuboidea, fuliginea. Status conidiophorus et spermogonicus in pluribus cogniti. — A gen. hypocreaceo *Melanospora* differt præcipue contextu fusco, subcarbonaceo.

1. **Ceratostoma Notarisii** Sacc. Fungi Ven. Ser. II, p. 308, F. ital. 771
tab. 185. *Sordaria rhynchophora* De Notaris, Nuov. Recl. in Comm. Critt. Ital. II. 480. — Peritheciis gregariis, superficialibus, globulosis, $\frac{1}{2}$ mill. diam., carbonaceis, atris, rugosis, initio ostioloque pilis remotiusculis, 150-200 \approx 3, articulatis sæpe ramulosis fuligineis patulis vestitis, dein calvescentibus; conidiis ex hyphis oriundis ellipsoideis, 8 \approx 6 $\frac{1}{2}$, guttulatis, fuscis; ostiolo filiformi usque 2 mill. longo, subtortuoso, non sulcato, nigro; ascis cylindraceo-subclavatis, apice subtruncatis, ibique crasse tunicatis, deorsum sensim oblique attenuatis, parte sporif. 35-40 \approx 5-7, paraphysibus filiformibus parvis obvallatis, 8-sporis; sporidiis oblique monostichis v. pro parte distichis, ovoideis, continuis, 5 $\frac{1}{2}$ \approx 3 $\frac{1}{2}$, 1-2 guttulatis, fuligineis.

Hab. in ligno putrido Pruni Cerasi et domesticæ in Cambiasca et Cadore (Ital. bor.) (DE NOT. et S. VENZO). — Nomen specificum «rhynchophora» servare non potui, quia omnia Ceratostomata rostrata sunt.

2. **Ceratostoma querceticolum** (Crouan) Sacc. *Sphæria querceticola* 772
Crouan, Finist. p. 24. — Peritheciis sphaericis, villosulis, $\frac{1}{5}$ mill. diam., in ostiolum cylindricum æquilongum productis; ascis cylin-

draceis; sporidiis ovoideis majusculis, granulosis; paraphysibus filiformibus ascos dimidios æquantibus.

Hab. in ligno putri quercino, Finistère (Gallia). — Sporidiorum color l. c. non indicatur, sed species prope phæosporas locatur.

3. **Ceratostoma caminatum** (C. et E.) Sacc. *Sphaeria* (Immersæ) *caminata* C. et E. New Jersey Fungi. Grev. VI, p. 94, t. 100, fig. 30. — Immersum; peritheciis subglobosis, atris, sparsis, vel subgregariis, in collum elongatum productis; ascis cylindraceutis; sporidiis uniseriatis, ellipticis, brunneis, $12 \approx 6$. 773

Hab. in ligno decorticato Aceris in New Jersey Am bor. — Ostiola elongata prominent.

4. **Ceratostoma Avocetta** (C. et E.) Sacc. *Sphaeria Avocetta* C. et E. New Jersey Fungi Grev. VIII, p. 15. — Sparsum, immersum, dein liberum; peritheciis atris, globosis, supra in collum longe attenuatis; ascis cylindraceutis; sporidiis anguste ellipticis, brunneis, $12 \approx 5$. 774

Hab. in ligno putrescente in New Jersey, Amer. bor. — Perithecia, ligno labefacto, libera; initio ostiola tantum emergunt.

5. **Ceratostoma brevirostre** (Fr.) Sacc. *Sphaeria brevirostris* Fr. S. M. II. 474. Curr. Linn. Trans. XXII, p. 322, fig. 68. — Sparsum, glaberrimum, atrum; peritheciis semiimmersis, globosis, lævibus; ostiolo peritheciis duplo breviori cylindrico æquali; ascis cylindraceutis, breve stipitatis, $100 \approx 10$; sporidiis monostichis ellipsoideis, $15-17 \mu$. long. pallide fuligineis. 775

Hab. ad ligna mollia cariosa in Suecia. — Juventute immersum, dein magis magisque emersum, subnudum, aterrimum, lævissimum, fere nitidum, fragile, mox evacuatum; ostiolum breve, cylindricum, crassiusculum, læve, rectum, subobtusum.

6. **Ceratostoma australe** Speg. Fungi Argent. Pug. IV, n. 126. — Peritheciis epidermide dealbata sæpius tectis, eaque secedente liberis, globosis, $300-450 \mu$. diam., glabris, atris, membranaceo-coriaceis, contextu indistincte parenchymatico, atro-fuligineo, in ostiolum carbonaceum prælongum $1000-1500 \approx 80-100$, rectum cylindraceutum, apice ob sporidia conglobatim protrudentia, grumoso-capitulatum productis; ascis obovato-clavatis, v. elongato-clavulatis $40-60 \approx 8-10$, sursum obtusiusculis, deorsum indistincte sed (ut videtur) longiuscule pedicellatis, mox secedenti-liberis, octosporis, paraphysibus crassiusculis, parvis, longissimis, guttulatis, fluxilibus immixtis; sporidiis oblique monostichis, v. distichis, ellipticis, rectis v. rarius subinæquilateralibus, utrinque acutiuscule rotundatis, $9-10 \approx 4-5$, primo 1-guttulatis, dein eguttatis, fuligineis. 776

Hab. in ramulis putrescentibus racemorum fructiferorum *Cocos Yatay*, Parque de Palermo, Argent. (Amer. austr.). — Species pulcherrima, primo intuitu facile cum *Stilbea dematiea* quadam commutanda.

7. **Ceratostoma rubefaciens** (Peck) Sacc. *Sphæria rubefaciens* Peck 777
in 28 Rep. on the St. Mus. New York. — Peritheciis minutis, sparsis, subglobosis, nigris, subliberis, in ostiolum longum subulatum abrupte desinentibus; ascis clavatis, fluxilibus; sporidiis ellipsoideis, 4-5 \approx 3,5, coloratis.

Hab. in lignis decorticatis arborum frondosarum, Forestburgh, Buffalo, Amer. bor. — Perithecia ligno cruentato adnata; ostiola sporidiis dein apice obruta, *Calicium* simulant. *C. pilifero* certe affinis species.

8. **Ceratostoma Jani-collinum** Sacc. et Sp. Mich. II, 246, F. ital. t. 778
184. — Peritheciis superficialibus, gregariis, globosis, atris, basi hyphis hyalinis cinctis, in rostrum cylindraceum, 300-350 \approx 30, apice longe et hyalino-penicillatum productis; contextu perithecii parenchymatico, rostri prosenchymatico rufo-fuligineo; ascis obovatis, 55 \approx 35, subsessilibus; sporidiis e globoso cuboideis 7-8 diam., fuligineis.

Hab. in caule putri Rubi fruticosi a Conegliano, (Collis Jani), Ital. bor. raro (SPEGAZZINI).

9. **Ceratostoma graphioides** Sacc. M. V. Cent. XIII, n. 1264, Mich. 779
II, 246, F. ital. t. 183. — Peritheciis superficialibus, hinc inde dense aggregatis, maculasque atras velutinas sistentibus, globosis, in rostrum cylindraceum, 250-300 \approx 30, apice fimbriatum productis, basi hyphulis cinctis; perithecii contextu distincte parenchymatico, tenui, melleo-fuligineo; ascis ovoideis, 20 \approx 15, sessilibus, mox evanidis, aparaphysatis, 8sporis; sporidiis conglobatis sphæroideo-ellipticis, utrinque subtruncatis, 5-5 $\frac{1}{2}$ \approx 3 $\frac{1}{2}$ -4 $\frac{1}{2}$, cinereo-fuligineis, nucleato-farctis, non guttulatis, denique protrusis et perithecia conspergentibus.

Hab. in ligno putrescente Juglandis regiæ, Padova, Ital. borealis (BIZZOZERO).

10. **Ceratostoma caulincolum** Fuck. Symb. mycol. p. 130. — Peri- 780
theeciis immersis, globosis, aterrimis, magnitudine eorum *Pleosporæ herbarum*, ostiolis concoloribus, exertis, strictis, longissimis, apice albo-fimbriatis; ascis 8sporis, mox evanescentibus; sporidiis ovatis, atris, minutis, sæpe in ostiolorum apicibus ut globulo aterrimo expulsis.

Hab. in caulibus exsiccatis Tanacetii vulgaris, rarius, vere, circa Œstrich, Rhenogovia,

11. **Ceratostoma culmicolum** Sacc. Fungi Ven. Ser. V, 175. F. ital. 781
t. 186. — Peritheciis emergentibus $\frac{1}{5}$ mill. diam., ostioliis $\frac{3}{4}$ mill. long., apice non v. obsolete fimbriatis; ascis ovoideis, sessilibus, 20 \approx 15, aparaphisatis, mucro obvolutis, 8sporis; sporidiis subdistichis, cuboideis, angulis obtusatis, 4-4 $\frac{1}{2}$ diam., minute guttulatis, brunneis.

Hab. in culmis putrescentibus Andropogonis Ischæmi, Patavii, Ital. bor. (G. BIZZOZERO). — A *Cerat. caulicolo* f. *Echii* a cl. WINTERO benevole communicato vix differt sporidiis distinctius cuboideis, neque cuboideo-oblongis, 5-5 $\frac{1}{2}$ \approx 4.

12. **Ceratostoma Therryanum** R. et S. Rev. Mycol. 1880, pag. 188, 782
Mich. II. 315. — Peritheciis superficialibus sparsis v. subgregariis, globoso-conicis, $\frac{1}{3}$ - $\frac{1}{2}$ mill. diam., atris, subcoriaceis, in ostiolum filiforme subæquilongum productis; contextu distincte parenchymatico, rufo-ochraceo; ascis.....; sporidiis ellipsoideis utrinque obtuse rotundatis, 15 \approx 7-8, fuliginis.

Hab. in cortice Platani orientalis, socio *Nematogonio aurantiaco*, Lyon (Gallia) legit TERRY.

13. **Ceratostoma Venetum** Speg. Mich. I, 455, F. ital. t. 628. — Pe- 783
ritheciis sub-carbonaceis majusculis, $\frac{1}{4}$ - $\frac{1}{3}$ -mill. diam. sparsis, superficialibus, subglobosis in ostiolum crassum fragile apicem versus molliusculum, desinentibus, contextu perithecorum parenchymatico-celluloso, ostioli autem prosenchymatico-fibroso; ascis (cito diffluentibus).....; sporidiis subnavicularibus, inferne inæquilateraliter sub-mucronatis, fuliginis, opacis, 6-9 \approx 5.

Hab. ad putamina Coryli Avellanæ putrescentia, Conegliano (Italia bor.), rarissime.

14. **Ceratostoma Vitis** Fuck. Symb. Myc. p. 129. — Peritheciis gre- 784
gariis, in corticis fissuris nidulantibus, globosis, media magnitudine, nigris, extus pilosis, pilis pallidioribus, rostro longissimo, perithecio sexies longioribus, strictis, nigris; ascis nondum inventis; sporidiis ovatis, continuis, fuscis, 6 \approx 4, uniguttulatis.

Hab. in rimis corticalibus radicum Vitis viniferæ, rarius, circa Œstrich (Rhenogovia).

Species incertæ.

15. **Ceratostoma fallax** C. et Sacc. New Jersey Fungi Grev. VII. p. 8. 785
— Peritheciis superficialibus, laxè gregariis, globoso-depressis, $\frac{1}{4}$

mill. diam., in ostiolum filiforme subflexuosum, usque 1 mill. long. productis; peritheci contextu parenchymatico dilute fuligineo ostioli contextu lineari-prosenchymatico, aterrime; conidii (?) perithecium conspergentibus globoso-angulosis, 15-25 μ . diam., aterrimis, quandoque hyalino-punctatis; spermatis intra perithecium orientibus, minimis, oblongis, 4 \approx 1-1,5 copiosissimis hyalinis, sæpe in glomerulum subglobosum, pluribus coalitis; ascosporis (?).

Hab. in ligno pineo in New Jersey, Amer. boreali.

16. **Ceratostoma piliferum** (Fr.) Fuck. Symb. myc. p. 128, *Sph. pi-* 786
lifera Fr. S. M. II, 472. — Gregarium, nudum, atrum, peritheciis minimis globosis lævibus, ostiolo capillari longissimo acuminato.

Hab. ad ligna pinea, abiegna etc., vulgatissimum in Suecia, Germania, Britannia, Gallia, Belgio, Italia, Amer. boreali. — Admodum subtile, subinde subiculo villosa v. maculæ fuligineo-nigrescenti insidens, sed perithecia glabra. Distinguitur ostioli longissimis tenerrimis æqualibus lævibus, nunc flexuosis, nunc striatis.

— β) *Pinastri* Nees, Syst. f. 354. Emersum, nudum, ostiolo breviori stricto; spermatis minutis, cylindræis, copiosis. — γ) *dryinum* Pers. Syn. p. 58, t. 2. f. 6. Emergens, solitarium, ostiolo breviori flexili; «nucleo sterili. Adsunt hyphæ, quandoque in ipsis ostioli parasiticæ, simplices, septatæ, fusæ, conidia cylindræo-clavulata, 14 \approx 1½, hyalina gerentes». In ligno mucido quercino, parcius, in Suecia, Italia, Germania. — δ) *capillatum* Fr. S. M. Immersum, peritheciis ovatis, ostiolo longissimo curvato; spermatis ovatis, hyalinis, 8 \approx 4. In Polyporis vetustis. — ϵ) *tenuissimum* Fuck. Symb. myc. 119. Ascis nondum inventis; sporidiis (spermatis?) oblongo-ovatis, continuis, hyalinis, 8 \approx 4. In ligno Pini in Germania. — Species tota male cognita et forte plures continens. Sec. Berk. Not. North Amer. fungi, sporidia essent alantoidæ 5 μ . longa; sec. Nees ovoidea v. globulosa.

17. **Ceratostoma procumbens** Fuck. Symb. myc. p. 128, t. IV, fig. 45. 787
— Peritheciis gregariis, superficialibus, *Ceratostomatis piliferi* parum majoribus, longissime rostratis, obverse pyriformibus, plerumque procumbentibus, rostro adscendente, vel verticalibus, rostro recto, lævibus, atro-fuscis: spermatis cylindræis, curvatis, minutissimis, in globulum terminalem expulsis.

Hab. in ligno duriore *Quercus*, Hallgarter Wald (Rhenogovia).

18. **Ceratostoma mucronatum** (Schw.) Sacc., *Sphæria mucronata* 788
Schw. Syn. Carol. n. 4, p. 28, Fr. S. M. II, 326. — Gregarium, atrum, peritheciis minutis nudis conicis glabris, ostiolo brevi cylindrico.

Hab. ad ligna in Carolina, Amer. bor. — Inter minimas, sæpe plures confluent, sed minime conferta species est. Perithecia adulta innato-superficialia, lævia, rigida, opaca, cum ostiolo brevior recto obtusiusculo confluentia.

19. **Ceratostoma hæmatorhynchum** (Somm.) Fr. S. Veg. Scand. p. 392. 789

Sphæria hæmatorhyncha Somm. Lapp. 215, Fr. El. II. p. 96. — Gregarium, emergens, atrum; peritheciis minutis, globosis, lævibus, ostiolo longissimo inæquabili subclavato, sub apice sanguineo-pruinoso.

Hab. in ligno Salicis capræ æri exposito in Nordlandia, parce. — Lignum, in quo sedet, rufescit. *Sph. rostratæ* (forsan et *S. barbirostri*) proximum, attamen rostro longiore, apice incrassato pruinoso satis distinctum.

20. **Ceratostoma cuspidatum** Fr. Summa Veg. Scand. p. 392. *Sphæ-* 790

ria cuspidata Fr. S. M. II. p. 474. — Confertum, glabrum, atrum; peritheciis ovato-globosis rugulosis nudis, ostiolo cylindrico longitudine perithecorum.

Hab. ad ligna Fagi et Carpini in Suecia et Germania. — Perithecia pauca sparsa, plurima stipata, confluentia, aterrima, opaca, primo immersa, mox nuda, magnitudine minori, intus evacua-ta atra. Ostiola stricta, firma (nec fragilia), obtusa, læviuscula. Magna cum *S. rostrata* affinitas.

21. **Ceratostoma Stilbum** (Schm.) Fr. Summa V. S. p. 396. *Sphæria* 791

Stilbum Schm. Myc. Heft. I, 63, Fr. S. M. II, 472. — Gregarium, byssisedum, atrum; peritheciis globosis glabris, ostiolis elongatis apice ampliatis; sporidiorum globulo albo.

Hab. ad ligna pinea in Suecia et Germania. — Subiculum floccosum, atrum; perithecia pusilla, ostiolo triplo longiora, stricta, gelatina globuli instar albi erumpente coronata.

22. **Ceratostoma Spina** (Schw.) Sacc. *Sphæria Spina* Schw. Syn. 792

Carol. n. 154, Fr. S. M. II. p. 475. — Sparsum, nigrum; peritheciis emergentibus globosis, ostiolis pyramidato-conicis obtusis nudis.

Hab. in cortice ramulorum juniorum Fraxini in Carolina, Am. bor. — Ex epidermide emergit sphæricula, ostiolo spinæformi, crasso, pyramidato-conico, tam duro ut cultello dividi non possit; ascendit ad altitudinem duarum linearum, in tuberculo rami oriens, basi subrotunda cortici affixa. Gelatina alba, ascis flexis.

CHÆTOMIUM Kunze Myc. Heft. I. p. 15. Zopf Entwick. d. Chætom.

Halle 1881, ex cl. *Chætomidio* (Etym. *chæta*, seta). — Perithecia

superficialia, carbonaceo-membranacea, subfragilia, typice pilis vestita; ostioloque breve obtuseque papillato pertuso, setis abdito instructa. Asci cito diffuentes, octospori (in *Ch. hispido* tetraspori et in *Ch. fimisedo* polyspori); sporidia continua globosa, ovoidea, typice fuliginea. — Species plures nimium conformes, pluresque heterogeneæ.

Species genuinæ.

1. **Chætomium comatum** (Tode) Fr. Syst. Myc. III. 253. *Sphæria comata* Tode, *Ch. Fieberi* Fuck. nec Corda. *Ch. elatum* Kunz. et Schm. Myk. Heft. I, p. 15, t. I, f. 3. — Peritheciis gregariis, subovoideis, tenuissimis, atris, pilis, basi radiantibus, superne, præcipue vertice, longissimis, erectis, ramosis, intricatis, badio-atris vel badiis asperulis vestitis; ascis sessilibus, v. breve stipitatis; oblongatis, utrinque obtusis, 40–48 \approx 16; sporidiis octonis, conglobatis, ellipsoideo-sphæroideis, utrinque apiculatis, fuscis, 10–12 \approx 8–9, lenissime compressis. — Status conidicus est *Sporodum conopleoides* (Fr.) Corda, sec. Fuck., sed Zopf non confirmat. 793

Hab. supra culmos putrescentes graminum, præprimis *Secalis cerealis*, nec non caules et ligna in tota Europa et America bor. — Sec. Fries *Ch. comatum* et *Ch. elatum* duas species sistunt sed discrimina ab ætate pendent. — Var. *helicotrichum* Sacc. a typo setis sursum circinatis recedit quo caractere ad *Ch. murorum* Corda vergit. In fimo vaccino in Italia (Mich. I, 222).

2. **Chætomium lageniforme** Corda Ic. fung. I, 24, t. VII, fig. 293. — 794
Gregarium, olivaceum; perithecio medio constricto semipellucido, pilis longis rigidis ramosis, concoloribus, pulverulentis tecto, ramis patentibus subulatis, acutissimis; sporidiis numerosis primum pellucidis albis, dein olivaceis, ovatis utrinque apiculatis, mycelio spurio.

Hab. in charta impressa putrida Reichenberg (Germania). — Sec. Zopf est forma *Ch. comati*.

3. **Chætomium atrum** Link. Spec. I, 46, Sacc. Mich. II, p. 55. — 795
Peritheciis dense gregaris globulosis 1 mill. diam., aterrimis, dein superne glabratis, nitidulisque, pilis longissimis maxime tortuosis subsimplicibus, 6–7 micr. cr. fuscis vestitis et circumdati; sporidiis limoniiformibus, 12 \approx 9–10, pluriguttulatis, violaceo-fuscis; ascis (sec. Tul.) ovato-leuceolatis, stipitatis.

Hab. in lignis putridis in Gallia et Germania. — Sec. Zopf Entw. Chæt. p. 83. est forma *Ch. comati*, sed mihi satis diversum videtur.

4. **Chætomium pannosum** Wallr. Fl. crypt. n. 1814, Zopf Entw. Chæt. 796

t. 4 et 5. — Peritheciis globosis majusculis fragilissimis sordide-nigris, pilis stipitatis opacis rigidulis implexo-crispis undique ob-textis, glebas pannosas dein confluentes stygias arete contextas mentientibus; ascis (teste Niessl in Hedw. 1876, p. 104) oblongo-ovoideis, longissime stipitatis, $90 \approx 15-20$, octosporis; sporidiis ellipsoideis utrinque apiculatis, $10-14 \approx 8-9$, obscure olivaceis v. nigrescentibus.

Hab. ad Helianthi annui etc. caules in Germania. — *Rhacodium* s. *Sphæriam byssisedam* ejusque incunabula fere refert; habitu externo et sporidiis uberrime superfusis et ex perithecio rarius integro profusis (sub vitro) pannum pulverulentum æmulatur. — Sec. Zopf ex hujus speciei mycelio oritur substantia rufo-tingens, quæ flava est in *Ch. comato*.

5. **Chætomium indicum** Corda Icon. fung. IV, 38, t VIII, fig. 104. 797
— Gregarium, atrum; perithecio verruciformi, atro, subacuto; setis longis ramosis, ramis ramulisque dichotomis, arcuatis, atris; ascis clavatis minutis; sporidiis ellipticis utrinque acutis, olivaceis, levibus, nucleatis, $5-6 \approx 4-4-5$, lenissime compressis.

Hab. in charta putri, India, Tenasserim, Maulmain, Burmah nec non in Gallia, Germania et Britannia, ab Indiis tamen verisimiliter allatum.

6. **Chætomium microsporum** Speg. Fung. Arg. Pug. IV. n. 113. — 798
Peritheciis laxissimis gregariis v. subsparis, globosis superne tantum penicillato-comatis, $0,3-0,5$ mill. diam., saturate atro-olivaceis, membranaceis, contextu indistincte parenchymatico olivaceo; pilis rigidulis, leviusculis, flexuosis, parce septulatis, 3μ . crass., atro-olivaceis; ascis ellipticis v. obovatis, $35-40 \approx 8-10$ p. sporif.; sursum plus minusve rotundatis deorsum longiuscule stipitatis, stip. $30-40 \approx 3-5$ aparaphysatis, octosporis; sporidiis subglobosis v. ellipticis, utrinque obtusiuscule acutatis, sæpe subinæquilateralibus $5-6,5 \approx 4-5$, olivaceo-fuligineis.

Hab. in charta diu loco udo servata in Universitate Bonacrensi (America australi).

7. **Chætomium globosum** Kunze Myc. Heft. I. 16. — 799
Perithecio minuto, adnato, semigloboso, undique pilis simplicibus divergentibus obsesso; sporidiis ellipsoideis.

Hab. ad caules herbarum, v. c. Dianthi Carthusianorum in Germania etc. — Minutum, punctiforme, basi adnata, globosum, atrum, ore punctiformi dehiscens, demum in discum exiguum pal-

lidum dilatatum. Pili totam superficiem æqualiter obducunt, rigidi, peritheciæ diametrum æquant.

8. **Chætomium chartarum** Ehrenb. Sylv. 15, 27. Fr. Syst. Myc. III. 800

254. — Perithecio subgloboso, nigro, macula læte flava cincto, setis simplicibus 2–3 mill. cr., dilute fuligineis asperulis; ascis clavatis, longiuscule stipitatis 45–50 \approx 14–16, stipite 25–45 \approx 5; sporidiis limoniiformibus, 8–10 \approx 6–8, 1-guttatis, olivaceo-fuligineis.

Hab. in charta emporetica putri in Anglia, Belgio, Germania, Gallia, Italia, Amer. bor. et austr., socia sæpe *Stachybotryte lobulata*. — Teste Zopf *Ch. globosum*, *chartarum* et *Fieberi* sunt formæ unius speciei, quam *Ch. Kunzeanum* vocat.

9. **Chætomium Fieberi** Corda Icon. Fung. I, p. 24, f. 293, C. *Ch. Kun-* 801

zeanum Zopf. — Peritheciis subsphæroideis, siccis vertice sæpe leviter collapsis, atris, latit. circiter 180 μ ., pilis prælongis ut plurimum simplicibus, rectis v. apice incurvis; ascis subsessilibus, oblongatis, 40 \approx 16; sporidiis octonis, subsphæroideis, interdum utrinque obsolete acutis, fuscidulis, 9–11 \approx 7–8.

Hab. supra chartam, in caulibus, tela putridis in Gallia, Italia, Germania, Fennia. — Adest in lignis udis Patavii var. *chlorina* Mich. I, pag. 27 in qua pili peritheciæ simplices recti vel apice ramosi, asperuli, successive flavi, chlorini, olivacei, atris; ascis clavatis stipitati! p. s. 35–40 \approx 15, stipite 20 long., octospori; sporidia disticha, limoniiformia, 12 \approx 8, olivaceo-fuliginea.

10. **Chætomium affine** Corda Ic. fung. IV. p. 37, t. VIII, fig. 101. — 802

Subgregarium; peritheciis globosis, atris; pilis longis, simplicissimis subulatis, olivaceo-atris; mycelio tenui minuto; sporidiis obovatis, infra acutis, olivaceo-fuscis.

Hab. in foliis putridis *Quercuum*, Pragæ (Germania). — Vix differt a *Ch. Fieberi*.

11. **Chætomium murorum** Corda Ic. fung. II, 29, t. XIII, fig. 103. Zopf. 803

Chæt. t. 6, f. 13–20. — Gregarium, minutum, atrum; perithecio subgloboso pilis septatis laxis flexuosis, cincto; ascis clavatis, stipitatis; sporidiis distichis ovatis utrimque acutatis, longitudinaliter subsulcatis, semipellucidis, 12–17 \approx 8–9, leniter compressis.

Hab. in muris udis in Germania, Pragæ et in Britannia.

12. **Chætomium streptothrix** Quel. Champ. Jura 531, t. IV. fig. 40. — 804

Peritheciis minutis, nigro-fuscis, setis asperulis, nigris, eximie spiritaliter contortis; ascis sporidiis limoniiformibus, brunneis, 12 μ . long.

Hab. agglomeratum in frustulis *Solani* tuberosi morborum,

in Jura et Vogesis (Gallia). — Cl. Quelet huc citat, etsi dubitanter, veluti statum conidiophorum *Peronosporam infestantem* sed, ut liquet, ex errore.

13. **Chætomium spirale** Zopf *Entwick. d. Chæt.* p. 79, t. 6, fig. 21-26. 805
— Peritheciis majusculis ovoideis, v. ellipsoideis, 240-420 \approx 220-360, ostiolo nec non setis ubique sparsis instructis; setis lateralibus subulatis, olivaceo-fuscis, sursum pallidioribus; terminalibus cylindricis, remote septatis, brunneis, levibus v. asperulis, 6 μ . crass., vicies et ultra æqualiter spiraliter convolutis, fasciculum majusculum efformantibus; ascis clavatis, breve stipitatis, 34-43 \approx 18 (p. sporif.); sporidiis oblongo-limoniiformibus, olivaceo-brunneis, 12-15 \approx 7-8, lenissime compressis.

Hab. in fimo equino, Berlin German., semel (Zopf). — An diversum a *Ch. streptothrice* Quel.?

14. **Chætomium bostrychodes** Zopf *Entwick. d. Chæt.* p. 81, t. 7, fig. 14-28. 806
— Peritheciis minusculis, ellipsoideis v. fere fusoides, 340 \approx 220, ubique setosis, ostiolo minuto, breve papillato, subhyalino; setis lateralibus subulatis remotis, terminalibus densioribus, adscendentibus, pluries (-6-14) spiraliter convolutis, brunneis, parce asperulis; ascis clavatis, minutis, breve stipitatis, 50 \approx 12; sporidiis ellipsoideis, utrinque obtusiusculis, 6-7 \approx 5, lenissime compressis, olivaceo-fuscis.

Hab. in animalculis putridis, Solani tuberibus, fimo etc., non frequens, Berlin et Göttingen (Zopf).

15. **Chætomium crispatum** Fuck. *Symb. Myc.* pag. 90. *Sphæria crispata* Fuck. *F. Rhen.* 2022. — Peritheciis gregariis, globosis, media magnitudine, undique olivaceo-pilosis, pilis aliis rectis, septatis, fuscis, diaphanis, aliis crispis, contortis, opacis; ascis stipitatis, cylindræis, 82-100 \approx 10 (p. sporif.); paraphysibus simplicibus, elongato-clavatis; sporidiis 8, monostichis, globosis seu globoso-ovatis, utrinque apiculatis, simplicibus, hyalinis, liberatis demum fuscis, 12 \approx 10, leniter compressis.

Hab. in tuberibus putridis Solani tuberosi in cellis humidis, Oestrich, Rhenogovia.

16. **Chætomium Cuniculorum** Fuck. *Symb. Myc.* p. 89. — Sparsum, 808
erectum, $\frac{1}{2}$ lineam altum; peritheciis ovatis, brevissime pilosis, fusco-olivaceis, vertice pilis paucis, comosis, perithecio duplo longioribus, rectis, strictis, articulatis, concoloribus; sporidiis elliptico-ovatis, simplicibus, umbrinis, 12 \approx 6-8, utrinque non v. vix apiculatis.

Hab. in stercore putri Cuniculorum, vere, Freienweinstein, Rhenogovia. — Sporidia juvenilia sæpius octono-conglobata.

17. **Chætomium orientale** Cooke, *Coco Palm. Fungi*, Grev. V, p. 103, 809
t. 86, fig. 5-11. — Gregarium, olivaceum; peritheciis subglobosis, strigosis; pilis tenuibus, simplicibus, flexuosis, brunneis; ascis pyriformibus, stipitatis; sporidiis globosis, utrinque leniter apiculatis, fuliginosis, 8-10 μ . diam.

Hab. in cicatricibus (unde folia ceciderunt) stipitis *Cocos nuciferæ*, Demerara (Guiana britannica). — Pili et perithecia minute scabra.

18. **Chætomium tomentosum** Preuss, *Pilze Hoyersw. n. 147.* — Gre- 810
garium atro-fuscum tomentosum; floccis radiantibus laxis, diaphanis fuscis; peritheciis subglobosis, subpubescentibus, atro-fuscis, irregulariter ruptis; sporidiis fuscis subellipticis, nucleo gelatinoso granuloso; ascis clavatis.

Hab. in lignis *Quercuum*, in domicilio plantarum calefacto sub testis floralibus, Hoyerswerda (Germania).

19. **Chætomium signatum** Preuss, *Pilze Hoyersw. in Linnæa vol. XXIV,* 811
p. 78. — Gregarium olivaceo-atrum; perithecio globoso, pilis longis septatis, lævibus, erectis, apice circinatis; sporidiis oblongis, fuscis, utrinque apicibus nigro-signatis.

Hab. in ligno *Pini* putrescente, Hoyerswerda (Germania).

20. **Chætomium lanosum** Peck 28 Rep, on the St. Mus. — Peritheciis 812
minutis, subglobosis, sparsis, v. aggregatis, dense villosis; pilis lanosis; obscure olivaceis v. murinis; ascis brevibus, crassis, fugacibus; sporidiis subglobosis, initio pallidis, dein fuscidulis, 7,5-8,5 μ . diam., grosse 1-nucleatis.

Hab. in gramineis in herbario male exsiccatis, Albany, Am. boreali, Majo.

21. **Chætomium sphærospermum** C. et E. Grevill. 1880, VIII, p. 16. 813
— Peritheciis superficialibus, atris, strigosis, in cæspitulos elongatos congestis, subglobosis; pilis rigidis, erectis, elongatis, tenuibus, atrobrunneis, sursum divaricato-ramosis; sporidiis globosis, brunneis, 10 μ . diam.

Hab. in disco doliorum in cellis vinariis, New-field, New Jersey (America boreali).

22. **Chætomium olivaceum** C. et E. New Jersey Fungi, Grev. 1878, 814
VI, p. 96, t. 100, fig. 38. — Viridi-flavum, vel olivaceum; peritheciis gregariis, subglobosis, pilis flexuosis simplicibus ornatis; sporidiis subglobosis, utrinque acuminatis, brunneis, 12 \approx 10.

Hab. in caule putri Erigerontis, New Jersey (Amer. bor).

— *Setae* olivaceae, sursum viridi-flavae, scabriusculae.

23. **Chaetomium funiculum** Cooke, Grevill. I, pag. 176. — Peritheciis 815
sparsis subovatis, nigris; setis ad verticem praelongis, dichotomis,
v. simplicibus, erectis, exilibus, acutis, nigris; sporidiis limoniiformibus,
atro-brunneis.

Hab. in chorda putrescente in Britannia et in scopis in Am.
bor. — Affine *Ch. comato* sed multo minus et levius. Omnino nig-
rum, setae tenuiores; sporidia diametro transversali sesquilingiora.

24. **Chaetomium melioloides** C. et Peck. 27 Rep. p. 106. — Sparsum 816
minutum; peritheciis brunneis, globosis, e mycelio ramoso septato
oriundis, setulis atro-fuliginosis, rigidulis sursum bis terve dichoto-
me ramosis, ramis patentibus; sporidiis ovoideis vel subglobosis,
pallide brunneis, 4,5 μ . diam.

Hab. in Amer. bor. North Greenbush, in culmis Maydis.

— Affine *Chaetomio funicolo*, sed setis ramosioribus, ramis diva-
ricatis, sporidiis aequalibus etc. differt.

25. **Chaetomium griseum** Cooke, Grevillea I, p. 175. — Subgregarium 817
v. sparsum, griseum; peritheciis globosis brunneis, submembrana-
ceis; pilis longis, elasticis, circinatis, pellucidis, tenuiter laxaque
septatis; ascis clavatis, fasciculatis; sporidiis limoniiformibus hya-
linis, granulosis nucleatisve, 13-17 \approx 6-9.

Hab. in tela corrupta King's Lynn, et charta putri High-
gate (Britannia). — Pilis molliusculis, sporidiis majoribus hyalinis
a *Ch. murorum* recedit.

26. **Chaetomium depressum** Wallr. Fl. crypt. n. 1811. Fuck. Symb. 818
myc. pag. 90. — Perithecio depresso-globoso nonnisi ovali, a basi
inde pilis brevibus rigidis nigris assurgentibus torvo, dein a ver-
tice inde apertis discum sporophorum recludentibus; ascis . . . non
visis; sporidiis ovatis subellipsoideis, utrinque apiculatis, fuscis,
14 \approx 10.

Hab. ad ramulos siccos lignaque abietina uda, minime ra-
rum aetumno, in Thuringia et Rhenogovia. — Sec. Fuck. I. c. fun-
gus conidiophorus est *Myxotrichum resinæ* Fr.

27. **Chaetomium concinnatum** Preuss, Fungi Hoyerw. n. 146. — Gre- 819
garium minutum, atrum; perithecio globoso, pilis longis rigidis,
subramosis subimpellucidis circinatis septatis tecto; ascis longis li-
nearibus; sporidiis atro-fuscis, ellipticis, nucleatis.

Hab. in caulibus Georginarum putrescentibus in pagina in-
teriore in hortis, Hoyerswerda (Germania).

28. **Chætomium lanatum** Quel. Champ. Jura 531, t. IV, fig. 43. — Peritheciis sphaericis, lævibus, nigris, pilis longis, lanosis, flexuosis, intertextis, tenuibus, glabris, nitidis, nigris vestitis; ascis; sporidiis globoso-limoniiformibus, 15 μ . long., guttulatis, fusco-olivaceis. 820

Hab. agglomeratum in ligno sub hortorum rejectamentis sepulto in Jura et Vogesis (Gallia). — *Chætomio comato* paulo minus.

Species desciscentes.

29. **Chætomium hispidum** Fr. Summa Veg. Scand. pag. 405. — Gregarium, atrum; peritheciis hemisphaericis subnitidis, setis rigidis divergentibus, sparsis; ascis amplis clavatis, pellucidis; sporidiis quaternis seriatis, continuis, lutescentibus. 821

Hab. ad caules herbarum in Scandinavia. — Interdum deficit perithecium (teste Fries). An?

30. **Chætomium stercoreum** Speg. Mich. I, 222, Fungi ital. t. 622. — Peritheciis dense gregariis v. hinc inde sparsis, superficialibus v. subimmersis, ovoideo-pyriformibus, undique setis strigosis, ad verticem longioribus atque densioribus vestitis, perithecii contextu laxo parenchymatico fuligineo; setis basi bulboso-incrassatis, primitus ubique muriculatis dein lævibus, remote septulatis, fuliginis sursum pallidioribus; ascis oblongo-ellipsoideis, apice acutato-rotundatis, deorsum stipitato-attenuatis, p. sporif. 60-70 \approx 16-22, stipite 40-50 \approx 7-8, octosporis; sporidiis limoniiformibus utrinque acutiusculis, primitus 8-9 \approx 6-7, tandem 15 \approx 10, jugiter hyalinis, luce refracta centro dilutissime chlorino-nucleatis, lævibus. 822

Hab. in stercore canino udo, Conegliano et Vittorio (Italia) Sept. Oct. 1877. — Sporidiis jugiter hyalino-chlorinis species prædistincta et propter hoc a genere desciscens.

31. **Chætomium calvescens** Sacc. Mich. II, 123. — Peritheciis superficialibus e basi applanata globulosis, diam. $\frac{1}{4}$ - $\frac{1}{5}$ mill., aterrimis, contextu distincte celluloso, fuligineo, breve sparse pilosellis; ascis (diffluentibus?); sporidiis ellipsoideo-limoniiformibus (h. e. utrinque breve obtuse apiculatis), 10-14 \approx 5-5 $\frac{1}{2}$, pluriguttulatis, fulvo-ferrugineis. 823

Hab. in ligno pineo putrescente, socia *Magnusia nitida*, Berolini 1869 (P. MAGNUS); in ligno abietino in agro Veneto (SPEGGAZZINI). — Colore et magnitudine sporidiorum facile dignoscenda species.

32. **Chætomium rufulum** B. et Br. Ann. N. Hist. n. 1397 t. X, 824
fig. 14. — Peritheciis subglobosis, rufis, celluloso-contextis, e mycelio parce filamentoso oriundis, astomis; ascis brevibus, clavatis obtusis, subsessilibus; sporidiis octonis vage distichis, sphaericis, 10-12 μ . diam., maturis vero 16-18 μ diam. conspicue muricatis, pallide brunneis, uninucleatis.

Hab. in charta sub campana vitrea, Elmhurst (Britannia).

33. **Chætomium Araliæ** Corda Ic. fung. IV, p. 37, t. VIII, fig. 102. 825
— Gregarium; peritheciis subphaericis, tenuibus, atris, pilis longis confertis subulatis, septatis atris tectis; nucleo atro; sporidiis oblongis glaucis semipellucidis (continuis); mycelio tenui adpresso atro.

Hab. in foliis et caulibus Araliæ arboreæ (SPRENGEL, sub *Amphitrichi Araliæ* nomine).

34. **Chætomium amphitrichum** Corda Ic. fung. IV, p. 37, t. VIII, fig. 826
103. — Gregarium, semi-immersum; peritheciis convexis, medio dein perforatis et pilis longis ramosis rectis, sursum uncinatis tectis; sporidiis conglobatis, atris, lentiformibus, depressis, rotundis, episporio crasso, nucleatis, 5-6 μ . diam.

Hab. in foliis emortuis plantarum in India or., Tenasserim.

35. **Chætomium fimisedum** Karst. Enum. Fung. Lapp. p. 218. — Pe- 827
ritheciis dispersis, globosis, exiguis, nigris, opacis, pilis erectis, divergentibus, sparsis, simplicibus, subulatis, concoloribus, longit. 60-80 μ . vestitis, ascis fasciculatis, hinc inde constrictis, cylindræcis, polysporis; sporidiis sphaeroideis, incoloribus, diam. 4-6 μ .

Hab. ad fimum caninum prope Soukelo in Lapponia rossica. — Teste ipso auctore est species ulterius inquirenda.

36. **Chætomium Braunii** Rabh. in Bot. Zeitung 1851, p. 453. — Gre- 828
garium, seriatum, subconfluens, atrum; peritheciis subglobosis adnatis vertice umbilicatis fragilibus atris; pilis setiformibus rigidis fusco-atris septatis vestitis; nucleo atro; cellulis matricibus (ascis) cylindrico-oblongis utrinque obtusis mox deliquescentibus hyalinis; sporidia subglobosa et granula minuta foveantibus.

Hab. in seminibus intra samaris Fraxini excelsioris, Giessen (Germania).

Species dubiæ v. mihi parum notæ.

37. **Chætomium coccodes** Wallr. Fl. crypt. n. 1807. — Perithecio 829
globoso sessili sparso verrucaformi atro tenerrimo, undique, pilis

brevibus rigidis porrectis horrido dein caduco, sporidia conglobata nuda relinquente.

Hab. ad Solani tuberosi tubera mucida hyemis tempore passim in Germania.

38. **Chætomium epiphyllum** Kunze in Wallr. Fl. crypt. n. 1804. — 830
Perithecio conoideo sessili punctiformi sparso atro, vertice pilos concolores comosos porrectos emittente.

Hab. ad folia sicca præprimis radicalia pl. herbacearum, v. c. Dianthi superbi in Germania. — « An *Vermiculariæ* species? »

39. **Chætomium gelatinosum** Ehrenb. Sylv. Ber. 15, 27. — Perithecio 831
subgloboso gelatinoso pellucido, basi pilis fibrosis insidente.

Hab. in caulibus putrescentibus in Germania. — Affine *Ch. comato* pro cuius statu immaturo etiamnum magis gelatinoso *Friesius* declarat.

40. **Chætomium viride** Lév. Ann. Sc. nat. 1845, pag. 65. — Gregarium; 832
peritheciis ovatis basi coarctatis undique setis viridibus vestitis.

Hab. Paraguay, in graminibus dejectis.

41. **Chætomium Cumingii** Lév. Ann. Sc. nat. 1845, p. 65. — Peritheciis 833
sparsis turbinatis, nigris, setis simplicibus; sporidiis ellipticis.

Hab. prope Manillam (India) in foliis delapsis. — Affine *Chætomio amphitricho* Corda, differt vero setis simplicibus; sporidiis ellipsoideis, non utrinque acutis.

42. **Chætomium pusillum** Fr. Syst. Myc. III. 255. — Perithecio adnato-globoso, pilis æqualibus brevibus erectis tecto; sporidiis globosis. 834

Hab. in foliis dejectis acerosis, vere, in Scandinavia. — In grege minutos elegantes collectum; ceterum *Chæt. globoso* valde affine, loco forsan tantum distinctum. Sporidia generis. Sec. cl. Corda Icon. II. p. 29 hæc species cum hodierna *Niesslia Chætomio* conveniret, sed hæc a diagnosi allata *Friesii* abhorret.

43. **Chætomium Douglasii** Schw. Syn. Am. bor. n. 2400. — Tomento 835
olivaceo-virente non intertexto sed floccoso-fastigiato, undique sed præsertim ex perithecorum apice nascente; peritheciis laxè tantum cauli affixis, majusculis, globoso-ovatis, fragilissimis, apice apertiusculis intus demum cavis, dense aggregatis, nigro-fuliginis, tomento concolori.

Hab. in caulibus *Hyssopi anisati* adhuc vigentis, versus radices dense investiens caules, in vicinia Lacus Huron Amer. bor. (TORREY). Fungus valde memorabilis affinis *Chætomio comato*.

44. **Chætomium Typhæ** Schw. Syn. Amer. bor. n. 2401. — Minutis- 836

sinuum, atrum, punctiforme; pilis tam brevibus involutum, ut vix discernantur nisi lente augmentiori; situm inter nervos folii.

Hab. non rarum in folii typhinis, Bethlehem Am. bor.

HELMINTHOSPHÆRIA Fuck. Symb. myc. p. 166 (Etym. a setulis *Helminthosporium* amulantibus). — Perithecia tomento denso insidentia, demum libera, globosa ovatave, minutissime papillata, tota pilis fuscis tecta, apice conidiiferis. Conidia oblonga, utrinque obtusissima, didyma, subopaco-fusca. Sporidia in asco stipitato, cylindræo, oblique monosticha, oblongo-lanceolata, 2guttulata, simplicia, fusca. Pycnidia ascophoris minora. Stylosporæ ovoideæ, fuliginæ 4-5-guttulatæ, 16 \approx 8.

1. **Helminthosphæria Clavariarum** (Desm.) Fuck. Symb. mycol. p. 166. 837
Sacc. Myc. Ven. Spec. tab. XI, f. 43-44, *Peziza* (Lachnea) *Clavariarum* Desm. Not. Crypt. 1837, p. 4, t. 2, f. 1. Gill. Discom. Franc. p. 81 cum icone. *Sordaria Clavariæ* Ces. et De Not. — Peritheciis gregariis, globosis, dein pezizoideo-cupulatis pilis conidiophoris, obsitis, conidiis didymis, oblongis, 15-20 \approx 8, loculis sæpe inæqualibus, guttulatis, fuliginis; ascis cylindricis, subsessilibus, 60 \approx 5 $\frac{1}{2}$, paraphysibus linearibus brevibus, parcis, obvallatis, 8sporis; sporidiis oblique monostichis, ovatis subfusoidis, 11 \approx 5 $\frac{1}{2}$, fuliginis, continuis, guttulatis.

Hab. in trunco *Clavariæ* cristatæ et griseæ languidæ in Germania, Gallia, Italia.

SORDARIA Ces. et De Not. Schem. Sfer. 51, pr. p. Fuck. Symb. Myc. p. 244 (Etym. a *sorde*, quia in sordidis nascitur et sordem refert). — Perithecia sparsa v. conferta v. in stromate spurio, crustaceo semimmersa, globosa, conica v. pyriformia pilis vestita v. glabra ostiolo obtuso-conico, atro. Asci stipitati, 8spori. Sporidia, ellipsoidea, fuliginæ basi v. utrinque hyalino-appendiculata. — Conidia et spermatia in nonnullis speciebus nota.

1. *Eusordaria*: ascis octosporis.

Fimicolæ.

1. **Sordaria coprophila** (Fr.) Ces. et De Not. Schem. Sfer. p. 52. 838
ital. t. XX, Wint. Sord. p. 26, t. IX, fig. 11, *Sphæria coprophila* Fr. S. M. II. pag. 342, *Cercophora mirabilis* Fuck. Symb. myc. p. 245 (stat. immaturus). — Peritheciis confertis subconfluentibus, primum plus minus immersis tomentoque tenui albido tectis, deinde

plus minus emergentibus nudatisque, ovoideo-sphæroideis vel sphæroideis, sordide atris, ostiolo obtuse conoideo, nigro; ascis pedicellatis, cylindræco-subclavatis, $130 \approx 21$; sporidiis octonis, subdistichis, ellipsoideis, fuscis, opacis, polo inferiori appendicula sporidio duplo longiori, hyalina instructis, sine appendicula $17-26 \approx 8-10$; paraphysibus nullis.

Hab. in fimo vaccino, leporino, asinino in tota Europa et Amer. bor. — Sec. Fuck. in peritheciis juvenilibus adsunt spermata allantoidea, perexigua.

2. **Sordaria natalitia** (Speg.) Sacc. *Hypocopa natalitia* Speg. Fungi 839
Arg. Pug. II, n. 58. — Peritheciis densissime gregariis, globoso-lenticularibus, in ostiolo acutiusculo cylindræco-conico attenuatis, minutis, $\frac{1}{3}-\frac{1}{4}$ mill., matrici insculptis, vel superficialibus, contextu tenui-membranæco, parenchymatico, fuligineo-atro, basi hyphis radicantibus exilibus vestitis; ascis cylindræco-clavatis superne obtuse rotundatis, quandoque subtruncatis, deorsum in pedicellum longiusculum attenuatis, $200-210 \approx 12-14$, octosporis; sporidiis distichis, primo hyalinis, cylindræcis, continuis, utrinque rotundatis, $45-50 \approx 6-7$, granuloso-farctis, dein apice elliptico-capitatis, vertice acutiuscule rotundatis, fuligineis, $15-16 \approx 10$, jodi ope nucleo obscuriore hyalino-ocellato ornatis, cauda hyalina recta cylindræca, $30-35 \approx 6-6\frac{1}{2}$, donatis.

Hab. in trunco putri aqua semmiimmerso Pircuniæ dioicæ secus Rio de la Plata, cerca de la Recoleta, America austr. — Species *S. coprophilæ* sat similis, sed sporidiorum magnitudine recedens.

3. **Sordaria minuta** Fuck. Symb. myc. App. II, p. 44, Wint. Sord. 840
p. 37, t. XI, fig. 21. — Peritheciis sparsis exacte conicis v. elongato-ovatis, $400 \approx 220$, antice brevissime setulosis; ascis cylindræcis, substipitatis, 8spor. $112 \approx 14$; sporidiis oblique monostichis, elliptico-ovatis, nucleatis, demum atro-umbrino-opacis, vertice globulo oblongo, gelatinoso, hyalino, mox deciduo, basi stipite recto, hyalino, sporidiorum dimidium æquante, $16-22 \approx 10$.

Hab. in fimo equino, vulpino, cuniculorum, murino, ovino in Germania, Britannia. — Datur forma 4-6-spora (*S. tetrastora* Wint.).

4. **Sordaria communis** (Speg.) Sacc. *Hypocopa communis* Speg. 841
Pug. 2. p. 20. — Peritheciis sparsis v. hinc inde 5-8 gregariis, globoso-lenticularibus, glabris, olivaceo-atris, fimo immersis, ostiolo tereti-conoideo, longiusculo, extante; ascis clavatis, apice truncato-

rotundatis, longiuscule stipitatis, 200-220 \approx 30-35, paraphysatis, octosporis; sporidiis distichis, ellipsoideis, hyalinis, dein fuligineis, 27-32 \approx 18-20, apice caudâ hyalina contorta, mox fluxâ, basi appendice tereti, recta, hyalina, persistente, 20-30 \approx 4-8, auctis.

Hab. in fimo vaccino putri secus Rio de la Plata, Amer. austr. — Affinis *S. decipienti*. Sporidia caudaque infera initio simulate 1-3-septata.

5. **Sordaria neglecta** E. et C. Hans. Champ. stere. Dan. p. 22, t. IX, fig. 12-18. — Peritheciis brevibus, pyriformibus, 1-1½ mill. altis, gregariis, subimmersis, virescenti-nigris, ostiolo brevi papillato, nigro; ascis stipitatis, fusoideis, apice rotundatis, octosporis, 150-170 \approx 48-60; sporidiis ovoideis 42-57 \approx 30-37, fuligineis, utrinque appendice hyalina sporidium subæquante auctis. 842

Hab. in fimo vaccino vetusto, Ribe (Dania). — Adest forma minor in fimo equino, sporidiis 32-40 \approx 18-21. Prope Holte in Selandia Daniæ.

6. **Sordaria hirta** E. C. Hans, Champ. stere. Dan. p. 22, t. VII. fig. 17-24. — Peritheciis sparsis, subimmersis oblongo-pyriformibus, 1-1½ mill. altis, nigro-olivaceis, ostiolo conico nigro, subinde longiusculo, pilis septatis brevibus obducto; ascis longe stipitatis, clavato-fusoideis, apice rotundatis; sporidiis octonis (raro quaternis) ovoideis, distichis, 30-50 \approx 18-22, utrinque appendicula hyalina sporidium subæquante auctis, brunneis; paraphysibus articulatisasco longioribus. 843

Hab. in fimo vaccino, Ribe (Dania).

7. **Sordaria fimiseda** Ces. et De Not., Wint. Sord. p. 25, t. IX, f. 13, *Podospora fimicola* Ces., *Cercospora fimiseda* Fuck. Symb. 245. — Peritheciis erumpenti-superficialibus confertis v. sparsis, ovoideo-conicis, majusculis, undique pilis fuligineis sursum pallidioribus, 80-100 \approx 5, vestitis, contextu membranaceo; ascis longiuscule stipitatis, oblongo-fusoideis, acutiusculis, parte sporif. 350-400 \approx 50-70, stip. 150-200 μ . longo; sporidiis octonis, plerumque distichis, interdum tamen deorsum monostichis, elliptico-ovatis, 50-60 \approx 28-30 apice appendiculâ crassa subrecta hyalinâ breviori, basi cauda hyalina cylindraceo-fusoideâ tortuosâ, 100 \approx 10 auctis. 844

Hab. in fimo equino, ovino et vaccino in Germania, Fennia, Britannia, Italia, Amer. boreali. — Quandoque cauda secunda accedit in basi sporidiorum cylindraceo-clavulata, hyalina, 55 \approx 5.

8. **Sordaria californica** Plowr. Calif. Spher. Grev. VII, p. 72, t. 120, fig. 2. — Peritheciis majusculis, indumento brunneo vestitis, spar- 845

sis v. gregariis, 1 mill. altis, ostiolo nudo ruguloso, subinde striis divergentibus circumdato; ascis crasse cylindræis breve stipitatis, octosporis 200–300 μ . longis; sporidiis distichis oblongo-ellipsoideis basi subtruncatis, 30–35 \approx 15–18, basi caudâ hyalina curvâ sporidium æquante auctis.

Hab. in fimo vaccino in California. — Sec. Plowr. species prædistincta.

9. **Sordaria carbonaria** (Plowr.) Sacc. *Sphæria carbonaria* Plowr. 846
Brit. Fungi in Grev. II, 188, t. 25, fig. 3. — Aggregata, globosa, semiimmersa, basi pilis hyalinis ramosis septatis cinta; ostiolo papillato, obtuso ruguloso; ascis cylindræis, apice truncatis paraphysatis; sporidiis 8, subnavicularibus, atro-fuscis, uniseriatis, 9 \approx 3, cauda brevissima hyalina basi auctis.

Hab. in humo carbonacea prope Shrewsbury (Britannia).

10. **Sordaria bombardioides** Auersw. in Niessl Beitr. p. 37, t. VI, 847
fig. 4. Wint. Sord. 22, t. VIII, fig. 11. — Peritheciis sparse cæspitosis, subconfluentibus forma valde variabili, nunc ovoideis, oblongis, nunc subpyriformibus vel utriculiformibus $\frac{3}{4}$ – $1\frac{1}{3}$ mill. altis, inferne contractis, apice late obtuse rotundatis, papillatis umbilicatisque, ceraceo-carnosis crassis, rugulosis, badiis, ostiolo fusco-atro; ascis elongato-clavatis stipite maxime elongato, apice obtusis, 8sporis, p. sporif. 140–160 \approx 15–18; sporidiis oblique monostichis sed sæpe inordinatis, obovato-oblongis, plerumque inæquilateralibus, 22–25 \approx 12–14, nitidis, fusco-atris, nucleo oleoso, circulo hyalino; paraphyses ascorum fere longitudine, articulata.

Hab. in fimo leporino prope Leipzig, Cæderan et Brünn (Germania), in fimo equino in California. — Sec. Rehm sporidia 25 \approx 9, asci cum stipite 270 \approx 15.

11. **Sordaria curvula** de Bary Morph. Pilze p. 209, Wint. Sord. 37, 848
t. XI, fig. 22, *Cercophora conica* Fuck. Symb. p. 245. — Peritheciis sparsis subsuperficialibus, oblongo-conicis, sæpius curvatis, rugulosis, pilis crassis articulatis, plerumque fasciculatis dense obsitis, basi filis repentibus ramosis cinctis, 750–800 \approx 380–400; ascis crasse cylindræis, longissime stipitatis, 8–sporis, p. sporif. 129 \approx 38; sporidiis ovoideis, opaco-fuscis, 18–25 \approx 9–10, vertice hyalino-apiculatis, basi caudâ cylindræâ 6 μ . long. hyalinâ auctis.

Hab. in fimo vaccino, equino, ovino, murino in tota Germania, Britannia, Italia, Fennia. — «Tuberculi perithecorum distincte papillati; asci cylindræi longe stipitati, 180–200 \approx 18–22, apice rotundati, octospori; sporidia ellipsoidea, 22–25 \approx 14, opace

fuliginea, caudâ hyalinâ cylindrica curvulâ aucta [Michelia]. — Var. *coronata* Wint. Sord. p. 38 (*Malinvernina breviseta* Fuck. Symb. p. 243). Peritheciis sub apice cirrhis 5-8 curvatis, divaricatis, fuscis, pellucidis coronatis, ceterum glabris. In fimo vaccino in Germania et Nova Zelandia. — Var. *aloides* (Fuck.) Wint. Sord. p. 38. Peritheciis sub apice cirrhis 5-12 elongatis curvatis, fuscis, opacis coronatis. In fimo vaccino in Helvetia.

12. **Sordaria Winterii** Karst. Myc. Fenn. II, p. 251, *Sord. breviseta* ⁸⁴⁹
 Karst. Myc. Fenn. II, p. 52, nec Fuck. — Peritheciis sparsis vel gregariis, erumpentibus, demum sæpe liberis, ovoideis, ad apicem obtusum, ostiolo latiusculo hiantem, attenuatis, atris, setulis brevibus, fuscis, subtilibus hirtulis; ascis pedicellatis, octosporis, cylindraceo-clavatis, apicem versus attenuatis, 150 \approx 30-40 p. sporif.; sporidiis subdistichis, ellipsoideis, fuscis, opacis polo inferiori appendicula sporidium subæquante, hyalina instructis, (sine appendicula) 22-36 \approx 14-15.

Hab. supra fimum equinum, vaccinum et leporinum in Fennia meridionali et media autumnò passim. — Partibus externis simillima est *Sord. fimesedæ*.

13. **Sordaria micrura** (Speg.) Sacc. *Hypocopra micrura* Speg. Pug. ⁸⁵⁰
 2. p. 20. — Peritheciis minutis, 150-180 μ . diam., levibus, globoso-lenticularibus, matrice immersis, ostiolo papillato, subcarbonaceo, exerto; hyphis repentibus anastomosantibus ornatis; contextu membranaceo-parenchymatico, olivaceo-fusco; ascis clavato-elongatis, sursum rotundatis, deorsum in pedicellum breviusculum attenuatis, 160-180 \approx 20-25, octosporis; sporidiis subdistichis, elliptico-limoniiformibus, 20-25 \approx 15, fuliginis, basi caudâ hyalinâ parvulâ 8-10 \approx 2 donatis.

Hab. in fimo Caviæ leucopygæ in pratis prope Buenos Aires, Argent. Amer. austr. — Peritheciis levibus, ascis breve stipitatis etc. a *Sord. curvula* dignoscitur.

14. **Sordaria appendiculata** (Auersw.) Niessl Beitr. pag. 38, tab. V, ⁸⁵¹
 fig. 40. — Peritheciis nunc sparsis, nunc aggregatis, oblongis, cum ostiolo conico sæpe curvato confluentibus, crassiusculis carnosæ coriaceis, atris, villo brevi fusco-griseo obductis; pilis 40 μ . long.; ascis clavatis longe stipitatis, 150-160 \approx 26-30 p. sporif.; apice obtuso-retusis, 8spor.; sporidiis subdistichis, ovato-oblongis, 26-28 \approx 14-15, nitidis, atro-fuscis in polo inferiore, rarius utrinque, appendicula recta vel parum curvata subhyalina, attenuata auctis; paraphysibus ascos superantibus angustis guttulatis.

Hab. in fimo leporino prope Leipzig, Brünn etc. in Germania. — Sec. Rehm Asc. Diagn. n. 498 appendicula superior 20–26 \approx 3, denique brunneola, inferior 70 \approx 3, curva, hyalina. — Satis diversa videtur a *Sordaria curvula* quacum jungitur a Wintero.

15. **Sordaria decipiens** Winter Sord. pag. 28, tab. IX, fig. 16, Fuck. 852
Symb. myc. App. II. pag. 44, tab. I. fig. 33. — Peritheciis sparsis, immersis, usque ad 1 mill. altis, globosis, primo et maturis fusco-diaphanis, extus pilis sparsis, brevibus, ostiolo brevi, truncato, obscuriori; ascis elongatis, utrinque attenuatis, 8sporis, 174–200 \approx 40–50, stipite 80–100 μ . longo; sporidiis distichis, lanceolato-oblongis, 1–2-guttulatis, rectis, umbrinis, demum subopacis, 36–48 \approx 19–22, basi caudâ cylindrico-clavulatâ, 40 \approx 8, lobulatâ instructis, apice caudiculis duabus, subliberis perfecte circinatis, indeque sæpius unicam simulantibus ornatis.

Hab. in fimo vaccino, cuniculorum et equino in Germania, Tyrolia et Italia boreali.

16. **Sordaria ampicornis** Ellis Bull. Torr. 1876, p. 109, *Sph. eximia* Peck, 28 Rep. on the St. Mus. p. 78, tab. 2, fig. 14–17. — 853
Peritheciis sparsis, subsuperficialibus, ovato-conicis, obtusis $\frac{3}{4}$ –1 mill. altis, villo fusco erecto vestitis; pilis tenuiter septatis; ascis octosporis tereti-clavatis; sporidiis ovoideis v. subnavicularibus, olivaceis denique fuligineis, 30 \approx 12–13, utrinque appendicibus subfiliformibus sporidio multo longioribus, rectiusculis auctis.

Hab. in fimo cuniculorum et leporum Kasoag, Newfield, Amer. bor. — Teste Rehm (Asc. n. 498) est *Sordarie appendiculatæ* forma, at ex icone l. c. diversa videtur.

17. **Sordaria valsooides** (Peck) Sacc. *Sphæria valsooides* Peck, 28 854
Rep. on the St. Mus. — Peritheciis matrice immersis, sparsis, nigris, apice pilis rigidis, erectis, paucis conspersis; ascis subclavatis; sporidiis biseriatis v. sparsis, ellipsoideo-oblongis, 27–33 μ . longis, initio olivaceis, dein fuligineis, sæpius uni-guttatis, basi cauda hyalina breviuscula auctis.

Hab. in stercore vaccino, Sageville, Amer. bor. — Cauda plerumque dimidium sporidium æquans. Setulæ vel processus ad apicem perithecorum *Valsam* minutam quamdam æmulantur, unde nomen.

18. **Sordaria squamulosa** Crouan Finist. pag. 22. — Peritheciis subpyriformibus, solidiusculis, olivaceis, 2 mill. cr., ostiolo nigro pilis 855

brevissimis obsito; ascis sub-clavatis, octosporis; sporidiis ovoideis, fuliginéis, appendiculis hyalinis angustissimis, curvis auctis.

Hab. in fimo vaccino, Finistère (Gallia).

Phytogenæ.

19. **Sordaria lignicola** Fuck. Symb. Myc. App. I, p. 38, Wint. Sord. p. 27, t. IX, f. 15. — Peritheciis massa gelatinosa sordida circumdatis, sparsis gregariisque, aut in ligno molli immersis, aut et plerumque liberis, majusculis, nigris, e basi globosa sensim in rostrum crassum, truncatum, perithecium dimidium subæquans attenuatis, 650 \approx 500; ascis amplis, elongatis, 8spor. 152 \approx 15 p. sporif.; sporidiis distichis, immaturis cylindræcis, curvatis, multiguttulatis, continuis, hyalinis, utrinque appendicula spiniformi, recta, diametrum sporidii æquante, 48 \approx 4; sporidiis maturis plerumque ab appendiculis liberatis, ovatis, basi truncatis, antice attenuatis, simplicibus, opaco-fuscis, 17 \approx 10. 856

Hab. in ligno patri Fagi prope Eberbach (Rhenogovia).

20. **Sordaria tomentosa** (Speg.) Sacc. *Hypocopra tomentosa* Speg. Fungi Arg. Pug. IV, n. 46. — Peritheciis densiuscule gregariis, ovato-subpyriformibus, majusculis, 1–1,5 mill. alt., 0,5–0,7 mill. crass., superficialibus, adpresse pruinoso-lanuginosis, atro-olivaceis, ostiolo conico, crassiusculo, vertice rotundato-truncato, atro, glabro ornatis, contextu parenchymatico, membranaceo, olivaceo-fuligineo; ascis cylindræcis, sursum longiuscule attenuatis, apice truncato-rotundatis, deorsum breviuscule et crasse stipitatis, 240–300 \approx 35–40, octosporis, aparaphysatis; sporidiis oblique monostichis, v. recte subdistichis, ellipticis, utrinque obtusiuscule rotundatis, majusculis, 50–70 \approx 25, intense fuliginéis, 1-guttulatis, duabus caudibus mucoso-hyalinis ornatis; superâ subæquilongâ, 5 μ . crass., contorto-revolutâ, inferâ recte flexuosâ, nonnihil longiore. Hyphæ perithecorum strigoso-intricatæ, breves, anastomosantes, crebre ramulosæ et parce septatæ, fuligineo-olivaceæ, 5 μ . crass. 857

Hab. in ramulis dejectis emortuis Salicis Humboldtianæ humo obvolutis in paludosis a la Recoleta, Arg., Amer. austr.

21. **Sordaria caudata** (Curr.) Sacc. *Sphæria caudata* Curr. Linn. Trans. XXII, p. 320, t. 58, f. 50. — Peritheciis parvis, sparsis, v. paucis aggregatis, conoideis v. subglobosis, ostiolo conico; ascis crasse cylindræceo-fusoideis, breve stipitatis, octosporis; sporidiis biseriatis ovoideis, 20 μ . long., fuliginéis, basi subtruncatis caudaque hyalinâ sesquilongiore guttulatâ, curvulâ auctis. 858

Hab. in ligno putri molli, Twycross (Britannia). — Perithecia modo subimmersa, modo fere libera.

22. **Sordaria lanuginosa** (Pr.) Sacc. Fungi Ven. Ser. VI. p. 26, *Sph.* 859
lanuginosa Pr. in Linn. 1853, XXVI, 714, *Arnium lanuginosum* Nits., *Sordaria Curreyi* Auersw., Niessl., Beitr. 42 (teste ipso), *Sph.* (Sord.) *Brassicæ* Kl. — Peritheciis majusculis, globoso-conoideis, sæpe curvulis, vertice subtruncatis, sordide griseo-tomentosis, $\frac{3}{4}$ mill. cr., 1 mill. alt., superficialibus; ascis cylindraceutis, 150–160 \approx 25–26 p. sporif., stipitatis apice obtuse rotundatis, octosporis; sporidiis oblique monostichis, ovato-ellipsoideis, 40–50 \approx 24, opace fuligineis, utrimque v. basi tantum caudâ hyalinâ deciduâ auctis.

Hab. in caulibus ramisque putridis *Brassicæ*, *Serratulæ*, *Heilanthi*, *Saponariæ*, *Ulmi* et *Sambuci*, *Selva* et *Conegliano*, Italia bor., Germania et Britannia. — *Sord. lanuginosa* Crouan Fin. p. 22 non videtur diversa.

23. **Sordaria culmigena** Sacc. et Sp. Mich. I. 373. F. it. t. 392. — 860
 Peritheciis sparsis superficialibus, globoso-conoideis, vix $\frac{1}{2}$ mill. diam., molliter atro-villosis; ascis cylindraceuto-clavatis, 180–200 \approx 25, breve stipitatis, paraphysatis, octosporis; sporidiis monostichis initio lasiosphæriaceis hyalinis, dein ovoideis, 36–40 \approx 18, 1-guttatis fuligineis, caudâ longissimâ 90–100 \approx 4–5 hyalinâ, quandoque 1-septatâ utrimque auctis.

Hab. in culmis *Arundinis Donacis* putridis, *Conegliano* (Italia bor.). — A *Sord. lanuginosa* appendiculis sporidiorum plusquam duplo longioribus imprimis differt.

24. **Sordaria leucotricha** Speg. Mich. I, 225, Sacc. Fung. ital. t. 619. 861
 — Peritheciis gregariis, superficialibus, globosis 250–350 micr. d., pilis longissimis, remote septatis, 3–4 micr. cr. oblongo-hyalinis obvolutis; ostiolo vix prominulo late pertuso; contextu tenui-membranaceo, parenchymatico, flavo-fuscidulo; ascis cylindraceutis apice obtuse rotundatis, breve stipitatis, 210–220 \approx 20–25, aparaphysatis, octosporis; sporidiis oblique monostichis subsphæricis v. ellipsoideis, 30–32 \approx 18–28, late fuligineis, crasse subhyalino-1-nucleatis, caudâque conicâ sæpe curvulâ, 7–8 \approx 5, auctis.

Hab. in ramulis putridis *Sambuci nigræ*, *Conegliano* (Italia boreali).

25. **Sordaria austro-americanana** (Speg.) Sacc. *Hypocopra austro-ame-* 862
ricana Speg. Fungi Arg. Pug. III, n. 47. — Peritheciis superficialibus v. immersis laxiuscule gregariis v. hinc inde sparsis, minutulis, 0,3–0,5 mill., atris, glabris, globosis, ostiolo papillato-trun-

cato donatis, e sporidiis exsurgentibus sæpius atro-areolatis; ascis cylindraceo-clavatis, sursum obtuse rotundatis, deorsum in pedicellum longiusculum attenuatis, 100-110 \approx 16-17 p. sporif., 60-80 \approx 4-6 ped., octosporis, paraphysibus filiformibus, longioribus, crassiusculis obvallatis; sporidiis recte v. oblique distichis, ellipticis, utrinque acutiuscule rotundatis, opace fuliginis, 28-30 \approx 10-12, deorsum caudâ cylindraceo-clavatâ, 14 \approx 5, hyalinâ, facillime deciduâ auctis.

Hab. in parte interiore humo obducta trunci vetusti ac cæsi Pircuniae dioicæ prope S. José de Flores, Argent. Amer. austr. — Var. *Agavis americanæ* Speg. Fungi Arg. Pug. IV, n. 129. A typo recedit peritheciis nonnihil minoribus, 200-250, magis coriaceis, ascis brevius stipitatis crassioribusque, 140-150 \approx 20, paraphysibus ægre visibilibus; sporidiorum magnitudine 24-30 \approx 12-14, colore atque cauda, 15-20 \approx 2-4, ut in typo. Hæc forma in ligno denudato vigens nonnihil ad *Roselliniam* vergit. — In ejusdem ligno dejecto putrescente prope el Bañado de S. José de Flores, Argent. Amer. austr.

26. **Sordaria Cirsii** Crouan Finist. p. 22. — Peritheciis pyriformi-⁸⁶³ bus, 2-3 mill. alt., nigricantibus, glabris, hinc vero hyphis mycelicis inspersis; ascis magnis, clavatis, apice mamillatis, deorsum attenuatis, e placenta filamentoso-cellulari oriundis, octosporis; sporidiis ovoideis, monostichis, flavis, dein nigricantibus, polis appendicula hyalina incurva, attenuata auctis.

Hab. in basi putrida Cirsii palustris in paludibus Finistère (Gallia).

II. *Malinvernia*: ascis tetrasporis.

27. **Sordaria anserina** (Rabh.) Wint. Sord. 35, t. XI, fig. 20, Sacc.⁸⁶⁴ Fungi Ven. V, p. 178, *Malinvernia anserina* Rabh., *Hypocopra anserina* Ces. in litt. — Peritheciis semiimmersis, majusculis, $\frac{1}{3}$ - $\frac{1}{2}$ mill. crass., globoso-conoideis, hyphis repentibus conidiophoris basi cinctis, verticeque setis rigidulis ex hyphis coalitis fuliginis instructis; contextu parenchymatico fuligineo (in forma *anserina* subcarbonaceo, in forma *ovina* et *equina* submembranaceo); ascis fusosideo-clavatis, p. sporif. 160-180 \approx 30-32, stip. 110-115 \approx 7-9, tetrasporis; sporidiis monostichis ovato-ellipsoideis, obtusiusculis, 40-42 \approx 22, opace fuliginis, caudâ hyalinâ, 35 \approx 5, basi donatis.

Hab. in stercore anserino, ovino, vaccino, equino, cuculorumque in Germania et Italia boreali.

28. **Sordaria australis** (Speg.) Sacc. *Hypocopra australis* Speg. Fung. 865

Arg. Pug. III, p. 16. — Peritheciis totaliter immersis atro-olivaceis majusculis, 0,5–0,8 mill., globosis, papillatis, truncato-ostiolatis et atro-rufescentibus, hyphis olivaceo-fulgineis, crebris, longiusculis, repentibus ubique vestitis; ascis cylindraceo-clavatis, sursum obtusissime rotundatis, deorsum in pedicellum crassiusculum attenuatis, 240–280 \approx 30, tetrasporis, aparaphysatis; sporidiis oblique distichis, majusculis, 60–70 \approx 25–30, utrimque obtusiuscule rotundatis, crassiuscule tunicatis, læte fulgineis, utrinque hyalino-caudatis, cauda superiore minore contorto-cirrhata, inferiore longiore, 50–70 \approx 5, flexuoso-recta.

Hab. in fimo vetusto Myopotami cœpyi ad truncos vetustos in nemorosis paludosis secus el Rio de la Plata a la Recoleta Argent. Amer. boreali.

29. **Sordaria erecta** (Speg.) Sacc. *Hypocopra erecta* Speg. Pug. 2, 866

p. 20. — Peritheciis ellipsoideis v. ovoideis, $\frac{1}{2}$ – $\frac{2}{3}$ mill. altis, erectis, superficialibus, glabris, v. pruinosis, griseo-fulgineis, basi hyphis radiantibus cinctis; ascis cylindraceo-clavatis, sursum truncato-rotundatis, longe stipitatis, 200–220 \approx 25–30, tetrasporis, aparaphysatis; sporidiis monostichis elliptico-navicularibus, utrinque subrotundatis 38–42 \approx 20, caudâ cylindraceâ, rectâ v. uncinata sporidium æquante utrinque auctis.

Hab. in fimo vaccino prope S. José de Flores, Argentina (Amer. austr.). — Caudæ sporidiorum cito fluxiles. Asci quandoque 5–6-spori.

30. **Sordaria Sarawacensis** Ces. Mycet. Born. p. 22. — Peritheciis 867

ex hyphasmate subiculum sat tenax albescens constituenta emersis, minutissimis, atris, ovalibus, in ostiolum acutum carbonaceum excurrentibus, cæterum substantia minute vesiculosa; ascis clavatis tetrasporis, sporidiis ovalibus utrinque obtusis, polo inferiori crasse caudato, 18 \approx 8–10, incl. cauda 10 μ . longa.

Hab. in fimo bubalino? Ceylon et Sarawak, Bornei.

Dubiæ.

31. **Sordaria grisea** Ces. Mycet. Born. p. 22. — Peritheciis aggregatis, majusculis, ovoideis, cinereo-pulveraceis, serius glabratis sed 868

scabridis, nigris, in ostiolum conicum continuis; ascis mox diffluentibus; sporidiis ovalibus, fuscis, simplicibus, guttula centrali sat conspicua; basi truncatis ergo prima ætate probabiliter caudatis.

Hab. ad fimum Ceylon, ad Pedrotallagalla.

HYPOCOPRA Fuck. Symb. myc. p. 240 et vix Fr. S. v. Sc. p. 397. (Etyu. *hypo*, sub, *copros*, fimus). — Perithecia simplicia (stromate deficiente), conferta sparsave matrice subimmersa v. insidentia submembranacea ovato-globosa, atra, glabra v. pilosa, ostiolo papillæformi. Asci cylindræci 4-8-spori; sporidia ovoidea v. ellipsoidea, fusca, caudata, circulo hyalino ut plurimum obvoluta.

Fimicolæ.

A) Octosporæ.

1. **Hypocopra fimicola** (Rob.) Sacc. *Sordaria fimicola* Ces. et de Not. 869
Schem. Sfer. p. 52. Wint. Sord. p. 17, t. VII, fig. 6. *Sphæria fimicola* Rob. in Desm. 17 Not. Ann. Sc. nat. 1849, p. 339. — Peritheciis gregariis, confertisve, semiimmersis minutis, $\frac{1}{5}$ - $\frac{1}{4}$ mill. diam., subglobosis cum ostiolo conoideo crasso brevi sæpe obliquo confluentibus, membranaceo-coriaceis rugulosis, lævibus, atris; ascis cylindricis, stipitatis, 100-150 \approx 14-16 p. sporif.; apice late rotundatis 8sporibus; sporidiis oblique monostichis, ovoideis, 17-20 \approx 10-12, olivaceo-fuscis, nitidis, nucleo oleoso, circulo hyalino.

Hab. in fimo leporino, ovino, canino, vaccinoque, in Germania, Belgio, Gallia, Britannia, Fennia, Italia, Amer. austr. — Forma que describitur in Mich. I, 226 et in Myc. Fenn. II, p. 50, est var. *macrospora*: sporidiis 30-32 \approx 16-18.

2. **Hypocopra humana** Fuck. Symb. Myc. p. 241. *Sordaria humana* 870
Wint. Sord. p. 21, t. VIII, fig. 9. — Peritheciis confertis, tectis sub crusta rugulosa, globosis, opaco-nigis, $\frac{1}{3}$ mill. cr. ostiolo emerso, cylindræco, vel perparum conico, recto, nitido; ascis cylindræcis, stipitatis, 8sporibus, 130-140 \approx 15-18; sporidiis monostichis, subglobosis, vel globoso-ovatis, 20-24 \approx 16-18, atro-fuscis, strato hyalina facile fluxili obvolutis.

Hab. in merda humana in Germania, Gallia, Italia, Fennia, Amer. austr. — Conf. Mich. I, p. 223, ubi fusius describitur nec non st. conidiophorus. Sec. Karst. est habenda ut var. *C. fimeti*.

3. **Hypocopra discospora** (Auersw.) Fuck. Symb. App. II. p. 43. *Sordaria discospora* Auersw. in Niessl. Beitr. p. 42, t. VI, fig. 41. 871
Wint. Sord. 19, t. VIII, fig. 8. — Peritheciis sparsis, minutis, globosis, cum ostiolo conico obtuso brevi crasso setis rigidis nigris instructo confluentibus, membranaceo-coriaceis, rugulosis, sublævibus, atris, $\frac{1}{2}$ mill. altis; ascis cylindricis, stipite brevi, apice retusetruncatis 8sporibus, 80-90 \approx 12 p. sporif.; sporidiis oblique monostichis, disciformibus, seu subrotundo-ellipticis, a latere compres-

sis, 12–13 μ . diam. e latere 3–5 μ . diam., fuscis, nitidis, nucleo oleoso. Paraphyses exiguæ (?).

Hab. in fimo leporino, cuniculorum, equino, pr. Leipzig, Brünn, Æstrich etc. (Germania) in Tyrolia et Britannia.

4. **Hypocopa platyspora** (Plowr.) Sacc. *Sordaria platyspora* Plowr. 872
 Br. Fungi in Grevill. VI, p. 28, t. 94, fig. 2. — Peritheciis sparsis fimo semiimmersis, conoideis, mediocribus, setulis rigidis, brevibus, crassis obsitis; ascis cylindraceutis, subsessilibus, 130 \approx 12, octosporis; sporidiis monostichis e fronte suborbicularibus, 20 \approx 18 e latere valde compressis 2–3 μ . cr., nigricantibus.

Hab. in fimo equino, Forres (Britannia) legit rev. J. KEITH. 873

5. **Hypocopa superba** (De Not.) Sacc. *Sordaria superba* De Not. 874
 Recl. Pir. in Comm. Critt. II, p. 479. — Peritheciis sparsis superficialibus, sphæroideis, atris, nudis, vertice nonnihil tenuato obtuse umbonatis ostiolo exiguo hiantibus; cellulis stratosi, in sicco collabascentibus; ascis teretibus, leptodermis, octosporis; sporidiis ellipsoideis, majusculis, fuligineo-fuscis, opacis, involucro diaphano crasso utrinque truncato obductis.

Hab. in excrementis Arctomydis Marmotæ, Val Grisanche, Italia boreali.

6. **Hypocopa vagans** (De Not.) Sacc. *Sordaria vagans* De Not. Recl. 874
 Piren. in Comm. Critt. II, p. 479. — Sparsa, superficialis; peritheciis ovoideis vertice crasse mammoso-attenuatis, atris, tenuiter villosulis, cellulis stratosi contextis, in sicco fragilibus; ascis e basi tenuata teretibus, octosporis, juventute apice subcapitellatis, paraphysatis, sporidiis sphæroideis v. sphæroideo-ellipsoideis, badiofuscis parce translucidis.

Hab. in excrementis Leporis variabilis, Riva, Valsesia (Ital. bor.). — Affinis sed satis diversa ab *H. macrospora*.

7. **Hypocopa microspora** (Plowr.) Sacc. *Sordaria microspora* Plowr. 875
 Brit. Fungi Grev. VI, p. 28, t. 94, fig. 3. — Peritheciis sparsis, majusculis obtuse conicis, parte superiori liberis setulisque rigidis brevibus 40 μ . long. obtusis, basi filis mycelicis paucis cinctis; ascis cylindricis 45–50 \approx 6–8, octosporis; sporidiis monostichis, subglobosis, minutis e latere compressis, 7 \approx 5, e latere 2 μ . cr., circulo hyalino obductis, fuligineis,

Hab. in fimo equino, Forres (Britannia) legit J. KEITH.

8. **Hypocopa macrospora** (Auersw.) Sacc. *Sordaria macrospora* 876
 Auersw. in Rabenh. fung. eur. n. 954, Niessl Beitr. p. 30, t. VI, fig. 43. *Hypocopa stercoris* Fuck. — Peritheciis sparsis vel gre-

gariis subglobosis cum ostiolo conoideo confluentibus, coriaceis, lævibus, fusco-atris, rugulosis $\frac{1}{2}$ - $\frac{3}{4}$, mill. altis; ascis cylindricis, stipitatis, apice obtuse rotundatis vel retusis 190-200 \approx 22-24 p. sporif.; sporidiis magnis, ovoideis, 26-30 \approx 15-17, nitidis, olivaceofuscis, nucleo oleoso. Paraphyses exiguæ (?).

Hab. in fimo leporino, murino, ovino, vaccinoque pr. Leipzig, Brünn, Zwickau, Schwarzkirchen, Gratz, Giessen etc. (Germania), nec non in Fennia et in Italia boreali.

9. **Hypocopra gigaspora** (Fuck.) Sacc. *Sordaria gigaspora* Fuck. 877
Symb. mycol. App. III, p. 26. — Peritheciis absque stromate in fimo immersis, demum vertice liberis, sparsis vel laxe gregariis, e maximis, perfecte globosis, lævibus, glabris, atris, ostiolo abrupte imposito, cylindraceo, plus minusve brevi, subtruncato; ascis saccatis, maximis, 8spor. distichis, ovatis, utrinque obtusissimis, continuis, lævibus, maturis fusco-violaceis, 70 \approx 34.

Hab. in fimo vaccino in passu Bernina (Helvetia).

10. **Hypocopra capturæ** (Speg.) Sacc. *Sordaria capturæ* Speg. F. 878
Argent. Pug. II, p. 21. — Peritheciis majusculis $\frac{1}{2}$ - $\frac{3}{4}$ mill. globosis, lævibus, matriæ immersis vel plus minusve protuberantibus, ceraceo-subolivaceis, ostiolo papillato, exerto, atro donatis, contextu tenui membranaceo-parenchymatico, olivaceo; ascis cylindraceis, sursum truncato-rotundatis, crassiuscule tunicatis, deorsum in pedicellum crassiusculum ac abbreviatum desinentibus, p. sporif. 200-210 \approx 25-28, ped. 50-60 \approx 10-15, octosporis, paraphysibus filiformibus, quandoque ramulosis obrvallatis; sporidiis oblique monostichis, ellipticis utrinque obtuse rotundatis 32-36 \approx 18-20, opace fuliginosis, exappendiculatis, strato hyalino, persistente, mucoso, crassiusculo obvolutis.

Hab. in fimo Cavie leucopygæ vetusto in pratis circa San José de Flores, Argent. Amer. austr.

11. **Hypocopra aviaria** Karst. Fungi Spetsberg p. 97, n. 28. — Peritheciis sparsis vel gregariis, demum sæpe subsuperficialibus, sphaeroideis, ostiolo papillato, atris, glabris, latit. $\frac{1}{3}$ - $\frac{1}{4}$ mill.; ascis cylindraceis, jodo non cærulescentibus, 82-110 \approx 12; sporidiis octonis monostichis, ellipsoideis vel sphaeroideo-ellipsoideis, simplicibus, fuscis, 14-18 \approx 9-10.

Hab. in stercore anserino, locis humidis, in Beeren Eiland. (Spitzberg). — Ab *H. stercoraria* (Sow.) præcipue forma et magnitudine sporidiorum minore diversa. Crusta fere nulla.

12. **Hypocopra argentina** (Speg.) Sacc. *Sordaria argentina* Speg. 880

F. Argent. Pug. 2, n. 64. — Peritheciis minutis 150–180, matrici semiimmersis, levibus, contextu membranaceo, sinuoso-parenchymatico, olivaceo, circa ostiolum coriaceo-subcarbonaceo-atro; ascis cylindraceutis, sursum truncato-rotundatis, crasse tunicatis, deorsum in pedicellum crassum, abbreviatumque attenuatis 120–130 \approx 16–17, octosporis, paraphysatis; sporidis oblique monostichis, ellipticis, utrinque acutiuscule rotundatis, 15–16 \approx 10, primo hyalinis dein fulvo-flavidis strato mucoso hyalino fluxili obvolutis, postremo fuliginis, liberis.

Hab. in fimo Caviæ leucopygæ prope S. José de Flores, Argent. Amer. austr.

13. **Hypocopra bombardioides** (Auersw. et Wint.) Sacc. *Sordaria* 881
bombardioides Wint. Sord. p. 22, t. VIII, fig. 11. — Peritheciis superficialibus sparsis, plerumque gregariis, basi subfasciculatis, ovoideis, subumbilicatis, sub apice, subconstrictis, obtusissime papillatis, fusco-nigris, glabris, rugulosis, 1–1½ mill. altis; ascis tetratis, longe stipitatis, 8-sporis, 170 \approx 15 p. sporif.; lumine apice foveolato; sporidiis oblique monostichis, ovoideis, circulo hyalino obvolutis, opaco-atris, 22 \approx 12; paraphysibusasco longioribus, filiformibus, septatis.

Hab. in fimo leporino Arnstadt, Brünn, Ederan (Germania). — Forma perithecorum prædistincta species.

14. **Hypocopra insignis** (Hans.) Sacc. *Sordaria insignis* E. C. Hans. 882
 Champ. ster. Dan. p. 21, t. VII, f. 13–16. — Peritheciis gregariis subimmersis breve pyriformibus, v. oblongis 1 mill. altis; ostiolo papillato, nigro, pilis nigris articulatis, obsito; ascis stipitatis fusoides, apice truncatis, octosporis, 240 \approx 68, p. sporif.; sporidiis distichis ovoideis, atro-brunneis 50–54 \approx 24–31; paraphysibus septatis ascos superantibus.

Hab. in fimo equino, Holte in Selandia (Dania).

15. **Hypocopra barbata** (Hans.) Sacc. *Sordaria barbata* E. C. Hans. 883
 Champ. ster. Dan. 21, t. IX, f. 19–22. — Peritheciis pyriformibus, subnigris, ½–¾ mill. altis, pilis copiosis quandoque fasciculatis vestitis, sparsis, subimmersis; ascis fusoides-clavatis, longe stipitatis, 160–200 \approx 44–60 p. sporif., octosporis; sporidiis ovoideis, hinc acutiusculis, olivaceo-fuliginis, 45–54 \approx 23–31, paraphysibus septatis ascos subæquantibus.

Hab. in fimo ovino, Rudersdal in Selandia Daniæ. — Perithecia subinde distoma.

16. **Hypocopra scatigena** (B. et Br.) Sacc. *Sphaeria scatigena* B. et 884

Br. Not. Brit. Fungi n. 972, t. 17, fig. 25. — Peritheciis liberis, ovoideis, subtiliter hispidis, pilis brevibus, rigidis; ostiolo papillato truncato; ascis teretibus, breve stipitatis, octosporis; sporidiis ellipsoideis, monostichis, initio circulo hyalino obvolutis, 20 μ . longis e fronte subglobosis, fuliginis.

Hab. in stercore equino King's Cliffe (Britannia).

17. **Hypocopra minima** (S. et Sp.) Sacc. *Sordaria minima* S. et Sp. 885

Mich. I. 373, F. ital. t. 617. — Peritheciis subsuperficialibus e globoso conoideis, 100–150 micr. diam., levibus, glabris, nigris, ostiolo obtuse papillato; peritheciis contextu tenui, minute areolato, fuligineo; ascis cylindræcis breve stipitatis, apice rotundato-truncatis, 50–58 \times 5–6, paraphysibus nullis visis, octosporis; sporidiis oblique monostichis ovoideis v. subellipsoideis, 8 \approx 4, fuliginis (egutulatis visis).

Hab. in fimo vaccino in sylva Cansiglio (Ital. bor.) socia *Sporormia fimetaria*, — Minutis peritheciis sporidiorumque a ceteris speciebus mox dignoscitur.

18. **Hypocopra stercoraria** (Sow.) Sacc. nec Fuck. *Sph. stercoraria* 886

Sow. t. 357, Curr. Linn. Trans. XXII, t. 57, fig. 38, Fr. S. M. II. 455. — Nigra, nitida, peritheciis globosis rigidis lævibus, ostiolo papillæformi; ascis crasse cylindræcis, breviuscule stipitatis; octosporis; sporidiis monostichis, ellipsoideo-limoniiformibus, 30 μ . long.

Hab. in stercore humano et equino in Suecia, Britannia. — Perithecia crassa, firma, non collabentia. — Var. *macrosperma* Dur. et M., Fl. Alg. p. 499, Mont. Syll. Crypt. n. 805. Denudata, sparsa vel aggregata, passim confluentis; peritheciis globosis magnis firmis nigris, ostiolo crassiusculo papillæformi pertuso impresso instructis; ascis amplis cylindræcis sporidia 8 maxima elliptica opaca continua foventibus. — In stercore vaccino, La Calle (DURIEU).

19. **Hypocopra leucoplaca** (B. et Rav.) Sacc. *Sphæria leucoplaca* B. 887

et Rav. North Am. Fungi n. 913. — Minuta, strato albo floccoso insidiens; ascis linearibus; sporidiis ellipticis, fuscis, uniseriatis.

Hab. in fimo vaccino in Carolina inf. (Amer. bor.).

B) Tetrasporæ (*Hypocoprina*).

20. **Hypocopra Serignanensis** H. Fab. Spher. Vaucl. p. 77. — Peri- 888

theeciis superficialibus, sparsis, atris, cylindræco-conoideis, rugosiusculis, vertice sublepressis poroque minimo perforatis, $\frac{1}{2}$ mill. cr., 1 mill. alt.; ascis cylindræcis, 4-sporis, longissime stipitatis,

250–300 μ . long. (pars sporifera long. 110–122 μ .); paraphysibus filiformibus, numerosissimis, obvallatis; sporidiis simplicibus, monostichis, ovalibus, annulo hyalino circumdati, initio magniguttatis, dein opaco-atris, 25–34 \approx 15–20.

Hab. ad stercora exsiccata Cuniculorum, in silvis Serignanensibus, Sérignan (Gallia).

21. **Hypocopra maxima** (Niessl) Sacc. *Sordaria maxima* Niessl, Beitr. 899 p. 38, t. VI, fig. 42. — Peritheciis gregariis, cæspitosis, forma et structura *H. bombardioidis* sed parum minoribus, $\frac{1}{2}$ –1 mill. alt., fusco-atris rugulosis; ascis clavato-cylindricis longissime stipitatis, 140–160 \approx 20–25 p. sporif.; apice obtuse rotundatis, 4sporis; sporidiis monostichis, oblongis, majusculis, 34–42 \approx 18–24; nitidis, fusco-atris, nucleo oleoso, circulo hyalino; paraphysibus ascos vix superantibus angustis.

Hab. in fimo leporino pr. Brünn (Moravia), Forres (Britannia). — Sec. cl. Wint. Sord. p. 23, huc verisimiliter spectat *Sph. stercoris* DC., Fr. Elench. II. 104.

22. **Hypocopra Rabenhorstii** (Niessl) Sacc. *Sordaria Rabenhorstii* 890 Niessl in Rabh. F. E. 1528, Wint. Sord. p. 16, t. VII, f. 5. — Peritheciis cæspitosis, primo immersis dein subsuperficialibus, ovoideis, fuscis, $\frac{1}{3}$ – $\frac{1}{2}$ mill. altis, pilis ramosis basi cinctis; ostiolo crasso elongato-conico, glabro, curvulo; ascis elongato-teretibus, longissime stipitatis, apice rotundatis, 70–80 \approx 10 p. sporif.; 4–5-sporis; sporidiis monostichis ovoideis, fuscis, 14 \approx 8, circulo hyalino obvolutis; paraphysibus ascum æquantibus, filiformibus, septatis.

Hab. in fimo Caprearum et Leporum prope Brünn, Moravia.

Non vere fimicolæ.

23. **Hypocopra papyricola** (Wint.) Sacc. *Sordaria papyricola* Wint. 891 Sord., p. 18, t. VIII, fig. 7. — Peritheciis sparsis, superficialibus, ovato-conicis, rugulosis, fuscis, basi pilis tenuissimis, arachnoideis repentibus cinctis, apice in collum crassum, breve conicum obtusatum attenuatis, $\frac{3}{4}$ mill. altis; ascis teretibus, longissime stipitatis, apice attenuatis obtusis, 150–180 \approx 24–26 p. sporif.; paraphysatis; sporidiis subdistichis, ovoideis fusco-nigris, 29–38 \approx 17–22.

Hab. in charta bibula putri in calidariis Lipsiæ. — **H. Rehmi* Sacc. (Rehm Asc. n. 300); sporidiis 18 \approx 9, circulo hyalino crasso obvolutis; ascis 125 \approx 10; peritheciis hyphis dichotomis fuscis cinctis. — In charta uda cum graminibus, Berolini.

24. **Hypocopra fermenti** Fuck. Symb. myc. 241. Wint. Sord. 21, 892
 tab. VIII. fig. 10. — Peritheciis subsuperficialibus, globosis, media
 magnitudine, $\frac{1}{3}$ mill. diam., dense villosis, villo sordido (glabris
 sec. Wint.), ostiolis papillatis, obtusis, perforatis, atris; ascis cy-
 lindraceis, stiptatis. 8spor. 140 = 20 p. sporif.; sporidiis monosti-
 chis, ovatis, fuscis, maturis opacis, 20-24 = 15-18, hyalino-obvolutis.
Hab. in fermento vini aeri diu exposito in Rhenogovia.
25. **Hypocopra phyllogena** Sacc. Mich. I, 373. F. ital. t. 391 (ut var. 893
H. fermenti). — Peritheciis in pagina inferiore foliorum putri-
 dorum gregariis, superficialibus, $\frac{1}{3}$ mill. diam., globoso-conoideis,
 regularibus, levibus, glabrisque; contextu distincte parenchymati-
 co fuligineo; ascis cylindricis. 115-130 = 18, apice lumine 2-foveo-
 lato rotundatis, breve stipitatis, 8spor. sporidiis globoso-ellipsoi-
 deis, 20-22 = 17, initio olivaceis, strato angusto mucoso obductis,
 dein atrofuligineis, crasse 1-guttatis.
Hab. in pag. inf. foliorum putrium Populi albæ, Vittorio
 (Ital. bor.). — Ab *H. fermenti* præcipue differt peritheciis regu-
 laribus, levibus, habitatione etc.
26. **Hypocopra? lasioderma** (Dur. et Mont.) Sacc. *Sphæria lasioder-* 894
ma Dur. et Mont. Fl. Alg., I, p. 494, t. 27, f. 5. Mont. Syll. Crypt.
 n. 798. — Sparsa, subrumpens, villosa; peritheciis magnis ovoideis
 fusco-atris, cum ostiolo late aperto confluentibus, villo griseo fle-
 xuoso mucido undique tectis; ascis maximis, clavato-cylindricis deor-
 sum subpedicellatis, inter paraphyses ramosas nidulantibus, spori-
 dia 4-6 ovoideo-oblonga fusca maxima includentibus.
Hab. in caule Ferulæ dejecto, Alger (DURIEU).
27. **Hypocopra capillifera** (Curr.) Sacc. *Sphæria capillifera* Curr. 895
 Linn. Tran. XXII, p. 317, t. 57, fig. 26. — Peritheciis globosis,
 setulis rigidis brevissimis parce vestitis, subiculo pallido insidenti-
 bus, ostiolis mamillatis; ascis cylindraceis octosporis; sporidiis mo-
 nostichis, late ellipsoideis, 1-2-nucleatis, fusco-fuligineis, 7,5-10
 μ . longis.
Hab. in Corticio et ligno subjecto in Britannia.
28. **Hypocopra vesticola** (B. et Br.) Sacc. *Sphæria vesticola* B. et 896
 Br. Brit. Fungi n. 874. Cooke Handb. n. 2602. — Peritheciis gre-
 gariis ovoideis, obliquis, sursum attenuatis, olivaceo-nigricantibus,
 deorsum flocculis v. furfure rugulosis; ascis linearibus; sporidiis
 limoniiformibus, uniseriatis 17 μ longis, nigricantibus.
Hab. in tela vetusta putri, Batheaston (Britannia).
29. **Hypocopra Rotula** (Cooke). Sacc. *Sphæria rotula* Cooke Handb. 897

n. 2598. — *Gregaria* v. *sparsa*; peritheciis globosis, atrobrunneis, villosulis v. glabris, opacis; ostiolo cylindraceo, crasso, radiatim sulcato, nigro; ascis sporidiis crasse ovoideis, subacuminatis, atro-fulgineis, opacis.

Hab. in humo, near Shere, Surrey (Britannia). — *Perithecia minuta*; sporidia triplo crassiora quam in *Rosellinia papaverea*, cui nonnullis notis accedit.

Dubiæ.

30. **Hypocopra bolbitoni** Quel. Jura 513 (Gibbera), t. IV, fig. 21. — 898
Peritheciis sphaericis subtiliter tomentosis, fulgineis, ostiolo minuto pertuso; ascis tereti-clavatis; sporidiis ellipsoideis, octonis, 2-guttulatis, 20 μ . longis.

Hab. innato-cæspitosa in fimo vaccino in regione Juro-vo-gesiaca.

31. **Hypocopra punctiformis** (Ces.) Sacc. *Sordaria punctiformis* Ces. 899
Mycet. Born. p. 23. — Peritheciis minutissimis in subiculo crustaceo albicante, ovatis, glabris, ostiolo vix conspicuo; contextu grosse vesiculoso; ascis; sporidiis late ellipsoideis, fuscis, simplicibus, guttula centrali, 8 \approx 7, ecaudatis (an primitus?).

Hab. ad terram stercore animalium inquinatam, Ceylon, ad Pedrotallagalla, m. majo 1865. — Primo obtutu pro *Sordaria discospora*, Awd. (ap. Niessl. bot. Beitr. p. 42, seu *Hypocopra discospora* Fuck. Symb. myc. Zweit. Nachtr., pag. 43), habueram. Conditio speciminum ceylanicorum rem rite eruere non concessit. Calvities perithecorum in nostro fungillo ex senescenti ejus ætate peti posset. Forma sporidiorum in utroque congruit; dissentiunt dimensiones. Ces. l. c.

32. **Hypocopra hippica** Sacc. *Hypoxyton equinum* B. et Rav. North 900
Am. Fungi n. 847. — Peritheciis e mycelio albo oriundis, ostiollis nigris papillæformibus; sporidiis breviter cymbiformibus, 15 μ . longis.

Hab. in fimo equino in Carol. inferiore (RAVENEL).

33. **Hypocopra equina** (Fr.) Sacc. *Sphæria equina* Fries, in litt. et 901
in Mont. Syll. Crypt. n. 797. — Villosa; peritheciis globosis, minimis, villo tenerrimo erecto tectis; ostiollis nigris; sporidiis maximis atris (Ascoboli) oblongis, in ascis hyalinis seriatim dispositis.

Hab. in fimo equino prope Sedanum in Ardennis (MONTAGNE).

34. **Hypocopra macrotheca** (Cr.) Sacc. *Sphæria macrotheca* Crouan 902
Finist. p. 24. — Peritheciis sphaeroideis, 1-2 mill. diam., brunneo-

virentibus, reticulatis, ostiolo apice paullulum incrassato; ascis oblongis, crassis (placenta hexagono cellulari oriundis), octosporis; sporidiis ellipsoideis, majusculis, initio flavis, dein brunnis, circulo hyalino obvolutis.

Hab. in fimo vaccino vetusto, cum *Splachno ampullaceo*, Finistère (Gallia).

COPROLEPA Fuck. Symb. p. 240 (Etym. *copros*, fimus et *lepos* cortex). — Perithecia crusta stromatica effusa, crassa, extus tomentosa immersa, ostiolo papillaeformi, atro, cum perithecii superiori parte prominulo, majuscula, globosa, intus atra. Conidia in tomenti hyphis, minuta, globosa, fusca. Asci cylindracei, stipitati, 8spori. Sporidia oblique monosticha, ovoidea, continua, opaca, circulo hyalino circumdata. Paraphyses lineares, multiguttulatae.

1. **Coprolepa fimeti** (Pers.) Sacc. *Sphaeria fimeti* Pers. Syn. 64. *Hypocopra fimeti* Pers. Fr. Summ. Veg. Scand. p. 397, nec Fuck. *Sordaria fimeti* Wint. Sord. 14, t. VII, f. 3. — Peritheciis confertis, immersis, dein emergentibus, sub crusta cinerea vel nigra, tenui, ovoideo-sphaeroideis, glabris in rostrum breve, late conoideum, subobliquum attenuatis; ascis cylindraceis, brevissime pedicellatis, 8sporis, 147 \approx 17 μ , sporif.; sporidiis oblique monostichis, ellipsoideis vel sphaeroideo-ellipsoideis, fuscis, opacis, 18–20 \approx 10–12 strato hyalino obvolutis.

Hab. supra fimum vaccinum et equinum, in Suecia, Fennia, Germania, Tyrolia, Belgio, Gallia, Britannia et Amer. bor. — Var. *canina* Karst. Sporidiis sphaeroideo-ellipsoideis, fuscis, opacis, 18–26 \approx 14–16. — In fimo canino aestate et autumno passim in Fennia.

2. **Coprolepa merdaria** (Fr.) Fuck. Symb. p. 240. *Sordaria merdaria* Fr. Awd., Wint. Sord. p. 13, t. VII, fig. 1. *Sphaeria merdaria* Fr. Elench. II. 100. — Peritheciis stromate crustaceo nigro totaliter vel semiimmersis, majusculis, globosis, 700–800 μ diam., pauci-aggregatis, extus albido-griseis, subtomentosis, nucleo atro-fuligineo mucoso; ostiolo conico brevi matricis superficiem attingente et circum circa zona atra stromatica cincto; ascis cylindraceis, apice obtusiuscule rotundatis, 200–220 \approx 20–25, subsessilibus sinuosis, paraphysibus filiformibus remote septulatis, duplo longioribus obvallatis, octosporis; sporidiis oblongo-ellipsoideis, utrinque obtusiusculis, 26–36 \approx 15, primo hyalinis, dein sordide flavis, tandem fuliginis strato hyalino mucoso persistente obvolutis.

Hab. in fimo ovino, cuniculorum, asinino etc. in Britannia, Germania, Belgio, Gallia, Italia.

3. **Caprolepa equorum** Fuck. Symb. myc. p. 240. *Sordaria equorum* 905
Wint. Sord. p. 13, t. 7, fig. 2. — Peritheciis immersis, majusculis, in stromate crustaceo-suberoso, intus sordido, extus nigro, fusco-villoso nidulantibus, globosis, circa ostiolum emersis, applanatis, glabris, atris, medio papillatis; villo conidiophoro, conidiis minutis, globosis, fuscis, uniguttulatis; ascis cylindraceutis, stipitatis, 8sporis, 200 \approx 16; sporidiis suboblique monostichis, oblongo-ovatis (ecaudatis), subinæquilateralibus, utrinque rotundatis, atris, simplicibus, circulo hyalino, lato circumdati, 20–24 \approx 10. Paraphyses adsunt.

Hab. in fimo equino et capreolino in Germania et Britannia. — Villum conidicum longe lateque repit in fimo et e longinquo dignoscitur.

PHILOCOPRA Speg. in Fungi Arg. Pug. I. in tab. (Etym. *philos* amicus, *copros* sterces). — Perithecia fimo subimmersa, globuloso-conica, glabra v. hirta, membranacea, nigricantia. Asci amplissimi, polyspori. Sporidia polysticha, ovoidea, fusca, ut plurimum hyalino-appendiculata. — Est *Sordaria*, sed ascis polysporis.

1. **Philocopra plejospora** (Wint.) Sacc. *S. plejospora* Winter, Hedwigia 1871, p. 161. Wint. Sord. p. 29, t. 10, fig. 17. — Peritheciis sparsis, in fimo putrido plerumque totis immersis, usque ad 1 mill. crass., ovato-globosis, primo diaphanis, demum opaco-nigris, junioribus villosis, demum pilis sparsis, fuscis, longiusculis obsitis, ostiolo prominulo, obscuriori, brevi, cylindraceuto, obtuso-truncato; ascis lanceolato-clavatis, utrinque acuminatis, subsessilibus, 40–60–sporis, 208–300 \approx 70–120, p. sporif.; sporidiis farctis, juvenilibus basi appendiculo cylindraceuto, curvato, sporidio duplo longiori, maturis elliptico-ovatis, continuis, atro-opacis, 34 \approx 16 apice appendicula curvata, hyalina, sporidium æquante, basi appendicula primo oblongo-rotundata, demum lacerata, hyalina, mox decidua, sporidium duplum æquante.

Hab. in fimo equino vetusto Lipsiæ, Ems, Kirchdorf (Germania), Colfosco et Selva (Ital. bor.). — «Appendicula superior 15 \approx 5, inferior 45 \approx 7–8».

2. **Philocopra setosa** (Wint.) Sacc. *Sordaria setosa* Wint. Sord. p. 33, t. 10, fig. 18. — Peritheciis sparsis v. gregariis, subglobosis, basi pilis pallidis cinctis, nigris, in ostiolum breve conicum sæpe 907

curvatum nigro-setosum attenuatis, 465 \approx 378 (cum collo); ascis cylindraccis apice attenuatis, breve pedicellatis, 238 \approx 45, paraphysatis, 128-sporis; sporidiis ovoideis, olivaceo-fuscis, 17-19 \approx 10-12, apice appendice hyalina recta sporidio breviori, infra cauda sporidium subæquante hyalina auctis.

Hab. in fimo anserino Leipzig, Eisleben, Germania.

**Ph. tarvisina* (S. setosa Mich. I. 228). — Peritheciis immersis e globoso pyriformibus, majusculis in ostiolum crassum, breve et circum circa undique penicillato-setulosum productis; ascis fusideo-subnavicularibus, in stipitem brevem attenuatis, apiceque acutatis, 300 \approx 70-75, aparaphysatis (?), 100-128-sporis; sporidiis ellipsoideis, 25 \approx 15, opace fuligineis, caudis duabus deciduis hyalinis ornatis, inferiore longissima, 55 \approx 2 $\frac{1}{2}$, superiore parvula, 15 \approx 2 $\frac{1}{2}$, curvulaque. — In fimo vaccino et equino, Conegliano, Colfosco et cuniculorum, Selva (Ital. bor.).

3. ***Philocopra curvicolla*** (Wint.) Sacc. *Sordaria curvicolla* Wint. 908
Sord. p. 34, tab. 10, fig. 19. — Peritheciis sparsis, immersis ovatis, fuscis, pilis sparsis, hyalinis obsitis, $\frac{1}{2}$ - $\frac{3}{4}$ mill. altis; collo crasso curvo apice setoso, erumpente; ascis ovato-saccatis, 250-300 \approx 100, vertice obtusatis, basi breve crasseque attenuato-stipitatis, paraphysatis, 100-140-sporis; sporidiis ellipsoideis, 14-18 \approx 9-12, atro-cyaneis, dein opace fuligineis, caudâ minusculâ, 10-15 \approx 2 $\frac{1}{2}$ -3 $\frac{1}{2}$, hyalinâ auctis.

Hab. in fimo murino, Cederan (Saxonia), cuniculorum, Selva (Italia boreali).

4. ***Philocopra platensis*** Speg. Fungi Arg. IV, n. 130. — Peritheciis 909
immersis v. semiimmersis, subglobosis, 350-400, olivaceo-atris, glaberrimis, membranaceis, contextu angulose parenchymatico, fusco-olivaceo, ostiolo papillato subcarbonaceo, parvulo, lateraliter ac sub-oblique 1-3 fasciculis setiformibus ornato; fasciculis erectis subcylindraccis, sursum attenuato-acutatis, 150-250 \approx 20-40, ex hyphis rectis exilibus, 2-2,5 μ . diam., simplicibus, conglutinatis, olivaceo-fuligineis compositis; ascis paucis, sæpius 5-9, ellipticis, sursum varie rotundatis, deorsum breve crasseque pedicellatis 180-220 \approx 90-110, aparaphysatis, 60-84-sporis; sporidiis dense conglobatis, ellipticis, utrinque obtusiusculis, 20-22 \approx 15-17, fuliginis, deorsum cauda parvula 10-12 \approx 3-4, cylindraceo-clavulata, hyalina ornatis.

Hab. in fimo vetusto Cavia leucopygæ in paludibus secus el Rio de la Plata, Barracas de Sur, Argent. Am. austr.

5. **Philocopra similis** (Hans.) Sacc. *Sordaria similis* E. C. Hans. 910
 Champ. sterc. Dan. p. 23, t. VIII, f. 1-3. — Peritheciis pyriformibus, sparsis, subimmersis, $\frac{1}{2}$ - $\frac{3}{4}$ mill. alt.; ostiolo cylindræo nigro pilis septatis patulis vestito; ascis longe stipitatis, fusoides, apice rotundatis, 16-sporis; paraphysibus articulatis ascos subæquantibus obvallatis, 108-200 \approx 40-60 p. sporif.; sporidiis oblongo-ovoideis, olivaceo-fuligineis, 27-34 \approx 17-18, caudâ brevi hyalinâ basi auctis.

Hab. in fimo ovino vetusto, Rudersdal, in Selandia (Dania).

6. **Philocopra canina** (Peck) Sacc. *Sphæria canina* Peck. Rep. on 911
 the state Mus. — Peritheciis minutis, sparsis, gregariisve subglobosis, fusco-rubiginosis, dein nigricantibus; ascis crassis, oblongis v. fusoides; sporidiis numerosis, ellipsoideis, dilute coloratis, 6,5-8 μ . longis.

Hab. in fimo canino, Bethlehem, Amer. bor.

7. **Philocopra myriospora** (Crouan) Sacc. *Sordaria myriaspora* Cr. 912
 Finist. p. 22. — Peritheciis immersis sphæroideis, reticulatis, albidis, 1 mill. diam., ostiolo recto, obtuso, brevi, nigro; ascis crassis, subclavatis, polysporis; sporidiis 80-100, ovoideis, brunneis, utrinque appendicula obtusa v. acuta auctis.

Hab. in fimo vaccino, Finistère (Gallia). — Perithecia penitus fere fimo immersa; ostiola tantum emergentia.

8. **Philocopra multifera** (B. et Rav.) Sacc. *Sphæria multifera* B. et 913
 Rav. North Amer. Fungi n. 914. — Minuta nigra subglobosa; ascis brevibus polysporis faretis; sporidiis subglobosis, 6-7 μ . long.

Hab. in fimo vaccino in Pennsylvania (Amer. bor.).

9. **Philocopra dubia** (Hans.) Sacc. E. C. Hans. Champ. sterc. Dan. p. 914
 23, t. VIII, fig. 48. — Peritheciis oblongo-pyriformibus, viridinigricantibus, verruculosus, 1-1 $\frac{1}{2}$ mill. alt. sparsis, liberis; ostiolo cylindræo; hyphis mycelii repentibus; ascis stipitatis fusoides, 204-280 \approx 36-52 p. sporif.; 16-sporis; sporidiis ovoideis, olivaceo-nigricantibus, 27-34 \approx 15-19, utrinque appendicibus, sporidio ut plurimum multo longioribus hyalinis auctis.

Hab. in fimo vaccino et ovino, Ribe (Dania). — Appendices sporidiorum striatulæ, superior crassior.

10. **Philocopra zygospora** (Speg.) Sacc. *Sordaria zygospora* Speg. 915
 Mich. I, 227, F. it. t. 618. — Peritheciis gregariis superficialibus, v. basi fimo insculptis, ovato-pyriformibus, 400-450 alt., 200-220 cr., in collum breve truncatum desinentibus, undique hyphis fuligineis, 3 micr. cr. non septatis strigose vestitis; contextu paren-

chymatico atro-fuligineo; ascis cylindraceutis, 300 \approx 40, deorsum longiuscule attenuato-stipitatis, vertice obtuse rotundatis, crassiuscule attenuato-stipitatis, vertice obtuse rotundatis, crassiuscule tunicatis, paraphysibus filiformibus obvallatis, duodecim-sporis; sporidiis distichis, ovato-ellipsoideis, basi truncatulis, 40 \approx 20-25, opacè fuligineis, interdum 1-2-guttatis, filamento longissimo, 70-100 \approx 5-6, hyalino, vermiculari, subtortuoso, per paria longitudinaliter connexis.

Hab. in fimo vaccino vetusto udo, Conegliano (Ital. bor.), rarissime. — Forma prædistincta atque singularis, a ceteris deflectens. Filamentum quandoque utrinque fuscidulum.

ROSELLINIA De Not. Cenzo Pir. in Giorn. Bot. ital. II. 334 (1847) (Ety. a Doct. *F. P. Rosellini*, pisano, Botanices cultori). — Perithecia subsuperficialia, globulosa, papillata, subcarbonacea, nigra, glabra v. hirta, v. byssiseda. Asci cylindraceuto-clavati, paraphysati, octospori. Sporidia globoso-ovoidea v. cymbiformia, fusca, mutica v. appendiculata. — Fungi saprogeni, sed non (nisi rarissime) fimicolæ.

1. *Eu-Rosellinia*: peritheciis majoribus, non setosis, typicè bysso insertis.

1. **Rosellinia aquila** (Fr.) De Not. Sfer. ital. p. 21, t. 18, Sacc. Fungi ital. t. 586. *Sphæria aquila* Fr. S. M. II, 442. — Peritheciis gregariis v. dense confertis, globosis firmis 1 mill. diam., quandoque obscure concentricè sulcatis, verticè sæpe depressis, papillatis, fusco-atris, e subiculo tomentoso fusco persistente emergentibus; ascis teretibus, longiuscule stipitatis, p. sporif. 120 \approx 10, octosporis; sporidiis submonostichis ovato-cymbiformibus, inæquilateralibus, 16-22 \approx 6-7, fuligineis, muticis v. appendicula minima hyalina auctis. — Stat. conidioph. sistit *Sporotrichum fuscum*.

Hab. in corticibus, lignisque in tota Europa, Amer. austr. et bor., Asia austr. — Subiculum late effusum, adnatum, e tomento delicato laxè contextum; perithecia magna, subiculo primo tecta subvillosa, mox semiemersa, glabra, bicorticata, papilla acutiuscula nigra. Obturaculum jodi ope cœrulescit. — Var. *glabra* (*Hypoxylon globulariforme* Fuck.). Peritheciis, bysso fere carentibus, nitidulis; ascis cylindraceutis, p. sporif. 100 \approx 9; sporidiis ovato-oblongis, 15-17 \approx 8-9, 1-2-guttatis, fuligineis. — Var. *byssiseda* Tode. Peritheciis sparsis depresso-globosis firmis papillatis cine-

reis, subiculo interrupto fibroso griseofusco insidentibus; fructificatione eadem. Nascitur utraque varietas hinc inde cum specie.

2. **Rosellinia Corticium** (Schw.) Sacc. *Sph. Corticium* Schw. Carol. 917
infer. n. 173, *Sord. aquila* β . Fr. S. M. — Subiculo orbiculari rufescente; peritheciis sub-solitariis, ostiolo impresso; ascis..... sporidiis cymbiformibus, 33 μ . long. (sec. Berk.).

Hab. in ramis *Quercus* et *Castaneæ* in Carolina superiore et New York (SCHWEIN., LÉV.).

3. **Rosellinia thelena** (Fr.) Rab. Fung. europ. ed. II, 747, Sacc. Fung. 918
ital. t. 587. — Peritheciis discretis gregariis vel dense confertis, subiculo superficiali, laxe adhærenti, dense contexto, subglabrato, tenui, demum evanescenti, fusco-purpurascenti insidentibus, sphæroideis, lævibus, fragilibus, glabris, fusco-atris, latit. circiter 1 mill. «ostiolo sensim et acutissimo conoideo»; ascis e basi tenuata teretiusculis, apice plerumque nonnihil incrassatis jodoque intense cœrulescentibus, 100-160 \approx 9 p. sporif., sporidiis octonis, monostichis, oblique oblongatis, utrinque obtuse attenuatis, hyalino-appendiculatis, rectis, guttulis 1-2 præditis, fuscis, 18-24 \approx 6,5-7,5; paraphysibus coalescentibus.

Hab. in ramis corticatis et decorticatis arborum variarum in tota Europa, sed parce, — Sporidiorum appendiculæ teretes, curvulæ, 8-10 \approx 2-3, hyalinæ. *R. andurnensis* Ces. ab hac vix differt. E contra *R. thelena* Ces. videtur *R. aquilæ* propior.

4. **Rosellinia andurnensis** Ces. et De Not. Sfer. ital. p. 19, t. XVII. 919
— Peritheciis gregariis superficialibus, subiculo filamentoso fusco insidentibus, globosis, acute breve papillatis, fragilibus; ascis cylindrico-clavatis, copiose paraphysatis; sporidiis oblique monostichis, oblongo-navicularibus, ut plurimum utrinque acutissimis, fuliginis (rarius obtusiusculis et hyalino appendiculatis), 30-35 μ . long.

Hab. in truncis variis muscosis in Pedemonte (Italia boreali). — Sporidiis plerumque utroque polo acutissimis longioribusque, peritheciis vertice minus acutis etc. a *Ros. thelena* satis differre videtur.

5. **Rosellinia Buxi** H. Fab. Sphér. Vaucl. p. 78, t. I, fig. 6. — Pe- 920
ritheciis dense confertis, subiculo byssoideo, atro, rigidiusculo, hirtello nidulantibus, conico-globosis, vertice tenue papillulatis, carbonaceis, fragilibus, $\frac{1}{2}$ mill. diam.; ascis cylindræis, 8-sporis, breve stipitatis, 190 \approx 10; sporidiis imbricato-submonostichis, oblongo-fusiformibus, plerumque leniter inæquilateralibus, initio pelucidis, pluriguttatis, dein opacis, atris, 22-36 \approx 6-7.

Hab. ad basim putrescentem Buxi sempervirentis, Vaucluse (Gallia): — A *R. thelena* sporidiis muticis etc. differt.

6. **Rosellinia Morthieri** Fuck. Symb. Myc. p. 148. — Peritheciis subsparsis, *Rosellinia aquilæ* forma magnitudineque sed vertice magis applanatis, minute conico-papillatis, fusco-pulveraceis, demum vertice glabris, nitido-fuscis, in massa grumosa, subtomentosa, candida, persistenti, erumpenti, orbiculari oblongave, determinata, conidiophora semiimmersis; conidiis ovato-globosis, minutis, circ. 4 μ . diam., hyalinis; ascis elongatis, 8sporis; sporidiis oblongis, utrinque attenuatis, rectis curvatisque, 2-3guttulatis, monoplastis, atrofuscis, 20 \approx 6. 921

Hab. in ramis corticatis Hederae Helicis in Jura (Helvetia), Coryli, Kirchdorf (Bavaria superiore).

7. **Rosellinia Desmazierii** (B. et Br.) Sacc. Fungi ital. t. 393, *Sph.* 922
Desmazierii B. et Br., Cooke Handb. p. 854, Curr. Simpl. *Sph.* tab. 57, fig. 2. — Peritheciis majusculis, globoso-conoideis, dense gregariis, usque 1½ mill. diam. subiculo pannoso-setoso conidiophoro insidentibus; ascis cylindricis prelongis, stipitatis, 300 \approx 10, stipite 80-100 μ . longo, apice tunica conspicue incrassata rotundatis, paraphysibus filiformibus ascos superantibus, guttulatis obvallati, octosporis; sporidiis laxe recte monostichis, anguste fusoides, curvulis, 38-45 \approx 8, utrinque obtusiuscule attenuatis, regulariter 7-9-guttulatis, fuligineis. — Subiculum sistit *Graphium Desmazierii* Sacc. Fungi ital. t. 394, setoso-velutinum, fuligineum; stipitibus erectis, 450 \approx 40, ex hyphis pluribus septulatis fuscis conflatum, hyphis superioribus expanso-paniculatis, ramulosis, subhyalinis, ramulis minute flexuoso-denticulatis conidiophoris; conidiis ovoideis, 3-4 \approx 2-½, hyalinis.

Hab. in basi putrescente trunci Philadelphi, Betulae, Corni etc. in Britannia, Gallia, Italia. — Magna et nobilis species. Ascorum obturaculum jodi ope cœrulescit.

8. **Rosellinia bunodes** (B. et Br.) Sacc. *Sph.* (*Byssisedæ*) *bunodes* B. 923
et Br. Fungi of Ceylon n. 1088, t. VIII, fig. 38. — Peritheciis magnis, 2 mill. diam., globosis verrucosis e strato strigoso oriundis; sporidiis maximis fusiformibus, apicibus elongatis acutissimis, multinucleatis.

Hab. in ligno putri, Peradeniya (Ceylon). — Mycelium ex hyphis fasciculatis fuscis, articulatis, ramosis, sursum pallidioribus constans; conidiis moniliformi-catenulatis 4-5 μ . long.; asci luminis apice capitato-foveolati.

9. **Rosellinia Beccariana** Ces. Note bot. p. 12, t. II, A. — Peritheciis subiculo fuligineo dein crustaceo, scabro insidentibus, stipatis sed omnino distinctis, in genere maximis, $2\frac{1}{2}$ mill. alt., $3\frac{1}{2}$ – $4\frac{3}{4}$ mill. in diametro, crustaceis, e fuligineo nigris, levigatissimis, pulchre tornatis, obverse pyriformibus, vertice areola lata depressa, papilla centrali conica acutiuscula umbonato; cortice carbonaceo sat rigido, $\frac{1}{3}$ mill. crasso, senio facile fragili; gleba sporidiifera e rufo brunnea; paraphysibus atque ascis, ob fructificationem quam maxime peractam, nullis visis; sporidiis fuliginis, quadantenus pellucidis, anguste lanceolatis, cylindræis, interdum fere curvulis et paullisper asymmetricis, utrinque acutis et calcaratis appendiculis opacis, rigidis, pro more rectis, acutissime subulatis, 50–60 \approx 6, sine appendiculis 36–40 longis, episporio sat tenui; guttulis v. nucleolis nullis.

Hab. in insulæ Borneo territorio Sarawak, ad corticem non determinandum, anno 1865 legit nob. vir OD. BECCARI, florentinus. — Præcedente paraffinis, nisi varietas.

10. **Rosellinia subiculata** (Schw.) Sacc. *Sph. subiculata* Schw. Car. 925 n. 175, Fr. S. M. II, 443, Curr. Simpl. Sphær. n. 221, t. 57, f. 9, *Hypoxyton subiculosum* Berk. North Amer. Fungi p. 162. — Peritheciis confertis hemisphæricis papillatis atris, subiculo floccoso-furfuraceo sulphureo insidentibus; ascis.....; sporidiis ellipsoideis, subnavicularibus, binucleatis, fuliginis, 10 μ . longis (12–13 μ . sec. Berk.).

Hab. in lignis cariosis Liriodendri, Quercus etc. in Carolina, Amer. bor. — Subiculum longitudinaliter effusum, tenue, pulveraceum, floccis vix conspicuis intertextum, in ambitu album; subinde evanescens, sed basis sulphureo-pulverulenta; perithecia majuscula, in serie elongata sparsa, glabra, lævia, nuda, superficialia. — A *R. aquila* differt peritheciis minoribus, depressioribus, magis atris.

11. **Rosellinia leprantha** (Fr.) Sacc. *Sph. leprantha* Fr. Nov. Symb. 926 131. — Peritheciis hemisphærico-globosis congestis connatisque lævibus glabris atris, subiculo floccoso-leproso fusco-atro impositis, ostiolo papillæformi in areola minuta submarginata prominulo; ascis longe pedicellatis lineari-clavatis; sporidiis ellipsoideis, continuis, fuscis.

Hab. ad cortices dejectos in insula Nikobar Oceanicæ (DIDRICHSEN).

— *R. aquilæ* et *R. mammiformi* affinis.

12. **Rosellinia aucklandica** Rabh. Hedw. 1878, p. 115. — Stromate 927

confluenti-expanso, subtomentoso-pannoso, nigricante, perithecia plus minusve obtegente; peritheciis solitariis subsparsis, opaco-atris, ostiolo subconico prominulo nitidulo, nucleo griseo-albo; ascis linearibus brevi-stipitatis, paraphysibus filiformibus ascos superantibus obvallatis; sporidiis ovato-subfusiformibus, uniseriatis rectis, utroque polo acute acuminatis, guttulatis, fuscis, $22 \approx 10-12$.

Hab. in cortice putri, Aucklandia, Oceaniæ (H. KRONE).

13. **Rosellinia pyxidella** Ces. Note bot. p. 14, t. II, D. — Peritheciis ⁹²⁸ minutis, $\frac{1}{2}$ mill. diam., $\frac{1}{4}$ mill. alt., dense aggregatis, contextu passim vesiculoso, villo brevissimo crispulo rufo ex toto obductis et e tapeto concolori tenuissimo assurgentibus, cylindræis, vertice plano areolam nudam rubeolam sistente, papilla conica operculi modo decidua; paraphysibus copiosis filiformibus, guttulatis, 130 long.; ascis e clavato cylindræis, stipitatis $120 \approx 8$, membrana tenuissima; sporidiis octonis, monostichis, subnavicularibus, acutiusculis, ocellaratis, $14 \approx 5-6$, 1-guttulatis, olivaceis.

Hab. Vercellis, ad Rubi cujusdam sarmenta diu humi strata. — Tota peritheciorum forma et magnitudine verticeque rubeolo *Massariam rhodostomam* (A. S.) simulat (Ces.).

14. **Rosellinia sepulta** (B. et C.) Sacc. *Sph.* (Byssisedæ) *sepulta* B. ⁹²⁹ et C., Cuban Fungi n. 845. — Hyphasmatis effusi fibris non aculeatis; peritheciis parvis, immersis; sporidiis magnis, subfusiformibus, 50 μ . longis.

Hab. in stipitibus palmarum in Cuba et Venezuela. — Habitus *Chaetosphaeria acanthostroma*.

15. **Rosellinia Tetradeniæ** (B. et Br.) Sacc. *Sph.* (Byssisedæ) *Tetra-* ⁹³⁰ *deniæ* B. et Br. Fungi of Ceylon n. 1094. — Mycelio repente e fibris tenellis septatis; peritheciis globosis, subliberis; ascis ovatis brevibus; sporidiis oblongo-ellipticis, 40 μ . longis.

Hab. in ramis Tetradeniæ.

16. **Rosellinia subænea** (B. et C.) Sacc. *Sph.* (Byssisedæ) *subænea* ⁹³¹ B. et C. Cuban Fungi n. 848. — Aggregata, e stromate fusco oriunda; peritheciis globosis, coffeatis, ostiolo papilliformi minuto; sporidiis breviter subcymbiformibus, $12-13 \approx 5$.

Hab. in corticibus emortuis in Cuba.

17. **Rosellinia immunda** (B. et C.) Sacc. *Sph.* (Byssisedæ) *immunda* ⁹³² B. et C. Cuban Fungi n. 846. — Gregaria; hyphasmate parco atro; peritheciis globosis, floccis aterrimis depressis vestitis; ostiolo papilliformi emergente; sporidiis monostichis, $35-45 \mu$. longis, hinc acutioribus, magnis, cymbiformibus.

Hab. in truncis in silvis opacis, Cuba.

18. **Rosellinia bothrina** (B. et Br.) Sacc. *Sph.* (Byssisedæ) *bothrina* 933
B. et Br. Fungi of Ceylon n. 1090. — Peritheciis in foveolis mycelii sitis; sporidiis fusiformibus acutissimis, 45 μ . long.

Hab. in truncis in Ceylon. — Ob sporidia *R. Desmazierii* accedit, ceterum diversa.

19. **Rosellinia emergens** (B. et Br.) Sacc. *Sph.* (Byssisedæ) *emergens* 934
B. et Br. Fungi of Ceylon n. 1089. — Peritheciis sero e mycelio velutino emergentibus; ostiolo prominulo; ascis clavatis, lumine apice capitato; sporidiis maximis fusiformibus, 60–62 μ . long., tunica obtusissima instructis; paraphysibus tenuibus.

Hab. in fragmentis ligneis in Ceylon.

20. **Rosellinia Marcucciana** Ces. Note bot. p. 13, t. II, B. — Peritheciis 935
e minoribus, vix $\frac{1}{3}$ mill. alt. et cr., e subiculo tenuissimo subcorticali ligno matricis innato per rimas corticis erumpentibus, ceterum omnino denudatis, cæspitosis, depressiuscule globosis, acute papillatis, atris, sat nitidis, lævibus; ascis paraphysibus copiosis, filiformibus simplicibus guttulatis obvallatis, cylindræis, 160 \approx 8–10, stipitatis, stipite filiformi dimidium longitudinis enuntiatae mentienti, vertice obtuso sed vix incrassato; sporidiis 8, olivaceis, oblique monostichis, ovalibus e facie, sublunatis e latere, utrinque pro more obtusiusculis, ealcaratis, 1–guttulatis, 18–20 \approx 8.

Hab. in ramulis Fici Caricæ exsiccatis, Ogliastris, Sardegna (E. MARCUCCI); in ramis emortuis, Jura (DUBY); Andorno Italiæ borealis (CESATI).

21. **Rosellinia ignobilis** Ces. Myc. Born. p. 22. — Subiculo brunneo, 936
e granulati tomentello, tenui, effuso; peritheciis aggregatis, minutis, globosis, asperulis?; ostiolo punctiformi; ascis linearibus diffluentibus; sporidiis uniserialibus, ovoideo-cymbiformibus, 4 \approx 2, fuligineis.

Hab. ad lignum putrescens, sordibus jam obrutum, Sarawak (Borneo).

22. **Rosellinia papaverea** (B. et Br.) Ces. et De Not. *Sphæria papaverea* 937
B. et Br. Brit. fungi n. 612, t. 6, fig. 14. Cooke Handb. n. 2597. — Subaggregata; peritheciis globosis, areolatis, velo albido, excepto ostiolo, tectis; ostiolo crasso, plano, orbiculari, radiatim sulcato, poro rotundo; ascis linearibus; sporidiis ellipsoideo-subnavicularibus, fuligineis.

Hab. in truncis putridis, Batheaston (Britannia). — Late effusa subiculo brunneo inserta; ostiolum stigmatis Papaveris æmulum.

II. *Calomastia*: peritheciis grandiusculis non setosis, subiculo subnullo.

23. **Rosellinia mammiformis** (Pers.) Ces. et De Not. in Comm. soc. 938
critt. ital. I. 227. *Sphæria mammiformis* Pers. Syn. p. 64. *Sph.*
brachystoma Wallr. Fl. crypt. n. 3897. *Hypoxylon mammiforme*
Berk. N. Am. Fungi. — Peritheciis gregariis, interdum con-
glomeratis vel confluentibus, superficialibus, sphæroideis, ostiolo
papilliformi, lævibus, opacis, glaberrimis, tenuibus, non collabenti-
bus, facile laceratis, atris, latit. 0,5-0,9 mill.; ascis e basi atte-
nuata teretiusculis, apice plerumque nonnihil incrassatis, jodoque
caerulescentibus, 90-140 \approx 9-10; sporidiis octonis oblique monosti-
chis, oblongatis, inæquilateralibus, 1-2-guttulatis, fuscis, 20-25 \approx
7-9, utrinque hyalino-appendiculatis, appendicula supera 6-7 \approx 7,
inferiore 10-12 \approx 2; paraphysibus filiformibus, coalescentibus.

Hab. in lignis ramisque variis in Succia, Germania, Fennia,
Belgio, Britannia, Gallia, Italia, Amer. bor., Nova Zelandia, Cey-
lania. — Inter *R. mastoideam* meam (F. It. t. 589 sub *R. mam-*
miformi) et *R. thelenam* (Fr.) Rabh. (F. It. 587) media, sed
huic affinior ob sporidiorum formam et appendices; ab eadem di-
stincta tamen ob peritheciolorum formam minus acutam et magni-
tudinem minorem.

24. **Rosellinia mastoidea** Sacc. Mich. II. 54. *R. mammiformis* Sacc. 939
F. ital. t. 589, nec Pers. — Peritheciis superficialibus, gregariis,
globosis, $\frac{3}{4}$ mill. diam., lævibus, glabris, ostiolo breve exquisite
papillato; ascis teretibus breve stipitatis, 100-115 \approx 9-10, paraphy-
sibus filiformibus obvallatis, octosporis; sporidiis oblique monosti-
chis, oblongo-ovoideis, 20-22 \approx 8, utrinque obtusiusculis, muticis,
2-guttulatis, fuliginis.

Hab. in ramis putridis dejectis, Romæ (BAGNIS), in ramis Ru-
sci, Coryli, Rubi, Vaucluse (FABRE). — A *R. mammiformi* spo-
ridiis muticis præ ceteris distinguitur.

25. **Rosellinia medullaris** (Wallr.) Ces. et De Not. Schema p. 227. *Sph.* 940
medullaris Wall. Fl. crypt. n. 3826. Mont. Pl. cell. Cent. VIII,
p. 62. — Peritheciis erumpentibus, magnis, ovato-subglobosis, atris,
testaceis, fragilissimis, laxè adnatis, vertice convexo conico-papil-
latis, extus pulvere fuliginoso delicatissimo obductis spurco-rugu-
losis, intus massam medullarem grumulosam sphærico-cellulosam
candidam (siccando) palpabilem formantibus; ascis; sporidiis
ovoideis, utrinque subacutis, badiis, circ. 25 \approx 11-12.

Hab. ad radices alneas effossas siccas, rarius in Germania.

— Affinis *R. mammiformi* sec. Mont., et sporidiis crassioribus, muticis diversa.

26. **Rosellinia sublimbata** (Dur. et Mont.) Pass. in Thuem. Contr. Lus. 941
n. 294. *S. sublimbata* Dur. et Mont. Fl. Alg. I, p. 498. — Gregaria, superficialis; peritheciis rigidis atris, basi expansa hemisphærico-truncatis bicorticatis, ostiolo papillæformi; ascis cylindricis sporidia uniseriata oblonga inæquilatera fusca $20 \approx 10$ foventibus.

Hab. in culmis Arundinis mauritanicæ, Alger (DURIEU) et Donacis, Coimbra, Lusitania (MOLLER).

27. **Rosellinia pruinata** (Kl.) Sacc. *Sphæria pruinata* Klotzsch in 942
Linnæa 1833, p. 489. Curr. Comp. Sph. n. 37, fig. 37. — Peritheciis globosis effusis, concrementibus, emersis, albido-pruinatis, intus nigris ostiolis prominentibus, atris; ascis crasse cylindræcis, breve stipitatis, octosporis; sporidiis monostichis, ellipsoideis, 1-4-guttatis, 25 μ . longis.

Hab. in cortice interiori arborum, Amer. bor. (DR. RICHARDSON). — An *Hypoxyylon*? Revera *H. serpens* fere æmuletur.

28. **Rosellinia araneosa** (Pers.) Sacc. *Sphæria araneosa* Pers. Ic. et 943
descr. I, p. 24, t. VII, fig. 6 a-h. — Peritheciis globosis, superficialibus, subsolitariis v. sæpius confertis, fragilibus, nigris, papillatis, villo tenuissimo albicante obtectis, intus albidis, majusculis; ascis cylindræcis, paraphysatis, octosporis; sporidiis monostichis, ovoideo-oblongis, inæquilateralibus, fuscis (ex icone Pers. l. c.).

Hab. ad ramos decorticatos emortuos in Germania. — *Sphæria* (Lasiella) *araneosa* Pers. (sec. Quel.) prorsus differt.

29. **Rosellinia mutans** (C. et Peck.) Sacc. *Sphæria mutans* C. et P. 944
29 Rep. on the St. Mus, — Peritheciis majusculis, $\frac{1}{2}$ - $\frac{3}{4}$ mill. d., gregariis v. aggregatis, globosis, papillatis, nigris, initio tomento tenui fusco velatis, dein glabrescentibus, nitidis; ascis cylindræcis; sporidiis monostichis, ellipsoideis, brunneis 10-13 μ . long.

Hab. in ligno putri, Tyre in Amer. bor. — Sec. auctores affinis *S. mutabili* Pers.

30. **Rosellinia nitens** Ces. Note bot. p. 13 (1872). *Hypoxyylon chalybæum* B. et Br. Ceyl. F. n. 1066 (1873). — Peritheciis gregariis, carbonaceis subiculo pulveraceo opaco, nigrescenti insidentibus, e cylindræceo ovatis, $1\frac{1}{2}$ mill. alt., 1 mill. lat., vertice obtuso areola angusta notato, papilla centrali minutissima, piceis, lævigatissimis, nitentibus; ascis; sporidiis ellipsoideis, 8-12 \approx 4-5, fuliginis.

Hab. in lignis putridis et corticibus, Borneo (BECCARI), Ceylon

(B. et BR.) — Cl. Cesatii distinguit (Myc. Born. p. 17): α) *typica*, peritheciis majoribus in glebas effusas coalitis, singulis hinc inde sparsis (Syn. *Hypoxyton chalybæum* B. et Br. !); β) *congesta*, peritheciis in acervulos convexos (e 7-8 individuis constantes) coalitis; facie magis hypoxylloidea; γ) *minor*, peritheciis dimidio minoribus arctius coacervatis et subiculo densiore obvallatis. Simillima *Hyp. marginato*, et *H. annulato*, sporidiorum dimensionibus differens.

31. **Rosellinia Julii** H. Fab. Sphér. Vaucl. 79, t. I, fig. 7. — Peritheciis superficialibus, sparsis vel parce gregariis, interdum nonnullis coalitis, majusculis, sphæroideis, fragilibus, carbonaceis, opacatris, verrucosis, brevissime papillatis; nucleo albo, 1-1½ mill. diam.; ascis cylindraceutis, 8-sporis, sat longe et crasse stipitatis, 200-250 \approx 15; sporidiis monostichis, ellipsoideis, nunc regularibus, nunc inæquilateralibus, utroque polo acutiusculis, opacis, atro-fuscis, 22-27 \approx 12-14. 946

Hab. ad cortices ramorum putrescentium *Quercus cocci-feræ*, et rarius *Quercus Ilicis*, Vaucluse (Gallia). — Asci maturi simul et integri ægre reperiuntur.

32. **Rosellinia cellarum** Lamb. Myc. Belg. II. 294. — Peritheciis sparsis v. subaggregatis, subovoideis, nigris, rigidulis, glabris, ostiolo poriformi; ascis tereti-clavatis, octosporis; sporidiis monostichis, cymbiformibus, inæquilateralibus, 2-guttatis, nigricantibus. 947

Hab. in obturaculis subereis lagenarum vino repletarum in cellis, in Belgio (LAMB.). — Sporidia *R. aquilæ* similia.

33. **Rosellinia rhombispora** Sacc. Mich. I, 372. F. ital. t. 334. — Peritheciis subsuperficialibus, sparsis, globulosis, ½ mill. diam., breviter papillatis, levibus, carbonaceis, nigris, contextu prosenchymatico fuligineo; ascis..... resorptis; sporidiis rhomboideo-limoniformibus, utrinque acutiusculis, 25 \approx 16-18, minute (ut videtur) asperulis, crasse 1-guttatis, opace fuligineis. 948

Hab. in tuberculis putrescentibus erraticis *Cyperis* esculenti ad ripas fl. Padi prope *Sermide*, in prov. Mantuæ, Ital. bor. (C. MAGNAGUTI-RONDININI). — Forma peculiari sporidiorum facile dignoscenda species.

34. **Rosellinia obliquata** (Somm.) Sacc. *Sphæria obliquata* Somm. 249 Lapp. 213. *Sordaria obliquata* Auersw. — Conferta, atra; peritheciis globoso-conicis in ostiolum acutiusculum desinentibus, lævibus, lateri adnatis; fructificatione, sec. Auersw. *Sordariæ*, h. e. phæospora.

Hab. in squamis infra superficiem externam strobilorum super exsiccatorum Pini sylvestris per Nordlandiam inferalpinam saltensem (Lapponia) rarius. — Etiam a celeb. Fries ut nova species agnita. Minuta simplex, peritheciis pyriformi-conicis, nitidis. Memorabilis est situ perithecorum, cum latere non basi affixa sint, qua ex re tota stirps quasi obliquata et adscendens fit.

III. *Tassiella*: peritheciis majusculis, distincte verrucosis, non setosis.

35. **Rosellinia Tassiana** De Not. Sf. it. 19, t. XVI. — Peritheciis 950 majusculis, subsparsis, sphæroideis, basi sæpius subcoarctatis, v. crasso subpedicellatis, verrucosis, pachydermaticis, nigris, intus albidis; ostiolo papillato, zona levi cincto; ascis cylindræo-clavatis prælongis, octosporis, paraphysibus guttulatis obvallatis; sporidiis ellipsoideis v. subovoideis, utrinque acutiusculis, 25–35 \approx 14–15, fuligineis, sæpius 1-nucleatis.

Hab. in ramis Mori, Siena, Pisa (Italia), Pruni spinosæ, Saintes (Gallia).

36. **Rosellinia callosa** Wint. Hedn. 1874, p. 134. — Peritheciis gre- 951 gariis superficialibus, media magnitudine, globosis v. pressione mutua angulatis, minutissime papillatis, fusco-atris, opacis, profunde areolato-rimosis, callosis, 1 mill. cr.; ascis cylindricis, longe paraphysatis, octosporis, 80–130 \approx 14 p. sporif., paraphysatis; sporidiis oblique monostichis v. subdistichis ovato-fusoideis, inæquilateralibus, utrinque rotundatis, muticis, 19–26 \approx 7–8, opaco-fuligineis.

Hab. in cortice duriori Quercus dejecto, prope Lipsiam (Germania). — Affinis *R. Tassianæ*, a qua peritheciis profundius areolato-rimosis, sporidiis minoribus etc. recedit.

37. **Rosellinia megalocarpa** (Plowr.) Sacc. *Sphæria megalocarpa* 952 Plowr. Calif. Sphær. in Grev. VII, 73, t. 120, fig. 1. — Peritheciis superficialibus, magnis, 3 mill. cr., sphæricis, nigricantibus, rugulosis; ostiolis minutissimis, vix prominulis, areola pallidiore cinctis; ascis cylindræis v. clavatis, 70–130 \approx 10–15; sporidiis ovoideis, 12–15 \approx 3–5, initio hyalinis, dein fuligineis, atris, 2-nucleatis; paraphysibus numerosis flexuosis.

Hab. in cortice putri Aceris in California. — Perithecia magna, sparsa v. subaggregata et tunc mutua pressione subangulosa.

38. **Rosellinia plicatula** (B. et Br.) Sacc. *Sph.* (Cæspitosæ) *plicatula*, 953 B. et Br. Fungi of Ceylon n. 1110. — Fasciculato-congesta; peritheciis atris, collapsis, minute granulatis, plicato-rugosis; ascis

clavatis; sporidiis distichis, doliiformibus utrinque leviter attenuatis, nucleo magno 12-20 \approx 8-10.

Hab. in corticibus, Central province, Ceylon.

39. **Rosellinia moroides** (Curr.) Sacc. *Sphæria moroides* Curr. Linn. 954 Trans. XXII, p. 318, t. 57, fig. 34. Cooke Handb. n. 2601. — Peritheciis minutis, rugosis; ascis tereti-clavatis, stipitatis; sporidiis octonis biseriatis, ellipticis, olivaceo-fuliginis, dein fuscis, 10-12 μ . longis.

Hab. in ligno putri in Britannia. — Habitu *Berticæ moriformi* accedit sed minor, fructuque diversissima.

IV. *Amphisphærella*: peritheciis basi insculptis v. semiimmersis.

(Cfr. *Anthostomella*).

40. **Rosellinia amphisphærioides** Sacc. et Sp. in Mycoth. Ven. n. 1274. 955 Mich. I. 352. F. ital. t. 588. — Peritheciis sparsis, basi cortice insculptis, rarius semi-immersis, globosis, $\frac{1}{4}$ - $\frac{1}{3}$ mill. diam., atris, carbonaceis, ostiolo conico-papillato; ascis cylindræis, 90-120 \approx 10-12, apice rotundatis, deorsum brevissime attenuato-stipitatis, paraphysibus filiformibus guttulatis obvallatis, octosporis; sporidiis recte v. oblique monostichis, ellipsoideis v. oblongo-ellipsoideis, 20-22 \approx 10, utrinque obtusiusculis, quandoque inæquilateralibus, non v. 1-2-guttulatis, olivaceo-fuliginis, subopacis.

Hab. in cortice duriore Populorum, Vittorio (Ital. bor.) et Vacluse (Gallia).

41. **Rosellinia protuberans** Karst. Myc. Fennicæ II, 49, Sacc. Fungi 956 ital. tab. 335. — Peritheciis sparsis vel subsparis, ligno subinatis, deinde plus minus emergentibus, parte emersa hemisphæricis cum ligno colore fusco-atro tincto concretis, sphæroideis, ostiolo papillato, prominulo, minuto instructis, fusco-atris, fragilibus, 0,5-0,7 mill. lat.; ascis cylindræis, 78 \approx 6-8 p. sporif.; stipite 30-40 μ . longo; sporidiis octonis, monostichis, ellipsoideis, subinde inæquilateralibus, 2-guttulatis, fuscis, 10-12 \approx 5-6; paraphysibus numerosis, coalescentibus.

Hab. in ligno salicino in Fennia, in ligno Corni sanguineæ in Italia boreali.

42. **Rosellinia Arausiaca** H. Fab. Sphér. Vaubl. p. 80, t. I, fig. 10. — 857 Peritheciis sparsis, ligno nigrificato semi-insculptis, deorsum globosis, sursum conoideis, rugosiusculis, vertice poro perforatis, $\frac{1}{2}$ mill. diam.; ascis cylindræis, breve stipitatis, 8-sporis, 70-80 \approx

12-13; sporidiis simplicibus, recte monostichis, ellipsoideis, atrobrunneis, tandem opacis, 20-22 \approx 10-12.

Hab. ad ramos exsiccatos *Lonicerae* etruscæ circa Orange (Arausium).

43. **Rosellinia mycophila** (Fr.) Sacc. *Sph. mycophila* Fr. S. M. II, 462, Berk. North Amer. Fungi p. 181. — Sparsa, atra, peritheciis hemisphæricis lævibus subinæqualibus, ostiolo papillato; ascis cylindræcis; sporidiis monostichis, ellipsoideis, brunneis. 958

Hab. in Polyporis putrescentibus in Suecia, Pennsylvania et Carolina inferiore. — Perithecia superficiali-emersa, fragilia, nitidula, irregularia, quando plura conferta confluent; perithecia papillæformia, primo papilla minuta atra tecta, dein hac deciduâ nuda pertusa.

44. **Rosellinia prinicola** (B. et C.) Sacc. *Sph. prinicola* B. et C. North Amer. Fungi n. 909. — Erumpens, subglobosa; peritheciis subtiliter granulatis, perforatis majusculis, obtusis; ascis linearibus; sporidiis naviculari-oblongis, fuscis, monostichis, 12-13 μ . longis. 959

Hab. in ramis *Prini* verticillatæ in Pennsylvania, Am. bor.

45. **Rosellinia canicollis** Karst. Myc. Fennica II, 49. — Peritheciis sparsis, immersis, fragilibus, tenuibus, sphæroideis, fusco-atris, majusculis, 0,7 mill. lat., ostiolo emerso, libero, oblongato v. elongato, crasso, rudi, apice excepto, furfure denso cano v. griseo obtecto, 0,3-0,4 mill. long.; ascis cylindræcis, 170 \approx 18 p. sporif.; sporidiis octonis, monostichis, oblongatis, utrinque acutis, fuscis, 28-38 \approx 11-16; paraphysibus filiformibus. 960

Hab. in ligno vetusto ramorum *Populi tremulæ* in oppido Abo (Fennia). — Lignum, cui innascitur, albicat.

46. **Rosellinia deerrata** (C. et E.) Sacc. *Sph.* (Pertusæ) *deerrata* C. et E. New Jersey Fungi Grev. V. 93. — Sparsa; peritheciis erumpentibus, paucis, globosis, atris; ascis cylindræcis; sporidiis uniseriatis, ellipticis, brunneis, 12 \approx 7. 961

Hab. in coniferis (*red Cedar* = *Junip. virginiana*?) in New Jersey, Amer. bor. — Perithecia nonnulla pyrenidica, *Monotospora* cuidam (conidiis globosis 20 μ . diam. fuscis, hyalino-apiculatis) sæpius associata.

47. **Rosellinia mammoidea** (Cooke) Sacc. *Psilosphaeria mammoidea* Cooke in Grev. VIII. 67. — Sparsa, denudata; peritheciis subglobosis, ad basim applanatis, atris, glabris, nitidis; ascis cylindræcis; sporidiis ellipticis, continuis, brunneis, 16-18 \approx 8. 962

Hab. in ligno putri, Wellington, Nova Zelandia (TRAVERS).

48. **Rosellinia marcescens** (B. et C.) Sacc. *Sph.* (Denudatæ) *marcescens* B. et C. Cuban Fungi n. 854. — Gregaria; peritheciis ovatis rugosis, ostiolo papilliformi, lateraliter compressis; ascis linearibus; sporidiis fuscis cymbiformibus, 15-20 \approx 3,5-4. 963
Hab. in fimo in Cuba. — Perithecia basi hyphis parvis brunneis cincta. — «An *Sordaria*?».
49. **Rosellinia Gaudefroyi** H. Fab. *Sphér.* Vaucl. 79, t. I, fig. 8. — 964
 Peritheciis sparsis, nonnullisve in cortice duriori semiimmersis, spheroides, carbonaceis, rugosiusculis, breve papillatis, 1 mill. d.; ascis cylindræis, 8-sporis, 200 \approx 250 \approx 15; sporidiis oblique monostichis, ovalibus, fuligineis, fere atris, multiguttulatis, 30-34 \approx 11-13.
Hab. in cortice duriori, ad basim truncorum *Quercus pubescentis*, Vaucluse (Gallia).
50. **Rosellinia inæquabilis** (B. et C.) Sacc. *Sph.* (Pertusæ) *inæquabilis* B. et C. Cuban Fungi n. 852. — Sparsa, erumpens; peritheciis late conicis; sporidiis ellipticis 15 μ . longis, hinc appendiculatis appendicula brevi obtusa. 965
Hab. in truncis emortuis *Coffeæ* in Cuba. — Dubia quia color sporidiorum indescriptus.
51. **Rosellinia obtusissima** (B. et C.) Sacc. *Sph.* *obtusissima* B. et C. 966
 North Amer. Fungi n. 910, nec Ceylon Fungi n. 853, quæ cfr. inter dubias. — Peritheciis ovatis, fibris ligneis semiimmersis; ostiolo papilliformi; ascis linearibus; sporidiis ellipticis obtusissimis fuscis, uniseriatis 12-14 μ . long.
Hab. in ligno putri dealbato in Pensylvauiâ (Amer. bor.). — *Sph. obtusissima* B. et C. Ceylon Fungi n. 853 diversa est.
52. **Rosellinia Despréauxii** (Mont.) Sacc. *Sph.* *Despréauxii* Mont. Pl. 967
 Cellul. Cent. VIII, p. 125. — Erumpens, simplex, subseriata; peritheciis sphericis, atris, opacis, apice depressis; ostiolo mammilloso minuto pertuso; ascis (non descriptis); sporidiis maximis continuis ex oblongo cymbiformibus fuscis, 40-50 \approx 10-15, circulo hyalino initio obvolutis.
Hab. in ramis emortuis dejectis in insula Terræ-Novæ (DESPRÉAUX). — Habitus *Melanopsammæ pomiformis*.
- V. *Coniomela*: peritheciis minoribus, glabris, sæpius dense gregariis.
53. **Rosellinia pulveracea** (Ehrh.) Fuck. Symb. p. 149, Sacc. Fungi 968
 ital. t. 591, *Sph. pulveracea* Ehrh., Pers. Syn. p. 83. — Peritheciis confertis, sæpe crustaceo-aggregatis, superficialibus, glo-

bulosis, eximie minute tuberculatis, rigidis, glabris, ostiolo impresso dein latiuscule hiante pertuso, atris, vix 0,3 mill. diam.; ascis cylindraceis, basi attenuatis, obturaculo jodo vix cœrulescentibus, 70-100 \approx 8-11 p. sporif.; sporidiis octonis, oblique monostichis sphæroideo-ellipsoideis vel ellipsoideis, fuscis, 10-12 \approx 7-9; paraphysibus filiformibus, haud bene discretis.

Hab. ad ligna Quercus, Sorbi, Alni, Betulæ, Fagi, Robiniæ, Populi, Juglandis etc. in tota Europa, America bor. et austr. — Sec. Fuck. *Sph.* (Coniothyrium) *myriocarpa* Fr., stylosporibus ovoideis fuscis, est pycnidium.

54. **Rosellinia Millegrana** (Schw.) Sacc. *Sph.* (denudatæ) *Millegrana* 969
Schw. Syn. Amer. bor. n. 1559. — Minutissima, plagis magnis effusa, singulis peritheciis nudo oculo vix distinguendis, sub vitro innumeris seriatim juxta positis, sed non confluentibus, globosis, minute punctato-rugosis, subattenuatis, ostiolis pertusis globulo ascifero magno coronatis; demum intus evacuatis; juniore ætate peritheciis fibris ligni subtectis, demum denudatis aterrimis; ascis (non descriptis); sporidiis late ellipticis, fuliginis, 13-15 μ . longis. (B. et Br.).

Hab. non rara ad ligna quercina, Platani, Liquidambaris Bethlehem, Amer. bor. — Plagis longis latisque quasi effiguratis ligna occupans. — Sec. Cooke Handb. n. 2600 esset forma *Rosell. pulveraceæ*, de quo ob peritheci formam diversam dubitandum.

55. **Rosellinia inspersa** (Berk.) Sacc. *Sph. inspersa* Berk. Decad. 970
n. 73. — Conferta et sparsa, minor atra; peritheciis, subglobosis rugulosis, rigidiusculis; ostiolo obsoleto; ascis linearibus; sporidiis ellipticis, brunneis.

Hab. in ligno putri, dealbato ubi crustas atra format, Swan River in Australia. — Probabiliter est forma *Ros. pulveraceæ*, nam cl. Berk. l. c. pro hac specie sumit *Melanomma pulverem pyrimum*.

56. **Rosellinia rimicola** Rehm Asc. n. 89, Sacc. Fungi Ven. Ser. II, 329, Fungi ital. t. 590, Wint. Diagn. etc. p. 9. — Peritheciis glabris, vix rugulosis, nitidulis, globoso-conoideis; ascis 80 \approx 7-8 (p. sporif.), stipite 10-15 micr. longo, ima basi noduloso; sporidiis oblique monostichis, ovoideis, 10-12 \approx 7-8, saturate fuliginis, eguttulatis.

Hab. in ramis decorticatis v. in corticis rimis Cytisi, Aceris, Tamaricis in Germania, Italia, Gallia.

57. **Rosellinia Rosarum** Niessl Beitr. 32, t. XV, fig. 35. — Peritheciis gregariis sparsive lignicolis, vel peridermio tectis, subconoidis vel subglobosis, rostro conico retuso sæpe obliquo, lævibus, coriaceis crassiusculis, siccis fragilibus, rugulosis, atro-fuscis, vix nitidis, 250–300 μ . diam.; ascis lineari-cylindræis, obtusis seu retusis stipitatis, 8sporis, 56–66 \approx 5–6 p. sporif.; sporidiis monostichis obovatis a latere visis compressis, disciformibus, olivaceo-fuscis, 8–9 \approx 4–5, e latere 2–3 μ . cr., nucleo oleoso, paraphysibus crassis, ascos superantibus, guttulatis.

Hab. in ramulis denudatis Rosæ caninæ et Cratægi, interdum corticalis, prope Brünn (Moravia).

58. **Rosellinia socia** (De Not.) Sacc. *Sordaria socia* De Not. Récl. in Comm. critt. II. 480. — Peritheciis confertissimis, transverse ad corticem seriatis, peridermate demum decedente, nudis, sphæroideis, vertice papillæformi-ostiolatis, setulis perbrevibus confertis scabris, atris, fragilibus, pachypleuris; ascis teretiusculis, octosporis, cum paraphysibus copiosissimis; sporidiis ellipsoideis, fuligineo-translucidis, primum involuero mucilagineo tectis, demum nudis.

Hab. in cortice Cerasi, socia *Calosph. pulchellæ*, Valle Intrasca (Ital. bor.).

59. **Rosellinia etrusca** H. Fab. Sphér. Vaucl. p. 80, t. I, fig. 9. — Peritheciis superficialibus, ligno decorticato, nigrificato insidentibus, carbonaceis, dense confertis, papillatis, amœne mammiformibus, $\frac{2}{3}$ – $\frac{3}{4}$ mill. diam.; ascis non visis; sporidiis ovalibus, opaco-fuscis, nunc regularibus, nunc tenuissime inæquilateralibus, 2–3-guttatis, utroque polo acutiusculis et appendicula brevi, lata, hyalina præditis, 11–13 \approx 5–6.

Hab. ad ramos exsiccatos Loniceræ etruscæ, Vaucluse (Gallia).

60. **Rosellinia catervaria** (B. et Br.) Sacc. *Sph.* (Denudatæ) *catervaria* B. et Br. Fungi of Ceylon n. 1104. — Disseminata; peritheciis globosis opacis ostiolo minuto; ascis linearibus; sporidiis fuscis, ellipticis, 37 μ . longis.

Hab. in ligno putri, Central province, Ceylon. — Habitus fere *Leptosporæ spermoidis*.

61. **Rosellinia pandanicola** (B. et Br.) Sacc. *Sph.* (Follicolæ) *pandanicola* B. et Br. — Peritheciis superficialibus brunneis, hemisphæricis, basi mycelio parco cinctis, in plagas parvas collectis; ascis linearibus; sporidiis ellipticis, 12 μ . longis.

Hab. in foliis Pandani odoratissimi, in Ceylon.

62. **Rosellinia apiculata** Sacc. Mich. I. 26, 99, Fungi ital. t. 150. — 977
 Peritheciis superficialibus, dense gregariis, carbonaceis, globosis $\frac{1}{3}$ - $\frac{1}{2}$ mill. diam., obtuse papillatis, rugulosis, glabris; ascis cylindraceo-clavatis, deorsum attenuato-stipitatis, $70 \approx 8-10$, p. sporif. 40 longa, aparaphysatis, octosporis; sporidiis distichis v. oblique monostichis, oblongo-ovoideis, $7-9 \approx 4-4\frac{1}{2}$, 1-2-guttulatis, fuliginis, basi appendicula hyalina obtusa brevi auctis.
Hab. in ligno putri quercino in sylva Montello (Ital. bor.).
 — Habitus fere *R. pulveraceæ* v. *Melanommatis Pulveris pyrii*.
63. **Rosellinia sylvana** Sacc. Fungi Ven. Ser. II, p. 329, Fungi ital. 978
 t. 149. — Peritheciis dense gregariis, globosis dein depressiusculis, $\frac{1}{2}$ mill. diam., rugulosis, fragilibus, ostiolo minuto papillatis, tomento ex hyphis fuliginis ramoso-intricatis composito insidentibus; ascis cylindraceo-clavatis, $150 \approx 10-11$, longiuscule noduloso-stipitatis, paraphysibus filiformibus obvallatis, octosporis; sporidiis monostichis oblongis v. subpyriformibus basi v. utrinque attenuato-truncatis, ibique breve hyalino-appendiculatis, $12-15 \approx 6$, 2-guttulatis; fuliginis.
Hab. in ligno putri Alni glutinosæ(?), Selva (Sylva) Treviso, Ital. bor. — Peritheciis dimidia v. tertia parte minoribus a *R. mammiformi* et *R. aquila* etc. dignoscitur. Sporidia initio cylindracea, flexa, granulosa, hyalina, dein sursum incrassata, postremo ut supra descripta.
64. **Rosellinia spadicea** Ces. Myc. Born. pag. 22. — Peritheciis glo- 979
 bosis, coffeinis, pulverulentis, demum circa ostiolum glabratis, subiculo tenui velutino concolori stipatim insidentibus; ostiolo punctiformi minutissimo; nucleo albicante; ascis jam reabsorptis; sporidiis ovalibus e fronte, sub-cymbiformibus e latere, fuscis, $6 \approx 2$.
Hab. ad calnum Bambusæ(?), Sarawak Borneo.
65. **Rosellinia ulmaticolor** (B. et C.) Sacc. *Sph. ulmaticolor* B. et C. 980
 North Amer. Fungi n. 952. — Maculis effusis umbrinis; peritheciis minutis; ascis linearibus; sporidiis ellipticis fuscis, uniseriatis, $7,5-8 \mu$. long.
Hab. in ramis decorticatis levibus in Carolina inf., Amer. bor.
66. **Rosellinia umbrinella** (B. et C.) Sacc. *Sph. umbrinella* B. et C. 981
 North Amer. Fungi n. 963. — Peritheciis umbrinis, ostiolo papilliformi nigro; ascis linearibus; sporidiis ellipticis, fuscis monostichis, biguttulatis.
Hab. in caule Eupatorii coronopifolii in Carolina inferiore, Amer. boreali.

67. **Rosellinia Verrucaria** (Mont.) Sacc. *Sph. Verrucaria* Mont. in Fl. 982
 Alg. p. 526, an Fr. S. M. II. 496. — Gregaria v. subcæspitosa; peritheciis innato-superficialibus, hemisphærico-subconicis, rugulosis, rigidis, astomis (?), extus intusque nigris; ascis cylindricis; sporidiis octonis ellipticis, continuis, opacis, monostichis.
Hab. in ramulo delapso Salsolæ oppositifoliæ, Mostaganem (Algeria). — Prorsus diversa a *Melanommate Verrucaria* (De Not.) etsi huic uniendam declaraverit cl. Montagne. Cfr. De Not. Sfer. ital. p. 66.
68. **Rosellinia Winteriana** Speg. Mich. I, 228, Fungi ital. t. 620. — 983
 Peritheciis superficialibus vel basi tantum immersis, subglobosis, ostiolo parvulo conoideo, undique glabris, 200–250 micr. d.; contextu subcarbonaceo atro-fusco; ascis cylindræis, vertice rotundatis, 140 \approx 10–14 (p. sporif. 80–90 \approx 10–14, stip. 50–60 longo) basi attenuato-stipitatis, paraphysibus subclavulatis obvallatis, octosporis; sporidiis oblique monostichis, ellipsoideis v. sæpius subnavicularibus, 12–14 \approx 7–8, utrinque rotundatis, opace atro-fuligineis, guttulatis.
Hab. in fimo ovino vetusto in pratis, Conegliano (Italia bor.). — Etsi fimicola potius *Rosellinia* quam *Sordaria* videtur, teste claro Spegazzinio.
69. **Rosellinia arctispora** (C. et E.) Sacc. *Sph.* (Denudatæ) *arctispora* C. et E. New Jersey Fungi, Grevill. V. 93. — 984
 Gregaria; peritheciis globosis ad basim applanatis, scabrosis, atris; ascis cylindræis; sporis anguste ellipticis, brunneis, 15 \approx 4.
Hab. in ramis Andromedæ, New Jersey, Amer. bor. — Cellulæ perithecii exteriores exsistentes, 100 μ . circ. longæ.
70. **Rosellinia microspora** (Ces.) Sacc. *Sordaria microspora* Ces. 985
 Myc. Born. p. 22. — Sparsa; peritheciis conicis e basi passim oblonga, vertice pertuso; ascis subtilibus; sporidiis uniseriatis, ovalibus, fuscis, 50 μ . longis.
Hab. ad lignum nudum marcidum, Ceylon, Peradenya.
71. **Rosellinia dispersella** (Nyl.) Karst. Myc. Fenn. II, 48, *Sph. dispersella* Nyl. Herb. Fenn. 112. — 986
 Peritheciis sparsis, prominulis, demum liberis, ovoideis vel subsphæroideis, ostiolo papillari, crassiusculo (fere tuberculoso), rigidis, nigris, glabris, mediocribus vel minoribus; ascis cylindræis, 100–105 \approx 12–14 p. sporif.; sporidiis octonis oblique monostichis, ellipsoideis, sæpe inæquilateralibus, simplicibus fuscis, 14–25 \approx 9–13; paraphysibus haud bene discretis.
Hab. supra corticem Populi tremulæ crassiorem e Fennia meridionali ad Lapponiam usque.

72. **Rosellinia hypoxylina** Ces. Myc. Born. p. 22. — Peritheciis minutis, globosis, opacis, ostiolo apiculatis; subiculo carbonaceo indeterminato in crustam effusam concretescentibus; ascis?; sporidiis ovoideo-navicularibus, fuscis, $7-7\frac{1}{2} \approx 5$.

Hab. ad lignum decorticatum exesum, Sarawak (Borneo).

73. **Rosellinia Pseudo-Bombarda** Sacc. Myc. Ven. Spec. p. 109, t. X, fig. 45-47, Fung. ital. t. 595. — Peritheciis gregariis, superficialibus, ellipsoideis, $\frac{1}{2}$ mill. altis, $\frac{1}{3}$ crassis, in ostiolum conico-prominulum sensim desinentibus, atris, nitidulis; ascis anguste cylindraceis, substipitatis, $80-85 \approx 5$, pseudo-paraphysisibus filiformibus guttulatis obvallatis, 8sporibus; sporidiis oblique monostichis fusoidis, curvulis, $15-16 \approx 4$, lutescenti-fuscis, 2-3-guttulatis.

Hab. in ligno denudato, fracido quercino, Selva agri Tarvisini (Italia boreali). — Perithecia ellipsoidea, interdum obliquata Bombardiam in mentem revocant.

74. **Rosellinia ovalis** Ellis Bull. Torr. cl. VIII, 11 Nov. 1881, p. 125. — Gregaria, v. subcæspitosa; peritheciis ovoideis, rugulosis, $\frac{1}{3}$ mill. diam., ostiolo papillato; ascis anguste cylindraceis; sporidiis monostichis, continuis, fuligineis, ellipsoideis vel oblongis, $7-8,5 \approx 5-6$.

Hab. in caulibus (*Sage brush* = *Salvia*?), New Jersey, America boreali.

75. **Rosellinia microscopica** (De Not.) Sacc. *Sordaria microscopica* De Not. Recl. in Comm. critt. II. 480. — Peritheciis perexiguis, nudo oculo vix conspicuis, sparsis, atris, subrotundato-hemisphæricis, ostiolo papillari, minutissimo hiantibus, læviusculis, in siccio fragilibus; ascis teretiusculis, octosporis; paraphysisibus copiosis, tenuibus; sporidiis ellipsoideis, badio-fuligineis, translucidis 5μ . long.

Hab. in libro denudato ramorum Cerasi, Valle Intrasca (Italia boreali).

VI. *Coniochaeta*: peritheciis minoribus, setosis, sæpius gregariis.

76. **Rosellinia ligniaria** (Grev.) Nits. Fuck. Symb. myc. 150, Sacc. Fungi ital. t. 596, *Sph. ligniaria* Grev. Crypt. Sc. I. 82. — Peritheciis gregariis, globosis, conicisve, nigris, superficialibus, pilis brevibus, unicellularibus, atris laxè vestitis, $\frac{1}{3}$ mill. diam.; ascis cylindraceis, stipitatis, 8sporibus, $80-96 \approx 10-12$; sporidiis oblique monostichis, oblongo-ovatis, utrinque obtusis, atro-fuscis, monoplastis, continuis, $16 \approx 8$.

Hab. in lignis et corticibus durioribus in Scotia, Belgio, Ger-

mania, Italia, Sibiria, Amer. bor. — Formæ: *Fagi sylvaticæ* (asci 90-100 \approx 9; sporidia 18 \approx 8-8 $\frac{1}{2}$), *Alni glutinosæ* (asci 80-90 \approx 9-10; sporidia 14-15 \approx 8-9), *Salicis purpureæ* (asci 80 \approx 8; sporidia 14-15 \approx 8), *Cupressi* (sporidia 14 \approx 8), *Pini* (15-17 \approx 7-8) etc. — Var. *detonsa* Cooke in Grev. (in ramis *Andromedæ*, New Jersey) differt peritheciis subglabris, sporidiis paulo minoribus.

77. **Rosellinia Niesslii** Auersw. Beitr. p. 35, t. V, fig. 37. — Peritheciis lignicolis, gregariis, conoideis vel subglobois, 200-300 μ . diam., ostiolo conico sæpe obliquo confluentibus, membranaceo-coriaceis (fere carnosis) obscure sordide puniceis, brunneis vel nigrescentibus, initio dense, demum sparse et breve pilosis tandem subglabris ostiolo barbato, rugulosis pilis 20-30 μ . longis; ascis cylindricis 110-118 \approx 9 p. sporif.; stipite brevi obliquo, apice obtuse retusis, 8spor.; sporidiis monostichis oblongo-ovoideis, atrofusis, circulo hyalino; paraphysibus crassis articulatis guttulatisque ascos vix superantibus. 992

Hab. in ligno *Berberidis vulgaris* pr. Gratz (Germania) aestate.

78. **Rosellinia malacotricha** (Auersw.) Niessl Beitr. 36, t. V, fig. 36. 993
Sacc. F. ital. t. 593. — Peritheciis lignicolis gregariis, sæpe densissime confertis, conoideis, seu subglobois 200-300 μ . diam.; coriaceo-carbonaceis, atris, setis rigidis, 40-70 μ . long., fasciculatis divergentibus atris tectis, ostiolo glabro brevi conico nitente; ascis 8spor., cylindricis, stipitatis, apice retusis 100 \approx 9-10; sporidiis monostichis disciformibus, seu ellipticis vel suborbicularibus a latere visis lenissime depressis, 11-14 \approx 8-10, initio 2-guttulatis luteolis, dein fusco atris, nucleo splendente; paraphysibus ascos vix superantibus guttulatis.

Hab. in ligno denudato *Pini silvestris* p. Leipzig (AUERSWALD) et *Pini Abietis* pr. Liezen, Germania (NIESSL); in corticis *Salicis* pag. interiori in Italia boreali.

79. **Rosellinia sordaria** (Fr.) Rehm Asc. n. 192. F. it. t. 595. *Sphaeria sordaria* Fr. S. M. II. 458. *Sordaria* et *Rosellinia Friesii* Niessl Beitr. — Peritheciis, gregariis, sæpe confertis, conoideis seu subglobois, coriaceis, nigris, nitidis, subtiliter rugulosis, 160-200 μ . diam., setulis obtusis (h. e. cellulis fibrosis peritheci liberatis), 15-20 \approx 2, continuis fuliginis crebrius circa ostiolum conspersis; ascis cylindræis, 60 \approx 4,5-5, stipite brevi curvato, 8spor.; sporidiis monostichis, ovatis, a latere visis lenissime compres- 994

sis, 7-8 \approx 4-5, initio 4-guttulatis, flavidis, dein opace fuligineis, eguttulatis.

Hab. in ligno fagineo, pineo, quercino, populino in tota fere Europa. — Dimensiones a Niessl datæ l. c. paulo majores quam nostræ. Huc *R. velutina* Fuck. sec. Niessl, pertineret.

80. **Rosellinia hirtissima** (Peck) Sacc. *Sphæria hirtissima* Peck 28 995
Rep. on the St. Mus. — Peritheciis sparsis v. gregariis, superficialibus, ovoideis, v. subglobosis, nigris, pilis rigidulis atris, breviusculis dense vestitis; ascis linearibus; sporidiis uniseriatis, crasse ellipsoideis v. subglobosis, 12-13 μ . longis, fuscis.

Hab. in ligno putri Pini, Center, Amer. bor. — Asci fugaces.

81. **Rosellinia foveolata** (B. et C.) Sacc. *Sph.* (Byssisedæ) *foveolata*, 996
B. et C. Cuban. fungi n. 847. — Late effusa, stromate nigerrimo, floccorum ramulis apice acutis; peritheciis globosis demum collapsis, pilis rigidis ornatis; sporidiis hemisphæricis, foveolatis, 5 μ . d.

Hab. in corticibus putridis in Cuba et in Carol. inf. — Sporidia seminibus («capsulis?») *Veronicæ* similia.

82. **Rosellinia ambigua** Sacc. F. Ven. Ser. II. 328, F. ital. t. 594. — 997
Peritheciis dense gregariis, superficialibus, habitu *Roselliniam pulveraceam* æmulantibus, globoso-conoideis, 120-140 diam., aterrimis, setulis continuis, 20-30 \approx 3-4, acutis divergentibus undique ob-
sitis, sed densius circa ostiolum brevissime papillatum, denique cal-
vescentibus; ascis cylindræis, basi attenuatis, 80 \approx 8, paraphysi-
bus filiformibus obvallatis, 8spor. ; sporidiis recte v. suboblique
monostichis, ellipsoideis, v. subglobosis, 10-12 \approx 8, latere compres-
siusculis, initio viridulis, 2-guttulatis, dein saturate fuligineis,
continuis.

Hab. in ramis emortuis Sambuci racemosæ in silva Cansiglio (Ital. bor.). — Affinis *Ros. ligniarie*, a qua sporidiis brevioribus, *R. abietinæ*, a qua sporidiis crassioribus et *R. malacotrichæ* Niessl, a qua setulis laxioribus, brevioribus, ascis sporidiisque minoribus satis differre videtur. Ex clar. Doct. Winter in litt. *R. ambigua* mea spectaret *R. pulveraceæ*, sed tunc censere cogor eundem virum pro hac alienam speciem sumere.

83. **Rosellinia abietina** Fuck. Symb. myc. p. 150. — Peritheciis gre- 998
gariis confertisque, *Rosellinia pulveracea* parum majoribus, ova-
tis, in ostiolum conicum, obtusum attenuatis, nigris, opacis, setis
brevissimis, concoloribus, strigosis; ascis cylindræis, 95-110 \approx
10-12, obturaculo jodo vix cœrulescente, curvato-stipitatis, 8spo-

ris; sporidiis oblique monostichis, oblongis, subellipticis, monoplastis, fuscis, 14-16 \approx 6-8.

Hab. in ligno Pini et Juniperi in Germania (FUCK.), Fennia et Lapponia (KARST.). — Var. *trichota* C. et Ell. in Gev.; sporidiis ovoideis v. subglobosis 12 \approx 10; setulis multo longioribus 90 μ . longis. In ligno pineo, New Jersey.

84. **Rosellinia xylarispora** (C. et E.) Sacc. *Sphæria* (Villosæ) *xylarispora*. C. et E. New Jersey Fungi. Grev. VII, 94, t. 100, fig. 2. 999
— Peritheciis gregariis, atris, velutinis, globoso-compressis, papillatis, pilis 40 μ . long. obtusis; ascis cylindraceis; sporidiis ellipticis, utrinque attenuatis, brunneis, uninucleatis, 16-18 \approx 6.

Hab. in ramis decorticatis *Andromedæ*, New Jersey, America boreali.

85. **Rosellinia velutina** Fuck. Symb. myc. p. 149. — Peritheciis gregariis confertisque, minutis, globoso-ovatis, subtilissime olivaceo-velutinis, ore minuto, subconico, perforato; ascis cylindraceis, oblique stipitatis, 8sporis, 56-72 \approx 8; sporidiis oblique monostichis, ovatis, atro-fuscis, 1-2guttulatis, 8 \approx 6. 1000

Hab. in cortice et ligno *Salicis* et *Ulmi*, Hattenheim (Germania).

86. **Rosellinia subcorticalis** Fuck. Symb. myc. p. 150. — Peritheciis sparsis, nunquam confertis, punctiformibus, ovatis, in ostiolum brevissimum, conicum, obtusum attenuatis, atris, setis brevissimis, concoloribus, strigosis obsitis, in peritheciis junioribus pilis terminalibus longioribus, fasciculatis, conidiophoris; conidiis oblongis, multiseptatis ut *Helminthosporium*, 20 \approx 10, fuscis; ascis cylindraceis, stipitatis, 8sporis, 72 \approx 8; sporidiis oblique monostichis, ovatis, monoplastis, uniguttulatis, atro-fuscis, 8 \approx 6. 1001

Hab. in pagina interiore corticis secedentis exsiccati *Alni glutinosæ* pr. *Æstrich* et in insulis *Rhenanis*.

87. **Rosellinia Platani** Fuck. Symb. mycol. pag. 150, — Peritheciis minutis, sparsis, e basi globosa conicis, atris, undique pilis concoloribus, peritheciis diametrum subæquantibus obsitis; ascis cylindraceis, stipitatis, 8spori, 80 \approx 8; sporidiis oblique monostichis, oblongo-ovatis, utrinque attenuatis, oblongo-uniguttulatis, pallide fuscis, 12 \approx 6. 1002

Hab. in pag. interiore corticis *Platani* durioris, Hattenheim (Germania).

88. **Rosellinia sanguinolenta** (Wallr.) Sacc. *Sph. sanguinolenta* Wallr. 1003
Comp. p. 801, Mont. Pl. Cell. Cent. VIII, p. 58. — Peritheciis

parvis confertis (sub cortice delitescens) erectis, præter basin adnatam liberis ovoideis nigris, pilis concoloribus brevissimis stipatis undique hirsutis mucoque cruento obductis, apice ostiolo prominulo nudo pertusis; ascis cylindræo-clavatis, $120 \approx 10$, apice hyalino-cuspidatis, octosporis, paraphysatis; sporidiis monostichis sphæroideo-oblongis, primo hyalinis, tandem obscure fuliginis.

Hab. sub cortice mox desquamato Lonicæræ Xylostei Hercyn. infer. rarissime (Germania).

89. **Rosellinia asperula** Mont. (Sacc.) *Sph. asperula* Mont. Pl. Cell. Cent. VIII, p. 146. — Denudata, sparsa, gregaria sparsimque agglomerata; peritheciis minimis, $\frac{1}{3}$ mill. diam., ovoideis, atris, opacis asperulis; ascis inter paraphyses nidulantibus, cylindricis, sporidia octona oblonga sphæroidea, 10 μ . long. continua tandem fuscidula, serie unica, foveolatis.

Hab. ad ramos dejectos cortice denudatos circa Brixiam Italiæ (CESATI).

90. **Rosellinia Gagliardi** (De Not.) Sacc. *Sordaria Gagliardi* De Not. Sfer. ital. p. 23, t. 21. — Pusilla; peritheciis sparsis v. gregariis, superficialibus, atris, e basi applanata subglobosis, obtusis, ostiolo minuto vix prominulo hiantibus, aculeolis rigidis fuscis obsitis, siccis vix collabentibus; ascis teretibus, octosporis, paraphysatis; sporidiis ellipsoideis, fusco-castaneis, 10-15 μ . longis.

Hab. in caulibus siccis herbarum Domodossola, Valle Intrasca (Italia bor.). — Peritheciis sphæroideis obtusis, nec ovoideo-conicis a *R. ligniaria* distinguenda.

91. **Rosellinia horrida** Hazl., Frig. Banat 1873, p. 49, t. I, f. 3. — Peritheciis liberis, dense aggregatis, rarius sparsis, obovatis, subcarbonaceis, rugulosis, aculeatis, aculeis subradiantibus atris, sursum pellucidis, e tuberculis oriundis; ascis paraphysatis, cylindræis, octosporis, $120-150 \approx 15-16$; sporidiis monostichis, $18-25 \approx 10-13$, oblongis, fuscis.

Hab. in sarmentis decorticatis *Vitis vinifæræ* ad Mehadiam (Banatus). — Mycelium, quo perithecia inserta, parcum, hyphis septatis, hyalinis contextum, superficiale; conidiis ovoideis, hyalinis, 2-3 μ . longis.

92. **Rosellinia chordicola** Sacc. Mich. I. 372, Fungi ital. t. 333. — Peritheciis sparsis, subsuperficialibus globoso-conoideis, $\frac{1}{2}$ mill. diam., lævibus, nigris, papillatis, circa ostiolum setulis 25-30 ≈ 3 , eseptatis, aterrimis ornatis; peritheciis contextu parenchymatico fuligineo; ascis cylindricis, $80-90 \approx 8$, apice rotundatis, breve sti-

pitatis, paraphysisibus filiformibus obvallatis, octosporis; sporidiis oblique monostichis, ellipsoideis, 8-10 \approx 6-7, fuligineis, eguttulatis.

Hab. in chorda putrescente dejecta in Horto Patavino, vere 1877. — A *Rosellinia ambigua* Sacc., peritheciis sparsis duplo majoribus, sporidiis angustioribus, non 2-guttatis, matrice aliena etc. differt.

93. **Rosellinia pachydermatica** (Ces.) Sacc. *Sordaria pachydermatica* 1008

Ces. Myc. Born. p. 22. — Peritheciis in macula nigricante effuse aggregatis, parabolicis, nigris, primitus scabris, serius præsertim ad verticem denudatis, pariete crassa carbonacea; ostiolo impresso; ascis linearibus; sporidiis uniseriatis, elongato-ellipticis acutiusculis, simplicibus, fuscis, 5 \approx 2.

Hab. in ligno marcescente, Etich River, ditionis Sarawak (Borneo).

94. **Rosellinia calva** (Tode) Sacc. *Sph. calva* Tode sec. Quel. Champ. 1009

Jura p. 517 (sub *Lasiella*), t. V, f. 30. — Peritheciis globulosis, papillatis, supra glabris, fusco-nigris, nitidis, deorsum pilis rigidulis brevibus conspersis, ostiolo convexo; ascis cylindricis breve stipitatis, octosporis; sporidiis ellipsoideis, 20 μ . long., fusco-olivaceis, 2-guttatis.

Hab. in ligno putri Alni, Pruni spinosæ in Vogesis et Jura.

95. **Rosellinia Hystricula** (B. et Br.) Sacc. *Sph.* (Byssisedæ) *Hystricula* 1010

B. et Br. Fungi of Ceylon n. 1092. — Peritheciis e strato hispido oriundis, rugosiusculis, cito collapsis, setis rigidis lanceolatis ornatis; ostiolo minuto; ascis faretis, 75 μ . long. clavatis; sporidiis oblongo-ellipticis, 2-3-nucleatis, 10 \approx 3,5-4.

Hab. in corticibus in Ceylon. — Habitus *Cælosphæricæ tristis*.

VII. *Cucurbitula* Fuck., peritheciis cæspitoso-crumpentibus.

96. **Rosellinia conglobata** (Fr. et Fuck.) Sacc. *Sph. conglobata* Fr. 1011

S. M. II. 414, *Cucurbitula conglobata* Fuck. Symb. mycol. 171, t. IV, f. 7. — Peritheciis cæspitosis, subglobosis, rugulosis, nigris, ostiolo papilliformi, obsolete; ascis cylindræis breve stipitatis 96 \approx 8, octosporis; sporidiis oblique monostichis, ellipsoideis, 12 \approx 8, biguttulatis, fuligineis.

Hab. in cortice secedente Betulæ albæ et Coryli in Suecia (FRIES), Germania (FUCK.), Jura et Vogesis (QUELET). — Cfr. *Cucurbitaria conglobata*.

97. **Rosellinia Myricariæ** (Fuck.) Sacc. *Cucurbitula Myricariæ* Fuck. 1012

Symb. myc. App. II, p. 32. — Peritheciis ascigeris in corticis rimis cæspitosis, elongato-dispositis, paullulo majoribus quam in fungo stylosporifero et magis regularibus, ovato-globosis, in ostiolum obtuso-conicum demum perforatum, aterrimum protractis, opaco-nigris; ascis stipitatis, cylindræis, 8sporis, $88 \approx 8$; sporidiis oblique monostichis, forma in eodem asco valde variabili, aliis subellipticis, aliis ovatis vel subrotundis, continuis, fuscis, $10 \approx 5-8$; paraphysibus filiformibus, multiguttulatis; peritheciis pycnidicis irregulari-globosis, cæspitulosis; stylosporibus ovoideis $10 \approx 4-6$, fuscis.

Hab. in ramis corticatis *Myricariæ germanicæ*, rarius, Ragaz ad ripas Rheni (Helvetia).

98. **Rosellinia Syringæ** (Kickx) Sacc. *Sph. Syringæ* Kickx Fl. cr. 1013 Fl. I. 337, *Cucurbitula Syringæ* (Kickx) Lamb. Fl. myc. belg. II. 323. — Peritheciis semierumpentibus emersisque, aggregatis, globosis, rugosis, nigris, opacis, glabris, ostiolo minuto granuliformi; ascis cylindræis; sporidiis monostichis ovoideis, obtusis, continuis, olivaceo-fuliginæis.

Hab. in ramis emortuis *Syringæ vulgaris*, Termonde, in Belgio (Westendorp). — Habitus potius *Cucurbitaricæ*.

VIII. *Lichenicolæ*.

99. **Rosellinia Cladoniæ** (Anzi) Sacc. *Sordaria Cladoniæ* Anzi Anal. 1014 lichen. p. 26 — Peritheciis sparsis, atris, minutis, sphæricis, semiimmersis, rugosis, tandem deformibus et cupulari-apertis; ascis 4-6-sporis; sporidiis cymbiformibus, fuligineo-opacis, $22-30 \approx 13-15$.
Hab. in podetiis *Cladoniæ* deformis senio infuscatis, Valfurva 1800 metr. alt. (Italia boreali).

100. **Rosellinia Nephromatis** (Crouan) Sacc. *Sph. Nephromæ* Crouan 1015 Finist. p. 25. — Peritheciis sphæricis, nigris, $\frac{1}{2}$ mill. diam.; ascis subclavatis, 4-sporis; sporidiis ovoideis, lutescentibus, 2-guttulatis.

Hab. in thallo *Nephromatis resupinati*, Finistère (Gallia).

101. **Rosellinia aspera** Hazl. in Hedw. 1874, pag. 140, Frig. Banat. 1016 1873, t. III, f. 12. — Peritheciis aggregatis, globosis, ostiolo mammillari, demum pertuso, scaberrimis atris; ascis linearibus, octosporis, paraphysatis; sporidiis ovoideis, demum opacis $19-20 \approx 12-13$, monostichis.

Hab. in thallo *Aspiciliæ cinereæ* in Alpe Retyezat Transylvaniæ. — Mycelium torulosum, superficiale, dendritice effiguratum, nigrum.

IX. *Sphaeropyxis* Bon., peritheciis breviter stipitatis; sporidiis globosis.

102. **Rosellinia hispida** Bon. Abhandl. p. 157 (*Sphaeropyxis*). — 1017

Peritheciis aggregatis, ovoideis, breviter pedicellatis, pilis brevibus continuis obsitis, ostiolo simplici pertusis; ascis cylindricis, paraphysibus simplicibus obvallatis; sporidiis globosis, fusco-nigris.

Hab. in ligno denudato in Guestphalia (Germania).

X. *Desciscentes* v. *dubie*

103. **Rosellinia rhypara** (B. et Br.) Sacc. *Sph.* (Denudatæ) *rhypara* 1018

B. et Br. Fungi of Ceylon n. 1106. — Peritheciis globosis coffeicoloribus, sordidis; ostiolo minuto; ascis linearibus; sporidiis ellipticis, utrinque attenuatis, 22–25 \approx 10–12.

Hab. in ligno putri in Ceylon. — Dubia quia sporidiorum color non indicatur.

104. **Rosellinia Tulasnei** (Crouan) Sacc. *Sph.* *Tulasnei* Crouan Finist. 1019

pag. 24. — Peritheciis obtuse pyriformibus, nigris, granulosis, $\frac{1}{2}$ mill. diam. contextu reticulato; ascis fusoides, utrinque obtusis, bisporis; sporidiis subfusoides, fuliginis, granulosis.

Hab. parasitica in Zygodonte viridissimo, Jungermannia dilatata, Cenomyce in truncis arborum, Finistère (Gallia).

105. **Rosellinia Schumacheri** (C. E. Hasn.) Sacc. *Spharella* *Schuma-* 1020

cheri E. C. Hans. Champ. sterc. Dan. p. 16, t. VI, fig. 24–27. — Peritheciis sphaeroideis, papillatis, nigris, quandoque pilosulis, 130–150 μ . altis, submembranaceis, sparsis, subinnato-erumpentibus; ascis oblongo-ovatis, subsessilibus, aparaphysatis; sporidiis polystichis oblongo-cymbiformibus, inæquilateralibus, 9–10 \approx 3–4, olivaceo-brunneis.

Hab. in excremento murino et cuniculorum, Bassnäs in Selandia (Dania).

106. **Rosellinia melioides** (B. et C.) Sacc. *Sph.* (Byssisedæ) *melio-* 1021

lodes B. et C. Cuban Fungi n. 849. — Soris orbicularibus; hyphasmate radiante delicato, demum pulvere cinnabarino plus minus peritheciisque globosis obsitis.

Hab. in pag. infer. foliorum coriaceorum in Cuba. — Pulchra species, sed, ob sporidia immatura, dubia.

107. **Rosellinia plana** (Preuss) Sacc. *Sph.* *plana* Preuss, in Linnæa 1022

XXVI. p. 712 (1853). — Sparsa; peritheciis, umbilicato-depressis, atris; ostioliis nudis, punctiformibus, intus fuscis; ascis clavatis,

quatuor sporas foventibus, sporidiis oblongis, paraphysibus nullis.

Hab. in ligno vetusto, Hoyerswerda (Germania).

108. **Rosellinia prorumpens** Bon. Abhand. p. 151 (*Ascotricha*). — 1023

Peritheciis globosis atris, aggregato-confluentibus, subimmersis, papilla parva conica præditis; ascis clavatis, paraphysatis; sporidiis ellipticis, curvatis, fusco-nigris, bipunctatis.

Hab. in ligno denudato in Germania.

109. **Rosellinia pulverulenta** Bon. Abhand. p. 151 (*Ascotricha*). — 1024

Peritheciis globosis v. ovoideis, nigris, punctatis, cæspitosis, pulvere fusco ferrugineo adpersis, ostiolo simplici; ascis cylindricis, paraphysatis; sporidiis oblongo-ellipsoideis, bipunctatis, fuscis.

Hab. in ligno putrido in Guestphalia. — Lignum eodem pulvere circumcirca inspersum.

110. **Rosellinia brunnea** Bon. Abhand. p. 152 (*Ascotricha*). — 1025

Peritheciis brunneis, conico-clivosis, rotundatis, basi applanatis, carbonaceis, astomis, liberis; ascis cylindricis, octosporis, paraphysatis; sporidiis ellipsoideis, brunneis, opacis.

Hab. in ramis Pruni Cerasi in Germania.

BOMBARDIA Fr. Summa Veg. S. p. 389 (in nota) (Etym. *bombarda*, ob perithecia bombardæ similia). — Perithecia superficialia, coriaceo-cornea, verticaliter elongata, fasciculata, glabra, minute papillata. Asci pedicellati, octospori. Sporidia, diu vermicularia, continua, hyalina, tandem ovoidea, fusca, hyalino-caudata. — Lignicolæ.

1. **Bombardia fasciculata** Fr. Summ. Veg. Scand. p. 389. Wint. in 1026

Hedw. 1874, p. 56, cum icone, *Sphæria Bombarda* Batsch, Elench. Cont. I. fig. 181. *Bertia Bombarda* (Batsch) Ces. et De Not. Schema Sf. it. in Comm. I. 225. — Peritheciis fasciculatis, superficialibus, elongatis, ventricosis, coriaceis, numquam collabentibus, humidis badio-fuscis, siccis nigricantibus, lævibus, glabris, ostiolo papillæformi, nigro, minuto, majusculis; ascis in pedicellum filiformem, longissimum attenuatis, 115-165 \approx 9-12; sporidiis diu conglobatis, cylindræis, vermicularibus, simplicibus, chlorino-hyalinis, 40-55 \approx 4, denique ovoideis, 14 \approx 7, fuliginæis caudâ hyalinâ, 1-septata, 24 \approx 4 basi auctis.

Hab. in ligno fagineo, salicino, betulino, carpineo etc., præcipue in discis cæsis, in tota fere Europa et Amer. bor.

2. **Bombardia bertioides** Ces. Myc. Born. p. 21. — Late effusa in 1027

subiculo tenuissimo maculari, plagas nigras ad lignum decortictum seu potius ad ambientem stratum peridermicum efficiens; pe-

ritheciis rugosis s. grosse granulatis, brunneis, ovatis, ostiolo vix prominente perforato; contextu consistente chartaceo; intus albis; sporidiis octonis, biseriatis, ex oblongo breviter cylindræis, leniter curvulis, episporio tenuissimo, 13-18 \approx 8, simplicibus, hyalinis, vel turbidulis, omnino conidia *Oidiorum* referentibus (tandem?); ascis mox diffluentibus nisi ex seriata sporarum dispositione divinandis.

Hab. in Sarawak (Borneo) in lignis putrescentibus. — Forma altera adest decalvata, quam omnino pro statu senescenti habere liceat. Tertia quoque forma magis abnormis, peritheciis irregularibus, turbinatis vel oblongis, in stipitellum passim attenuatis, sed sterilibus.

ANTHOSTOMELLA Sacc. Consp. Gen. Pyr. ital. p. 8. (Ety. sb *Anthostoma*, quia ejusdem analogum genus). — Perithecia submembranacea, globoso-depressa, peridermio typice circa ostiolum vix erumpens denigrato tecta. Asci octospori, rarissime tetraspori, typice paraphysati. Sporidia ovoidea v. oblonga, continua, fuliginea, mutica v. hyalino-appendiculata.

I. *Euanthostomella*: sporidiis muticis.

§ In Monocotyledoneis.

1. **Anthostomella punctulata** (Rob. et Desm.) Sacc. *Sphæria punctulata* Rob. et Desm. XIX, Not. p. 19. — Epi- rarius hypophylla, gregaria v. sparsa; peritheciis minutissimis globosis, innatis, atris, epidermide nigrificata tectis, $\frac{1}{8}$ mill. diam., ostiolo erumpente prominulo papilliformi nitido; ascis cylindricis 60 \approx 5; sporidiis octonis ovoideo-oblongis, monostichis, brunneis, 10 μ . long. 1028

Hab. in Gallia, Caen, in foliis vetustis *Caricis pendulæ*. — Sec. Niessl Beitr. p. 59, in ipsis exemplaribus Desmazierii ascis sunt 40 \approx 5 p. sporif.; sporidia 6-8 \approx 3-4, sæpe fabæformia.

2. **Anthostomella minima** Sacc. Mich. II. 255. Ab *Anth. punctulata* recedit sporidiis multo minoribus; peritheciis gregariis minutis globulosis, 70-90 μ . diam., epidermide punctiformi-nigrificata tectis; ascis cylindricis breve stipitatis, 45-55 \approx 4-5, octosporis paraphysatis; sporidiis, monostichis ovato-oblongis, inæquilateralibus, 4-5 \approx 2 $\frac{1}{2}$, fuligineo-olivaceis, minute 2-guttulatis. 1029

Hab. in culmo donacino, Conegliano (Italia boreali).

3. **Anthostomella lugubris** (Rob. et Desm.) Sacc., *Anthostoma lugubre* Niessl, Beitr. p. 58, t. VII, fig. 47. *Sphæria lagubris* Roberge in Desm. Not. An. Sc. nat. VIII. 1847, p. 172. *Sordaria* 1230

lugubris Ces. et de Not. Schem. p. 52. — Peritheciis majusculis, parenchymati haud mutato insidentibus vel subinnatis, gregariis solitariisve, epidermide nigro-maculosa tectis, subglobosis, coriaceo-carbonaceis, 400 μ . diam., ostiolo brevi conoideo, vix erumpentibus; ascis cylindricis, breviter stipitatis, apice rotundatis, 112-138 \approx 10-11 p. sporif.; membrana interna crassa, Ssporis; sporidiis oblique monostichis elliptico-oblongis utrinque attenuato-rotundatis, 19-20 \approx 9, opacis, atro-fuscis, nucleo oleoso, circulo hyalino; paraphysibus articulatis ascorum longitudine.

Hab. in foliis siccis Calamagrostidis arenariæ ad «Dune de Lyon sur. mer.» Calvados (ROBERGE).

4. **Anthostomella nitidissima** (Dur. et Mont.) Sacc. *Sph. nitidissima* 1031
Dur. et Mont. Syll. n. 831 et Fl. Alg., I, p. 523. — Gregaria confluens; peritheciis ovoideo-depressis, culmo atrato-nitido tectis, ostiolo prominulo obtuso; ascis subcylindricis, 80 \approx 5; sporidiis 8 oblongis simplicibus, brunneis, 10 \approx 3-4.

Hab. in culmis Arundinis Donacis, Alger (DURIEU).

5. **Anthostomella nigro-annulata** (B. et C.) Sacc. *Sph. (Obtectæ) nigro-annulata* B. et C. Cuban Fungi n. 889. — Peritheciis epidermide circum circa nigra, medio pallida, tectis; ascis linearibus; sporidiis uniseriatis oblongo-subellipticis fuscis, 13-15 \approx 7-7,5. 1032

Hab. in foliis putridis Yuccæ aloifoliæ, Aloes lineatæ in Cuba, Carolina sup., Africa australi.

6. **Anthostomella Yuccæ** Thuem. M. U. n. 1853. — Peritheciis sparsis gregariisve, epidermide circum circa breve nigrificata tectis, conico-hemisphæricis, nigris, parvis, ostiolo brevi perforante; ascis elongato-cylindræis, breviter stipitatis, interdum curvis, apice rotundatis, 100 \approx 6-7, octosporis; sporidiis ellipsoideis, fuligineofuscis, monostichis, 8 \approx 4, eguttulatis; paraphysibus filiformibus ascos æquantibus. 1033

Hab. in foliis Yuccæ aloifoliæ, Coimbra (Lusitania).

7. **Anthostomella phæosticta** (Berk.) Sacc. Mich. I, 374, F. it. t. 374. 1034
Sphæria phæosticta Berk. Crypt. Antarct. p. 59, t. 68, fig. IV. Curr. Simpl. Sph. t. 59, fig. 127. *Leptosphæria phæosticta* Awd. in Mycol. Europ. t. 11, fig. 154. — Peritheciis minusculis, $\frac{1}{5}$ mill. diam., globoso-depressis, innatis, ostiolo punctiformi-papillato vix erumpente, epidermide circum circa atro-inquinata; ascis cylindræis breve stipitatis apice rotundatis, 45-60 \approx 4, paraphysibus filiformibus obvallatis, octosporis; sporidiis oblongis, curvulis, utrinque rotundatis, -8 \approx 3 $\frac{1}{2}$, sæpe 1-2-guttulatis, olivaceo-fuscis.

Hab. in foliis putridis Hierochloes Brunonis, Caricis pendulæ, Arundinis Donacis, in Aucklandia. Britannia, Gallia et Italia.

8. **Anthostomella contaminans** (Dur. et Mont.) Sacc. Mich. II. 313. 1035

Sph. contaminans Dur. et Mont. Syll. n. 865 et Fl. Alg. p. 522.

— Sparsa vel gregaria, maculans; peritheciis minutis cortici immersis tectis, globosis aut ovoideis depressis ostiolisque vix prominulis atris; ascis tereti-clavatis, apice rotundatis breve stipitatis, 90-110 \approx 10, octosporis; sporidiis monostichis, oblongo-ellipsoideis, 15-18 \approx 6-8, olivaceis, dein atrofusis, initio strato hyalino obvolutis.

Hab. in petiolis foliorum Phœnicis dactyliferæ et Chamæropis humilis, Mostaganem et Alger (DURIEU, TRABUT).

9. **Anthostomella pisana** Pass. Micr. ital. in Rev. Myc. II, 35. — 1036

Peritheciis sparsis, pustulatin prominulis, epidermide nitido-nigricante tectis; ascis cylindricis brevissime stipitatis, rectis vel curvis. 8spor. 45 \approx 5 $\frac{1}{2}$; sporidiis uniseriatis ovalibus subinæquilateralis, tandem fuscis, 10 \approx 5; paraphysibus continuis, intus granulosis.

Hab. ad petiolos aridos Chamæropis humilis, in R. Horto Botanico Pisano (Ital. media). — Accedit forma spermatifera *Leptothyrium* referens, spermatiis bacillaribus hyalinis 7 $\frac{1}{2}$ \approx 1 $\frac{1}{2}$.

10. **Anthostomella platensis** Speg. F. Arg. Pug. III. p. 14. — 1037

Maculis stromaticis, epidermicis, parvulis, suborbicularibus $\frac{1}{3}$ - $\frac{1}{2}$ mill. diam., atris, sparsis v. laxe gregariis, rarissime confluentibus, ambitu determinato, areola latiuscula pallescente cinctis; peritheciis, globosis, atris, glabris, sub maculis profundiuscule immersis, $\frac{1}{3}$ - $\frac{1}{2}$ mill. diam., ostiolo conoideo, superficiem attingente, non exerto ornatis, contextu coriaceo-membranaceo, indistincte parenchymatico, fuligineo-atris; ascis cylindræo-subclavatis, sursum obtuse truncato-rotundatis, deorsum in pedicellum gracilem, breviusculum desinentibus, 90-110 \approx 10-12, octosporis, aparaphysatis; sporidiis oblique monostichis, elliptico-navicularibus, utrinque inæquilateraliter rotundatis, inferne appendice parva, globoso-hemisphærica ornatis, 20 \approx 7-8, obscure fuligineis, grosse uniguttulatis.

Hab. in culmis emortuis ad ripas fluminis Rio de la Plata dejectis putrescentibus, Amer. merid.

11. **Anthostomella Puiggarii** Speg. Fungi Arg. Pug. IV, n. 127. — 1038

Peritheciis minutis, 110-120 μ . diam., globosis, atris, immersis sparsis, membranaceo-subcarbonaceis, contextu indistincte parenchymatico, macula elongata, majuscula, vix fuscescente, linea stro-

matica atra, tortuosa limitata insidentibus; ascis cylindraceis sursum obtuse rotundatis, deorsum breve crasseque stipitatis, 65-70 \approx 6-7, aparaphysatis, octosporis; sporidiis recte v. oblique monostichis, elliptico-navicularibus, e latere valde compressis, 10-12 \approx 4-5 e latere 1,5-2 crass. utrinque obtusiusculis, opace fuliginis, primo strato mucoso tenui obvolutis.

Hab. in foliis dejectis Bambusaceæ cujusdam prope sepulchretum de Iporanga, Brasilia meridionali (J. PUIGGARI).

12. **Anthostomella Tenacis** (Cooke) Sacc. *Sphæria Tenacis*, Cooke 1039
N. Zeal. Fungi in Grev. VIII. p. 67. — Sparsa, punctiformis, tecta; peritheciis subglobosis, depressis; ascis cylindraceis, stipitatis; sporidiis ellipticis, continuis, 10 \approx 5, brunneis.

Hab. in Phormio tenace, Waitaki, Nov. Zelandia.

13. **Anthostomella eliminata** (B. et C.) Sacc. *Sphæria eliminata* B. 1040
et C. North Am. Fungi n. 943. — Peritheciis epidermide nigrificata supra ostiolum albâ tectis; ascis linearibus; sporidiis anguste oblongis uninucleatis, 14 \approx 3,5-4, monostichis.

Hab. in caule Smilacis, Alabama, Amer. bor.

14. **Anthostomella Smilacis** H. Fab. Sphér. Vaubl. p. 80, t. I, fig. 11. 1041
— Peritheciis numerosissimis, epidermide tectis, semi-insculptis, globosis, atris, vertice papillatis, diam. $\frac{1}{5}$ mill.; ascis cylindraceis, brevissime stipitatis, 8-sporis, 100-112 \approx 14; sporidiis, oblique monostichis, ovatis, atro-fuscis, 1-2-magniguttatis, 16-18 \approx 11-12.

Hab. ad ramos exsiccatos Smilacis asperæ. — A *Sphæria Smilacis* Cast. certe diversa.

15. **Anthostomella sepelibilis** (B. et C.) Sacc. *Sphæria sepelibilis* B. et 1042
C. North. Am. Fungi n. 928, Cooke New Jersey f. — Hysteriiformis, cuticula nigrificata tecta; sporidiis ellipticis, 1-2 nucleatis, 18 \approx 8, brunneis.

Hab. in caule Smilacis laurifoliæ in Carolina infer. et in New Jersey. — Sec. Berk. sporidia, 12-13, longa.

16. **Anthostomella smilacinina** (Peck) Sacc. *Sphæria* (caulicolæ) *smilacinina* Peck 29 Rep. on the St. Mus. — Peritheciis copiosis, minutis, epidermide nigrificata initio tectis, prominulis; ascis cylindraceis v. subclavatis; sporidiis stiptatis, ovoideis, v. inæqualiter ellipsoideis, flavo-olivaceis, 12-15 μ . longis, sæpius 1-nucleatis.

Hab. in caule Smilacinæ stellatæ, Center (Amer. bor.).

17. **Anthostomella sphæroidea** Speg. Fung. Arg. I, 179. — Peritheciis sphæroideis, minutis, 200-250 μ . diam., dense gregariis, atris contextu membranaceo-sub-carbonaceo, fuligineo-atro, superne epi- 1044

dermide extus punctiformi-nigrificata adnata tectis macula late albicante insidentibus; ascis cylindræis sursum subtruncato-rotundatis, deorsum in pedicellum brevem desinentibus, 75-80 \approx 6, paraphysatis, octosporis; sporidiis recte vel oblique monostichis, non vel 1-2 guttulatis, 9-12 \approx 4-5, intense fuligineis.

Hab. ad folia emortua putrescentia *Yuccæ gloriosæ*, a la Recoleta, Argent. Amer. boreali.

18. **Anthostomella Tomicum** (Lév.) Sacc. Fungi Ven. Ser. IV, 1, F. 1045 ital. t. 373. *Sph. Tomicum* Lév. Ann. S. N. 1848, p. 144, Cooke Hdb. p. 894. — Peritheciis innatis, e basi applanata convexulis, nitidulis, epidermide circum circa nigrificata tectis, ostiolo perforante obtusiusculo; ascis cylindræis, apice rotundatis, sessilibus 100-115 \approx 15-18, octosporis; sporidiis monostichis, ovoideo-oblongis, sæpe inæquilateralibus 15-16 \approx 8-9, 1-guttatis, fuligineis, muticis.

Hab. in foliis putrescentibus *Typharum Juncorum*, Graminumque in Italia, Gallia, Belgio, Britannia. — Var. *leptospora*; ascis 100 \approx 6-7; sporidiis 16 \approx 5-6. In foliis *Cladii Marisci* in Gallia.

19. **Anthostomella tumulosa** (Rob. et Desm.) Sacc. *Sphæria tumulosa* Rob. et Desm. XIX Not. p. 14. — Sparsa minuta epidermide nigricante tecta; peritheciis immersis evoideis nigris; ostiolis erumpenti-punctiformibus, nucleo livido v. nigro; ascis elongatis, cylindricis, 150-200 \approx 10; sporidiis majusculis, 20 \approx 6-6 $\frac{1}{2}$, octonis, brunneis, semi-opacis, oblongo-semiellipsoideis v. sublunulatis, uniseriatis, 1-3-guttulatis.

Hab. in Gallia, in caule *Junci articulati*.

20. **Anthostomella consanguinea** (Ces.) Sacc. *Sordaria consanguinea* Cesati in Rabh. F. E. 2661. — Peritheciis sparsis, punctiformibus, epidermide, vix nigrificata obtectis, demum perforantibus et verticem obtusum convexum revelantibus; ascis linearibus, 60-70 \approx 16; sporidiis 8, uniseriatis, ellipticis, ad utrumque polum subacutiusculis, primitus viridibus, dein fuscis, omni ætate in medio ocellatis.

Hab. in lamina exsiccata foliorum *Sabal Adansonii* in Horto Bot. Neapolitano, sub diu (CESATI).

21. **Anthostomella Trabutiana** Sacc. et R. Rev. mycol. III, f. IX, p. 27. 1048 — Peritheciis gregariis cortice nidulantibus, epidermideque ad ostium punctiforme-nigrificata velatis, globulosis, $\frac{1}{4}$ mill. diam.; ascis cylindricis, 100 \approx 5, p. sporif. 80-90, paraphysibus guttulatis obvalatis, octosporis; sporidiis monostichis, ovoideo-oblongis, 10-11 \approx 4, utrinque rotundatis, 2-guttulatis, olivaceo-fuscis.

Hab. in foliis emarcidis *Agaves americanæ* in Algeria (TRABUT).

22. **Anthostomella Parmula** (Lév.) Sacc. *Sphæria* (obtecta) *Parmula* 1049

Lév. Ann. Scienc. nat. 3, 1845, p. 52. — Gregaria; peritheciis globosis immersis nigris, collis in scutum discoideum dilatatis, 1–2 mill. diam.; ostiolis centralibus papillatis; ascis linearibus; sporiidiis ovoideo-oblongis, utrinque subattenuatis, fuliginis.

Hab. in insula Borbonia, ad culmos Gramineæ dictæ *Calumet* (PERVILLÉ).

23. **Anthostomella clivulosa** (Mont.) Sacc. *Sph. clivulosa* Mont. Syll. 1050

crypt. n. 853, et Guy., n. 563, t. 6, f. 4. — Culmicola, epidermide atrata semper tecta, linearis, confluens; peritheciis convexis depressis uni- aut pluriserialibus intus nigris, ostiolis minutis prominulis; ascis lineari-clavatis, breve stipitatis, sporidia 15 μ . longa, monosticha, 8 oblonga fusca foventibus.

Hab. in culmis arundinaceis?, Cayenna (LEPRIEUR).

§§ In Dicotyledoneis.

24. **Anthostomella clypeata** (De Not.) Sacc. *Sordaria clypeata* De 1051

Not. Sfer. ital. p. 24, t. XXII, — Peritheciis sparsis, peridermio atrato adhærente nigricante tectis, sphæroideis v. sphæroideo-depressis, ostiolo papillato brevi, perforante, subcarbonaceis, basi in sicco subcollabascentibus; ascis teretiusculis, tenuibus, 8-sporis, filiformi-paraphysatis; sporidiis oblongo-ellipsoideis, 10 μ . longis, initio luteolis, 1-guttatis, maturis badio-fuliginis.

Hab. in sarmentis Rubi fruticosi, Valle Intrasca, It. bor.

25. **Anthostomella conorum** (Fuck.) Sacc. *Amphisphæria conorum* 1052

Fuck. Symb. myc. App. III, p. 20. — Peritheciis sparsis subgregariisve, sub conorum squamarum epidermide, grisea, pustulatim elevata nidulantibus, 1 mill. diam., globosis, atris, ostiolo prominulo, brevi cylindræo, truncato, aterrimo, perforato, primo spermatiiferis, spermatis cylindræis, continuis, rectis, hyalinis, 20–24 \approx 4; demum ascigeris, ascis cylindræis, in stipitem attenuatis, 8spor, 104 \approx 11; sporidiis oblique monostichis, oblongo-ovatis, utrimque obtusis, continuis, fuscis, demum totis opacis, 15 \approx 10.

Hab. in squamis conorum dejectis Pini sylvestris sæpius pag. sup., Vollrads (Rhenogovia).

26. **Anthostomella nitidula** Sacc. Fungi Ven. Ser. IV. p. 2, F. ital. 1053

t. 131. — Peritheciis densiuscule gregariis sub epidermide pustulatim elevata et nitide circa quodque perithecium nigrificata nidu-

lantibus, e globoso lenticularibus, $\frac{1}{2}$ mill. diam., membranaceis, nucleo in vivo subolivaceo, ostiolo brevi conoideo-papillato epidermidem tandem perforante; ascis cylindricis, apice obtusatis, 110-120 \approx 10, breve crasseque stipitatis, paraphysibus filiformis sæpe guttulatis obvallatis, 8-sporis; sporidiis oblongo-fusoideis, inæquilateralibus, pluriguttulatis, diu hyalinis et 25 \approx 6-7, tandem fuscis, 20 \approx 5.

Hab. in ramulis tenuioribus Carpini Betuli, Selva, Treviso (Italia boreali).

27. **Anthostomella nigrotecta** (B. et Rav.) Sacc. *Sphæria nigrotecta*. 1054
B. et Rav. North Amer. Fungi n. 972. — Peritheciis nitidis centro e cuticula albis; ascis linearibus; sporidiis ellipticis, fuscis monostichis.

Hab. in foliis Ilicis in Carolina inf., America boreali.

28. **Anthostomella limitata** Sacc. Fungi Ven. Ser. IV. pag. 1, Fungi 1055
ital. tab. 129. — Peritheciis gregariis sub epidermide leniter tumefacta et circum circa breviter infuscata nidulantibus, membranaceis, globoso-depressis, $\frac{1}{6}$ mill. diam., atris; ostiolo breviter papillato, non vel vix perforante; ascis cylindricis, 70-85 \approx 4-5, breve crassiuscule stipitatis, apice rotundatis, paraphysatis, 8-sporis; sporidiis oblique monostichis ovoideis utrinque vel uno apice acutiusculis, continuis 10-12 \approx 4-5, dilute fuliginis, 2-guttulatis.

Hab. in caulibus ramulisque tenuioribus Corni sanguineæ, (asci 85 \approx 5; sporidia 10-12 \approx 4 $\frac{1}{2}$ -5), Rubi fruticosi (sp. 10-11 \approx 4 $\frac{1}{2}$), Kerriæ japonicæ (sp. 10 \approx 5), Viburni Lantanae (asci 80 \approx 5; sp. 10-12 \approx 4-5), Rusci aculeati (asci 80-90 \approx 5; sp. 10-11 \approx 4 $\frac{1}{2}$ -5), Angelicæ sylvestris (asci 70 \approx 4; sp. 10-11 \approx 4-4 $\frac{1}{2}$), Vincæ majoris et Salicis babylonicæ, in agro Tarvisino (Italia bor.); in ramis Salicis Humboldtianæ (asci 90-100 \approx 7-8; sp. 14-16 \approx 5-6), prope Buenos Aires Amer. australis.

29. **Anthostomella Olearum** Sacc. et Speg. Mich. I, 25, Fungi ital. 1056
t. 176. — Peritheciis innatis, sparsis, epidermide tumidula et leniter nigrificata velatis, globulosis, breve papillatis, subcarbonaceis; ascis cylindricis, longiuscule attenuato-stipitatis, 130-150 \approx 7-9, apice tunica integra, paraphysibus filiformibus spuris obvallatis, octosporis; sporidiis recte monostichis, ellipsoideis, utrinque obtuse rotundatis, 12-15 \approx 6-7, sæpe 2-guttatis, exappendiculatis, fuliginis.

Hab. in cortice duriore Oleæ europææ, Conegliano (Italia

bor.). — Accedit ad *Anth. clypeatam* (De Not.) Sacc., quæ ascis subclavatis, peritheciis distincte clypeatis satis recedere videtur.

30. **Anthostomella intermedia** Sacc. Mich. I, 327, Fungi ital. t. 172, 1057

Anthostoma intermedium Sacc. Fungi Ven. Ser. IV, p. 18, vix Nits. — Peritheciis gregariis, cortice nidulantibus, globosis $\frac{1}{2}$ mill. diam., breve papillatis, epidermidem denique perforantibus, parum nigrificantibus; ascis cylindræis breve stipitatis, apice rotundatis, rotundatis, 70–80 \approx 6, paraphysibus filiformibus guttulatis obvallatis, octosporis; sporidiis ovato-oblongis, 12–14 \approx 5, quandoque curvulis, minute 2–3-guttulatis, fuliginæis.

Hab. in ramis corticatis putrescentibus Salicis vitellinæ, Selva et Treviso (Italia boreali).

31. **Anthostomella Unedonis** (De Not.) Sacc. Fungi ital. t. 175, Mich. 1058

I, 328, *Sph. Unedonis* De Not. Microm. ital. Decad. IX, fig. VI. — Peritheciis gregariis e basi applanata, lenticularibus, $\frac{3}{4}$ mill. diam. peridermio circum circa nigrificato tectis, ostiolo brevi erumpente; ascis crasse cylindræis, apice obtusis, 150 \approx 12–14, stipite 25 micr. longo, paraphysibus filiformibus guttulatis asco longioribus obvallatis, octosporis; sporidiis oblongis utrinque rotundatis, 25 \approx 12, rectis, 1-guttulatis, fuliginæis, initio strato hyalino exiguo cinctis.

Hab. in truncis corticatis emortuis Arbuti Unedonis, Genova allo Scoglietto (DE NOTARIS).

32. **Anthostomella Intybi** (Dur. et Mont.) Sacc., *Sph. Intybi* Dur. et 1059

Mont. Syll. Crypt. n. 827 et in Fl. Alg. p. 518. — Tecta, atropinquinans; peritheciis sparsis immersis ovato-globosis persistentibus atris subprominentibus, pro ratione magnis, $\frac{3}{4}$ mill. diam., papilla decidua ostiolatis, nucleo fulvescenti evacuato intus nitidis; ascis clavatis 120 \approx 20; sporidiis distichis cymbiformibus, altero latere gibbis, initio biguttatis fuscidulis, dein 4-guttulatis intense fuliginæis.

Hab. in caulibus Cichorii Intybi, Alger (DURIEU). — Habitus *Anthostomatis Xylostei* (Pers.).

33. **Anthostomella Baptisiæ** (Cooke) Sacc. *Sph. Baptisiæ* Cooke, Rav. 1060

Fungi Amer. n. 200, et in Grev. — Sparsa vel subgregaria; peritheciis depressis, epidermide nigrificata tectis; ascis obclavatis; sporidiis elongato-ellipticis, binucleatis, 14 \approx 4.

Hab. in caulibus Baptisiæ perfoliatæ, Aiken, Carolina infer., socia *Phoma Baptisiæ* Cooke.

34. **Anthosnomella chionostoma** (Dur. et Mont.) Sacc. *Sph. chiono-* 1061

stoma Dur. et Mont. in Syll. Crypt. n. 845 et in Fl. Alg. p. 521. — Caulicola; peritheciis innato-erumpentibus convexo-hemisphæricis, atris, epidermide nigricante tectis, ostiolo zona alba farinosa cincto; ascis linearibus, 150-180 \approx 15; sporidiis, 25-30 \approx 12, simplicibus, brunneis, late cymbiformibus, uniseriatis.

Hab. ad caules herbarum, Alger (DURIEU).

II. *Entosordaria*: sporidiis hinc v. utrinque hyalino-appendiculatis.

35. **Anthostomella perfidiosa** (De Not.) Sacc. *Sordaria perfidiosa* De 1062
Not. Recl. pir. in Comm. II, p. 481 (1867). — Corticola; peritheciis majusculis, sparsis, rotundatis, peridermio pustulato et circum circa nigricante tectis, ostiolo valido, mucroniformi, nitido, apice emergente; ascis teretiusculis, octosporis, paraphysatis; sporidiis ellipsoideis, vertice papillula brevi obtusa hyalina auctis, badio-fuscis.

Hab. in cortice Aceris Pseudoplatani, Riva, (Italia boreali) (CARESTIA).

36. **Anthostomella Pœtschii** Niessl Not. Pyr. p. 41 (1876). *Amphisphaeria umbrinella* Fuck. Symb. myc. 159, Fungi rhen. 2028, nec De Not.! — Peritheciis sparsis, immersis, demum erumpentibus, strato pseudostromatico conico elevato apice retuso, atro fusco primitus tectis, majusculis, 0,8 mill. diam., globosis, fragilibus carbonaceis, ostiolo conico; ascis tubulosis, stipite brevi 160-180 \approx 12, sporidiis octonis, monostichis, oblongo-ovatis, rectis, atro-fuscis, episporio fragili subopaco, antice appendiculo brevi conico hyalino, 20-24 \approx 10-12; paraphysibus multis, tenuibus guttulatis, simplicibus vel sparse ramosis. 1063

Hab. in cortice Aceris Pseudoplatani prope Cœstrich et Kremsmünter (Germania). — Sporidiis non utrinque appendiculatis mox dignoscitur ab *A. umbrinella*. Verisimiliter vero non diversa ab *A. perfidiosa* (De Not.) Sacc.

37. **Anthostomella appendiculosa** (B. et Br.) Sacc. Mich. II, 234 et 1064
Fungi ital. t. 174, *Sphaeria appendiculosa* B. et Br. Brit. Fungi n. 613, t. 7, f. 20. — Peritheciis gregariis v. subsparis, globoso-depressis, $\frac{3}{4}$ mill. diam.; peridermio circum circa nitide nigricante et adhærente velatis; ostiolo papillato breviter extante; ascis cylindræis, breve stipitatis, 130-135 \approx 10-11, aparaphysatis, 8sporibus; sporidiis diu subfusoides sursum acutis, basi appendicula rostriformi obliqua 8 micr. longa, facile secedenti auctis (una cum appendice) 28 \approx 7-8, 4-guttulatis, vel 1-nucleatis, [hyalinis, tandem

(etsi rarius et extra ascos) ovoideo-oblongis, continuis, 15–16 \approx 5–6, subfuligineis.

Hab. in sarmentis emortuis Ruborum in Britannia, Italia, Lusitania, Gallia et Argentina (Amer. austr.).

38. **Anthostomella confusa** Sacc. *Sph. appendiculosa* B. et C. North Amer. Fungi n. 967, nec B. et Br. — Peritheciis hic illic congestis, basi epidermide arcte cinctis; ascis oblongis; sporidiis biseriatis fusiformibus quadrinucleatis, 12–13 μ . longis, utrinque appendicula filiformi, recta, hyalina auctis. 1065

Hab. in foliis Sapindi, Texas (C. Wright). — Ab *A. appendiculosa* certe diversa, etsi, ut videtur, immatura descripta.

39. **Anthostomella umbrinella** (De Not.) Sacc. *Sphæria umbrinella* De Not. Micr. ital. Dec. IX. fig. V. — Peritheciis globulosis, laxe gregariis, cortice immersis, ostiolo erumpente et circum circa peridermium clavante et nigrificante; ascis teretibus breve stipitatis, paraphysibus filiformibus guttulatis obvallatis, octosporis 160 \approx 12 sporidiis oblique monostichis ellipsoideis fuligineis, 22–24 \approx 12–14, utrinque apiculo minuto hyalino auctis. 1066

Hab. in cortice Castanearum dealbato prope Genuam (Italia).

40. **Anthostomella Closterium** (B. et C.) Sacc. *Sph. Closterium* B. et C. North Amer. Fungi n. 933. — Minuta, initio epidermide nigro-nitente tecta, dein erumpens; ascis lanceolatis; sporidiis ellipticis utrinque appendice longa curvata, totis 50 μ . longis. 1067

Hab. in ramis Spirææ opulifoliæ, in montanis New York, America boreali. — Rarius sporidia in duas partes ellipsoideas dividuntur.

41. **Anthostomella rostrispora** (Gerard) Sacc. Mich. I, 25, *Sph. rostraspora* W. R. Gerard, Torr. bot. Cl. Jun. 1874. — Peritheciis gregariis subglobosis, stromate nigro fibrilloso insidentibus; ascis cylindraceis; sporidiis ovoideis, fusco-brunneis, 15 \approx 5, appendicula seu rostello hyalino auctis. 1068

Hab. in basi caulis Inulæ Helenii, Amer. bor. — Var. *foliicola* Fungi ital. t. 177; peritheciis epidermide circum circa nigrificata tectis, $\frac{1}{4}$ mill. diam.; ascis cylindricis, 91–115 \approx 5, octosporis; sporidiis monostichis, oblongo-ellipsoideis, 9–14 \approx 4, 2-guttulatis, fuligineis, utrinque rostro curvo hyalino auctis, rostro inferiore 7 μ . longo, superiore 5 μ . longo. — In foliis putrescentibus Castaneæ vescæ, Conegliano (Italia boreali).

42. **Anthostomella achira** Speg. Fungi Arg. Pug. IV. n. 128. — Macula nulla; peritheciis sparsis, immersis, lenticulari-globulosis, co- 1069

riaceo-membranaceis, glaberrimis, atris; ascis cylindræis v. clavatis, sursum plus minusve rotundatis, crasse tunicatis, operculatim dehiscentibus, deorsum breve attenuato-stipitatis, 90-140 \approx 7-10, aparaphysatis, octosporis; sporidiis oblique monostichis v. distichis, ellipticis, 16-17 \approx 5 (25 μ . long. cum caudis), quandoque inæquilateralibus, primo hyalinis dein fuliginæis, strato mucoso ac utrinque cauda conico-acutiuscula, sæpe leniter curvula ornatis, grosse 1-guttulatis, levissimis.

Hab. in foliis dejectis putrescentibus Cannæ glaucæ (vulg. Achira) in uliginosis nemorosis, Palermo, Argent. Amer. austr.

43. **Anthostomella mirabilis** Spég. in Rev. Mycol. 1880, p. 28 nota 4, 1070
Mich. II, 313. — Peritheciis globosis subcarbonaceis, atris, parenchymate immersis, ostiolo papillulato exerto donatis, 180-200 micr. diam.; ascis cito diffluentibus; sporidiis elliptico-sublunariiformibus e latere compressis curvulis, fuliginæis, utrinque apiculo hemisphærico, hyalino auctis, strato mucoso obvolutis, sæpe uni-guttatis, 15 \approx 5½-6, e latere 3½-4 μ . cr.

Hab. in foliis putridis Ananassæ, Toulouse (Gallia).

44. **Anthostomella scotina** (Dur. et Mont.) Sacc. *Sph. scotina* Dur. 1071
et Mont. Fl. Alg. pag. 534 et Mont. Syll. n. 852. — Subinquinans; peritheciis immersis sparsis punctiformibus extus et intus atris cum ostiolo late conico tandem erumpente ovoideis; ascis numerosis cylindricis, sporidiis 6-8 oblongis, 10 μ . longis, tandem fuscis, ex utroque fine obtuso appendiculatis aculeatisve.

Hab. in culmis Scirpi lacustris, La Calle (DURIÉU).

45. **Anthostomella unguiculata** (Mont.) Sacc. *Sph. unguiculata* Mont. 1072
Syll. Crypt. n. 861 et Fl. Chil., VII, p. 464, t. 9, f. 8. — Hypophylla; peritheciis globosis, endogenis, atris; ostiolo eumorpho prominulo; ascis cylindricis 8-sporis; sporidiis, oblongis, simplicibus, fuscis, altero fine unguiculo hyalino instructis.

Hab. in foliis Desfontainiæ?, in Chile (GAY).

46. **Anthostomella italica** Sacc. et Spég. Michel. I, 328, Fungi ital. 1073
t. 178. — Peritheciis gregariis, foliorum parenchymate immersis, epidermide vix perforata et circum circa breve nigrificata velatis, globoso-depressis, 1½ mill. diam., brevissime papillatis; ascis cylindræis, breve stipitatis, 80-90 \approx 10, paraphysibus (spuriis?) crassiusculis, pluriguttulatis, obvallatis, octosporis; sporidiis oblique monostichis, obovatis, curvulis, 18-22 \approx 6-7, 2-guttatis, fuliginæis, cauda hyalina 1½-2 obtusiuscula basi auctis.

Hab. in foliis putrescentibus *Sacchari stricti* nostratis, nec non *Bambusæ* cultæ, Susegana (Italia boreali).

- ***Anthostomella affinis** Sacc. Mich. I. 439. — A typo differt peritheciis duplo majoribus, sporidiis paulo brevioribus; nempe peritheciis $\frac{3}{4}$ mill. diam.; ascis 90–100 \approx 8; sporidiis 15–16 \approx 6. — In caulibus putrescentibus *Galii sylvatici*, Belluno (SPEGAZZ.).
47. **Anthostomella Bambusæ** (Lév.) Sacc. *Sph.* (conferta) *Bambusæ* 1074
Lév. Ann. Scienc. nat. 3, 1845, p. 50, *Hypopteris Bambusæ* Berk. Dec. of Fungi n. 485. — Peritheciis globosis, confertis, intus albidis, stromate subeffuso carbonaceo nigro obtectis, ostiolis prominulis obtusis; ascis cylindræis, paraphysatis; sporidiis (sec. Berk.) ellipsoideo-oblongis, fuscis, 14 μ . longis, appendicula hyalina basi auctis.

Hab. ad culmos *Bambusæ arundinacæ*, in montibus Nāngki, in India orientali.

48. **Anthostomella Rehmii** (Thuem.) Rehm Asc. Diagn. n. 387, *Am-* 1075
phisphaeria Rehmii Thuem. Myc. univ. n. 464. — Peritheciis solitariis, epiphyllis, epidermide tectis, demum perforantibus, atris; ascis cylindræis, curvulis, apice obtusis, hyalinis, 120 \approx 10, octosporis; sporidiis ovatis, utrinque acuminatis, sæpe inæquilateralibus, 1–2-nucleatis, polo altero obtusiore ibique appendiculâ hyalina, brevissima caudatis, fuscidulis, uniseriatis, 15 \approx 4,5–5; paraphysibus elongatis, tenuibus, ramosis, hyalinis, Jodi solutione adhibita valde cœrulescentibus.

Hab. in Bavaria, Bayreuth, in *Abietis pectinatæ* foliis emortuis ad ramos adhuc vivos, raro.

49. **Anthostomella tomicoides** Sacc. Fungi Ven. Ser. IV, 1, Fungi 1076
ital. t. 130. — Peritheciis sparsis gregariisve membranaceis sub epidermide circum circa nitide nigrificata et adhærente nidulantibus, sphæroideo-applanatis, $\frac{1}{2}$ mill. diam., atris; ostiolo argute conoideo epidermidem perforante et parum superante; ascis cylindricis brevissime crasseque stipitatis, 90–100 \approx 7–8, 8sporibus, paraphysatis; sporidiis suboblique monostichis, ovoideis, inæquilateralibus, continuis, minuteque hyalino-appendiculatis.

Hab. ad caules putrescentes *Carlinae vulgaris*, *Galii sylvatici*, *Salviae glutinosæ*, *Melampyri nemorosi*, in sylva Montello, Treviso (Italia bor.). — *Anth. Tomico* (Lév.) et præcipue *Anth. perfidiosæ* (De Not.) affinis, sed satis distincta.

III. *Desciscentes* (Macula stromatica nigra circa ostiolum nulla,
v. saltem non indicata).

50. **Anthostomella Genistæ** (Crouan) Sacc. *Sphæria Genistæ* Crouan 1077
Finist. p. 25. — Peritheciis ligno semiimmersis peridermio tectis,
sphaericis, 1 mill. diam.; ostiolo brevissimo peridermium perforan-
te; ascis cylindræis, octosporis, monostichis, cymbiformibus, brun-
neis, 4-guttulatis,

Hab. in ramulis Genistæ scopariæ, Finistère (Gallia).

51. **Anthostomella abdita** (B. et C.) Sacc. *Sphæria* (Obtectæ) *abdita* 1078
B. et C. Cuban Fungi n. 857. — Gregaria, epidermide tecta, cõr-
tice immersa; ascis brevibus; sporidiis late cymbiformibus quater-
nis cornicoloribus, 15-25 \approx 8-12.

Hab. in ramis Diptericeis odoratæ in Cuba.

52. **Anthostomella Cytisi** (Fuck.) Sacc. *Myriocarpa Cytisi* Fuck. Symb. 1079
myc. p. 116, t. VI, fig. 36. — Peritheciis dense gregariis, sub epi-
dermide nidulantibus, aterritis, vertice epidermidi dealbatæ ad-
natis simulateque albo-papillatis; ascis breviter stipitatis, oblongis,
obtusis, octosporis 68 \approx 12; sporidiis lanceolatis, rectis, continuis,
primo 2-4 guttulis, hyalinis, demum fuscis, 24 \approx 8.

Hab. in ramulorum alis Cytisi sagittalis prope Æstrich
(Rhenogovia). — Sec. Fuck. spermogonium sistit *Septoriam* (Psi-
lothecium) *innumerabilem* Fuck.; peritheciis punctiformibus, sub-
cutaneis; spermatiis tereti-fusoideis, curvatis, 6-7-septatis, 44 \approx 4,
hyalinis.

53. **Anthostomella Loniceræ** (Fuck.) Sacc. *Myriocarpa Loniceræ* 1080
Fuck. Symb. myc. p. 117. — Peritheciis gregariis, numerosissimis,
punctiformibus, subglobosis, atris, tectis, simulate albo-papillatis;
ascis stipitatis, amplis, oblongis, retrorso-attenuatis, curvatis, 8-
sporis, 40 \approx 10; sporidiis subdistichis, oblongis, utrinque attenuatis,
simplicibus, 3guttulatis, hyalinis (an semper?), 14 \approx 4.

Hab. in ramis vivis Loniceræ alpigænæ, rarius, Jura
(MORTIER).

54. **Anthostomella africana** (K. et C.) Sacc. *Sphæria africana* Kalch. 1081
et Cooke Grev. 1880, p. 29, Tab. 137, f. 29. — Sparsa, caulicola,
erumpens; peritheciis subglobosis, atris, nitidis, pertusis, semi-emer-
sis; ascis cylindræis; sporidiis uniseriatis, amygdalæformibus,
atro-fuscis, opacis, 22-32 \approx 12-15.

Hab. in caulibus herbaceis in Africa australi.

55. **Anthostomella sulcigena** (Mont.) Sacc. *Sph. sulcigena* Mont. Syll. 1082
Crypt. n. 856 et Guy., mss., n. 566. — Seriata; peritheciis tectis, hemisphæricis dimidiatis superne fusco-lanatis, epidermidi adnexis, ostiolo erumpente punctiformi; ascis diffluentibus; sporidiis ovoideis, fuscis a latere visis plano-concavis, $20 \approx 10$, e latere 5 *p.* cr.
Hab. in petiolis Palmæ cujusdam, sub epidermide, Cayenna (LEPRIEUR).
56. **Anthostomella stegophora** (Mont.) Sacc. *Sph. stegophora* Mont. 1083
Syll. n. 854 et Guy. mss., n. 564. — Bullato-erumpens, tecta, lineari-oblonga elongataque; peritheciis seriatis, atris, sphæricis, nigro-farctis, stromate concolori immersis; ostiolis globosis prominulis; sporidiis fuscis ex oblongo amygdaloideis.
Hab. in culmis arundinaceis? Guyana (LEPRIEUR).
57. **Anthostomella oblectans** (Ces.) Sacc. *Sordaria oblectans* Ces. 1084
Myc. Born. p. 23. — Peritheciis e corticibus gregatim erumpentibus obovatis vel obconicis, 2–3 mill. altis, atris, lævigatis, vertice rotundato in ostiolum minutum acutum abrupte desinente; nucleo albido; paraphysibus capillaribus ascum paullo superantibus; ascis filiformibus pro $\frac{2}{3}$ longitudinis in clavulam cylindraceam exeuntibus, $30 \approx 2$; sporidiis minutis, $2 \approx 1$, oblongis, utrinque obtusis, simplicibus, fuscis, octonis.
Hab. in corticibus Sarawak Bornei. — Dimensiones sporidiorum (an ex errore?) justo minores videntur.
58. **Anthostomella palmacea** (Cooke) Sacc. *Sphæria palmacea* Cooke 1085
Calif. Fungi in Grev. VII, p. 12. — Immersa, tecta; peritheciis minimis, subglobosis; ascis cylindraceis; sporidiis ellipticis, uniseriatis, constrictis, brunneis, $13 \approx 6$.
Hab. in foliis emortuis Palmarum in California. — Solummodo conspicitur si cuticula tegens madefat.
59. **Anthostomella Paliuri** H. Fab. Sphær. Vaubl. p. 81, t. I, fig. 12. 1086
— Peritheciis sparsis, nonnullisve confertis, ligno fracido infixis, epidermide tectis, globosis, atris, vertice erumpenti papillatis $\frac{2}{3}$ mill. diam.; ascis cylindraceis, stipitatis, 8-sporis, $70-80 \approx 8$; sporidiis simplicibus, oblique monostichis, plus minusve regulariter ovalibus, fusco-fulvis, $10-15 \approx 5-6$.
Hab. ad ramos emortuos Paliuri aculeati, Vaocluse (Gallia).
60. **Anthostomella delitescens** (De Not.) Sacc. Mich. I, 328. *Sphæria delitescens* De Not. Micr. ital. Dec. VIII, p. 124, fig. IX. 1087
— Peritheciis gregariis subcutaneis, globoso-depressis, ostiolis conoideis vix perforantibus; ascis teretibus, subsessilibus, octosporis,

100-110 \approx 10-12; sporidiis oblique monostichis, oblongo-ellipsoideis, utrinque rotundatis, guttulatis, fuliginis, 28-30 \approx 7-7.5.

Hab. ad ramos *Ericæ arboreæ* prope Genuam (Italia). — Cutis supra perithecia sæpius cinerascit.

61. **Anthostomella nobilis** Sacc. et Sp. Mich. I, p. 328, F. ital. t. 173. 1088

Peritheciis macula stromatica vix ulla cinctis, globosis papillulatis, $\frac{1}{3}$ - $\frac{1}{2}$ mill. diam., nigris; ascis cylindræis, breve stipitatis p. sporif. 90 \approx 8, octosporis, paraphysisibus guttulatis obvallatis; sporidiis oblongo-ovoideis, 15-16 \approx 6-7, fuliginis, eguttulatis.

Hab. in ramis corticatis *Lauri nobilis* putrescentibus, Conegliano (Ital. bor.).

62. **Anthostomella acanthina** (Mont.) Sacc. *Sph. acanthina* Mont. 1089

Syll. Crypt. n. 866 et in Fl. Alg. p. 533. — Confertim sparsa, epidermide innata, semper tecta; peritheciis globosis minutis pachydermaticis, prominulis, extus intusque atris, poro simplici pertusis; ascis cylindricis 70 \approx 10; sporidiis 15 \approx 6, continuis ellipticis obscuris.

Hab. in petiolis foliorum *Acanthi mollis*, Alger (DURIÉU).

63. **Anthostomella Pandani** (Rabh.) Sacc. *Sphæria Pandani* Rabh. 1090

Hedw. 1878, p. 45. — Gregaria; peritheciis minutis, innatis, atris, glabris; ostiolo brevi, depresso-conico; ascis fasciculatis, angusto cylindræis, octosporis, tunica tenuissima; sporidiis monostichis, 9-14 \approx 8, continuis, fuscis.

Hab. in *Pandani furcati* foliis, sociis spermogoniis, Calcutta.

64. **Anthostomella caulicola** (Ces.) Sacc. *Sordaria caulicola* Cesati 1091

Myc. Born. p. 23. — Gregarie effusa, erumpens, peritheciis depresso-hemisphæricis, brunneis, glabris, opacis, ostiolo minuto coronatis; ascis linearibus; sporidiis octonis, uniserialibus, ovoideis subcymbiformibus, simplicibus, fuscis, 4 \approx 2-3.

Hab. ex epidermide caulino *Monocotyledonæ* ejusdam marcescentis erumpens, Sarawak (Borneo). — Si volva stellata adesset, certissime habuissem pro *Astrocystide mirabili*, B. Br. in *fungis Ceylanicis*, p. 87. Dubium prorsus me subigit, num in fungo Berkeleyano de vera volva, a matrice rite discreta, agatur, num dirumpendo epidermis caplina fortuito volvæ formam sumpserit (Ces.).

65. **Anthostomella duplex** Sow., sec. Crouan Finist. p. 25 (*Sphæria*). 1092

— Sparsa, peritheciis sparsis, tectis, globosis, nigris, ostiolo erumpente, latiusculo, hemisphærico: ascis.....; sporidiis brunneis, cymbiformibus, 2-guttulatis.

Hab. in *Luzula maxima*, Finistere, Gallia (CROUAN); in petiolis *Sparganii* in Britannia (SOWERBY).

66. **Anthostomella? picacea** (C. et E.) Sacc. *Sphæria* (Immersæ) *picacea* C. et E. New Jersey Fungi in Grev. — Peritheciis globosis, subgregariis, ligno superficie nigro-maculato immersis; ascis cylindraceutis; sporidiis uniseriatis, cylindricis, obtusis, rectis, fuscis, 10 ≈ 4. 1093

Hab. in caulibus decorticatis *Vaccinii*, New Jersey. — An *Anthostoma*?

67. **Anthostomella? Visci** (Kalchbr.) Sacc. *Dothidea Visci* Kalchbr. 1094
Spep. Gomb. in Hedw. 1869, p. 117. — Peritheciis dense gregariis, confluentibusve, globoso-complanatis, epidermide rupta cinctis, atris, nucleo albo firmo; ascis amplis, cylindraceutis octosporis, paraphysibus ramosis obvallatis; sporidiis ellipsoideis, majusculis, fuscis.

Hab. in Visco in Ungaria.

68. **Anthostomella? Steinheilii** (Mont.) Sacc. *Sph. Steinheilii* Mont. 1095
Syll. n. 868 et in Ann., 2, I, p. 285, t. 13, f. 8 (*Sphæria*). — Innata, amphigena, convexa, oblonga lanceolatave, nigra nitida, macula fusca cincta; peritheciis minimis tectis atro-farctis, stromate fuscescente immersis, ostioliis aliis impressis; ascis...; sporidiis ellipsoideo oblongis, 2-3 guttatis.

Hab. in foliis emortuis *Chamæropis humilis*, Bone (Gallia) (STEINHEIL). — Species per dubia. Cl. Montagne primitus sporidia pro ascis habuit et guttulas pro sporidiis, quæ emendavit in Sylloge sua. De colore quoque sporidiorum cl. auct. silet.

ASTROCYSTIS B. et Br. Fungi of Ceylon p. 123, t. 7, f. 36. (Etym. *aster* et *cystis*, ob indumentum stellatum perithecorum). — Perithecia opaca, globosa, peridermio tecta, mox erumpentia papillata, sigillatim e volva stellata erumpentia. Asci cylindraceuti, octospori. Sporidia ovoideo-oblonga, fusca.

1. **Astrocystis mirabilis** B. et Br. Fungi of Ceylon l. c. n. 1078. — 1096

Hab. in culmis emortuis *Bambusæ*, Peradeniya (Ceylon). — Dense gregaria; volva («an ex peridermio orta?») sæpius in 6 lacinias fissa, perithecium unicum rarissime bina includens; perithecia obtusiuscule papillata pertusa (ex icone), minuta, 1/2 mill. cr.; asci teretes deorsum attenuati; sporidia oblique monosticha, ovoideo-oblonga, 1-nucleata, 12-13 ≈ 6-7.

ANTHOSTOMA Nits. Pyr. Germ. p. 110 (Etym. *anthos*, flos, et *stoma*, ostiolum, ob formam ostiolorum *Anth. decipientis*). — Stro-

ma late effusum eutypeum v. valseum v. verruciforme, corticolum v. lignicolum. Perithecia membranacea, numquam vere carbonacea, stromate immersa. Asci typice cylindracei, octospori, paraphysati. Sporidia ellipsoideo-oblonga, fuliginea. — Spermogonia in paucis nota cytisporea.

1. *Euanthostoma*: stromate late effuso, eutypeo.

1. **Anthostoma melanotes** (B. et Br.) Sacc. Mich. I, 326, Fungi ital. 1097 t. 164. *Sph. melanotes* B. et Br. Fungi n. 634, t. 9, fig. 6 (1852). — Stromate effuso ligno omnino immerso, ejusque superficiem nigricante ac maculas formante, plerumque elongatas, sæpe confluentes, fusciscentes vel tandem nigricantes, opacas, postremo intus quoque nigro-limitato; peritheciis exiguis, depresso globosis, omnino immersis, monostichis, laxè sparsis, ostiolo exserto, minutissimo, integro, conico v. hemisphærico, nitidulo, tandem perforato instructis; ascis cylindricis breviter pedicellatis, octospori, paraphysibus simplicibus, eseptatis obvallatis, $70 \approx 7.5$; sporidiis oblique monostichis, obtuse fusiformibus, rectis v. rarius nonnihil inæquilateralibus, nigricantibus, $12-14 \approx 5-6$.

Var. *Schmidtii* (Auersw.) Nits. Pyr. Germ. p. 116, Sacc. Fungi italici t. 163. A specie vix differt ascis sporidiisque paulo angustioribus, primis $80 \approx 4-5$, postremis $13-14 \approx 4-5$.

Hab. species et varietas in ramis decorticatis Fraxini, Fagi, Quercus, Rhamni, Castanæ, Alni, Pyri Mali in Germania, Helvetia, Italia, Britannia et Fennia.

2. **Anthostoma tomentosum** (Ehrens.) Sacc. Cfr. Nits. Pyr. Germ. 1098 p. 117. — *A. melanoti* affine, differt stromatibus brunneo-ochraceis, pilis conidiophoris subtomentosis; ostiolis minoribus, rotundis, nitidis; ascis..... resorptis; sporidiis ovoideis, $6 \approx 4$, rectis fuligineis.

Hab. in lignis in Germania (herb. KUNZE).

3. **Anthostoma ferrugineum** Nits. Pyr. Germ. pag. 118. — Stromate 1099 immerso, effuso, in ligno superficie maculas ferrugineas, elongatas, striæformes, rarius ellipticas v. suborbiculares ac parum elevatas efficiente, parte immersa tamquam ligni substantia nigricante formata ac tandem nigro-limitata; peritheciis alte immersis, monostiche sed ordine inæquali dispositis, singulis in soros arctius confertis quorum mediis concentricis, marginalibus vero conniventibus, symmetricis, omnibus autem globosis, minutis, aterrimis, in collum longam, tenue, cylindricum subito attenuatis; ostiolis nunc vix exsertis, minutissimis, perforatis, umbilicatis, nunc contra elon-

gatis, cylindricis vel nonnihil ventricoso-incrassatis, subtorulosis, dense stipatis; ascis cylindricis, pedicellatis, paraphysibus filiformibus, simplicibus, esepatis, crassiusculis obvallatis, octosporis, 80-100 \approx 8 p. sporif.; sporidiis recte v. oblique monostichis, ovalibus, rectis, nigricantibus, 12 \approx 5-6.

Hab. in ligno putrido Carpini, Betuli et Salicis prope Münster et Æstrich (Germania). — Habitus fere *Endoxyle*.

4. **Anthostoma venetum** Sacc. Mich. I, 25, Fungi ital. tab. 128. — 1100

Peritheciis laxè gregariis ligno immutato v. parum infuscato immersis, globosis, $\frac{1}{4}$ mill. diam., aterrimis, ostiolo conoideo-truncato, ligni superficiem attingente, dein perforato; ascis cylindraceis, 120-130 \approx 18, breviter stipitatis, apice tunica integra crassiuscula truncatis, octosporis; sporidiis, oblique monostichis, ovato-oblongis, 30 \approx 12-13, utrinque obtusiusculis, crasse 1-3-nucleatis (nucleis quandoque oblique rimosis), intense fuliginis.

Hab. in ligno putrescente Pyri v. Mali socia *Propoli versicolori* Fr. f. *lactea*, Conegliano, Italia bor. (SPGAZZINI).

5. **Anthostoma urophorum** Sacc. et Speg. Mich. I, 327, Fungi ital. 1101

t. 166. — Stromate superficiali in lignum breve penetrante, albicante, perithecia singula v. pauca ambiente, subcirculari, minuto; peritheciis ligno immersis, globulosis, $\frac{3}{4}$ mill. diam. nigris, ostiolo breve papillato parum emergente; ascis cylindraceis, 100-110 \approx 8, breve stipitatis, apice, lumine integro, obtusis, paraphysibus guttulatis obvallatis, octosporis; sporidiis oblongo-ovoideis, 15-22 \approx 5-6 $\frac{1}{2}$, utrinque acutiusculis, 2-guttulatis, fuliginis, basi apiculo hyalino, raro sub-lobulato auctis.

Hab. in ligno decorticato (Ulmi?) putrescente, Conegliano, Italia bor., vere 1877, rarissime.

6. **Anthostoma atro-punctatum** (Schw.) Sacc. *Sph. atro-punctata* Schw. 1102

Carol. n. 44, Fr. S. M. II, 351, *Diatrype atro-punctata* Berk., Curr. Comp. Sph. n. 66, fig. 70. — Latissime effusa, lævis, ligni superficiem dealbens, intus aterrima, peritheciis sparsis, ostiolis punctiformibus nigris; ascis crasse cylindraceis, breve stipitatis; sporidiis submonostichis, ovoideo-navicularibus, 25-30 \approx 8-9, fuliginis, granulosis.

Hab. in ramis decorticatis crassioribus, quercinis præsertim, Carolina, Ohio, Florida, New York, Amer. bor. — Latissime, interdum viginti pedum longitudine ambit arbores emortuas, adhuc stantes, subæquale, hinc inde rugulosum, margine nigro undulato limitatum; perithecia monosticha, non conferta, tecta stromate tenui

nitente, adeo rigido, ut cultro dissecto, strideat: ostiola convexa, levia, nitida, superficiem nigro-punctatam reddunt.

7. **Anthostoma areolatum** Nits. Pyr. Germ. p. 115. — Stromate effuso, ligno immerso, parte immersa ligni substantia, specie immutata formata sed undique nigro-limitata, in superficie sæpe nonnihil elevata ac peritheciis parum protuberantibus tuberculosa, ceterum levi, fere nitidula, mox nigrificata, maculasistente, nunc breves, ovatas v. ellipticas, nunc contra elongatas sæpeque confluentes; peritheciis subglobosis v. sæpius a latere parum compressis, majusculis, irregulariter sed plerumque dense ac monostiche sparsis, parte superiore plus minus emergentibus, ligno v. stromatis strato extimo, tenuissimo, nigrificato tectis, ostiolo minutissimo, papillaformi, integro, tandem poro angusto pertuso in vertice coronatis (rârissime occurrunt ostiola elongata, cylindrica, recta v. fasciculatim erumpentia): ascis cylindricis, breviter basim versus attenuatis, octosporis, paraphysibus filiformibus simplicibusque obvallatis, 65-72 \approx 9-10; sporidiis oblique monostichis, ovalibus, utrinque rotundatis, obtusissimis, rectis, nigricantibus, 10-12 \approx 6-7.

Hab. in ramis crassioribus decorticatis Fagi sylvaticæ, prope Münster (Germania).

8. **Anthostoma discincolum** (Schw.) Sacc. *Sph. discincola* Schw. Carol. n. 63, Fr. S. M. II, 368, Curr. Comp. Sph. n. 106, fig. 105. — Emerso-superficiale, peritheciis globosis confertis nigris truncato-annulatis, furfure cinereo-albo obrutis; ascis..... jam resorptis; sporidiis subgloboso-ovoideis v. ellipsoideis, 15 μ . long., atro-fuliginosis.

Hab. in disco truncorum cæsorom Mali in Carolina (America bor.). — Irregulare, subrotundum, rugosum, stromate tenui nigro in ligno profunde penetrans; perithecia sparsa, majuscula, urceolata, ore minuto orbiculari coarctato, apice aperta, sed ex massa farinacea (papilla insititia) obturata.

9. **Anthosoma exutans** (Cooke) Sacc. *Diatrype exutans* Cooke Fungi of Texas p. 143. — Late effusum, nigrum, subcuticulare; ostioliis punctiformibus, depressis; ascis cylindræis; sporidiis ellipticis, utrinque attenuatis, brunneis, uninucleatis, 15 \approx 8.

Hab. in ligno vetusto quercino, Houston, Texas (Amer. bor.) et Maungaroa (Nova Zelandia).

10. **Anthostoma inquinans** Nits. Pyr. Germ. pag. 114. — Stromate effuso, interrupto, ambiente v. brevi, maculæformi, matrici omnino innato, superficie sola, atro-inquinata, immo aterrima, opa-

ca, peritheciis irregulariter v. gregatim sparsis, paullo prominentibus tuberculosa; stromatis maculis, saltem in matricis superficie, finibus certis haud circumscriptis; peritheciis exiguis, subglobosis, laxe sparsis ac vix umquam compressis, parietibus crassis instructis substrati strato supremo, haud fucato immersis, plus minus exstantibus, singulis tuberculo ligneo inclusis, ostioliis minimis, papillæformibus, integerrimis, tandem poro, pro ratione latiusculo pertusis, tubercula coronantibus; ascis cylindricis, subsessilibus, octosporis, membrana crassa, paraphysibus tenuissimis, filiformibus simplicibusque obvallatis, 140-180 \approx 12; sporidiis oblique v. recte monostichis, ovalibus, utrinque rotundatis, obtusissimis, rectis, nigricantibus, 20 \approx 7-8.

Hab. in ramis decorticatis *Aceris campestris*, Cappenberg (Germania) raro.

11. **Anthostoma italicum** Sacc. et Speg. Michel. I, 326, Fungi ital. 1107 t. 165. — Stromate superficiali, hinc inde varie effuso, nigricante; peritheciis gregariis cauli decorticato immerso-prominulis, globoso-depressis, $\frac{1}{3}$ - $\frac{1}{2}$ mill. diam., papillulatis, nigris; ascis cylindræis, 80-100 \approx 8-10, breve stipitatis, apice obtusis, lumineque sub-trifoveolato, paraphysibus filiformibus obvallatis, octosporis; sporidiis ovato-oblongis, 25 \approx 7-8, curvulis, 2- (raro 1-) guttulatis, utrinque brevissime hyalino-apiculatis, fuliginæis.

Hab. in caulibus herbarum majorum putrescentibus, Conegliano, Febr. 1877.

12. **Anthostoma intermedium** Nits. Pyr. Germ. p. 117. — Stromate 1108 ligao v. cortici innato et in eorum superficie ceterum haud mutata v. peritheciis protuberantibus parum pustulato-elevata maculas formante minutas, irregulares, approximatas, immo confluentes, ex cinereo sordide nigricantes, rarius peridermio adhærente, atro-inquinato tecto, sæpissime contra tandem, peridermio secesso, libero; peritheciis in singula macula paucis tantum, immo singularibus, minutis, depresso globosis, monostichis, matricis substantiæ incoloratæ nunc omnino immersis, nunc plus minus emergentibus, collo brevissimo ostioloque pro ratione majusculo, conico v. truncato, nitidulo; peritheciis 2-6 sæpe confertioribus, comiventibus, symmetricis; ascis cylindricis, breviter pedicellatis, paraphysibus filiformibus, simplicibus, unicellularibus, crassiusculis longe superatis, octosporis, 72 \approx 8 p. sporif.; sporidiis oblique monostichis, ovalibus, rectis, fuscis, 12 \approx 6.

Hab. in ramis siccis *Pruni spinosæ* prope Münster (Ger-

mania). — Inter *A. melanotes* et *A. ferrugineum* fere medium.

13. **Anthostoma pithodes** (B. et Br.) Sacc. *Diatrype pithodes* B. et Br. Fungi of Ceylon n. 1081. — Latissimum, stromate tenui nigro; superficie picea nitente; peritheciis oblongis; ostioliis papillæformibus; sporidiis magnis cymbiformibus apiculatis, 25 = 12.

Hab. in ligno putri, Ceylon et Borneo. — Affine *S. Clypeo** (Schw.) quæ vero sporidiis minutis, ellipsoideis, utitur.

14. **Anthostoma polynesia** (B. et C.) Sacc. *Sph. polynesia* B. et C. North Amer. Fungi n. 931. — Oblongum; peritheciis conditis; ascis filiformibus, sporidiis fuscis, oblongis, 7 μ . longis.

Hab. in lignis in montanis Virginiae, Amer. bor. — Format maculas oblongas, nigras ostioliis punctulatas.

15. **Anthostoma carbonescens** Nits. Pyr. Germ. p. 114. — Stromate longe lateque effuso, forma varia, irregulari, sæpe interrupto nec in ligni superficie finibus certis circumscripto, matrici omnino immerso ejusque stratum supremum ex fuligineo nigrificans ac tamquam in carbonem mutante; peritheciis grandiusculis, exacte globosis, rarius a latere compressis, sine ordine sparsis, nunc laxè distributis, nunc in caespites v. series elongatas densius congregatis parte inferiore substrato immersis, superiore protuberante, ligni strato extimo, nigrificato, tenui tectis, in collum brevissimum subito angustatis, ostioliis hemisphaericis, papillæformibus, integerimis, majusculis tandemque poro angustissimo pertusis; subinde peritheciis 2-3 tantum, immo singularibus stromate minimo, maculeforme exceptis; ascis cylindricis, breviter pedicellatis v. sessilibus, octosporis, paraphysibus simplicibus, filiformibus obvalatis, 120 = 10 p. sporif.; sporidiis monostichis, inæquilateralibus, atrofuscis, 16-18 = 7-8.

Hab. in ligno Carpini Betuli, Cëstrich (Rhenogovia) ubi legit FÜCKEL.

16. **Anthostoma microplacum** (B. et C.) Sacc. *Diatrype* (Lignosæ) *microplaca* B. et C. Cuban Fungi n. 839. — Tenue, orbiculare, hypophæum, ostioliis minutis papillæformibus parce notatum; «ascis teretibus, stipitatis, 37-50 = 4-5 octosporis; sporidiis ellipsoideis, inæquilateralibus, 5-6 = 3,5-4, monostichis, olivaceo-fuligineis».

Hab. in corticibus Laurorum in Carolina infer. et Cuba. — Affine *A. hypophlæo*.

17. **Anthostoma capnodes** (Berk.) Sacc. *Diatrype capnodes* Berk. Dec. of Fung. n. 70. Curr. Comp. Sphær. n. 69, fig. 74. — Effusum nigro-griseum, leviusculum, sed ostioliis prominulis punctulatum;

ascis cylindraceis breve stipitatis, octosporis; sporidiis monostichis ellipsoideis 10-12 \approx 5-6, fuscis dein atro-fuligineis, minute guttulis.

Hab. in ramis, in Nova Hollandia (Australia). — Habitus fere *Diatrypes Stigmatis*.

18. **Anthostoma grandineum** (B. et R.) Sacc. *Diatrype grandinea* B. 1114
et R. North Amer. Fungi n. 851^{bis}. — Late decorticans, transversim rimosum, ostiolis frequentissimis asperum; stromate subrufo; ascis clavatis; sporidiis fuscis subellipticis.

Hab. in ram quercinis in Carolina infer., Amer. bor. (RAVENEL). — Atiquot uncias latum, rufescens.

19. **Anthostoma anceps** Sacc. et Roum. Reliq. Myc. Lib. II, n. 50, 1115
t. XIX, fig. 2. — Peritheciis cortice innatis, globosis, $\frac{3}{4}$ mill. d., ostiolo obtuso pertuso parum emergente; ascis cylindraceis, breve stipitatis, 140-150 \approx 11-14, paraphysatis, octosporis; sporidiis oblique monostichis ellipsoideo-oblongis, 22-25 \approx 10-11, fuligineis, superne obtuse hyalino-apiculatis, crasse 1-guttatis.

Hab. in corticibus crassioribus Coniferarum, Malmedy (Germania). — Affine *A. Veneto*, a quo sporidiis apiculatis recedit; habitu admodum accedit ad *Valsariam apiculatam*, sed sporidia continua.

20. **Anthostoma Phillyreæ** (Mont.) Sacc. *Diatrype Phillyreæ* Mont. 1116
Syll. crypt. n. 746 et in Fl. Alg. p. 458 (*Sphæria*). — Effusum, serpens, convexo-depressum, ambitu repandum, nigrum, initio albo-punctatum, tandem inæquabile; peritheciis ovoideis, erectis in collum attenuatis, rufo-farctis, evacuatis, atris, nitidis; ostiolis impressis; ascis clavatis, 90 μ . longis; sporidiis 8 amygdaliformibus fuscis, altero latere gibbosis, 15 μ . longis.

Hab. in cortice et ligno Phillyreæ mediæ, Philippeville Algeriæ (DURIEU).

21. **Anthostoma defossum** (Dur. et Mont.) Sacc. *Sph. defossa* Dur. 1117
et Mont. Syll. Crypt. n. 820. Fl. Alg., I, p. 513, t. 26, f. 5 a-h. — Immersum; peritheciis globosis, in tuberculo ligneo aterrimo nidulantibus, intus cinereis, ostiolo in foveola vix prominulo; sporidiis cymbiformibus, fusciscentibus, biserialibus, 4-guttulatis, 20 \approx 10.

Hab. in caulibus Atropæ frutescentis, etc. Algeria (DURIEU).

22. **Anthostoma cubiculare** (Fr.) Nits. Pyr. Germ. p. 119. *Sphæria cubicularis* Fr. S. M. II, 477. *Sordaria Fleischhackii* Auersw. 1118
Corticis crassioris v. ligni substantia in perithecorum circuitu ac

præsertim in superficie, ut videtur (fungi stromate), exalbescente ac tubercula sistente minuta orbicularia elevata albida, haud raro confluentia, peritheciolorum ostioli pulchre nigropunctata; peritheciis in tuberculo (stromate) nunc singularibus nunc contra gregatim sociatis, globosis, confertis, 2-6, plerumque seriatim ordinatis, minutis, v. depressis, matrici omnino immersis, collo brevi, pro ratione crassiusculo, ostiolo aterrimo, minuto, hemisphærico, integro, poro tandem pertuso, parum v. vix exserto; ascis cylindricis, breviter basim versus attenuatis, octosporis, paraphysisibus filiformibus, tenuissimis, simplicibus stipatis, $160 \approx 16$; sporidiis oblique monostichis, late ovalibus, rectis, utrinque rotundatis, obtusissimis, rarius acutiusculis, fuscis, $18-22 \approx 10-14$.

Hab. in ligno putrescente Cratægi, Ulmi, Pini in Suecia, Germania, Gallia et Britannia.

23. **Anthostoma syciospermum** (Dur. et Mont.) Sacc. *Sph. syciosperma* Dur. et Mont. Syll. Crypt. n. 838, et Fl. Alg. p. 519. — Subglobosum, erumpens, uniloculare, stromate ligneo extus aterrimo tectum; perithecio simplici sphærico, membranaceo, nigro-farcto, evacuato fulvo, ostiolo nullo; ascis clavato-cylindricis, sporidia oblongo-attenuata, peponis seminibus simillima, brunnea, opaca, $25 \approx 15$ foventibus.

Hab. in ramulo *Quercus cocciferæ*, Alger (DURIÉU).

24. **Anthostoma sustentum** (Plow.) Sacc. *Sph. sustenta* Plowr. Calif. Sphær. Grevill. VII, p. 73. — Peritheciis immersis; ostioli inter fibras dealbatas matricis erumpentibus; ascis cylindræis, $150 \approx 10-15$; sporidiis ovoideis, atrofuscis dein nigricantibus, $20-25 \approx 10-11$.

Hab. in ramis dealbatis *Arctostaphyli* in California. — Stromma minus manifestum, ligni fibras dealbans.

25. **Anthostoma Oxyacanthæ** (Mont.) Sacc. *Sph. Oxyacanthæ* Mont. Syll. Crypt. n. 836 et in Cast. Supplem., p. 48. — Obtectum; peritheciis sphæricis in ligno albescente semimmersis confertis, extus intusque nigris opacis, ostiolo conico-acuminato; sporidiis ellipticis continuis brunneis, a latere visis coffeæformibus.

Hab. in ramis Cratægi *Oxyacanthæ* in Gallia australi (CASTAGNE).

26. **Anthostoma Xylostei** (Pers.) Sacc. F. ital. t. 162. *Sph. Xylostei* Pers. Disp. p. 4. *Amph. Xylostei* Pers. De Not. Sfer. ital. p. 71, t. LXXIV. — Peritheciis sparsis vel adproximatis seriatim, ligno v. cortice insculptis, peridermio nigricato tectis, dein emergentibus, sphæroideis, ostioli conoideis, apice subtruncatis, prominulis,

poro exiguo hiantibus, fragilibus, atris; ascis brevissime pedicellatis, cylindræis, 140-150 \approx 12-14 μ .; sporidiis octonis, oblique monostichis, ellipsoideis, vel sphæroideo-ellipsoideis, sæpe plasmate bipartito et simulate uniseptatis, non constrictis, fuscis, 15-17 \approx 9-11; paraphysibus gracilibus, brevibus.

Hab. in ramis corticatis v. denique decorticatis *Loniceræ Xylostei* et *L. balearicæ* in Suecia, Britannia, Gallia, Germania, Belgio, Fennia, Italia, Algeria. — Prima ætate ad *Anthostomellam* nutat.

27. **Anthostoma alpigenum** (Fuck.) Sacc. F. Ven. Ser. IV. 18, F. ital. 1123
t. 161. *Amphisphæria alpigena* Fuck. Symb. myc. App. I, p. 304. *Anth. oreophilum* Sacc. M. V. n. 228. — Peritheciis subgregariis sparsisve, sub epidermide nigrificata nidulantibus, *Anth. Xylostei* minoribus, globosis, nigris; ostiolis conico-papillatis, senio, papilla delapsa, latiuscule hiantibus; ascis cylindræis, 120-130 \approx 13, apice rotundatis, basi breviter attenuato-stipitatis, paraphysibus filiformibus, minute guttulatis obvallatis, 8sporibus; sporidiis oblique monostichis, amplis, ovoideis, sed e latere conspicue compressis, 20-25 \approx 12-13,5, utrinque obtusiusculis, sæpius curvulis, multiguttulatis, fuligineis.

Hab. in ramis ramulisque *Loniceræ alpigenæ* et *nigræ* in sylvaticis alpinis Helvetiæ et Italiæ bor. — Ad *Anthostomellam*, saltem in ætate juniore, nutat.

28. **Anthostoma Hederæ** (Fuck.) Sacc. *Amphisphæria Hederæ* Fuck. 1124
Symb. Myc. App. I. p. 16. — Peritheciis e maximis, sparsis, sub epidermide nigrificata nidulantibus, depresso-globosis, nigris, subtilissime papillatis, demum perforatis; ascis cylindræis, 8sporibus; sporidiis oblique monostichis, ellipsoideis, cum guttulis 4, magnis, fuscis, 26 \approx 10.

Hab. in ramis siccis corticatis *Hederæ Helicis*, Neuchâtel (Helvetia) ubi legit cl. MORTIER.

29. **Anthostoma hiascens** (Fr.) Nits. Pyr. Germ. p. 113. *Sph. hiascens* Fr. S. M. II. 477. — Stromate longe lateque effuso, indeterminato, ligni durissimi strato supremo nigrificato, in superficie tandem expallenti immerso, primum pilis longiusculis (conidiferis), ex fusco nigricantibus dense obsito; peritheciis omnino immersis depresse globosis, monostichis, nunc fere sparsis nunc contra, sed rarius, dense confertis, in collum brevissimum abrupte attenuatis; ostiolis valde incrassatis, grandiusculis, superficialibus, abbreviatis, rimis plerumque 4 alte ac radiatim quadripartitis, deinde fere

cupiliformibus; sporidiis obtuse fusiformibus, obscure nigricantibus, rectis v. inæquilateralibus, 32-36 \approx 8.

Hab. in trunco decorticato duro Fagi sylvaticæ in Suecia et Germania, ut videtur, rarius.

30. **Anthostoma decipiens** (De C.) Nits. Pyr. Germ. p. 111. Sacc. 1126
 Myc. Ven. p. 142. t. XIV, fig. 43-46, F. it. t. 167. *Sphæria decipiens* DC. Fl. fr. II, 285. *Sph. floriformis* Sow. — Stromate latissime effuso, indeterminato, cortici crassiori innato eumque ex cinereo mox extus intusque atroinquinante, superficie tandem exalbescente primum vero pilis aterrimis conidiferis subrectis, septatis, longiusculis, apice simpliciter v. verticillatim ramosis, rarius omnino simplicibus dense vestito; conidiis subcylindricis, utrinque acutiusculis, curvulis, hyalinis unicellularibus, in pilis eorumque ramulis acrogenis; spermogoniis sub corticis strato extimo natis, plerumque oblongis, margine repandis, seriatim sæpe ordinatis, multilocularibus, auratis, locellis innumeris, ordine haud perspicuo dispositis; spermatiis lineari-cylindricis, tenuissimis, curvatis, in cirrhus v. glebas rubras v. aureas tandem eructatis; peritheciis, monostichis, densissime stipatis, crassiusculis, ovatis v. subglobosis, aterrimis, omnino immersis, collis longiusculis ostiolisque in-crassatis, apice rimis plerumque 6 exaratis pulchreque radiato-stellatis; ascis cylindricis, brevi-pedicellatis, octosporis, paraphysibus filiformibus, simplicibus, basi septatis longissime superatis 60-70 \approx 5-6 stip. 15-20 μ . longo; sporidiis ovalibus, rectis v. rarius nonnihil inæquilateralibus, oblique monostichis, nigricantibus, 7-8 \approx 3-4.

Hab. in truncis decorticatis corticatisque Carpini, rarius in Acere, Betula, Quercu, Fago in Germania, Gallia, Italia, Britannia et Belgio.

31. **Anthostoma? scoriadeum** (Fr) Sacc. *Sph. scoriadea* Fr. El. II. 1127
 87. *Verrucaria conferta* Tayl. — Innatum, stromate late effuso latente nigro, peritheciis corneis confertis hemisphærico-prominulis nitidis pertusis albofarctis; ascis.; sporidiis distichis, fusoides sublageniformibus, rufo-brunneis, utrinque pallidioribus, 40-70 μ . longis, junioribus hyalino-obvolutis.

Hab. in cortice Betulæ albæ et lentæ in Britannia, Suecia. — Perenne! lichenosum, facie *Verrucariæ nitidæ* Ach., a qua vero abunde differt stromate subpulverulento nigro sub epidermide omnino latente, late effuso, ramos ambiente et cortici interiori innato. — Perithecia cornea! subglobosa, innata, hemisphærico-prominula, lævia, nitida, atra, ostiolo simplici pertusa, admodum

conferta, sed non confluentia. Nucleo albo evacuato, intus nigrescunt. An lichen? Cfr. Curr. Comp. Sphær. n. 188, fig. 187.

II. *Fuckelia* Nits. em.: stromate valseo, v. erumpenti-verruciformi.

32. **Anthostoma turgidum** (P.) Nits. Pyr. germ. p. 121. Sacc. F. it. t. 1128

168. *Sphæria turgida* Pers. Obs. myc. I. 17. *Valsa turgida* Fr. S. V. S. 412. *Sphæria sphinctrina* Fr. S. M. II. 400 (verisimiliter). — Stromate valseo, corticis interioris parenchymate, specie immutato formato ejusque strato supremo basi innato, pustulato ac peridermio arcte adhærente tecto, depresso hemisphærico, obsolete; spermogoniis late conicis, multilocularibus; spermatis cylindricis, curvulis, hyalinis, minimis, in sterigmatibus densissime cæspitosis, brevibus, simplicibus, unicellularibus acrogenis; peritheciis in singulo stromate 6–8, majusculis, globosis, circumstantibus, confertis, adscendentibus, aterrimis, rigidis, ostiolis in discum minutum, concavum, ex fusco nigricantem conjunctis, rarissime plus minus exsertis, obtuse conicis; ascis cylindricis, subsessilibus, paraphysibus filiformibus, simplicibus, crassiusculis, eseptatis stipatis, octosporis, 100–120 \approx 7–8; sporidiis monostichis, late ovalibus, reticatis, utrinque rotundatis, nigricantibus, 8–12 \approx 5–7.

Hab. in ramis corticatis Fagi sylvaticæ in Britannia, Suecia, Belgio, Italia, Gallia, Germania. — Huc forte spectat *Pyrenodochium atrum* Bon. Abhandl. p. 164.

33. **Anthostoma gastrinum** (Fr.) Sacc. Myc. Ven. Spec. p. 143, Tab. 1129

XIV, f. 52–57, Fungi ital. t. 169–170. *Sphæria gastrina* Fr. S. M. II. 379. *Sph. irregularis* Sow. *Hypoxylon gastrinum* Fr. serius. *Melogramma gastrinum* Tul. *Quaternaria Nitschkii* Fuck. (forma corticola), *Phacosperma gastrinum* Nits. — Acervulis majusculis, sparsis, subrotundis, repandisque applanatis, subinde confluentibus, cortici immersis lignoque adnatis et epidermide parum sublevata et nigrificata tectis; stromate corticolo e substantia corticali parum mutata efformato sed zona nigra, sæpe 2–3 acervulos complectente, undique limitato; peritheciis majusculis sphæroideis, $\frac{1}{2}$ mill. diam., atris, intus nitidis, varia profunditate immersis, in quoque acervulo 8–42, ostiolis cylindricis pro loco plus minusve elongatis $\frac{1}{3}$ – $\frac{2}{3}$ mill. rectis v. subconvergentibus, apice non incrassato in discum leniter convexum lævigatum obscure punctato-areolatum, nigrum, plerumque epidermide atroinquinata tectum desinentibus; ascis cylindricis breviter stipitatis, 90–120 \approx 5, paraphysibus filiformibus simplicibus, guttulatis, obvallatis, 8spo-

ris; sporidiis oblongo-ellipsoideis, 10-14 \approx 4 $\frac{1}{2}$ -5, utrinque rotundatis, fuliginosis, dein opacis, sæpissime 2-guttulatis.

Hab. in cortice trunci v. ramorum Ulmi, Rhamni, Carpinii, Quercus, Castaneæ, Mori in Britannia, Belgio, Gallia, Germania, Suecia, Italia, Amer. bor. — Sec. Fuck. hujus st. conidius sistit *Myxosporium sanguineum* Fuck. conidiis oblongis, 20 \approx 8, hyalinis, stipitatis. — Species hæc statu normali et perfecte evoluta reperitur qualis supra descripta est, i. e. stromate in corticem omnino immerso et e substantia corticali parum mutata formato; serius vero, cortice ex parte v. ex integro dejecto, conceptacula in ligni superficie libera evadunt, crasseq. pulvinata et *Melogramma* v. *Hypoxylon* quodammodo æmulantur: sed hoc Valseis quoque sæpissime accedere solet: satius igitur videtur *Anthostomati* subjungi quam inter Melogrammeas speciem litigiosam, sed typice valseam, collocari.

34. **Anthostoma tæniosporum** Sacc. Mycol. Ven. Spec. p. 143, t. XIV, 1130 f. 47-51. Fungi it. t. 171. — Acervulis minutis, sparsis, subrotundis repandisve, convexo-depressis, fuscis, libro immersis et epidermide nigricata primo tectis, dein lacerata cinctis, stromate subvalseo nigricante, tandem subevanescente et perithecia subnuda relinquente; peritheciis submonostiche circinatis, in quoque acervulo 6-10, atris intus nitidis, diam vix $\frac{1}{3}$ mill., ovato-subrotundis, leniter conniventibus, ostioliis brevissimis, v. latentibus, tandem perforatis; ascis cylindricis basi attenuatis, breve stipitatis, 120 \approx 15, 8sporis, paraphysisibus crasse filiformibus simplicibus obvallatis; sporidiis recte v. suboblique monostichis ellipsoideis, plerumque 18-20 \approx 10, rarius 15 \approx 12, 2-3-guttulatis, primo luteolis, tandem fuligineo-nigricantibus, vitta angustissima alba sæpe tortuosa longitudinali (ex interruptione plasmatis orta) notatis.

Hab. in cortice ramorum emortuorum *Quercus pedunculatæ* in sylva Montello (Ital. bor.), raro. — Ob sporidia magna ad *A. cubiculare* accedit sed stromate, sporidiorum vittis aliisque differt: ab *A. turgido* peritheciis minoribus et sporidiorum fabrica recedit: ab utroque loco natali diverso.

35. **Anthostoma ostropoides** Rehm, Asc. n. 520 et in Diagn. n. 520. 1131 — Stromatibus albidis, convexis vel subglobosis, sæpe pisiformibus, 2-3 μ . diam., in cortice vel ligno immersis, denique, cortice dilacerato et elapso, fere sessilibus; peritheciis in stromate 1-4 monostichis, magnis, globosis, in colla discreta, usque ad 1 mill. long., 0,5 mill. lat. elongatis; ostioliis integris sæpe tuberculiformiter supra

corticis superficiem exstantibus, poro concavo, griseo, haud pertuso; ascis clavatis, apice incrassatis, 8-sporis, $180 \approx 15$; sporidiis 2-stichis, fuscis, ellipticis, 2-3 nucleis magnis praeditis, $36 \approx 10$; paraphysibus longis, filiformibus, nucleatis, c. 3 μ . cr.

Hab. ad ramos siccos Rosae caninae in monte apud «Hammelburg» Franconiae bavaricae (DR. RHEM.).

36. **Anthostoma linospermum** (Mont.) Sacc. *Dialtrype linosperma* Mont. 1132

Syll. Crypt. n. 749 et in Fl. Alg. p. 467 (*Sphaeria*). — Conico-truncatum, magnum; stromate lutescenti-olivaceo; peritheciis ovato-oblongis amplis intus atro-nitidis, in collum elongatum attenuatis, conceptaculo dimidiato cingente tectis, ostiolis hemisphaericis supra discum planum aut convexum aterritimum prominulis; ascis cylindricis, $160 \approx 15$; sporidiis 8, imbricatis, cymbiformibus 18-20 \approx 3, fuscis.

Hab. ad corticem trunci Pistaciae Lentisci, Mostaganem Algeriae (DURIEU).

37. **Anthostoma Eterio** (B. et Br.) Sacc. *Sph.* (confluentes) *Eterio* 1133

B. et Br. Fungi of Ceylon n. 1115. — Peritheciis in glebulam umbrinellam conglomeratis; ostiolis punctiformibus prominulis; sporidiis late ellipticis 11 \approx 6,5.

Hab. in truncis, Habgalla (Ceylon).

38. **Anthostoma Plowrightii** (Niessl) Sacc. *Fuckelia Plowrightii* Niessl 1134

in Hedw. 1875, p. 130. *Dothidea tetraspora*. Plowr. *Sph.* brit. n. 18 (nec B. et Br.). — Stromatibus erumpentibus, 2-3 mill. lat. nigris, gregariis; peritheciis stromate immersis et cum eo concretescentibus, subsphaericis, vertice conico prominentibus; ascis cylindricis, longe stipitatis, octosporis, $140 \approx 7-8$, tunica apice incrassata, paraphysatis; sporidiis monostichis continuis oblongis, utrinque rotundatis, fuligineis, opacis, 10-14 \approx 6-7.

Hab. in ramis Ulicis in Britannia.

39. **Anthostoma conostomum** (Mont.) Sacc. *Valsa conostoma* Mont. 1135

Syll. Crypt. n. 763 et Cent. II, n. 51, in Ann., 2, XIV, p. 321. — Gregarium, obovatum, initio velo tomentoso umbrino vestitum, demum nigrum transversim striatulum, bicorticatum, cortice exteriori seu conceptaculo rugoso fragilissimo; peritheciis in singulo conceptaculo paucis, 2-3, oblongo-quadratis, amplis; intus evacuatibus fuscis, ostiolis conicis brevibus apice, nitidis; ascis magnis clavatis 8-sporis; sporidia subcymbiformia pellucida, nucleo tandem obscuro, foveolis.

Hab. ad cortices arborum juxta ripas amnis Conana et circa Cayennam (LEPRIEUR).

40. **Anthostoma cercidicolum** (B. et C.) Sacc. *Diatrype cercidicola* 1136
 B. et C. Peck, 25. Rep. p. 101. — Stromate nigro, applanato epidermide rupta cincto, subcirculari, 6-8 mill. diam., cortice nigricato nidulante, ostiolis minutis depressis aut umbilicatis, denique perforatis; peritheciis sparsis, ellipticis ovatisve; sporidiis inæqualiter ovoideis, coloratis, 10 μ . longis.
Hab. in Amer. bor. Buffalo, in cortice trunci ignoti.
41. **Anthostoma hypophlæum** (B. et Rav.) Sacc. *Diatrype hypophlæa* 1137
 B. et Rav. North. Am. Fungi n. 852. — Suborbiculare tenue ostiolis prominulis exasperatum; ascis cylindræis, breve stipitatis 50-60 \approx 5 p. sporif.; sporidiis elliptico-ovoideis, monostichis, 4-6 \approx 2-3, olivaceo-fuligineis». *Hab.* in ramis putribus Magnoliæ glaucæ, Carolina infer., Amer. bor. — Format plagas suborbiculares, e peridermio erumpentes.
42. **Anthostoma Auerswaldi** Niessl Beitr. p. 55, tab. VI, fig. 45. — 1138
 Stromate valseo, pustulato, peridermio adhærente tecto, corticis interioris parenchymate fere immutato formato; peritheciis in singulo stromate 4-6-10, mono- vel irregulariter distichis, majusculis, $\frac{1}{2}$ mill. diam., subcarbonaceis, fragilibus, globosis, atris, ostiolo crasso cylindrico sæpe umbilicato erumpentibus; ascis cylindricis stipitatis, 8-sporis 110-113 \approx 9-10 p. sporif.; sporidiis monostichis oblongis sæpe inæquilateralibus, utrinque acutiusculis vel apiculatis, unicellularibus, 24-28 \approx 6-7, olivaceo-fuscis, circulo hyalino; paraphysibus crassis, guttulatis ascorum longitudine.
Hab. in ramulis Alni glutinosæ, prope Gratz (Austria).
43. **Anthostoma insidiosum** (Crouan) Sacc. *Valsa insidiosa* Crouan 1139
 Finist. p. 32. — Peritheciis 4-8 valsiformi-aggregatis, stromate flavido exceptis, peridermio denique erupto, tectis, sphæroideis, nigris $\frac{1}{2}$ mill. cr., brevicollibus; ascis cylindræis, apice truncatis, octo-sporis; sporidiis monostichis elliptico-oblongis, majusculis, brunneis.
Hab. in ramulis emortuis Fagi sylvaticæ, Finistère (Gallia).
44. **Anthostoma rumpens** (Cooke) Sacc. *Diatrype rumpens* Cooke 1140
 Fungi of Texas 143. — Ellipticum, tenue; ostiolis vix prominulis, cuticula rupta cinctis; ascis cylindræis; sporidiis late amygdaliformibus, atro-brunneis, opacis, 15 \approx 9.
Hab. in corticibus Galveston Bay, Texas (Amer. boreali).
45. **Anthostoma Massaræ** (De Not) Sacc. *Hypoxylon Massaræ* De Not. 1141
 Sfer. ital. 17, t. 14. — Stromatibus cortice immersis, nigro-limitatis, obconicis, erumpentibus, disco orbiculari applanato nigro, et peritheciis protuberantibus colliculoso, ostiolis minute papillatis;

peritheciis subglobosis, immersis, molliusculis, in quoque stromate 10-20; majusculis; ascis teretibus, stipitatis, paraphysatis octosporis; sporidiis monostichis ellipsoideo-oblongis, utrinque obtusiusculis, $20 \approx 8$, fusco-fuligineis.

Hab. in ramis corticatis, Valtellina, Ital. bor. (MASSARA). — Peritheciis non carbonaceis ab *Hypoxylo* differt et *Anth. gastrino* accedere videtur.

46. **Anthostoma adustum** (C. et P.) Sacc. *Diatrype adusta* C. et P. 1142
in Rep. on the St. Mus. — Pustulis minutis, prominulis, subconicis, nigricantibus, peridermio tectis, disculo minuto erumpente; stromate albido; ostiolis paucis, nigris; ascis cylindricis; sporidiis monostichis, ellipsoideis, fuligineis, 18-22 μ . longis.

Hab. in ramis putridis, New Baltimore, Amer. boreali.

47. **Anthostoma microsporum** Karst. Fungi Fenn. 860, *Phæosperma* 1143
microspora Kart. Myc. Fenn. II, 53, *Ph. helvetica* Fuck. Symb. p. 224, t. VI, fig. 40 (teste Karst.). — Stromatibus per corticis epidermidem erumpentibus, valde tumidis, ventricosis, hemisphæricis, oblongisve, 3-4 mill. lat., 2-3 mill. cr., plerumque confluentibus crustam magnam constituentibus, fusco-nigris, intus concoloribus; peritheciis in stromatis inferiori parte nidulantibus, majusculis, ovoidis, monosticho-stipatis, concoloribus, ostiolis longis, in stromatis culmine dense laxèque exsertis, conicis, obtusis, 1 mill. altis, concoloribus, pertusis; ascis longissime stipitatis, elliptico-oblongis, 8sporibus, $22 \approx 5$ p. sporif.; paraphysibus filiformibus; sporidiis inordinatis, quandoque transversaliter jacentibus, oblongo-ovatis, utrinque obtusissimis, continuis, biguttulatis, fusco-olivaceis, $5 \approx 2\frac{1}{2}$.

Hab. in cortice crassiore Alni et Betulæ in Fennia et Helvetia.

48. **Anthostoma rhenanum** (Fuck.) Sacc. *Fuckelia rhenana* Fuck. 1144
Symb. myc. p. 224. — Stromatibus erumpentibus pulvinatis; ascis cylindræis, oblique stipitatis, 8sporibus, $17\hat{6} \approx 18$; sporidiis monostichis, oblongo-ovatis, curvatis, utrinque oblique apiculatis, simplicibus, 2-4guttulatis, atro-fuscis, $30 \approx 12$.

Hab. in ramis siccis Aceris Pseudoplatani et Fagi sylvaticæ, rarius prope Mappen et Æstrich (Rhenogovia). — Sporidia diu circulo inæquali hyalino obvoluta.

49. **Anthostoma amœnum** (Nits.) Sacc. *Fuckelia amœna* Nits. in Fuck. 1145
Symb. mycol. p. 224, t. III, fig. 5. — Peritheciis majusculis, 4-6 in acervulo erumpente, liberis subconfluentibusve et stromate niveo demum evanescente insidentibus, ostiolo crasso, cylindræo-

cónico, obtuso, perforato coronatis, nigris, opacis; ascis sessilibus, oblongis, 178 \approx 20; sporidiis 8, submonostichis, ovatis, utrinque breviter apiculatis et irregulariter mucosis, parum curvatis, simplicibus, uniguttulatis, atro-fuscis, 30 \approx 14.

Hab. in ramis siccis Fagi sylvaticæ, rarius, prope Æstreich (Rhenogovia).

50. **Anthostoma Ellisii** Sacc. *Diatrype microspora* Ellis, nec Karst. 1146
(Anth.) in Bull. Torrey. Cl. 1881, p. 74. — Stromate tuberculi-formi 5-6 mill. diam., olivascenti-nigro; peritheciis 15-20, stromate subimmersis, oblongis, subcoriaceis, stipatis; ostioliis papillatis, prominulis; ascis linearibus, angustis, tenuistipitatis, 35-45 \approx 5; sporidiis monostichis, obliquis, oblongis, obtusis, pallide fuliginis, 1-nucleatis, 4-5 \approx 1,7-2.

Hab. in ramis Alni, Wells, Amer. boreali (BLAKE).

51. **Anthostoma amygdalinum** (Cooke) Sacc. *Melanconis amygdalina* 1147
Cooke in Grey. V, p. 55, t. 81, fig. 4. — Laxe circumscriptum, stromate pallido; peritheciis circinantibus, globosis; ostioliis convergentibus in disco fusco, prominulis; ascis cylindraceutis; sporidiis amygdaliformibus, fuliginis, 22-25 \approx 12, appendicula tenui hyalina filiformi utrinque auctis.

Hab. in cortice Liquidambaris, Carolina infer. (RAVENEL).
— Appendiculæ 20-30 μ . long.

52. **Anthostoma denigrans** (Curr.) Sacc. *Diatrype denigrans* Curr. 1148
Linn. Trans. XXII, n. 74, fig. 78, Cooke Handb. n. 2450. — Peritheciis conicis vel depressis, ligno penitus immersis, lignum in pustulas minutas nigras elevantibus, lineaque nigra circumscriptibus; ostioliis longis corticem penetrantibus; ascis teretibus, breve stipitatis, 8-sporis; sporidiis monostichis, ellipsoideis, 12-13 μ . longis, stipatis, 2-plurinucleatis, vel enucleatis, olivaceo-fuliginis.

Hab. in ramis in Britannia.

53. **Anthostoma dryophilum** (Curr.) Sacc. *Diatrype dryophila* Curr. 1149
Linn. Trans. XXII, p. 279, fig. 75, Cooke Handb. p. 2449. — Peritheciis immersis ovoideis vel subglobosis, stromate fusco-viridi exceptis, pustulas compactas sparsas formantibus; ostioliis longis, convergentibus, corticem perforantibus; ascis linearibus, breve stipitatis, 8-sporis; sporidiis monostichis, oblongis, angustis, 2-nucleatis, olivaceo-nigricantibus, 10-15 \approx 3-4.

Hab. in ramis putrescentibus Quercus in Britannia.

XYLARIA Hill. Hist. Plant. (1773), p. 62 et 63, Fr., Nits. etc. (Etym. *xylon*, lignum, quia fungus lignosus). — Stroma erectum, teres, clavatum v. subglobosum, sæpius stipitatum, tuberosum v. coriaceum; perithecia stromate immersa v. adnata, carbonacea, papillata; asci teretiusculi, typice octospori. Sporidia ovoidea v. subnavicularia, continua, fuliginea. Conidia sæpissime stromatis summitatem occupantia, læticoloria. — Genus vastissimum; species europeæ paucae, tropicæ multo copiosiores.

Sect. I. *Xyloglossa* Fr. N. Symb. 124: clava undique fertili, stipite glabro.

A) Basis stipitis subæqualis.

1. **Xylaria polymorpha** (Pers.) Grev. Flor. Edin. p. 35, Nits. Pyr. 1150 Germ. p. 17, *Sph. polymorpha* Pers. Comm. p. 17. — Stromatibus 2-6, rarius pluribus basi in cæspites connatis, rarissime solitariis, erectis, crassis, glabris, ex argillaceo-fusco nigricantibus, nunc simplicibus ac teretibus, basi apiceque plus minus attenuatis v. obtusissimis, subcylindricis, nunc obovatis, compressis, emarginatis v. furcato-ramosis, nunc denique subglobosis; clavula perithecigera, excepto stipite brevissimo v. subnullo, stroma integrum formante, peritheciis prominulis rugulosa; hymenio conidifero æruginoso-cinereo; conidiis obovato-subglobosis, minutissimis; peritheciis majusculis, densissime stipatis, ovatis v. subglobosis, ostioliis papillæformibus; ascis cylindricis, longissime pedicellatis, octosporis, 140-180 \approx 8-10 p. sporif.; sporidiis monostichis, subfusiformibus v. fere ovatis, utrinque acutiusculis, rarius obtusis, inæquilateralibus, immo curvulis, fuscis, 20-32 \approx 5-9.

Var. α) *acrodactyla* Nits. l. c. Stromate elongato-fusififormi v. e basi incrassata apicem versus sensim attenuato, tereti, forma regulari; cæspitosa; sporidiis 20-24 \approx 6-7.

Var. β) *pistillaris* Nits. l. c. Stromate cylindrico, apice rotundato, obtusissimo, in stipitem brevissimum v. subnullum plerumque sensim attenuato, forma regulari; cæspitosa; sporidiis 24-28 \approx 8.

Var. γ) *Mentzeliana* Tul. Sel. Fung. Carp. II, p. 9. Clavula subcylindrica, crassissima, apice obtusissima, in stipitem brevem subito attenuata, plus minus deformi; cæspitosa; sporidiis 24-32 \approx 8.

Var. δ) *spathulata* Pers. Obs. myc. II, p. 64, t. II, f. 2. Stromate compresso, obovato, apice obtusissimo, emarginato v. furcato, immo ramoso, clavulas 2-3 gerente, in stipitem nunc brevissimum nunc elongatum sensim attenuato, deformi; cæspitosa v. solitaria; sporidiis 24-28 \approx 8-9.

Var. ε) *hyporylea* Nits. l. c. Stromate subgloboso, tandem tumuloso-rimoso, deformi, in stipitem brevissimum subito attenuato; solitaria; sporidiis 24-30 ≈ 7-9.

Hab. species cum varietatibus in basi truncorum putrescenti in tota Europa, Asia merid., Java, Australia, Tasmania, America meridionali et boreali.

2. **Xylaria leptopus** (Fr.) Sacc. *Hyporylon leptopus* Fr. Nov. Symb. 1151

231. — Suberoso-lignosa, clava obtusa lævi atra, velo contiguo tenuissimo glabro immato ærugineo-griseo primo obducta, intus solida fibroso-radiosa alba, stipite discreto glabro gracili basi scutato; peritheciis immersis, ostioliis minutis papillæformibus; sporidiis generis, curvulis.

Hab. in India occidentali (KRÆBS). — Fungus 2-3 unc. altus, (stipes $\frac{1}{2}$ unc.) stipite gracili, tegumentoque glabro ærugineo-griseo a *X. polymorpha*, cui accedit, distinguitur.

3. **Xylaria curta** Fr. Nov. Symb. 126. — 1152

Subsessilis, verticalis, oblonga, solida, atra, stromate turgido obtuso papuloso-corrugato, intus solido albo, peritheciis globosis immersis periphericis, ostioliis papillæformibus; ascis sporidiisque ut *X. polymorpha* sed minoribus.

Hab. ad truncos in insula Oceanica Oahu (DIDRICHSEN). — *X. polymorphæ* affinis, $\frac{1}{2}$ - $\frac{3}{4}$ unc. alta, 3 lin cr.

4. **Xylaria siphonia** Fr. Nov. Symb. 126. — 1153

Sessilis, verticalis, cylindrica, stromate cavo! æquali obtusiusculo lævi glaberrimo aeneofusco, ex ostioliis prominulis nigro-punctata; peritheciis periphericis globosis; sporidiis, oblongis, opacis, continuis.

Hab. ad ligna muscosa in ins. oceanica Pulo Milu (DIDRICHSEN). — Affinis *X. papyrifere*, 1-1 $\frac{1}{2}$ uncias longa, 2 lin. crassa.

5. **Xylaria protea** Fr. Nov. Symb. 125. — 1154

Stromate suberoso-indurato lanceolato, obtuso, corrugi, nudo, atro, intus albo, stipite tenui æquali glabro; peritheciis globosis subimmersis periphericis, ostioliis prominulis depresso-hemisphæricis; ascis linearibus; sporidiis uniserialibus oblongis, curvulis, opacis.

Hab. ad truncos in Costa Rica prope Antillas (ÆRSTED). — *X. corniformi* satis affinis.

6. **Xylaria turgida** Fr. Nov. Symb. 124. — 1155

Stromate suberoso indurato ovali sordide gilvo ex ostioliis prominulis nigro-punctato, ceterum lævi, intus cinereo, stipite tenui brevi, glabro-nitente; peritheciis immersis globosis periphericis; sporidiis oblongis, fuscis, minutis.

Hab. in insulis Nikobaricis (DIDRICHs.). — Stipes 2-3 lin. longus, 2 lin. cr., clava 1½-2 unc. alta, 1 unc. cr. Affinis *X. eu-glossæ*.

7. **Xylaria variabilis** Welw. et Curr. Fungi Angol. pag. 280, t. 18, fig. 7. — Simplex vel ramosa, tota glabra, 2-6 unc. longa, fuliginoso-atra, peritheciis . . . non visis; substantia medullari sic-cando contracta. 1156

Hab. sparsa ad truncos vetustos dejectos cariosos in sylvis primitivis de Quisucula prope Bango, Golungo alto (Angola).

8. **Xylaria axillaris** Welw. et Curr. Fungi Angol. p. 279, t. 17, fig. 24-25. — Stromate suberoso, nigro glabro (sterili longiore et fragiliore); peritheciis irregulariter sparsis, protuberantibus, globosis, mammillatis; sporidiis nigro-fuscis, elliptico-acuminatis, 25-30 = 12-14. 1157

Hab. ad axillas ramulorum arboris e familia Artocarpacearum juxta ripas fluvii Coango, Golungo alto (Angola). — Affinis *X. Hypoxylø* v. *wiformi* Mont. sed perithecia laxiora et sporidia majora.

9. **Xylaria arenicola** Welw. et Curr. Fungi Angol. p. 280, t. 17, fig. 5-6. — Stipite fragili, elongato, nigro-fusco, glabro, profunde sepulto, 1-3 unc. longo; capite fusco, maculato, ostioliis minutis nigris scabro, ¼-½ unc. longo, conico vel subcylindrico, apicem versus acuminato vel rotundato, aliquando leviter curvato, toto fertili; peritheciis nigris, subglobosis; sporidiis minutis, nigro-fuscis, cymbiformibus, 5 µ. longis. 1158

Hab. ad terram sabulosam humidam prope Cazella, Pungo Aundongo (Angola) — Ad *V. polymorpham* accedit.

10. **Xylaria Myosurus** Mont. Syll. Crypt. n. 700. — Simplex, cornea, atra, myosuroidea, subsessilis; peritheciis exiguis, immersis, ostioliis subprominulis, nitidis; ascis clavatis diffluentibus, paraphysibus ramosis obvallatis; sporidiis 8 seriatis oblongis ob guttulam oleosam specie septatis, 10 µ. longis, 1159

Hab. ad lignum denudatum, Cayenna (LEPRIEUR).

11. **Xylaria melanaxis** Ces. Myc. Born. p. 16. — Sparsa, nigra, quatuor, usque quinque pollices alta, pro 2½ ad stipitem sæpius tortuosum, pro residuo ad clavulam spectantes; stipite anguloso, glabro, nitente, sensim in clavulam abeunte cylindræam, obtusam longitudinaliter rugosam, ostioliis emergentibus exasperatam; stromate extus carbonaceo, intus fuscescente, axi filiformi nigro per-curso. 1160

Hab. in truncis Sarawack, Borneo.

12. **Xylaria marasmoides** B. et Cooke. Fungi of Braz. n. 406. — Spar- 1161
sa, stipite setaceo penetrante; capitulo globoso primum dealbato,
dein secundum perithecia condita fisso.

Hab. in corticibus, Capana Brasiliæ. — Stipes vix 7 mill. altus,
penetrans apice minute collariatus; capitulum 1 mill. diam. Species
quam *X. aristata* minor, ostiolisque non exertis.

13. **Xylaria intermedia** Ces. Myc. Born. p. 16. — Hinc *Xylaria mas-* 1162
sula Ces. illinc *Hyporylo paucillo* Ces. forma adproximans; spo-
ridiis 3 ≈ 2; pulvillis irregulariter globosis, 2 mill. diam., atris, su-
perficie rudi, intus albidis, compactis.

Hab. ad Sarawak a Kutein, Bornei.

14. **Xylaria hæmorrhoidalis** B. et Br. Fungi of Ceylon n. 1035. — 1163
Subglobosa vel oblonga obtusissima, sessilis, rugosiuscula.

Hab. in ligno putri, Ceylon, — Exemplaria verisimiliter con-
didiophora, nuda deorsum, sursum valde ramosa; conidiis copiosis glo-
bosis 5 μ . diam.

15. **Xylaria Gardneri** Berk. Fungi of Ceylon n. 1038. — Stipite elon- 1164
gato ramoso radicante; capitulis cylindricis, primum dealbatis ru-
gosis; ostiolis papillæformibus, demum nigricantibus; sporidiis late
cymbiformibus, 5 ≈ 4; conidiis 5 μ . diam.

Hab. in ligno putri, Peradenya (GARDNER, BECCARI). — Alta
7-12 cent., radix sæpe æquilonga; capitulum 5-10 cent. long.
Exemplaria conidiophora sunt acicularia et angustiora. — Var. *mi-*
nor (*Sph. Gardneri* Berk. Dec. of Fungi n. 190). Suberosa, cla-
vulis simplicibus cylindricis obtusis, rugosis, 3-5 cent. long., gri-
seo-nigris, a stipite discretis, ostiolis obtusiusculis; stipite elongato
3-5 cent. longo e radice sclerotiformi oriente, atro, glabro; spo-
ridiis brevibus, minutis. — In Ceylon.

16. **Xylaria guyanensis** Mont. Syll. Crypt. n. 679 et Cent. II, n. 27, 1165
tab. 9, fig. 2. — Suberosa, clavæformis, maxima, crassa, simplex,
subcompressa, lævis, fuliginoso-atra, intus alba; stipite lacunoso-
plicato; peritheciis periphæricis globoso-depressis immersis, ostiolis
in disco excavato plano, primo albo-velato, demum nigro promi-
nulis; ascis teretibus; sporidiis generis, 18 ≈ 4-5.

Hab. ad truncos putridos in Guyana (LEPRIEUR).

17. **Xylaria fulvella** B. et C. Cuban Fungi n. 788. — Clavata, rubi- 1166
ginosa, papillata; peritheciis semiprominulis, ostiolis nigris; stipite
cylindrico, pallide fulvo, lineato-rugoso; sporidiis oblongis 7,6 μ .
longis.

Hab. in ligno putri, Cuba, Alabama. — Affinis *X. phosphoreæ* Berk. a qua differt defectu anuli albi circa ostiolum.

18. **Xylaria phosphorea** Berk. Austr. Fungi n. 232. — Rufa; stipite 1167
brevi, cylindrico, striato in clavam brevem sursum dilatato; peritheciis superficiem in verrucas læves elevantibus; disco pallido, ostioliis prominulis nigris.

Hab. ad truncos, Victoria, Australiae, (MÜLLER).

19. **Xylaria papyrifera** (Link. et Fr.) Fr. Nov. Symb. p. 126, *Sph.* 1168
papyrifera Link. et Fr. Linnæa, 1830, p. 536. — Carnoso-suberosa, clavæformis, simplex, lævis, nigrificans; intus determinate cava, stipite glabro; peritheciis periphericis, immerso-prominulis, stipatis, globosis, atris, ostioliis punctiformibus.

Hab. in Brasilia ad basim truncorum (BEYRICH et LUND). — Tres uncias alta; *X. Gompho* subaffinis sed pluribus notis diversa.

20. **Xylaria pumila** (Fr.) Sacc. *Sph. pumila* Fr. in Linnæa, 1830, 1169
p. 538. — Mollis, fragilis, clavata, difformis, glaberrima, atra, intus alba; stipite brevi; peritheciis periphericis pallidis, prominulis; ascis *Hypoxylosum* (nec ut in *Hypocreis*).

Hab. in ramis virescentibus Lantanæ mutabilis in Brasilia (BEYRICH).

21. **Xylaria portoricensis** Kl. Fungi Portor. pag. 364 (Linnæa). — 1170
Clavis magnis obtusis, pallide fuscis fistulosis, in stipitem brunneum glabrum satis longum basi incurvum attenuatis; peritheciis magnis, subinde confluentibus; ostioliis minutis, atris; sporidiis elongatis, nigricantibus.

Hab. ad ramos vetustos, prope Naguabo (Portorico). — Stipes 1-2 pollices longus, crassitudine pennæ anserinæ; clava 1-2 poll. longa, 6-10 lin. cr. velo farinaceo gilvo-fusco obducta.

22. **Xylaria fistuca** Berk. Decad. n. 482. — Clavula regulari, sursum 1171
incrassata obtusa, lineis obscurioribus ostiola gerentibus picta; stipite cylindrico abrupto; ostioliis superficialibus; sporidiis minutis, breve cymbiformibus. 8-9 μ . longis.

Hab. in lignis Nepal, Myrong, India. — Totus fungus 30-32 mill. altus, *X. corniformi* affinis.

23. **Xylaria clavicularis** Kl. Fungi Portor. p. 365 (Linnæa). — Clavis 1172
magnis fistulosis, utrinque attenuatis, stipiteque velo farinaceo sordide fusco obductis; peritheciis parvis sparsis globosis; ostioliis minutissimis atris; sporidiis fusiformibus.

Hab. ad ligna putrida prope Naguabo (Portorico). — Stipes pollicaris, 2-3 lin. cr.; clava 1-1½ poll. long., 4-5 lin. cr.

24. **Xylaria abnormis** Berk. Dec. n. 618. — Pallida, hic illic ostioliis 1173
depressis nigris notata, cerebriformis, subglobosa, nodulosa, durissima, intus concolor; peritheciis pallidis oblongis crassis; ascis gracilibus; sporidiis minutissimis, 5 μ . longis, monostichis.
Hab. in ligno putri, Panuré, Brasilia. — Nonnullis notis ad *Hypocreaceas* vergit.
25. **Xylaria piliceps** Berk. Challeng. not. III, n. 186. — Clavula sub- 1174
turbinata, coffeata, rimosa, molli, fragili; ostioliis subprominulis punctata; stipite gracili concolori laccato, rimoso, contextu pallido.
Hab. in truncis, Aru prope Moluccas. — Stipes 2 cent. altus; clavula 12 mill. alt., 8 cr. Sporidia non reperta.
26. **Xylaria coronata** West. Prodr. Fl. Bat. Fungi pag. 42, Kickx 1175
Fl. crypt. crypt. Flandr. I, 311. — Stromate elongato, tenui, stipitiformi, tortuoso et inæquali, fusco-nigricante intus albo; capitulo conico apice laciniis 3-5 digitiformibus 2 mill. longis coronato; peritheciis raris, immersis, prominulis, ostiolo papillato; ascis cylindricis, 8sporis 100 μ . longis; sporidiis monostichis fuliginis ovoideis, 15 μ . longis.
Hab. in radice putri lignosa, Maastricht in Belgio (WESTENDORF).
27. **Xylaria conocephala** B. et C. Cuban Fungi n. 781. — Maxima, 1176
caespitosa, e basi obtuse conica, umbrina, rimulosa, exsiccatione hic illic contracta; ostioliis sparsis prominulis; stipite brevi longitudinaliter sulcato-rugosa.
Hab. in ligno putri Cuba, Bareellos Brasiliæ.
28. **Xylaria cubensis** Mont. Syll. Crypt. n. 782 et Cent. II, n. 29, et 1177
Cuba, p. 347, t. 13, f. 1. — Clavæformis, junior caesio-pruinosa obtusa, adulta longitrorsum medio sulcata v. subbipartita, lævigata, nuda, nigro, initio caesio-pruinosa, breviter stipitata, clavula intus cava crusta tenui secedente fragili obducta; peritheciis periphericis confertis globosis strato interiori pallido immersis, ostioliis punctiformi-prominulis; sporidiis generis.
Hab. ad ligna putrida, in Cuba (RAMON DE LA SAGRA), in Guyana (LEPRIEUR).
29. **Xylaria allantoidea** Berk. Cuban Fungi n. 782, *Sph.* (Cordyceps) 1178
allantoidea Berk. Exot. Fungi Hook. p. 397 (1839). — Stromate clavato, obtuso, compacto, nigro-crustato, coriaceo, stipite brevissimo glabro; peritheciis minutis globosis, ostioliis minutis prominulis.
Hab. in Brasilia, S. Domingo, Guyana, Cuba, Ceylon et Borneo. — Stroma 100 mill. altum, 1 cr., denique intus cavum.

30. **Xylaria biceps** Speg. Fungi Arg. Pug. IV. n. 137. — Stromati- 1179
bus dense gregariis, extus atris, opacis, intus candidis, basi parce ramosis; ramis erectis longiusculis, compressis, 10-30 mill. long., 1-1,5 lat., 0,5 crass., ruguloso-subtortis, glaberrimis, apice simplicibus v. bifidis v. brevissime bis dichotomis, primo vertice compressissimo, dilatato, truncato, roseolo-aurantio v. roseo-albo (conidiis nondum visis), dein biclavuligero; clavulis elliptico-cylindraceis, sæpius e latere compressiusculis, 8-10 mill. long., 2 mill. lat., 1-1,5 mill. crass., binis in quoque ramulo, dorso connato-confluentibus, ad tertium v. usque ad medium, sursum liberis ac divergentibus, apice breviter conico-attenuatis, deorsum abrupte subtruncato-rotundatis, ac in ramulo coarctato-attenuatis, undulatis, parce minuteque hinc inde papillulatis, extus atris, opacis, glaberrimis, intus primo spongioso-flocculoso farctis, dein subvacuis, albis; peritheciis subglobosis, 350-400 μ . diam., atris, crassiusculis, coriaceo-membranaceis, contextu minute parenchymatico, fuligineo-olivaceo; ascis cylindraceo-clavatis, sursum obtusiusculis, deorsum longe attenuato-stipitatis, 70-90 \simeq 6-8 p. sporif., stip. 44-45 \simeq 2-5. octosporis, paraphysibus filiformibus obvallatis; sporidiis oblique monostichis, elliptico-navicularibus, quandoque curvulis, utrinque obtusiusculis; 14-15 \simeq 5, opace fuligineis.

Hab. in ollis ligneis plantarum cultarum en el Patio «Emprenta Coni» Buenos-aires, Argent. — A *Xylaria* (Sphæria) *diceras* (Pers.) videtur valde distincta.

31. **Xylaria diceras** (Lév.) Fr. Nov. Symb. p. 128, *Sph.* (Cordyceps) 1180
diceras Pers. mss. Lév. Ann. Scienc. nat. 3, 1845, p. 43. — Nigra, stipite elongato, compresso, nudo, sursum bifido, clavulis divaricatis clavatis obtusis, rugoso-undulatis; peritheciis globosis immersis, ostiolis minimis sparsis prominulis; sporidiis in ascis linearibus paraphysatis, navicularibus utrinque acutis, opacis.

Hab. in Hispaniola, ad truncos (Poiteau). — Stipes 3-4 cent. longus.

32. **Xylaria divaricata** (Fée) Sacc. *Sph. divaricata* Fée Not. sur 1181
trois esp. nouv. de Sphæria exot. p. 1. — Suberosa, bifurcata, rugosissima, atro-rubra, depressa; clavulis divaricatis, acuminatis; peritheciis inæqualibus, remotis, crassis; sporidiis ovoideis, subfuscis.

Hab. in S. Domingo ad ligna vetusta. — Stroma 1 dec. altum.

33. **Xylaria Domingensis** (Berk.) Sacc. *Hypoxylon Domingense* Berk. 1182
enum. Fungi St. Domingo p. 11. — Maxima, cylindrico-clavæfor-

mis, deorsum furcata, rigida, laccata, fusco-purpurea ostiolis prominulis asperula, sursum involuta.

Hab. in ligno putri St. Domingo (SALLÉ).

34. **Xylaria echinata** (Lév.) Fr. Nov. Symb. 126, *Sph.* (Cordyceps) 1183

echinata Lév. Ann. Scienc. nat. 3, 1845, p. 43. — Cæspitoso-fasciculata, clavulis ovatis obtusis nigris subsessilibus, peritheciis stromate griseo immersis, ostiolis exertis conicis; ascis paraphysatis octosporis; sporidiis ovoideo-oblongis, monostichis, opacis.

Hab. Java, ad cortices (KORTHALS). — Affinis *X. anisopleura* Mont. Clavulæ 4-7 cent. long., 2-4 cr.

35. **Xylaria escharoidea** (Berk.) Sacc. *Sph. escharoidea* Berk. Notic. 1184

Fungi Herb. British Museum p. 385 (1843), *Clavaria pistillaris membrana escharoidea tecta* Fl. zeyl. — Suberosa, simplex, clavula cylindrica apiculata ex ostiolis conicis prominulis scabra, pallida; stipite elongato, cylindrico, radicato.

Hab. in Ceylon (KÖNIG). — Sporidia nondum evoluta.

36. **Xylaria fistulosa** (Lév.) Fr. Nov. Symb. p. 126, *Sph.* (Cordyceps) 1185

fistulosa Lév. Ann. Scienc. nat. 3, 1845, p. 42. — Suberosa, simplex, clavæformis, crustaceo-laccata, nigro-opaca, cava, cum stipite brevi nudo confluenta, peritheciis globosis, ostiolis prominulis confertis atro-nitidis; ascis paraphysatis; sporidiis oblongis monostichis, 1-guttatis.

Hab. in Java ad truncos. — Inter *X. proteam* et *siphoniam* media; stroma 4-9 cent. altum. 5-7 mill. cr.

37. **Xylaria fissilis** Ces. Myc. Born. p. 16. — Cæspitosa, clavulis ni- 1186

grescenti-brunneis, linearibus, 5-6 cent. altis, quatuor usque quinque millimetra latis, stipitatis, torulosis et transverse rugosis, obtusis, sæpius longitrorsum sulco dimidiatis, stromate carbonaceo, intus secernibile, filamentoso; peritheciis brunneis, depresso-globosis, ostiolis vix prominulis; sporidiis 20 ≈ 5 (teste Cooke).

Hab. Sarawak Bornei, ad ligna muscosa putrescentia.

38. **Xylaria Gomphus** Fr. Nov. Symb. pag. 127, *Sph. Gomphus* Fr. 1187

Elench. Fung. II. 54. — Lignosa, clavæformis, simplex, lacunoso-rugosa, undique crustaceo-laccata, opaca atra, stipite lævi glabro.

Hab. ad basim truncorum in Brasilia (LUND). — Maxima inter species hactenus descriptas (majores in Java a Blumeo lectas accepimus), 3-6 unc. alta, $1\frac{1}{2}$ unc. et ultra crassa, sursum sensim incrassata, statura *Clavariæ pistillaris* b. *herculeæ*, sed *Sph. Ghomphi* elava difformis, superficie, *Morchelle instar!*, cujus speciem primo obtutu habui (sic mire ludit in maxime affinibus stro-

matis figura, dum receptaculi in Elvellaceis constans est!), lacunos-reticulata plicataque, lacunis oblongis, undique peritheciis cincta; stipes clavula multoties brevior est, inæqualis, sed omnino lævis deorsum attenuatus, vix radicans; superficies omnis crusta laccata, glaberrima, opaca, piceo-atra; intus longitudinaliter cava est; ceterum substantia suberosa, dura, crassiuscula, alba, contextu obscurius floccoso; perithecia periphærica, *rare sparsa*, globosa, primo pallentia; ostiola latentia, tantum sub lente conspicienda, punctorum instar prominula (Fl. l. c.).

39. **Xylaria gracilis** Kl. in Hook. Herb. Berk. A. N. H. X. p. 398. 1188

Sph. digitata Hook. — Coriacea; stipite glabro, furcata, fastigiata, angusta, acuta, apice sterili; intermedia inter *X. digitatam* et *X. multiplicem* Kl.

Hab. in Andibus (HUMBOLDT). — Perithecia quandoque infra bifurcationem extensa. Stroma 36-40 mill. altum, 2-3 mill. cr.

40. **Xylaria grammica** Mont. Syll. Crypt. n. 680 et Cent. II, n. 23, 1189

t. 9, f. 1. — Magna, suberosa, claviformis, crustaceo-laccata, rigida, fragilis, fuliginoso-atra, glabra; clavula elongata cum stipite confluenta, apice acuminato obtuso sterili, lineolis (sulcis planis) longitudinalibus flexuosis anostomosantibus vix impressis percursa, intus cava; peritheciis carbonaceis, tenuibus, determinate seriatis, ostioliis in medio sulcorum papillatis; ascis sporidiisque generis.

Hab. Ad truncos putridos in Guyana centrali (LEPRIEUR), Cuba, S. Domingo, Brasilia.

41 **Xylaria Kegeliana** (Lév.) Fr. Nov. Symb. p. 125, *Sph.* (Cordyceps) 1190

Kegeliana Lév. Ann. Scienc. nat. 5, 1846, p. 256. — Receptaculis stipitatis cylindricis apice abrupte acuminatis, crusta pallide fulva obtectis, ab ostioliis minutis sparsis prominulis nigro-punctatis, stipitibus nudis brevibus nigris; ascis linearibus, stipitatis; sporidiis oblongis, navicularibus, fuliginosis.

Hab. in Guyana Batava ad truncos (KEGEL). — Affinis *X. escharoidea* Berk. Stipes 1-3 cent. long.

42. **Xylaria obovata** Berk. Cub. F. n. 785. *Sph.* (Cord.) *obovata* Berk. 1191

Exot. Fungi Hook. — Stromate brevi stipitato, sursum sensim breviterque clavato, intus cavo, indumento subpapyraceo vestito, cortice nigro; peritheciis majusculis, sparsis, ostioliis exiguis; ascis cylindræis; sporidiis octonis coffeiformibus.

Hab. in ligno putri in S. Vincentii ins. (REV. GUILDING), Guiana, Venezuela, Cuba. — Affinis *X. papyracea* sed dimensione et forma diversa. Stroma 20 mill. alt., 12 mill. cr. fragile, intus

fulvescens. — *Sph. obovata* Berk. A. N. II. III. p. 397, seu *Hyp. obovatum* Mont. sec. Berk. ex Brasilia, eadem species videtur.

43. **Xylaria Poiteani** (Lév.) Fr. Nov. Symb. p. 125. *Sphæria* (*Cordyceps*) *Poitei* Lév. Ann. sc. nat. 3, 1845, p. 40. — Suberosa, claviformis, simplex, obtusa, nigro-violacea cum stipite brevi crasso nudo confluyente, ostioliis prominulis nitidis; peritheciis magnis rugosis ostioliis prominulis, nigro-lucidis; ascis linearibus paraphysatis, sporidiis 8 oblongo-ovalibus, utrinque acutiuseculis, opacis. 1192

Hab. in Hispaniola ad truncos (POITEAU), in insula S. Crucis Antillarum (BENZON).

44. **Xylaria Lingua** (Lév.) Fr. Nov. Symb. p. p. 126. *Sphæria* (*Cordyceps*) *Lingua*. Lév. Ann. scienc. nat. 3, 1845, p. 41. — Suberosa, simplex compressa, linguæformis, atra cum stipite brevissimo nudo confluyente; peritheciis hemisphæricis prominulis pertusis. 1193

Hab. Java, ad truncos. — Stromata 4-7 cent. longa, 12-15 mill. cr., extus nigra, intus alba.

45. **Xylaria obtusissima** (Berk.) Sacc. *Hypoxylon obtusissimum* Berk. Fungi St. Domingo, p. 11. — Capitulo brevi, late elliptico-clavato, obtusissimo, stipite brevissimo, cuticula fragili tenui, ostioliis minutissimis. 1194

Hab. in insula St. Domingo (SALLÉ).

46. **Xylaria plebeja** Ces. Myc. Born p. 16. — Plus minus cæspitosa, curta, pollicem et semis alta, clavulis compressis rudibus, lacunoso-rugosis, nunc simplicibus, nunc digitatis, peritheciis stipatis, ostiolo obtuso prominente. 1195

Hab. ad Sarawak Bornei. — Fructificatio ob ætatem nimis protractam ignota. Haud dissimilis a *X. digitata* pro qua primitus eam habui; nunc, monente cl. Berkeleyo, distinguo. Media intercedit dictæ speciei et *X. polymorphæ* (Ces. l. c.).

47. **Xylaria pyramidata** B. et Br. F. of Ceyl. n. 1036. — Stipite elongato, deorsum attenuato; capitulo hemisphærico sublentiformi, subtus striato; peritheciis pyramidato-prominentibus; sporidiis 5 μ . longis, obliquis. 1196

Hab. in ligno putri, Kandy, Ceylon. — Stipes, 35 mill. alt., 1 mill. cr.; capitulum 5-6 mill. cr.

48. **Xylaria ectogramma** Berk. Austr. Fungi n. 231. — Clavula oblongo-lineari, obtusa, laccata, dealbata, hic illic rimosa; ostioliis determinato-seriatis; stipite fusco brevi vel elongato, subinde partim fertili. 1197

Hab. Victoria Australiæ. — A *V. aciculari* differt ob ostiola

seriata a *X. grammica* quia rumpendo non collabascit. Stroma simplex v. furcatum, intus album, extus griseum, 5 cent. alt.

49. **Xylaria retipes** (Lév.) Fr. Symb. p. 126, *Sphæria* (Cordyceps) 1198
retipes Lév. Ann. scienc. nat. 5, 1846, p. 257. — Stromatibus cæspitosis elongatis cylindricis, pruina alba pulverulenta, demum denu-
datis, nigris; peritheciis globosis, immersis, ostioliis minutis papilla-
tis, stipitibus nigris nudis alveolato-rugosis.

Hab. in Java ad truncos (ZOLLINGER).

50. **Xylaria rhizocola** Mont. Syll. Crypt. n. 684 et Cent. II, n. 28, 1199
t. 9. f. 3. — Elata, gracilis; stipite elongato lævi, e radicibus plan-
tæ cujusdam enato, extus opaco, intus solido pallido; clavula pro
ratione brevi lanceolata, apice fertili; peritheciis periphericis con-
fertis minutis atris prominulis rugoso-colliculosa, ostioliis puncti-
formibus atris; ascis sporidiisque generis.

Hab. in sylvis Guyanæ centralis (LEPRIEUR), in radice herba-
rum, Sarawak, Borneo (BECCARI). — Habitus sec. Ces. a *X. Gue-
pini* non dissimilis.

51. **Xylaria rhytidophlœa** Mont. Syll. Crypt. n. 687 et Guy., mss., 1200
n. 480. — Simplex; stromate indurato corneo tereti-compresso ob-
tuso vel corniformi, atro, opaco, intus fuliginoso stipiteque brevis-
simo, tenuissime rugoso-reticulatis; peritheciis periphericis, globo-
sis immersis atro-faretis, ostioliis prominulis; ascis generis; spori-
diis minimis, oblongo-ovoideis, fuscis.

Hab. ad ligna denudata, Cayenna (LEPRIEUR), Melbourne, Au-
stralia (MÜLLER).

52. **Xylaria ruginosa** Mont. Syll. Crypt. n. 689 et Guy., mss., n. 485. 1201
— Elata, dichotoma, compressa, scruposa, atro-fusca, opaca; cla-
vulis terminalibus, ellipticis, glabris, profunde rugoso-rimosis, intus
corneis rigidis; peritheciis majoribus periphericis immersis, ostio-
lis minutis (ad lentem) prominulis; ascis sporidiisque generis.

Hab. in Guyana (LEPRIEUR).

53. **Xylaria scotica** Cooke Grev. IV, p. 112. — Suberosa; stromate 1202
longissimo, pallido, rhizoide, tenui, sursum 1-3-dichotomo-ramoso,
ramis elongatis, v. brevissimis fasciculatisque; capitulis elongatis,
subcylindricis, apice plus minus attenuatis, griseo-brunneis, dein
nigris; peritheciis copiosis, subpapillatis; ascis cylindricis; spori-
diis monostichis, ellipsoideis; brunneis, minutis, 5-6 \approx 3.

Hab. ad terram Meihlouer, Scotia (MATHESON). — Tota 5-15
cent. longa; clavulæ 2-3 cent. longæ. Minutie sporidiorum mox
dignoscenda species.

54. **Xylaria stilboidea** Kalch. et Cooke. Grey. 1880, p. 28, tab. 137, 1203
fig. 26. — Parva, stipitata; capitulo subgloboso, atro (1-2 μ . diam.)
ostiolis exertis asperatum; stipite cylindrico, fusco (1-1½ mill.
long.) gracili; stromate albo; peritheciis atris, immersis; ascis
cylindricis; sporidiis uniseriatis, ellipticis, atro-fuscis 14-15 \approx 5.
Hab. in ligno putri in Africa australi. — Minuta stirps, habitu
Stilbi eujusdam æmula.
55. **Xylaria Telfairii** (Berk.) Sacc. *Sphæria* (Cord.) *Telfairii* Berk. 1204
Exot. Fungi Hook. p. 397. — Coriacea, clavata, apice obtusiuscu-
la solida, cortice fragili cervino obducta, ostiolis peritheciorum
punctulata; peritheciis majusculis subglobosis; ascis cylindræis,
octosporis; sporidiis coffeiformibus, sæpe 1-guttulatis.
Hab. in insul. Mauritia (TELFAIR). — Adest in h. Klotzsch sub
nomine *S. involuta*. — Stroma 50 mill. alt., 12 mill. cr. — Sec.
Curr. Comp. Sphær. n. 7. fig. 8 (*S. involuta* Kl.) fungus siccan-
do finditur et cortex cum peritheciis secedit; sporidia monosticha
elliptico-reniformia, 16-18 μ . longa, fuliginea.
56. **Xylaria tentaculata** B. et Br. (ex Rav.) Cuban F. n. 796, North 1205
Amer. Fungi n. 826. — Stipite elongato, tenui, glabro fusco; ca-
pitulo brevi cylindrico, ostiolis adscendentibus asperato, apice pro-
cessibus longis tentaculiformibus coronato.
Hab. in lignis muscosis putridis in Cuba, Ceylon, Carolina inf.,
Cordova. — Stroma 2 cent. alt., 2 mill. cr., capitulum 2-4 mill.
longum; ostiola prominula; tentacula 12-12 mill. longa. Affinis *X.*
comosa Mont. Sporidia non descripta. Conidia elliptica 5 μ . longa.
57. **Xylaria Thyrsus** (Berk.) Sacc. *Sphæria Thyrsus* Berk. Notic. fun- 1206
gi Herb. British Museum. p. 384 (1843). *Clathrus acuminatus*
Roxb. — Suberosa, simplex, clavula obovata acuminata pallida;
peritheciis sursum spectantibus magnis, ostiolis subelongatis obtu-
sis nigris; stipite elongato cylindrico deorsum longissime radicato;
ascis linearibus obtusis, 8-sporis; sporidiis subcymbiformibus, fuli-
gineis, utrinque hyalino-mucosis.
Hab. in horto botanico, Calcutta, Ind. Or.
58. **Xylaria Titan** B. et C. North Am. Fungi n. 823. — Gigantea, 1207
allantoidea, dura, extus albida; ostiolis nigris prominentibus.
Hab. in truncis in Texas Amer. bor. — Alta 12 cent., 5 cent.
crassa, botuliformis, hinc convexa, hic concava, solida, alba, spo-
ridiis fœdata, ostiolis prominulis punctulata.
59. **Xylaria tortuosa** Sow. MS. in Herb. Kew., Cooke in Grey. VIII, 1208
p. 10. — Suberoso-fragilis, repetito-ramosa, angusta et rhizomo-

phoidea, nigra, 10 cent. alta, hinc inde ramulos clavatos obtusos fertiles exerens; peritheciis prominulis, aggregatis; ascis cylindricis; sporidiis monostichis, anguste fusoideis, utrinque obtusis, leniter curvis, fuliginis, 20-22 = 4.

Hab. ad terram in Mead Place Britannicæ (SOWERBY). — Habitus *X. Guelpini* var. *eupiliacæ* Ces., sed sporidia multo ampliora, v. *X. rhizomorphæ* Mont. sed huic sunt sporidia minutissima.

60. **Xylaria zelandica** Cooke N. Zeal. Fungi, in Grevillea VIII, p. 66. 1209
— Simplex, gracilis, stipitata, atra; capitulis cylindricis, rugosis, supra obtusis; ostiolis minutis, nervisequis; stipite glabro, canaliculato, convoluto; ascis cylindræis; sporidiis late fusiformibus, uninucleatis, atro-brunneis, 32-35 = 10.

Hab. in ligno putri Wellington, N. Zelandiæ (TRAVERS). — Stipes 25-35 mill. alt.; capitulum 18-20 mill. longum. — *X. zeylanica* Berk. aliena est. Cfr.

61. **Xylaria zeylanica** Berk. Fungi of Ceyl. n. 1039. *Sphaeria* (Cordyceps) *zeylanica* Berk. Dec. n. 189. — Suberosa; clavulis lanceolatis, compressis, levibus, atro-laccatis, cum stipitibus rugosis, brevibus confluentibus; ostiolis minutissimis; sporidiis ellipticis, minutis, 1210

Hab. in ligno putri, Ambagamoia in insula Ceylon (GARDNER). — 3-4 cent. alta, ostiolis granulat nigra, pruinâ ferrugineâ conspersa.

62. **Xylaria microceras** (Mont.) Berk. Cub. Fungi n. 803. *Hypoxyylon* 1211
microceras Mont. Ann. Sc. nat. 1840, XIII, p. 348, t. 9, fig. 4. Curr. Comp. Sph. n. 17, fig. 18. — Pumila, simplex, raro furcata; stipite vix ullo; clavula incurviuscula, corniformi, extus velo albo, persistente obducta, intus cinerea, subpulveracea; peritheciis periphericis atris, immersis, ostiolo nigro prominulo; ascis cylindræis breve stipitatis, octosporis; sporidiis irregulariter ellipsoideis, 10 μ . longis, fuscis.

Hab. in ligno putri, Cuba, Guiana, Java. — Minuta, 15 mill. alta, 1 mill. cr. albo-velata, ostiolis nigro punctata.

63. **Xylaria Wrightii** B. et C. Cuban Fungi n. 787. — Stipite cylindrico, rimoso, exiccatione rugoso, coffeato e basi spongiosa oriundo; capite subelliptico obtusissimo pallide rufo, deorsum præcipue lituris oblongis brunneis notato, ostiolis prominulis; sporidiis cymbiformibus, 22-24 μ . longis. 1212

Hab. in ligno putri, Cuba. — Stipes 25 mill. alt.; capitulum 25 mill. altum, 10 mill. cr.

64. **Xylaria Cudonia** B. et C. North Am. Fungi n. 824. — Sublacca- 1213
ta; stipite curto sursum dilatato; capitulo hemisphærico e perithe-
ciis papillato; ostiolis minimis.

Hab. in truncis putridis Carolinæ inf. Santee Canal. — Stipes
12 mill. altus, 4 mill. cr.; capitulum 12 mill. diam.

65. **Xylaria enterogena** Mont. Syll. Crypt. n. 683 et Cent. II, n. 25. 1214
— Stroma clavatum, intus solidum, pallidum, extus velo argilla-
ceo polito plane obductum, stipitatum, stipite brevi compresso sul-
cato; peritheciis (anormaliter) dimorphis, aliis normalibus periphe-
ricis minoribus et minimis ostiolo subtilissimo instructis, aliis en-
dogenis maximis crassis carbonaceis astomis, nucleo libero cera-
ceo; sporidiis ovato-globosis, hyalinis, 30 \approx 10, intermixtis aliis nor-
malibus generis.

Hab. in sylvis Sinnamariensibus ad truncos putridos (LEPREUR).

66. **Xylaria ænea** Mont. Syll. Crypt. n. 685 et Guy., mss., n. 477. — 1215
Stromate suberoso clavato obtuso plicato-rugoso tandem æneo gla-
bro, ex ostiolis prominulis crassis exasperato, intus pallido, in sti-
pitem brevissimum basi convexa dilatatum confluyente; peritheciis
periphericis minutis immerso-latentibus; sporidiis maximis.

Hab. in ligno emortuo, Cayenna (LEPREUR).

67. **Xylaria Acicula** Ces. Myc. Born. p. 15. — Sparsa in petiolis fo- 1216
liisque coriaceis exsiccatis, stipite capillari 1-3 centimetra alto, gla-
bro, abrupte abeunte in clavulam globosam, vel obovatam vix mil-
limetrum et semis diametro metientem, asperitatibus obsitam, atram.
Fructificatio ignota.

Hab. ad Sarawak Bornei (BECCARI).

68. **Xylaria exalbata** B. et Br. Fungi of Ceyl. n. 1043. Ces. Myc. 1217
Born. p. 16. — Stipite cylindrico nitido; capitulo clavato niveo
ostiolis nigris punctato, demum nudo nitido.

Hab. in ligno putri Central province, Ceylon. — Alta 50 mill., 6
mill. cr.; stipes clavulam subequans. Iunior tota albido-pruinosa,
clavulis intus cavis, sæpius sulco mediano in longitudinem bi-
partitis.

69. **Xylaria columnifera** Mont. Syll. Crypt. n. 686 et Guy., mss., n. 1218
481. — Stromate columella filiformi suberosa pallida persistente
percorso; clavula cylindræea compressa rugosa cortice rigido fra-
gili vestita, intus cava, extus fulvo-velata, tandem glabra cinereo-
nigrescente stipiteque longissimo atro-carbonaceis, fragilissimis; pe-
ritheciis membranaceis.

Hab. ad ligna prope Cayennam (LEPREUR).

70. **Xylaria anisopleura** Mont. Syll. Crypt. n. 688. Cent. II., n. 32. 1219
 — Solitaria, lignosa, durissima; clavula cum stipite obliquo obconicis leprosis opacis intus pallidis solidis; peritheciis in parte suprema subhemisphærica tuberculosa submarginata obviis, globosis, parum prominulis, monostichis, ostiolis discoideis, centro papillatis; sporidiis generis.
Hab. ad ligna emortua in sylvis Guyanæ (LEPRIEUR), Peradeniya (BERK.) — Conidia globosa, 5 μ . diam.; sporidia 30 μ . longa (BERK.).
71. **Xylaria Clavulus** B. et C. North Am. Fungi n. 825. — Parva, 1220
 seriata; stipite brevi crassiusculo penetrante; capitulo convexo.
Hab. in culmo putrescente graminum Texas Amer. borealis. — Stroma integrum circ. 2-3 mill. alt. non laccatum. Species minuta, pulchella, solidiuscula.
72. **Xylaria complanata** Ces. Myc. Born. p. 16. — Tres pollices alta, 1221
 ad basim interdum ramosa, brunnescenti-nigra, glabra, stipite brevissimo; clavulis utriusque attenuatis, complanatis, tortis; peritheciis stipatissimis ostiolo obtuso prominentibus (Specimina nimis evoluta, evacuata).
Hab. ad Sarawak, Borneo (BECCARI).
73. **Xylaria Schweinitzii** Berk. et Curt. Exot. fungi Schw. p. 284. 1222
Sphæria capitata Schw. MS. — Capitulo elliptico, obtuso, suberoso, compacto, stipite elongato discreto laccato lævissimo, parce rimuloso; peritheciis globosis; ostiolis sparsis vix prominulis; sporidiis cymbiformibus, 30 μ . longis.
Hab. in ligno putri in Surinam et Ceylon. — Specimina zeylanica brevius stipitata quam surinamensia. *Xyl. polymorphæ* subaffinis.
74. **Xylaria dealbata** Berk. et Curt. Exot. fungi Schw. p. 284. Berk. 1223
 Dec. N. 616. — Capitulo elliptico in stipitem cylindricum deorsum attenuato, toto crusta fragili dealbata tecto; sporidiis magnis 30 μ . longis.
Hab. in truncis putridis in Surinam et in Brasilia. — Capitulum 18-20 mill. alt., 12 cr.
75. **Xylaria cerebrina** (Fée) Sacc. *Sph. cerebrina* Fée Not. sur trois 1224
 esp. nouv. de Sphæria exot. p. 2. — Aggregata, fusco-nigra; stipitibus basi connatis; clavulis apice dilatato-congestis, confluentibusque; exterioribus simplicibus, rotundato-depressis; interioribus abbreviatis, deformibus, angulosis, complanatisve; peritheciis in tota superficie conspersis, papillatis; papilla crassa, nitida, poro pertusa.

Hab. in Brasilia, Rio Janeiro, ad truncos emortuos.

76. **Xylaria tuberiformis** Berk. Fl. Nov. Zel. II, pag. 204, tab. CV, 1225
fig. 11. — Suberosa, subglobosa, pileiformis; stipite brevissimo, vel obsoleto; ostioliis latiusculis prominentibus; sporidiis magnis, navicularibus, 25 μ . longis.

Hab. in ligno putri secus Manavatu, Nov. Zeland. (COLENSO). Bay ob Islands, Winton (COOKE). — Stroma 6–8 mill. cr., rugulosum nec laccatum, fuscum intus album; perithecia ellipsoidea.

77. **Xylaria gigantea** (Zipp. et Lév.) Fr. Nov. Symb. p. 127. *Sphaeria* 1126
(*Cordyceps*) *gigantea* Zipp. et Lév. Ann. Scienc. nat. 3, 1845, p. 41. — Suberosa, simplex claviformis, compressa vel subcylindrica obtusa, rugoso-undulata, crustaceo-laccata, lurida cum stipite brevi nudo confluenta; peritheciis immersis, ostioliis prominulis distantibus punctiformibus, atris nitidis; ascis paraphysatis, octosporis; sporidiis ovoideis, continuis, opacis.

Hab. in Java et Borneo, ad truncos (ZIPP., BECCARI). — Clavulæ ultra tres pollices longæ, dimidium crassæ, quandoque, dum compressæ fiunt, usque ad pollicem latæ, in stipitem brevissimum attenuatæ, cæterum cylindræ, vel linguæformes, vel clavatæ, semper obtusæ, fulvæ, ostioliis obscurioribus punctatæ; senio nigrefactæ longitudinaliter lacerantur et cavas se præbent. Stroma albidum (Ces. Myc. Born. p. 16).

78. **Xylaria euglossa** Fr. Nov. Symb. 124. — Stromate clavato, nu- 1227
do, sursum incrassato, obtuso lævi, argillaceo ex ostioliis subtilissimis, nigro-punctato, intus centro albido-cinereo, in ambitu nigricante, peritheciis totis immersis subglobosis atris; stipite tenui elongato glabro nigricante; ascis linearibus; sporidiis oblongis, fuscis.

Hab. in Costa Rica, prope Antillas (ERSTED). — Fungus 3 unc. et ultra altus, habitu fere *Geoglossi difformis*.

79. **Xylaria tabacina** (Kickx) Berk. Decad. n. 482*, *Hypoxylon taba-* 1228
cinum Kickx Bull. Acad. Bruxell. VIII, p. 11 (1841). — Affinis *X. euglossæ* Fr., sed ochracea luteo-fuscescens, intus alba, robusta, concava, mucoso-obvoluta; sporidiis 10 \approx 5.

Hab. in ligno putri Kala Panee, Indiae orient., Peradenya Ceylon, Sikhim, Khasia, Xelapa, Surinam, Cuba.

80. **Xylaria aurantiaca** B. et C. Cuban Fungi n. 806. — Subglobosa, 1229
inflata, aurantiaca, polita, subtus pallidior, ostioliis impressis.

Hab. ad terram in sylvis Cubæ. — Immatura, sed certe gregi *X. punctatæ* pertinens.

81. *Xylaria splendens* B. et C. Cuban Fungi n. 807. — Globosa, coc- 1230
cinea, exsiccatione rugosa, stipite brevissimo.

Hab. ad terram in Cuba. — Capitulum 25 mill. diam. vel amplius. *Xyl. aurantiaca*. proxime cognata, ceterum immatura.

82. *Xylaria punctata* (Junghuhn) Berk. Decad. 482*, *Sphæria com-* 1231
punctata Jungh. Præm. Jav. p. 21, *Hypoxylon punctatum* Fr. Symb. p. 130. — Globoso-diformis, basi constricta, glabra, alutaceo-pallida, nigro-punctata, intus pallida radiatim fibrosa; peritheciis maximis concentricis, globoso-ovoideis; sporidiis ovoideo-oblongis, 12-14 \approx 7-8, fuscis,

Hab. in trunco prostrato mont. Burang-rang Javæ, nec non in Ceylon et Khasia Indiæ orient. — Subglobosa eximia, magnitudine pomi majoris. Differt substantia molliori a gen. *Xylaria*, ceterum *Xylaricæ tabacinæ* subaffinis (Berk.). Secundum Friesium vero potius *Hypoxylo* adscribenda.

83. *Xylaria Puiggarii* Speg. Fungi Argent. IV, Pug. p. 139. — Stro- 1232
matibus majusculis, 10-30 mill. diam., 10 mill. alt., compactissimis, superne subæqualiter hemisphærico-applanatis, suborbicularibus, v. confluenti-diformibus, inferne irregulariter subconicis; contextu atro, glaberrimo, levi, opaco, fragili, carbonaceo-corticato, intus primo albo-farcto, dein fusco et laxe meduloso, postremo sæpius cavo; basi tuberculato-diformi, ligno v. cortice innato-prominula; ramis plus minus elongatis, subrepenti-exsurgentibus, crebre ramulosis; ramulis gracilibus, densissimis, brevibus, strigoso-intricatis, teretibus v. mutue compressis, apice abrupte subgloboso-capitatis; clavulis solitariis in quoque ramulo, dense aggregatis, obovato-subglobosis, e mutua pressione obtuse angulatis, 2-3 mill. diam., sursum truncato-applanatis, margine late obtuso, parce et laxissime papilloso-asperulis, sæpe centrum versus anulatim depressis, centro tamen umbonato-prominulo, levissimo; peritheciis omnibus verticalibus (!!), marginem clavulæ occupantibus, ellipticis, v. ovoideis, atro-carbonaceis, fragilibus, paucis, 10-12 in quaque clavula, majusculis, 0,7-1 mill. alt., 0,5-0,7 mill. lat., apice in ostiolum parvulum vix exertum papilliforme abeuntibus; ascis cylindræcis, apice obtuse ac crasse tunicatis, deorsum longe stipitatis, 80-100 \approx 9-10 p. sporif., 40-50 \approx 5-8 stip., tetrasporis, paraphysibus mucosis obvallatis; sporidiis recte monostichis, elongato-cymbiformibus, utrinque obtusiuscule rotundatis, centro tumidulis, e latere compressis, 28-30 \approx 5-6 e latere, 3-4 μ . crass., non v. minute 2-guttulatis, opace fuliginæis.

Hab. ad cortices truncorum putrescentium, Apiahy, Brasilia meridionali, leg. cl. Dr. J. PUIGGARI. — Species mox distinguenda clavularum forma atque constipatione, notis fructificationis peritheciisque autem omnibus verticalibus facile ad novam sectionem ducenda; *Hyp. cetrarioidi* Curr. et W. facile, ut videtur, affinis. — An ergo potius e sect. *Cænopodis Hypoxyli*?

84. **Xylaria contracta** Speg. Fungi Arg. Pug. IV, n. 139*. Affinis X. 1233

Puiggarii; ramis et ramulis brevioribus crassioribusque (tota planta vix 5-10 mill. alt.), densius evolutis, sæpius fasciculatis, mox in clavulas productis; clavulis in quoque ramulo binis, tereti-subcompressis, gibbuloso-undulatis, papilloso-asperulis, sursum non v. vix attenuato-acutatis, sæpius truncatis v. crasse obtusatis, minoribus, 3-5 mill. long., 1,5-2 mill. crass., quandoque vix basi parce confluentibus, bene evolutis ac divergentibus, quandoque (sæpius) una abortiva, minuta tuberculato-diformi, altera autem perfecte evoluta. Cetera ut in X. *Puiggarii*.

Hab. in ollis plantarum cultarum hinc inde per Bonariam, Argent., nec non ad palos vetustos in montosis «Sierra del Tandil» (Dr. E. L. HOLMBERG).

85. **Xylaria rhopaloides** (Kunze) Mont. Ann. Sc. nat. 1855, III, 99, 1234

Sphæria (*Hypoxylon*) *rhopaloides* Kunze Exs. Mont. Ann. Sc. nat. 1840, XIII, Cent. II, n. 27.

Hab. in lignis putridis, Guiana, Amagon, Mexico, Natal, Cuba, Ceylon, Brasilia. — Asci cylindracei breve stipitati, octospori. Sporidia 8-10 μ . longa. Speciei diagnosim loc. cit. non inveni.

B) *Basipeltis*: basi stipitis peltato-dilatata.

86. **Xylaria platypoda** (Lév.) Fr. Nov. Symb. 127, *Sph.* (*Cordyceps*) 1235

platypoda Lév. Ann. Scienc. nat. 3, 1845, p. 40. — Gregaria, clavula simplici, ovata, crassa, undulata, obtusa, crustaceo-alba, peritheciis globosis prominulis, ostiolis papillatis, stipite brevi, nigro, lævi basi scutato-dilatato; ascis cylindraceis, paraphysatis; sporiidiis ellipsoideis utrinque acutis, fuliginis, monostichis.

Hab. Pic de Tolima, Cuchilla de la Divisadera (Just. Goudot). Stroma 2-3 cent. altum.

87. **Xylaria hyperythra** Mont. Syll. Crypt. n. 681 et Cent. II, n. 26. 1236

— Simplex, suberosa; clavula lanceolata stipitata, stipite glabro basi scutulata affixo, intus pallida, extus atro-corticata veloque subpulverulento rubiginoso persistente obducta, rugosa; peritheciis peri-

phericis immersis carbonaceis atris, ostioliis papillatis, prominulis; sporidiis generis.

Hab. in sylvis Sinnamariensibus ad truncos putridos (LEPRIEUR); nec non in Guiana, Cuba, Brasilia.

88. **Xylaria pallida** B. et Cooke Fungi of Braz. n. 394. — Suberosa, 1237
claviformis, simplex, pallida; clavula cylindræa, apice subacuminato; stipite gracili, ad basim discoideo; sporidiis cymbiformibus, fuscis, 15 \approx 5.

Hab. in lignis, Papunha Brasiliæ (TRAILL). — Tota 25–40 mill. alta, stipes 15–20 mill. longus. Ostiola punctiformia minuta nigra.

89. **Xylaria clavulata** (Schw.) B. et C. Cuban Fungi n. 701, *Sph.* 1238
(*Cordyceps clavulata* Schw. Synops. Amer. bor. n. 1155. — Subiculo clypeato, ovato, regulari, contextu fibrilloso-membranæo arcte epidermide insidenti, centro incrassato-elevato, marginibus subliberis inflexis, ad quartam partem uncix expanso; clavulis ex subiculo patellari, basilari, assurgentibus rigidulis, subdivergentibus, ad 7–10; tres lineas altis, substantia suberosa, intus albis, extus nigris, et apice obtuso cinereo-pulveraceis; stipite attenuato, et in capitulum oblongum obtusum sensim abeunte, capitulo a stipite denique distincto; peritheciis parallelis nigris prominulis cum ostioliis minutis, et demum dejacentibus corticem exteriorem cinereo-pulverulentum; intus albis farctis.

Hab. in ramulis vivis *Quercus palustris* et *coccineæ*, onustis operibus *Cynipum*, Bethlehem, Amer. bor., Venezuela, Cuba.

Sect. 2. *Xylocoryne* Fr. l. c.: clava undique fertili, stipite vestito.

90. **Xylaria corniformis** Fr. Summ. Veg. Scand. p. 381, Nits. Pyr. 1239
Germ. p. 13, *Sph. corniformis* Fr. El. II, 57. — Stromate omnino simplici nec furcato nec ramoso, cylindrico, nunquam compresso v. dilatato, crassiusculo, fragili, ex fusco nigricante, apice nonnihil angustato, obtusiusculo plus minus incurvo, corniformi, basi incrassata, subhemisphærica v. conica, villosa substrato adfixa, peritheciis undique obsito; stromatibus congregatis quidem sed liberis nec inter se conjunctis paginæ inferiori ligni, humi prostrati, sæpe adpressis, horizontalibus; peritheciis subglobosis, confertissimis, minutis, plus minus protuberantibus, ostioliis papillæformibus, minimis; ascis cylindricis, longissime pedicellatis, octosporis, 60–75 \approx 6–7 p. sporif.; sporidiis oblique monostichis, nonnihil inæquilateralibus v. subrectis, utrinque rotundatis, obtusissimis, fuscis, 8–10 \approx 5.

Hab. in truncis prostratis Fagi, Populi, Aceris etc. in Britannia, Germania, Italia, Smolandia, Amer. bor., Ceylon, Nova Zelandia. — Var. *obovata*, New York. — Var. *irregularis*, stromate irregulari et compressiori. Amer. bor. — *X. furcata* (Schw.) Berk. et Curt. Exot. Schw. Fungi p. 284 (nec Fr.), seu *Hypoxyylon corniforme* Mont. (ex Guiana) differret a *X. corniformi* Fr. sporidiis angustioribus; sed sec. Currey (Linn. Trans. XXII, tab. 45, fig. 20-21) vix varietas.

91. **Xylaria longipes** Nits. Pyr. Germ. p. 14, *X. polymorpha* Auct. 1240 p. p. — Stromatibus erectis v. assurgentibus varieque curvatis, stipitatis in ramis crassis putrescentibus ac plerumque decorticatis prostratisque sparsim v. multo rarius 2-3 basi tantum conjunctis, clavula perithecigera in plerisque omnino simplici, tereti exacte cylindrica, crassa, apice obtusissima, rotundata, rarius ventricosoinflata, oblonga, rarissime compressa, integra v. bipartita, superficie reticulato-rimosa, ex argillaceo nigricante perithecorumque ostioliis exiguis, hemisphæricis, extantibus nigropunctulata, in stipitem longitudine nunc breviorē nunc contra subæqualem, immo longiorē sed semper multo tenuiorē sensim attenuata; stipite basi tuberoso-incrassato, pilis crassiusculis, patentibus v. contextis atque adpressis, rubescentibus dense hirsuto, superne glabro, plicato-rugoso, ex argillaceo fusciscente; hymenio conidifero cinereoalbido, mox disparente; conidiis obovatis, exiguis, 8 ≈ 4-5, in sterigmatibus brevissimis, septatis solitarie acrogenis; peritheciis clavulæ omnino immersis nec protuberantibus, minutis, globosis vel compressis, dense ac monostiche stipitatis; ascis cylindricis, longissime pedicellatis, octosporis, 80-100 ≈ 7-8 p. sporif.; sporidiis oblique monostichis, ovatis, inæquilateralibus, nigricantibus, 11-14 ≈ 5-6.

Hab. in basi putrida truncorum Fagi, Aceris, etc. in Westphalia et Rhenogovia Germaniæ.

92. **Xylaria aphrodisiaca** Welw. et Curr. Fungi Angol. p. 280, t. 18, 1241 fig. 3-4. — Cæspitosa, glabra, clavulis, subcylindricis, 1-2 unc. altis, fusco-cinereis, tota superficie inordinate areolatis; medulla centrali albißima; peritheciis.....?; basi communi tomento fusco delicato vestita.

Hab. rarior in sylvis primitivis densis ad truncos diu putrefactos, juxta rivum Delamboá, distr. Golungo alto, Angola (ubi fungus uti aphrodisiacus habitus est). — Ex icone clavula tota est perithecigera.

93. **Xylaria fastigiata** Fr. Nov. Symb. 127. — Dense cæspitose-con- 1242
nata, fistulosa, atra, stipitibus elongatis compresso-inæqualibus e
leproso glabratis, clavulis contiguis brevibus, oblongis, cylindricisve
obtusis, papilloso-scabris, peritheciis immersis periphericis globosis,
ostiolis papillæformibus; sporidiis oblongis, curvulis, opacis.
Hab. ad truncos in Costa Rica, prope Antillas (ÆRSTED). —
Clavulæ vix 2 lin. cr. Affinis *X. scruposæ* et *multiplifici* Fr.
94. **Xylaria Beccariana** Pass. Funghi Abiss. p. 185. — Stromate com- 1243
presso, spathulato, apice rotundato vel truncato, peritheciis undique
obsito, siccitate durissimo, in stipitem brevissimum vel elongatum
villosum attenuato; ascis cylindricis, 8sporidis; sporidiis oblique mo-
nostichis ovatis, lateribus parum inæqualibus, apicibus obtusis, sim-
plicibus; fuscis, 4-5 = 2.
Hab. ad Sciotel, in montibus Zelamba (Abyssinia). — A *X. poly-
morphæ* (Pers.) differt præ ceteris sporidiis dimidio minoribus et a
X. corniformi Fr. et *X. longipede* Nits. saltem forma et duritie
lignosa stromatis. Clavulæ solitariæ vel geminatæ saltem in spe-
ciminibus visis; centim. 5 sine stipite metientes.
95. **Xylaria multiplex** (Kunze et Fr.) B. et C. Cuban Fungi n. 795, 1244
Sph. multiplex Kunze et Fr. in Linnæa 1830, p. 532. — Cæspi-
tosa, suberosa, fusco-atra, clavulis tereti-compressis, subdivisis, læ-
vibus intus albis, stipitibus elongatis leproso-villosis; peritheciis
prorsus immersis, globosis, confertis, ostiolis punctiformibus, dein
subdilatis; sporidiis ovoideis, 20-22 μ . long.
- Hab.* ad truncos, Surinami, Java, Nova Zelandia, Guiana, Juan
Fernandez. — *X. Hypoxylo* affinis.
96. **Xylaria Geoglossum** (Schw.) Fr. Nov. Symb. 126, *Sph.* (Hypocrea) 1245
Geoglossum Schw. New Amer. Sphær. p. 4, t. I, f. 4 et in Linnæa
IV, Litt. 44. — Subcarnosa, geoglossides, intus albida, extus ater-
rima; capitulo linguiformi, medio compresso et canaliculato, apice
obtuso; peritheciis parvis confertis immerso-prominulis; stipite
clavula triplo longiore, subhirsuto, intus albo, extus atro.
Hab. New York, Amer. bor. — Totus fungus pollicem altus,
valde gracilis.
97. **Xylaria castorea** Berk. Fl. Nov. Zel. I, p. 204. t. CV, f. 10. — 1246
Stipite brevi, primum spongioso-velutino demum nudo, rugoso; cla-
vula obtusa ovata vel subelliptica, valde compressa minutissime
areolata, ostiolis prominulis punctato-aspera; ascis angustis; spo-
ridiis ovoideo-oblongis, fuliginis, 10 μ . longis.
Hab. in ligno putri in Nova Zelandia (COLENSO), Wellington

N. Z. (TRAVERS). — Stroma 2-3 cent. alt., 12-16 mill. cr. Habitus fere *X. Linguae* Lév.

98. *Xylaria collabens* Mont. Syll. Crypt. n. 696 et Cent. II, n. 31, 1247
t. 9, f. 6, *Acrosphæria collabens* (Mont.) Corda Anleit. p. 136. —
Fragilissima, stipitata; stipite nigro-villoso, villo patenti, simplici
aut fureato; clavula magna spherica, Cerasi magnitudine, nigra,
intus cava, extus subsquarrosula, appendice apicali brevi aut nullâ
instructa; peritheciis periphericis magnis membranaceis fuscis col-
labentibus, ostioli papillæformis prominuli limbo interno circulari
adnatis; sporidiis generis at duplo majoribus.

Hab. in cortice arborum in Guyana centrali (LEPRIEUR).

99. *Xylaria adscendens* Fr. Nov. Symb. 128, *Sph. adscendens* Fr. 1248
Linnæa 1830, pag. 537. — Suberosa, simplex ramosave, clavulis
compressis longitudinaliter costato-rugosis, laccatis, atris, stipitibus
adscendentibus subglabris lacunoso-sulcatis; peritheciis immersis,
haud prominulis globosis amplis, sparsis.

Hab. in truncis demortuis prope Tifuca Brasiliæ (BEYRICH). —

Stirps 3-4 unc. alta, a *X. Hypoxylo* non multum absimilis.

100. *Xylaria alpina* Speg. Nov. Add. n. 64, Mich. II, 253. — Stroma- 1249
tibus sæpius solitariis, rarius in cæspitibus 2-3 connatis, clavæfor-
mibus rarius subcylindraceis, rarissime lateraliter compressis, 2 cent.
altis, $\frac{1}{3}$ - $1\frac{1}{2}$ diam.; extus atris ruguloso-scabrosis, intus candidis;
clavula peritheciis subglobosis, totaliter immersis, vix apice ostioli
exsertis, confertissimis, undique ornata; stipite atro, brevi, ligno
immerso, sæpe subbulboso, pulvinulo depresso, subcirculari, to-
mentoso-ozoniaceo, atro-olivaceo circumdato; ascis longissime pe-
dicellatis, 40-45 \approx $4\frac{1}{2}$ -5 p. sporif., 100-110 \approx $1-1\frac{1}{2}$ stip., paraphy-
sibus crassis torulosis obvallatis, octosporis; sporidiis oblique mono-
stichis, navicularibus, rarius subellipticis, utrinque obtusiusculis,
1-guttulatis, fusco-fuligineis, 7-10 \approx 4-5.

Hab. in trunco carioso putrescente Abietis in sylva alpina
Cansiglio, in Italia boreali.

101. *Xylaria portentosa* Mont. Syll. Crypt. n. 677 et Cent. I, n. 33, 1250
Fl. Boliv., sub *Sphæria* (1839), p. 46, et Fl. Chil., VIII, p. 420,
t. 9, f. 1, *Sph. antilopea* Lév. Ann. Scienc. nat. 1846. — Ligno-
sa; stipite basi ramoso-subfasciculato, clavulis elongato-linguifor-
mibus atris intus cavis, undique perithecia magna superficialia ova-
to-globosa crassa papillata gerentibus; ascis cylindraceis longe sti-
pitatis, paraphysatis; sporidiis cymbiformibus binucleolatis.

Hab. ad lignum emortuum in Chile (ALC. D'ORBIGNY), Guade-

lupa (L'HERMINIER). — Stromata cylindracea, 6–12 cent. longa, basi 3–5 mill. cr.

102. **Xylaria radicata** B. et C. Cuban Fungi n. 780, *Sph. radicata* 1251
Schw.! herb. — Cylindrica, simplex vel e radice longa tomentosa subcæspitosa oriunda, ex atropurpureo nigra, rugosa, leviter rimosa, ostiolis prominulis papillata; stipite brevissimo; sporidiis cymbiformibus 15–20 μ . longis.

Hab. in ligno putri Cubæ et Surinami. — Radix 2–5 cent. longa; capitulum fere æquilongum.

103. **Xylaria scruposa** (Fr.) Berk. Cub. Fungi n. 802, *Sph. scruposa* 1252
Fr. El. II, p. 55. — Cæspitosa, suberosa, clavulis simplicibus scruposo-rugosis undique peritheciis tectis, intus griseis, stipitibus subvillosis.

Hab. ad truncos Brasiliæ, Indiæ occidentalis et Cubæ. — Species eximie distincta! Stipites plurimi conjuncti, inferne in radicem deorsum attenuatam, truncos intrantem, connati, longitudine clavulæ, leproso-villosi, lineam crassi; variant glabrescentes. Clavulæ oblongatæ, obtuse, simplicissimæ, undique peritheciis cinctæ et tuberculosæ, superficie insuper rugoso-scruposa et adspectu quasi leprosa, ut varii fungi Brasiliani, opaca, atra. Intus tota solida est, molliuscula, grisea, haud pulveracea. Perithecia globosa, conferta, passim polysticha (immatura stromati immersa), pro ratione majuscula, prominentia, atra. Ostiola ipsa superficie leprosa oblitterantur. Tota 1–2 unc. alta, clavulis 2–3 lin. diametro.

104. **Xylaria comosa** Mont. Syll. Crypt. n. 696 et Cent. II, n. 30, 1253
t. 9, f. 5, *Sph. echinocephala* Schw. MS. — Simplex, stipitata; stipite coriaceo-suberoso nigro-velutino; clavula brevi elliptica etiam villosula, crusta rimosa (velo) juniore ochroleuca, demum fusciscente obducta, apice varie fimbriata, fimbriis comam fingentibus, intus initio fibris transversis faretæ, dein columella axili pallida tantum percursa; peritheciis globosis, sparsis membranaceis mollibus flaccidis collabentibus, ostiolis papillatis ad rimulas crustæ sæpius insidentibus.

Hab. ad ligna emortua in sylvis Sinnamariensibus (LEPRIEUR), Cuba, Surinam, S. Domingo (BERK.).

105. **Xylaria Culleniæ** B. et Br. Fungi of Ceylon n. 1047. — Stipite 1254
elongato strigoso quandoque furcato; capitulo simplici vel fasciculato-partito; peritheciis prominulis rugosis; sporidiis cymbiformibus curvulis.

Hab. in capsulis aculeatis *Culleniæ spinosæ*, Ceylon. —

Pili stipitis septati.

106. **Xylaria hispidula** B. et C. Cuban Fungi n. 804. — Stipite elongato æquali nigro floccis patentibus demum depressis vestito; capitulo subcylindrico obtuso subfulvo venis flexuosis nigris ornato; peritheciis prominulis; sporidiis cymbiformibus, 14-15 μ . longis. 1255

Hab. in ligno putri, Cuba. — Stipes 5 cent. longus; capitulum 25 mill. long. deorsum attenuatum. Affinis *X. escharoidi*, sed rite distincta.

107. **Xylaria microcephala** Mont. Syll. Crypt. n. 692 et Fl. Chil., VII, p. 432, t. 9, f. 2. — Cæspitosa, minuta, 4 mill. alta; stipitibus teretibus ramosis, fusco-tomentosis; capitulo globoso depresso millim. crasso concolori; peritheciis paucis immersis intus albis. 1256

Hab. ad cortices arborum emortuarum in Chile (BERTERO).

108. **Xylaria spathulata** B. et Br. Fungi of Ceyl. n. 1040. — Capitulo late obovato castaneo ostiolis nigris punctato; stipite brevi brunneo basi penetrante materie fusca spongiosa prædito; carne pallida; sporidiis minutis 10 μ . longis. 1257

Hab. in ligno putri, Central province, Ceylon. — Stipes 20 mill. long. capitulum æquans; perithecia in stipitem decurrunt.

109. **Xylaria tenuissima** (Zipp. et Lév.) Fr. Nov. Symb. p. 128, *Sphæria* (Cordyceps) *tenuissima* Zipp. mss. Lév. Ann. Scienc. nat. 3, 1845, p. 44. — Nigra; stipite gracili elongato, scruposo-velutino deorsum attenuato, sursum bifido, claviculis torulosis elongatis mucronatis, peritheciis globosis semi-immersis, ostiolis obsolete. 1258

Hab. in Java et Cili, ad truncos. — Stipes 3 cent. altus. Accedit ad *Xyl.* (Thamn.) *hispidissimam* Fr.

Sect. 3. *Xylodactyla* Fr. l. c.; clava apice sterili, stipite villosa.

110. **Xylaria pedunculata** (Diks.) Fr. Summ. Veg. Scand. p. 382. Nits. Pyr. Germ. p. 8 *Sph. pedunculata* Dicks. Crypt. Brit. IV. p. 27, t. XII, f. 8. — Stromate e terra emergente, crassiusculo, flexuoso, fusco-nigricante, simplici v. rarius parce ramoso; hymenio conidifero cinereo; clavula perithecigera crassa, subglobosa, peritheciis prominentibus verrucosa, apice conico, acuto, sterili; ascis cylindricis, brevi-pedicellatis, octosporis; sporidiis late ovatis, obtusissimis, rectis, oblique monostichis, ex fusco nigricantibus, opacis, strato mucoso, crasso, hyalino cinctis, 40 \approx 20. 1259

Hab. ad terram uliginosam plerumque stercorata in Gallia, Britannia et Missouri, Amer. bor.

111. **Xylaria Hypoxylon** (Linn.) Grev. Flora Edin. p. 355. Nits. Pyr. 1260
 Germ. p. 5, *Clavaria Hypoxylon* Linn. Fl. Suec. ed II, p. 457.
Sph. Hypoxylon Pers. Obs. myc. I, p. 20. — Stromate erecto, com-
 presso-dilatato varieque partito, rarius tereti ac simplici, atro et
 basin versus villosus; hymenio conidifero albido, conidiis fusiformi-
 bus, minimis; clavula peritheciigera stipite multo crassiore perithe-
 ciis ovatis, paullo prominentibus, dense stipatis rugosa, apice ste-
 rili; stipite clavula plerumque breviori; peritheciis rarius in stro-
 mate fere integro irregulariter sparsis; ascis cylindricis, octosporis,
 longe pedicellatis, $80 \approx 7-8$, parte sporif.; sporidiis fusiformi-
 bus obtusis, inæquilateralibus, nigricantibus, oblique monostichis,
 $12-14 \approx 5-6$.

Hab. ad ligna putrida, cortices muscosos truncorum in tota Eu-
 ropa, Amer. merid. et bor., Asia merid., Cuba, Java, Australia,
 Natal. — Var. *Bowmanni* Müll.; gracilis, brevior, 18-24 mill. alta.
 In Australia, King's Creek. — Var. *mucronata* Berk. Ceylon. —
 Var. *pedata*, glabra, nigra, clavula subdiscreta pedato-incisa; sti-
 pite clavulam superante. Cum vulgari. — Var. *cupressiformis* Pers.
X. cupressiformis (Woodw.) Fr., minor, simplex, clavula discreta,
 cylindrica conico-acuminata. In Suecia et Germania.

112. **Xylaria cupressiformis** Becc. in Erb. critt. ital. n. 1278, *Lichen-* 1261
agaricus cupressiformis Mich. N. pl. gen. 104, t. 55, fig. 2, nec
 Pers. — A *X. Hypoxylon* differt indumento basilari pannoso, rufo-
 brunneo, nec hirsuto; sporidiis oblongo-navicularibus, latitudine
 sua fere triplo longioribus (in *X. Hypoxylon* latitudine vix duplo
 longiora sunt).

Hab. in truncis Populi in sylva Pisana (Ital. media) ubi le-
 git O. BECCARI. — *X. cupressiformis* Ces. Myc. Born. p. 17, ex
 Sarawak (Borneo) huc forte quoque spectat.

113. **Xylaria Massula** Ces. Myc. Born. p. 15. — *Xylariæ cupressi-* 1262
formi aliquantulum similis; clavulis gregariis, dimidium centime-
 trum ad summum altis, ovatis in stipitellum abrupte attenuatis,
 obtusis, rugosis, atris; ascis linearibus, sporidiis cymbiformibus al-
 ternatim versis, uniseriatis, utrinque obtusis, continuis, e virenti
 fuscidulis, sub-opacis, $8 \approx 5$.

Hab. in Sarawak Bornei ad Mattang, in corticibus et ligno de-
 nudato.

114. **Xylaria aristata** Mont. Syll. Crypt. n. 694 et Guy.. mss., n. 497, 1263
 t. 5, f. 6. — Simplex aut furcata, filiformis, carnosus-suberosa;
 clavula ex ovoideo spherica, mucronato-aristata, umbrina, lævi;

peritheciis sphaericis latentibus membranaceis, ostiolis prominulis atris; stipite patenti-villoso attenuato; ascis cylindraceo-clavatis, 80 \approx 5, paraphysatis; sporidiis minutis cymbiformi-gibbis, 10 μ . longis.

Hab. ad folia Guttiferæ cujusdam, Cayenna (LEPRIEUR), Borneo (BECCARI), Cuba in foliis Clusiæ etc. (BERK.). — Sparsa, in foliis coriaceis insititia. Stipes simplex, e basi parum crassiori filiformis, ultra pollicem et dimidium longus, rigidus, interdum paulisper flexuosus, desinens in clavulam oblongam, 3-4 mill. longam, $\frac{1}{2}$ crassam, ostiolis exasperatam, mucronatam. Totus fungus umbrinus, glaber, levis (Ces.).

115. **Xylaria apiculata** Cooke Nev. Zeal. Fungi in Grev. VIII, 66. — 1264
Simplex, gracilis, stipitata, atra; capitulis cylindricis, superne apiculatis; peritheciis prominulis, papillatis; stipite velutino; ascis cylindraceis; sporidiis uniseriatis, lanceolatis, subcurvulis, atro-brunneis, 20-22 \approx 7.

Hab. in ligno putri Maungaroa Novæ Zelandiæ. — Stipes 25-38 mill. altus, clavula 12 mill. long. 2 mill. cr. apice spinulosa.

116. **Xylaria Tulasnei** Nits. Pyr. Germ. p. 8, *X. pedunculata* var. 1265
pusilla Tul. Carp. II, p. 18, t. II, fig. 1-28. — Stromate e terra v. e fimo cuniculari apice clavuligero erumpente, simplici, nigricante, gracili, filiformi, flexuoso v. contorto, basi plerumque varie incrassato, sclerotiiformi, plerumque sub clavulam nec non ad basin versus pilis copiosis hirsuto, ceterum variæ longitudinis; hymenio conidifero cinereo; conidiis obovato-globosis minutissimis; clavula perithecigera subglobosa vel e basi maxime incrassata in apicem sterilem acutum sensim attenuata, peritheciis prominulis mammosa; ascis cylindricis, breviter pedicellatis, octosporis, pseudoparaphysibus longissimis, filiformibus, tenerimis, septatis obvalatis; sporidiis submonostichis, late ovatis, obtusissimis, rectis, nigricantibus, strato crasso, hyalino, involutis, 24 \approx 12-14.

Hab. in humo fimo Cuniculorum stercorata in Gallia, Britannia et Germania. — A *X. pedunculata* statura multo minori differt.

117. **Xylaria stuppea** (Wallr.) Nits. Hedw. 1868, p. 83. *Sph. stuppea* Wallr. Crypt. Germ. n. 4114. *Sph. digitata* β *rhizoides* Fr. El. II. 56. — Stromate nigro fusco, tegmine stipposo stipato-contexto, stratum medullare album ambeunte tecto, molli, e basi rhizode ramosissima implexa in stipites prolificos, inferne bulbosos, superne in apicem primum albo-pruinose tenuatum, dein perithe-

ciis globosis, vertice acuto papillato prominentibus, nucleo nigro faretis asperum cylindricum desinente, plexus fasciculatos rhizomatoideos mentiente; ascis cylindricis, stipitatis, $160 \approx 8$, p. sporif.; sporidiis octonis, oblongis, inæquilateralibus, $20-27 \approx 6-7$, fuligineis.

Hab. ad ligna quercina aquæductuum northusanorum Germ. semel at abundanter. — Clavula 6-20 mill. longa, 2-3 mill. crassa. — A *X. digitata* et *X. polymorpha* satis recedit.

118. **Xylaria polyclada** (Lév.) Fr. Symb. myc. 128. *Sphæria* (Cordyceps) *polycladia* Pers. mss. Lév. Ann. Scienc. nat. 3, 1845, p. 44. 1267
 — Carnoso-suberosa, ramosa subdichotoma, clavulis elongatis crustaceo-laccatis rugosis cylindricis opacis compressis dilatatis albis, peritheciis globosis immersis, ostiolis punctiformibus atris nitidis prominulis, stipite scruposo fuligineo; ascis densis, 8-sporis; sporidiis navicularibus, monostichis, opacis.

Hab. in Hispaniola (PORTEAU). — Stroma 12-15 cent. altum, stipite 6-7 cent. long.

119. **Xylaria persicaria** (Schwein). B. et C., Thuem. F. Pomic. p. 101. 1268
Sph. persicaria Schwein. Syn. Carol. n. 9. — Suberosa, simplex, clavula nuda albo-carnea, stipite flexuoso villosa rugosa.

Hab. in defossis putaminibus Persicarum in Carolina, sat frequens. — Cæspitosa. Caulis flexuosus, raro ramosus, radicans, 3 unc. longus et ultra, crassitie pennæ corvinæ, primo villosus virescens, demum niger (in nostris speciminibus ferrugineus), perithecia continens valde prominula, in medio sita. Clavula alba, in colorem albo-carneum v. lutescentem mutatur. In profunde defossis matricibus longitudinem acquirit 6 unc.

120. **Xylaria Guepini** (Fr.) Ces. Comm. critt. I, p. 71, t. V. *Sph. Guepini*, Fr. Elench. II, 58. — Stipite radicoso extus intusque stuppeo albo, clavulis digitatis testaceis, apice sterilibus, ostiolis granulosis atris; ascis cylindricis breve stipitatis, 8sporibus; sporidiis monostichis ovoideis, inæquilateralibus, fuligineis. 1269

Hab. ad terram fimetosam Italiæ borealis, Galliæ occidentalis (GUEPIN), Brasiliæ (FRIES), Ceylon et Borneo (BECCARI). — Inter Sphærias recentiori seculo in Europa detectas nulla memorabilior. Stipes ad 6-7 unc. extensus, lineam crassus, erectus, æqualis, firmus, sed mollis, undique vellere stuppeo obductus, velut Rhizomorpha xylostroma Ach!, sursum dichotome divisus in clavulas plures digitato-congestas. Clavulæ 3-5-digitatæ, simplices aut bifidæ, (est enim in toto fungo dichotomiæ nisus), breves, unciam

haud attingentes, utrinque attenuatæ, mucrone sterili obtuso terminatæ; colore pallide testaceo, sed ex ostioliis nigris demum granulosis atræ; intus solidæ, stupposæ, albæ. Perithecia pro ratione ampla, atra, confertissima, immo polysticha, ostioliis prominulis conicis. Fr. l. c. — Var. *eupiliaca* Ces. l. c. in quo a specie differat nescio.

121. **Xylaria carpophila** (P.) Fr. Sum. Veg. Scand. p. 382. Nits. Pyr. 1270

Germ. p. 6. *Sphæria carpophila* Pers. Obs. myc. I. 19. — Stromate assurgente, flexuoso, gracili, filiformi, nigricante, simplici et terete, v. apice paullo spathuliformi— dilatato, immo bipartito, duasque clavulas gerente, basi plus minus villosa; hymenio conidifero cinereo v. cinereo-olivaceo; conidiis minutissimis, ovatis; clavula perithecigera stipite crassiore ac plerumque brevior, subulata, peritheciis nonnihil exstantibus tuberculosa, apice sterili; peritheciis subglobosis; ascis cylindricis, pedicellatis, octosporis, $80 \approx 6$ p. sporif.; sporidiis oblique monostichis, fusiformibus, obtusis, atrofuscis, inæquilateralibus, $12-16 \approx 4-5$.

Hab. in pericarpis putrescentibus Fagi sylvaticæ, rarius Diospyri, Goniothalami, Liquidambaris, in Britannia, Germania, Belgio, Gallia, Italia, Suecia, Amer. bor. Ceylon.

122. **Xylaria Oxyacanthæ** Tul., Carp. II, p. 15, tab. 13, fig. 1-10. X. 1271

Fuckelii Nits. Pyr. Germ. p. 7. — Stromate primo hypogæo, deinde e terra emergente, nunc simplici et terete, nunc contra versus apicem dilatato—compresso, varieque partito, nigerrimo, basi villosa; hymenio conidifero ex albido dilute flavicante; conidiis, globosis, minimis; clavula perithecigera crassa, apice sterili; peritheciis dense stipatis, vix prominentibus; ascis cylindricis breviter pedicellatis, octosporis, $80-100$ p. longis; sporidiis oblique monostichis, ovatis, inæquilateralibus, atrofuscis, $10 \approx 4$.

Hab. in fructibus humi dejectis Cratægi Oxyacanthæ, in Gallia. — A *X. carpophila* (Pers.) recedit stromate robustiore brevior, magis diviso, parte conidiophora flavicante etc.

123. **Xylaria Delitschii** Auersw. Hedw. 1868, p. 136. X. *Fuckelii* 1272

Nits. (p. p. in fructibus Carpini). — A typo differt stromatibus simplicibus cylindricis, nec bifidis, compressis; ascis et sporidiis ut *X. Hypoxyli*, a qua differt conidiis globosis nec lanceolatis.

Hab. in fructibus Carpini, Lipsiæ (AUERSWALD.).

124. **Xylaria flabelliformis** (Schw.) B. et Curt. Cuban Fungi n. 793. 1273

Sph. flabelliformis (Schw.) Fr. Elench. II, 58, Schw. Syn. Am. bor. p. 189. *Merisma nigripes* Schw. Syn. Carol. p. 85. — Coria-

cea, clavula palmato-incisa, fimbriata, pubescente, luteo-carnea, stipe subbulboso nigro, villosa.

Hab. in ramis et lignis dejectis Carolinae, Pennsylvaniae, Ceylon, Cuba. — Valde singularis plantula, in statu sterili *Isariæ* æmula. Specimina solitaria, $\frac{1}{2}$ unc. alta vel paulo ultra; basi bulbosa, ovata, villosa, abrupte nigricante; clavula apice sterili compressa, irregulariter fimbriata dentataque, tuberculata; subinde in ramos palmatos finditur. Color in siccis ob pubescentiam pulverulentam albicans. Perithecia minuta. Junior *Thelephoram* quamdam in memoriam revocat.

125. **Xylaria Feejensis** (Berk.) Fr. Nov. Symb. 128. *Sphæria* (Hypoxylon) *Feejensis* Berk. descrip. fung. Hinds p. 10. — Suberosa, simplex, vel sursum palmata, fusco-purpurea, rugosa, rimulosa; peritheciis minutis subglobosis subprominulis, ostiolis nigris; stipite brevi vel nullo; sporidiis minutis, segmentiformibus. 1274

Hab. in truncis putridis Feeje, insulæ m. Pacifici (R. B. HINDS).

126. **Xylaria dichotoma** Mont. Syll. p. 204. Cuba, p. 351, t. 13, f. 3, 1275
sub *Hypoxylo*, nec Lév. — Cæspitosa, subcarnosa, teres, dichotoma, sub axillis compressa, atro-fusca opaca, solida, intus pallida, undique, apicibus stipitibusque villosis exceptis, peritheciis minutis, globosis prominentibus papillatis tecta.

Hab. ad ligna dejecta, Cuba (RAMON DE LA SAGRA).

127. **Xylaria Arbuscula** Sacc. M. V. n. 1192. Mich. I. 249. Fung. ital. 1276
t. 583. — Gregaria, fasciculata, arbusculiformis, atra; stipitibus gracilibus, cent. $1\frac{1}{2}$ - $2\frac{1}{2}$ alt. mill. $1\frac{1}{2}$ -2 cr., adscendentibus, tomentosis; clavulis (conidiophoris) attenuatis, sæpe compressis, apice albicantibus (conidiis nondum visis), clavulis pyrenophoris teretibus, apice breviter sed acute cuspidatis, $\frac{1}{2}$ -1 cent. long., 1- $1\frac{1}{2}$ mill. cr., initio longitudinaliter cinereo-rivulosis, tandem, ob perithecia, depresso tuberculatis; peritheciis globosis immersis, vix $\frac{1}{2}$ mill. diam. papillulatis; ascis cylindræis longiuscule stipitatis, p. sporif. 80 \approx 8-10, stip. 30-40 long., apice rotundatis, aparaphysatis, 8sporis; sporidiis oblique monostichis, oblongo-fusoideis, 14-16 \approx 5-7, curvulis, 1-2-guttatis, initio hyalinis, dein cinereis, tandem atro-fuliginis.

Hab. in cistis ligneis putrescentibus muscosis Orchideas tropicales hospitantibus in calidario Horti LEVI, Treviso, Ital. bor. — A *Xyl. Hypoxylo* (L.) Grev., X. *cupressiformi* (Mich.) Becc. et pluribus exoticis satis diversa.

128. **Xylaria acuta** Peck, 25 Rep. p. 101. — Gregaria aut cæspito- 1277

sa. 1-1.5 alta: stromate cylindrico aut subfusiformi, saepius apice sterili acuto, nigricante, intus albo, radiato-contexto; stipite tomento mucedineo purpurascente obvoluto, simulateque bulboso; peritheciis globosis nigris; sporidiis monostichis, ellipsoideis, interdum curvulis, coloratis, 15-18 μ . long.

Hab. in Amer. boreal. Greig, in truncis muscosis. — A *X. digitata* differt habitu caespitoso, stipite et substantia interiore.

129. **Xylaria Cornu-Damae** (Schw.) Berk. North Am. Fungi p. 158, 1278

Sph. (*Cordyceps*) *Cornu-Damae* Schw. Syn. Am. bor. n. 1163. — Suberosa, aterrima, crassiuscula, trunco subradicato, varie torto, atro-floccoso in radice, compresso, in apice furcato-ramoso, dilatato; plerumque apicibus abrupte acuminatis, demum fertilibus, exacte ut cornu damae; apice juniore squamuloso-cinerascente, ceterum tomento atro unlique brevissimo vestito; peritheciis majusculis prominulis, ostiolis obtusato-cylindricis brevibus; intus candidissimo; sporidiis (teste Berk.) curvulis, angustis, 15-26 μ . longis.

Hab. in truncis antiquis dejectis subdefossis, Bethlehem Am. bor.

— *X. Hypoxylo* affinis sed multo crassior.

130. **Xylaria mucronata** (Schw.) Sacc. *Sph. mucronata* Schw. New 1279

Sphaer. Amer. p. 5. t. 1, fig. 1, Fr. S. M. II, 326. — Carnosa, simplex, badia, clavula incrassata lutescente, apice sterili mucronato, peritheciis atris.

Hab. in trunco *Liriodendri* Carolinae Amer. bor. — Stipes badius, subsquamosus, inflexus, compressus, unciam altus, 4 lin. crassus. Clavula incrassata, irregularis. Perithecia majora, prominula, ostiolis globosis, nigris. Asci moniliformes, post evacuationem teretes. Sporidia subglobosa, atra.

131. **Xylaria piperiformis** Berk. Decad. n. 481. — Clava gracili, 1280

cylindrica, saepius apice acuminata sterili; stipite elongato flexuoso lineato-rugoso radicante; ostiolis prominentibus; sporidiis minimis, 6 μ . longis, cymbiformibus.

Hab. in India, Sikkim. — Stipes 50-70 mill. alt., 2 mill. cr.; clavula 25-50 mill. longa, vix 2 mill. cr.; ostiolis rugulosa, subinde pruinosa; perithecia elliptica.

132. **Xylaria subterranea** (Schw.) Sacc. *Sph.* (*Hypoxylon*) *subterra-* 1281

nea Schw. New Am. Sphaeriae p. 4, t. 1, fig. 3, et in Linnæa IV. Litt. 45. — Caulescens suberosa, indivisa, longissima, apice elongato griseo, pulverulento, integro, ex reliquo nigricans, $\frac{1}{2}$ ped. alta, basi flexa hirsuta, indeque usque ad medium tenui-fusco-tomentosa; peritheciis sparsis, in parte pulverulenta rarioribus.

Hab. in fodinis et puteis, New Jersey, Amer. bor.

133. **Xylaria ianthino-velutina** Mont. Syll. Crypt. n. 690 et Cent. II, 1282
n. 34 et Guy., n. 492. — Simplex vel ramosa, teres, apice acuto
compressa, undique villo longo violaceo-brunneo hirta aut vestita;
peritheciis superficialibus, subliferis ovoideis depressis sparsis de-
mum pertusis inter setulis; sporidiis monostichis naviculari-sub-
pyriformibus, 12-13 μ . long.

Hab. in fructu putrido Hymenæe Courbaril in Guyana
(LEPRIEUR), in legumine ligneo in Brasilia (TRAILL). — An eadem
cum *X. Apeibæ* Mont.?

Sect. 4. *Xylostyla* Fr. l. c. clava apice sterili, stipite glabro.

134. **Xylaria digitata** (Linn.) Grev. Flor. Edin. 356. Nits. Pyr. Germ. 1283
p. 9. *Clavaria digitata* Linn. S. Veg. ed. XV, p. 1010. — Stro-
mate erecto, crasso, fusco, leproso-velutino, glabro, terete ac sim-
plici, apice sensim attenuato, rarius obtuso, immo emarginato v. in
ramos 2-3 dichotome partito, rarissime plus minus compresso ac
furcato, basi connato v. tanquam in corpus solidum, crassissimum
confluente hymenio conidifero ex albedo-fuscescente; conidiis ob-
ovato-subglobosis, minimis; clavula perithecigera mediam stroma-
tis partem occupante, et in stipitem brevem et in apicem sterilem
continuo transiente, peritheciis numerosissimis, denseque stipatis,
paullo prominentibus rugosa; ascis cylindricis, longe pedicellatis,
octosporis, 120 \approx 7 p. sporif.; sporidiis oblique monostichis, fusi-
formibus, obtusis, inæquilateralibus, atrofusis, 18-20 \approx 5-6.

Hab. in lignis fabrefactis et trabibus putrescentibus udis in Bri-
tannia, Germania, Suecia, Gallia, Italia, Helvetia, America bor.,
Brasilia, Java, Ceylon. — Var. *Americana* Peck.; sporidiis mino-
ribus, 12-13 μ . longis ceterum non diversa. New York. — Var.
torulosa Jungh. Præm. Fl. Java, p. 22; clavulis torulosis. In truncis
Javæ. — Var. *dubia* Jungh. l. c. stromatibus sphaeroideis stro-
mati communi effuso subimmersis; peritheciis magnis. In truncis,
Javæ. Hæc verisimiliter spectat ad sect. IV. *Xyposyli* (CÆNOPUS).

135. **Xylaria grandis** Peck, 26 Rep. p. 85. — Magna, nigrobrunnea, 1284
irregularis, apice sterili obtusa acuminata, rubiginosaque, basi ab-
rupte attenuata, intus albicante; peritheciis subglobosis; sporidiis
fusoideis, utrinque acuminatis, rectis vel curvatis, 20-23 μ . long.;
stipite ramoso, radiante, sæpe valde elongato.

Hab. in Amer. bor. Portage ad terram. — Planta 7-12 cent. alt.,
clava 3-7 cent. long., 16-20 mill. cr. Stipite ramoso, apice sterili

acuto, mole majori differt a *X. polymorpha*; sporidiis majoribus a *X. digitata*.

136. **Xylaria bulbosa** (Pers.) Berk. et Br. in Berkeley, Outl. of Brit. 1285
Fung. p. 385, t. 24, f. 2, *Sph. bulbosa* Pers. Obs. mycol. II, 63, t. I, f. 1. — Stromate erecto, crasso, simplici v. apice furcato, tereti v. rarius apicem versus paullo dilatato-compresso, glabro, nigricante, basi tuberoso; clavula peritheciigera apice sterili, simplici v. bi-tricururi, peritheciis dense stipatis, nonnihil prominentibus mammilosa, tereti v. subcompressa, stipite brevi; ascis cylindricis, pedicellatis, octosporis, plerumque pseudoparaphysisibus filiformibus, simplicibus, septatis longe superatis, 80-84 \approx 6-7 p. sporif.; sporidiis oblique monostichis, fusiformibus, obtusis, inæquilateralibus, fuscis, 12 \approx 4.

Hab. inter muscos et folia Pinorum ad terram in Germania, Britannia, Italia, Carolina, rarius.

137. **Xylaria graminicola** Gerard, in Peck 26 Rep. n. 85. — Tenuis, 1286
cylindrica, indivisa, intus viridi-pulverulenta, dein nigro-brunnea, ob perithecia globosa prominula exasperata, vertice sterili, acuto; stipite levi, recto vel flexuoso, brunneo; sporidiis monostichis, inæqualiter ellipsoideis, 10 \approx 5.

Hab. in Amer. bor., Ponghkeepsie in rhizomate graminum languentium (GERARD). — Planta 2 circ. alta, *Xylaria Hypoxylon* affinis.

138. **Xylaria cæspitulosâ** Ces. Myc. Born. p. 15. — Dense cæspitosa, 1287
cæspitibus pollicem altis e stipite basi ramoso, ramis erectis vel adscendentibus filiformibus, compressis, in clavulam tenuem cylindraceam torulosam apice sterili producto desinentibus; tota brunnea glabrata; sporidiis (ex Cooke) 12 \approx 3,5.

Hab. in truncis ad Sarawak, Borneo. — Ex mente cl. Berkeleyi ad veram *X. scopiformem* reduci posset; dissentit cl. Cooke.

139. **Xylaria scopiformis** Mont. Ann. Scienc. nat. 1840, XIII, p. 349, 1288
Hypoxylon scopiforme Kunze (Diagnosim reperire non potui. Cfr. ad *X. cæspitulosam* Cesati).

Hab. in radicibus et truncis putridis in Guiana, Surinam, Brasilia, Ceylon, Cuba. — Sporidia 10 μ . longa. — Adest var. *elatior*: clavulis elongatis torulosis. Ceylon (BECCARI).

140. **Xylaria fasciculata** Speg. Fungi Arg. Pug. II, p. 19. — Stro- 1289
matibus rimis ligni et corticis innatis, non vel vix exertis, 15-50 densissime gregarie congestis; stipitibus glabris rugulosis, atris, longissime subrhizomorphaeideis, ligni profunde radicatis, sæpius

mycelio albo-fibroso, sub-arachnoideo vestitis; clavulis, 1-1 $\frac{1}{3}$ cent. alt., basi subteretibus undulato-gibbulosis et perithecigeris, 3-4 mill. long., sursum sterilibus compressis, apice obtuso vel acuto, integro vel lobulato donatis, quandoque strato conidiophoro griseo-croceo vestitis, minute ruguloso-foveolatis, extus atris, intus albis; ascis clavatis, sursum acutiusculo rotundatis, deorsum in pedicellum longiusculum attenuatis, 90-100 \approx 18-20, octosporis, paraphysibus filiformibus crebris obvallatis; sporidiis distichis vel inferne monostichis, elliptico-elongatis, 15 \approx 5, utrinque attenuato-rotundatis ac uniguttulatis, inæquilaterali-cymbiformibus, dilute griseo-fuscis.

Hab. in trunco dejecto subputrescente Salicis Humboldtianæ secus Rio de la Plata, cerca de la Recoleta, Argent. Americæ australis.

141. **Xylaria cristata** Speg. Fung. Arg. I. p. 179. — Stromatibus, 1290
1-2,5 cent. alt., solitariis, sparsis, rarius 2-5 gregariis vel 2-connatis; stipite brevi, quandoque deficienti compresso vel tereti, glabro, ruguloso, atro; clavula subtereti, undulato-gibbulosa, ob perithecia prominula scabrosula, intus alba in apicem, parti perithecigeræ subæquilongum, sterilem quandoque (sed rarius) teretem quandoque, sæpius, compressum 2-5 laciniato-cristatum, albido-roseo-croceum, conidiis vestitum, producta; peritheciis stromati immersis, globulosis, e mutua pressione quandoque angulosis, $\frac{1}{4}$ - $\frac{1}{5}$ mill. diam., atris, ostiolo inconspicuo perforatis; ascis cylindraceutis, 70 \approx 6-8 p. sporif., 30 \approx 5 ped.; apice rotundatis in stipitem deorsum attenuatis, octosporis, aparaphysatis(?); sporidiis oblique monostichis, elongato-navicularibus, 12-15 \approx 4-5, utrinque obtusiusculis, granuloso-farctis, opace fuliginis.

Hab. ad caudices vetustos emortuos Salicis Humboldtianæ in umbrosis secus Rio de la Plata a la Recoleta, Argent.

142. **Xylaria coccophora** Mont. Syll. Crypt. n. 699 et Guy., mss., 1291
n. 502. — Dichotoma, suberosa, tereti-compressa, gracilis; stipite atro, axillis dilatato-complanato; clavulis teretibus apice mucronatis torulosis velo fulvo rimuloso primitus vestitis; peritheciis prominulo-exsertis; ascis cito diffluentibus, octosporis; sporidiis inæqualiter cymbiformibus, 10 μ . longis.

Hab. ad ligna putrida, Cayenna (LEPRIEUR).

143. **Xylaria vaporaria** Berk. Curr. Linn. Trans. XXIV, t. 25, f. 17, 1292
26. — Stromate sclerotioideo, suberoso, rugoso, irregulari, sursum protuberantiis brevibus terminato; clavulis conicis stipitatis, tantum inferius peritheciophoris, atris, sursum attenuatis, pulverulentis.

rubescenti-fuscis; peritheciis subsparsis, prominulis, nucleo nigro glutinoso: sporidiis octonis, navicularibus, biseriatis, nigricantibus, 40-50 μ . longis.

Hab. in Slerotio inter fungos cultos, Cornwell (Britannia).

144. **Xylaria phyllophila** Ces. Myc. Born. p. 15. — Abunde paginam 1293
utramque foliorum arboris mihi ignotæ obsidens; stipite pollicem et semis longo, filiformi, atro, glabro, in longitudinem striato; clavula tenui, cylindræea, dimidii centimetri usque centimetrum et ultra longa, umbrina, torulosa, apiculata, immo aristata.

Hab. in Sarawk, Mattang, Borneo. — An eadem ac *X. Phyllocharis* Mont.?

145. **Xylaria Phyllocharis** Mont. Syll. Crypt. n. 698 et Guy., mss., 1294
n. 501. — Simplex, filiformis; clavula cylindrica carnosa, stipite glabro striatulo atro longiori mucronulata; peritheciis membranaceis innato-periphericis, ostiolis atris prominulis; ascis subtetrasporis, sporidiis ovoideis minutis brunneis, 13 μ . longis.

Hab. ad folia dejecta prope Cayennam (LEPRIEUR).

146. **Xylaria inæqualis** B. et C. Cuban Fungi n. 805. — Receptaculo 1295
filiformi rugoso, peritheciis sparsis papilloso; e basi conica spongiosa oriundo; sporidiis gibbis, utrinque acutiuseculis 15 μ . longis.

Hab. in ligno putri, in Cuba et Brasilia. — Basis conica 5 mill. longa, clava 20 mill. longa.

147. **Xylaria filiformis** (Alb. et Schw.) Fr. Summ. Veg. Scand. p. 382, 1296
Nits. Pyr. Germ. p. 12, Sacc. Fungi it. t. 584, *Sph. filiformis* Alb. et Schw. Lus. p. 2, *X. subularis* Fr. S. V. S. 382, *Thamnomycetes hippotrichoides* Sacc., olim, nec B. et Br. — Stromate erecto, nigricante, glaberrimo, lævi, immo nitidulo, simplici, furcato v. varie ramoso, filiformi, subflexuoso, plerumque compresso, rarissime apicem versus dilatato, bicruri; clavula perithecigera stipite breviori ac vix crassiori a stromatis parte superiore sterili, rosea, sæpe incurva, apicem versus sensim attenuata longe superata; peritheciis globosis valde prominentibus papillatis aspera; «ascis cylindricis longiusecule stipitatis, apice rotundatis 80-100 \approx 6-7 p. sporif., 70 μ . longa, paraphysibus veris nullis, octosporis; sporidiis oblique monostichis, oblongo-fusoideis, inæquilateralibus, 12-15 \approx 5, 2-3-guttatis, fuligineis».

Hab. in foliis putridis, ligni corruptis, corticibus dejectis in Suecia, Germania, Fennia, Belgio, Gallia, Italia, Brasilia, Amer. bor., Venezuela, Cuba.

148. **Xylaria tricolor** Fr. Nov. Symb. 128. — Simplicissima, tenaci, 1297

subulata, gracili, longitudinaliter rugosa, undique glabra, basi nigra, medio fertilis cinerea, apice sterilis fulvella, peritheciis latentibus, ostiolis punctiformibus.

Hab. ad truncos in insula oceanica Oahu (DIDRICHS.). — Fungus 1-2 unc. altus, *X. filiformi* subaffinis.

149. **Xylaria furcata** Fr. Nov. Symb. 128, *Sph.* (*Cordyceps*) *dichotoma* Lév. Ann. Scienc. nat. 3, 1845, p. 45, nec Mont. (teste Friesio) *Sph. scoparia* Lév. MS. — Gregaria, filiformis, teres nuda, nigra, dichotoma, axillis compressis, ramulis ultimis subulatis, albis.

Hab. in Java ad truncos (KORTHALS), Sarawak, Borneo (BECCARI). — Stroma 1 decim. longum. *X. scopiformi* affinis.

150. **Xylaria gracillima** Fr. Nov. Symb. 128, *Sph. gracillima* Fr. in Linnæa 1830, p. 538. — Simplex, tenax, teres, subcapillaris, glabra lineolis nigris in ligno serpens, nigrescens, apice testaceo-pallens; peritheciis lateralibus, raris immerso-latentibus, globosis, nigris.

Hab. ad ligna putrida sylvarum Cayennensium, cum *Thamnomyce*. — Clavulæ filiformes, 4-6 lin. longæ, simplices.

151. **Xylaria Rhizomorpha** Mont. Syll. Crypt. n. 678 et Cent. II, n. 24, *Rhizomorpha guyanensis* Fr. Summa V. S. 382 et Nov. Symb. 128. — Carnoso-suberosa, atra, intus nigrescens, a basi ramosa, dichotoma, teres, lævis, apicibus filiformi-attenuatis; peritheciis superficialibus sparsis, raro confluentibus, depresso-globosis vel ovoideis, ostiolo papillæformi; sporis generis.

Hab. in sylvis Guyanæ (LEPRIEUR), Sarawak ad Mattang (BECCARI).

152. **Xylaria axifera** Mont. Syll. Crypt. n. 695 et Guy., mss., n. 498, t. 3, f. 7. — Stipite axiformi filiformi rufo-fuscescente puberulo; clavula prope apicem irregulariter globosa extus intusque atra; peritheciis paucis magnis prominentibus ostiolis inconspicuis; sporidiis subquaternis, oblongo-fusiformibus fuscis.

Hab. in ramis arborum circa Cayennam (LEPRIEUR), Sarawak, Borneo (BECCARI), in petiolis putridis *Sciadophylli* in Cuba (BERK.).

153. **Xylaria Apeibæ** Mont. Syll. Crypt. n. 693, Guy., mss., n. 493. — Suberosa, filiformis, dichotoma, divisionibus patenti-erectis hirsutiuscula; peritheciis sparsis exertis mamillatis, atris; sporidiis.....

Hab. in fructibus *Apeibæ*, Guyana (LEPRIEUR), Brasilia (TRAILL).

subg. *Thamnomycetes* Ehrenb. Rhizomorpha Auct. p. p. — Stroma rigidum carbonaceum, subfragile, teres vel filiforme. Perithecia superficialia, laxa. — Plures Xylariæ species e. g. n. 147, 149, 150 etc. in hoc subgenus transeunt.

154. **Xylaria hippotrichoides** (Sow.) Sacc. *Sph. hippotrichoides* Sow. 1303
t. 200. *Hypoæ. loculiferum* Bull., *Ceratonea hippotrich.* Pers.,
Rhizomorpha tuberculosa Ach., *Cryptothamnium usneæforme*
Wallr., *Rhizomorpha setiformis* Roth., *Chanocarpus setosus* Reb.,
Chanocarpus Simonini Desm. — Subfasciculata, filiformis, adscen-
dens, nigra, ramosa: peritheciis sparsis, superficialibus, globoso-
conicis, obtuse papillatis: ascis; sporidiis ovoideis inæquila-
teralibus, atrofuscis, 16 ≈ 10.

Hab. in udis, cellis vinariis ad fragmenta lignea, telas, sube-
rem etc. putrescentia, in Gallia, Germania, Belgio, Britannia. —
Perithecia quandoque brevissime stipitata, initio tomentella. Asci
sec. Kickx subclavati; sporidia oblique monosticha.

155. **Xylaria rostrata** (Mont.) Sacc. *Thamnomycetes rostratus* Mont. 1304
Syll. crypt. n. 701, Cent. II, n. 21, t. 6, f. 2. — Ramosa, ramis
teretibus, longissimis, erectis; peritheciis lateralibus, sessilibus,
ovoideis, patentibus, ostiolo longo acuto rostratis; sporidiis fuscis,
phaseoliformibus, 7-8 ≈ 3-3,5.

Hab. ad truncos prostratos in sylvis Cayennæ (LEPRIEUR), Pa-
nuré, Brasilia (SPRUCE). — Var. *similis* Berk. Dec. of Fungi n. 620*:
peritheciis suberostratis. In Brasilia.

156. **Xylaria adnata** (Fuck.) Sacc. *Rhizom. adnata* Fuck. Symb. myc. 1305
p. 237, t. IV, fig. 24. — Stromatibus late effusis, primo ligno pu-
trido adnatis, demum (carie consumpto) liberis, $\frac{1}{4}$ lin. crassis, atro-
fuscis, superficie rugulosis, fragilissimis; peritheciis superficialibus,
conicis, sparsis; sporidiis (ascis?) 16-20 ≈ 8, aut sporidiolis repletis,
aut vacuis, lutescentibus.

Hab. in ligno putrido excavato Fagi sylvaticæ pluribus lo-
cis Wiesbaden inter et Rudesheim (Germania).

157. **Xylaria fragilis** (Roth) Sacc., *Rhizomorpha fragilis* Roth, Cat. 1306
I, 231. Fr. Nov. Symb. p. 231. — Stromatibus subrepentibus sub-
corticalibus, subinde erumpentibus, glabris, cylindraceo-filiformi-
bus, subcompressis, tortuosis vage et repetite ramosis, fusco-nigri-
cantibus, ramulis pallidioribus; peritheciis subsparsis conico-ovatis,
papillatis, superficialibus: ascis octosporis; sporidiis curvulis Hy-
poxylorum (teste Fries l. c.).

Hab. sub cortice arborum variarum, Salicum, Quercuum, Fagorum in tota fere Europa, rarissime fructificans.

158. **Xylaria hispidissima** (Fr.) Sacc. *Rhizomorpha hispidissima* Fr. 1307
Nov. Symb. 129. — Simplicissima, fragillima, usque ad perithecia depresso-globosa papillata strigoso-hispidissima, atra, apice tenuissimo, subulato, concolori; peritheciis subliberis, depresso-globosis, papillatis, glabris; ascis sublinearibus, octosporis; sporidiis monostichis, oblongis, inæquilateralibus, fuliginis.

Hab. in insula Nikobar majori (DIDRICKS.) — Affinis *X. filiformi*, sed fragilitate, peritheciis exogenis etc. distincta.

159. **Xylaria Chamissonis** (Ehrenb.) Sacc. *Thamnomycetes Chamissonis* Ehrenb. F. Chamiss. p. 79, t. XVII, fig. 1. — Stromate rigido peritheciis concolore fusco-nigro, caudicibus repetito-dichotomis teretibus ad 6 poll. altis, basi 2 lin. crassis, sensim gracilioribus ramis apice crebrioribus brevioribus; peritheciis ramulis adnatis, hinc inde 2-4 aggregatis, globosis, papillatis, ostiolo pertuso albo; ascis cylindraceutis; sporidiis monostichis, ovoideis.

Hab. in insula brasiliensi S. Catharina in rupibus (CHAMISSO, et nuperius SPRUCE).

160. **Xylaria annulata** (Ehrenb.) Sacc. *Thamnomycetes annulatus* 1309
Ehrenb. Fungi Cham. p. 82. — Fusco-nigricans, intus concolor, cava, stromate rigido in ramos abeunte, ramis simplicibus teretibus ultra 4 pollices longis, cylindricis, vix $\frac{1}{3}$ lin. crassis, sub lente annulatis ubique peritheciis sparsis, globosis, papillatis obsitis.

Hab. in India occidentali (HORNSCHUCH). — Natura cum *X. Chamissonis*, habitu vero cum *X. hippotrichoide* convenit.

161. **Xylaria chordalis** (Fr.) Sacc. *Thamnomycetes chordalis* Fr. in 1310
Linnæa 1830, p. 534. — Cæspitosa, stricta, filiformis, simplicissima subfarcta, atra; peritheciis ad latera protuberantibus, sparsis, globoso-ovatis, obtusis; ascis linearibus; sporidiis globulosis.

Hab. in sylvis Cayennensibus (RICHARD, DUFOUR). — Fungus 20-24 cent. alt., filo vix crassior, rigidus, levis, sursum longe cuspidatus.

162. **Xylaria fuciformis** (Berk.) Sacc. *Thamnomycetes fuciformis* 1311
Berk. Dec. n. 620. — Stipite crassiusculo filiformi, flexuoso, 2 mill. cr.; ramulis rectis 4 mill. longis regulariter vestito; ramulis centro inflatis cavisque; peritheciis

Hab. in truncis putridis Panuré, Brasilia (SPRUCE). — Habitus Fuci cujusdam potius quam fungi.

163. **Xylaria annulipes** (Mont.) Sacc. *Thamnomycetes annulipes* Mont. 1312

Syll. n. 702 et in Ann. 2, p. 75, t. 4, f. 4. *Acrosphaeria annulipes* Corda Anl. p. 136. — Cæspitosa, simplex, flexuosa, annulata, pellicularis, atra, fæceta; perithecio terminali sphaerico, extus granulato; ascis oblongis octosporis, subsessilibus; sporidiis distichis, ovoideo-globosis pellucidis.

Hab. ad cortices in Monte Corcovado Brasilæ (GAUDICHAUD). — Ex icone Mont. sic dictum perithecium sphaericum granulatum potius ut capitulum, e peritheciis pluribus formatum, habendum mihi videtur.

Species mihi ignota.

164. *Xylaria fulvo-lanata* Berk. Lond. Journ. (1842) l. pag. 151, X. 1313
fulvo-velutina Fr. Novæ Symb. mycol. p. 128. — In insulis Philippinis. — Diagnosim reperire non contigit.

CAMILLEA Fries, Summa V. S. p. 382. Mont. Syll. Crypt. p. 207 (Ety. ab ill. *Camillo Montagne*). — Stroma verticale, terminiforme, carbonaceum, stipitem mentiens, basi sæpius annulo matricali helciiformi cinctum. Perithecia heterogenea, linearia aut phialiformia, membranacea, stromate immersa, in orbem disposita et ad apicem truncatum excavatum marginatumque stromatis spectantia, substiolata vel modo poro pertusa. Ascii cylindrici, gelatinosi, deliquescentes, paraphysibus capillaribus immixti, octospori. Sporidia oblonga aut cymbiformia, continua, typice fusca, appendiculo ut plurimum uromorpha fine altero caudata.

Mens erat hoc memorabile genus nec non forte *Kretschmarium*, *Leveilleam*, *Cordieritem* etc. in subordinem proprium seorsim ponere, sed analogia *Camilleæ* cum *Hypocylo* nimia est et quoad cetera genera modo citata, eorum cognitio nondum satis plena.

1. **Camillea Leprieurii** Mont. Syll. Crypt. n. 703 et Cent. II, n. 40, t. 10, f. 3, sub Bacillaria et Guy., n. 507, t. 5, f. 1. — Cylindrica, carbonacea, polita, extus intusque atra, basi annulo stromatico ochreata, apice primum cortice orbiculatim rupto sublevatoque velata, dein disco abrupte excavata; margine disci obtuso; peritheciis amplis oblongis erectis, periphericis, collo brevissimo aut nullo, ostiolo in areola insculpta papillato; ascis linearibus prælongis 8-sporis; sporidiis cymbiformibus primo seriato-concatenatis, dein liberis, 22-25 = 6-7, caudatis; paraphysibus acicularibus.

Hab. ad cortices ramorum emortuorum in sylvis Guyanæ (LEPRIEUR), Caripi Brasilæ (SPRUCE).

2. **Camillea Bacillum** Mont. Syll. Crypt. n. 704. Cent. I. n. 32, sub 1315
Thamnomyce; Cuba, p. 343, sub Hypoxylo, et Guy., n. 509, t. 5,
f. 3. — Simplex; stipite cylindrico, basi annulato-ochreato, sursum
in clavulam teretem æqualem obtusam, apice punctulatam abeunte;
peritheciis paucis oblongo-attenuatis; collo subtilissimo ostioloque
impresso instructis; sporidiis reniformibus, fuscis.

Hab. in cortice corrupto ad S. Marcos Cubæ (AUBER), in An-
tillis (MOUGÉOT), Guyana (MONT.).

3. **Camillea Cyclops** Mont. Syll. Crypt. n. 705 et Cent. II, n. 41, t. 1316
10, f. 4, et Guy., n. 510, t. 5, f. 2. — Stroma e ligno erumpens,
carbonaceum, cylindricum, crassum, breviusculum, durissimum atro-
nitens apice obtuso rotundato cupuliformi-excavatum; peritheciis
immersis inordinatis erectis elongatis pressione mutua difformibus,
ostiolis in disco parvo crasse obtuseque marginato vix prominulis;
ascis cylindraceo-clavatis, octosporiis; sporidiis monostichis, oblon-
go-ellipsoideis, fuscis.

Hab. ad ligna emortua prope Cayennam (LEPRIEUR).

4. **Camillea Labellum** Mont. Syll. Crypt. n. 706 et Guy., mss., n. 511, 1317
t. 5, f. 5. — Erumpens, velo crasso verrucoso primitus involuta,
dein libera; stromate tereti brevi crasso apice cupulari-aperto,
margine tenuissime granulato; peritheciis erectis oblongis in col-
lum attenuatis et ostiolo prominulo papillæformi instructis; spori-
diis fusioideo-navicularibus, 30 μ . longis, inæquilateris, fuscis.

Hab. in truncis emortuis sub cortice nascens, Cayenna (LE-
PRIEUR).

5. **Camillea mucronata** Mont. Syll. Crypt. n. 707 et Guy., mss., n. 1318
508, t. 5, f. 4. — Stromate cylindraceo-conico, limitiformi, 6 \approx 3
mill. carbonaceo atro polito longitrosum striatulo, basi nudo, api-
ce excavato crasse marginato, centro disci valide mamillato-mu-
cronato; peritheciis inordinatis confertis elongatis circa basin mu-
cronis discum ostiolo petentibus; ascis tubulosis 100 μ . longis; spo-
ridiis ellipsoideo-oblongis, 2-guttatis, 10 \approx 3,5-4,5.

Hab. ad ligna emortua nigrefacta in Guyana (LEPRIEUR). — In
disco stromatis adsunt perithecia conica spermatiis minimis fæta;
an st. spermogonicus *Camilleæ*?

6. **Camillea surinamensis** Berk. et Curt. Exot. Fungi Schw. p. 285. 1319
— Subcongesta, opaca, non polita, brevis, apice obtuso, plano, le-
viter umbilicato; peritheciis.....

Hab. in cortice putri, Surinam, Amer. merid. — Erumpens, ut
species congeneres, gregaria, 4 mill. alta, 2½ cr. Differt a *C. Sa-*

græana defectu papillarum apicalium et a *C. Cyclope* quia opaca et vix umbilicata.

7. **Camillea Sagræana** (Mont.) B. et C. Exot. Fungi p. 285. *Hypox.* 1320 (Pulvinatæ) *sagræanum*, Mont. Cub. p. 341, tab. 12, fig. 1. Berk. Cub. Fungi n. 821. *Phylacia Sagræana* Mont. Syll. Crypt. n. 921. — Cæspitoso-connata, obovata, nigra, nitida, fragilis, a basi sub-stipitata, stipitibus stromate atro conjunctis, in capitulum ovoideum læve dilatata; peritheciis erectis linearibus demersis, fuscis compresso-angulatis, ostiolis latentibus.

Hab. in ramis dejectis in Cuba (RAMON DE LA SAGRA) et Nicaragua pr. Panama (BERK). — Sporidia 10 μ . longa, utrinque obtuse rotundata, inæquilateralia, fuliginea (Curr. Comp. Sph. n. 23, fig. 24).

PORONIA Willd. Flor. Berol. Prodr. p. 400 (Etym. *poros*, quia discus punctato-porosus). — Stroma carnosum-suberosum, primo claviforme, deinde cupuliforme, stipitatum v. sessile, albicans v. nigricans. Perithecia stromatis parti superiori disciformi tantum immersa, carbonacea, atra. Asci cylindracei octospori. Sporidia ellipsoidea, fusca, mucos hyalino involuta. — Hymenium conidiferum stroma recens vestiens. Conidia spherioidea, minima. — Fungus pezizoideus, fimicola.

Nonnullæ species jam *Poronie* relatæ (e. g. *P. candida*, *P. Pocula* etc.) merito ad *Ensliniam* adductæ sunt, quod genus, hic Sphæriaceis, hinc Hypocereaceis et illinc tandem Discomycetibus affine, in Appendice cum nonnullis aliis ancipitibus describam.

1. **Poronia punctata** (Linn.) Fr. Summ. Veg. Scand. p. 382, Nits. Pyr. 1321 Germ. p. 16. *Peziza punctata* Linn. Fl. Suec. p. 458, *Sph. Poronia* Pers. Syn. p. 15, *Sph. truncata* Bolt. Fung. III, t. 127, *Lecidea bovina* Vis. Spec. Dalm. p. 21. — Stromate erecto, simplici, primo clavato, mox aperto, cupuliformi, denique deplanato in stipitem plus minus longum, tomentosum attenuato, hypocrateriformi, extus nigricante, disco albo, perithecorum ostiolis prominulis atro-punctato; hymenio conidifero stroma recens vestiens, ex cinereo fuscescente; conidiis globosis, minimis; ascis cylindraceis breviter pedicellatis, octosporis, 160 \approx 16-18; pseudoparaphysisibus longissimis; sporidiis monostichis, ovatis, rectis, nigricantibus, mucos hyalino involutis, 18-26 \approx 10-14.

Hab. in fimo equino, vaccino, asinino, elephantino in Suecia, Germania, Britannia, Gallia, Belgio, Sibiria, Dalmatia,

Fennia, Natal. — Sec. Hans F. fim. dan. *Peziza coriacea* Bull. est forma monstrosa *Poroniæ punctatæ*.

2. **Poronia Œdipus** Mont. Syll. Plant. Crypt. p. 209, Nits. Pyr. Germ. 1322 p. 20, *Sph. incrassata* Jungh., *Por. Œdipus* β . *cladonioides* Ces. in Comm. critt. I, 70, t. IV, f. IV. — Stromate erecto, extus nigricante, simplici v. ramoso, stipite glabrescente, longiusculo, basim versus clavæformi-incrassato, apice in cupulam, tota superficie nigricantem, perithecorum ostiolis prominulis papillatam, primo excavatam, deinde deplanatam dilatato; conidiis subglobosis, minimis; ascis subcylindricis, brevissime pedicellatis, octosporis, 120 \approx 24; pseudoparaphysibus, longissimis, crasse filiformibus, septatis; sporidiis monostichis v. pro parte distichis, ovatis, rectis, nigricantibus, strato mucoso, hyalino, crasso cinctis, 28-30 \approx 16.

Hab. in fimo equino et vaccino in Italia boreali, Cayenna, Cuba, Java, Borneo, Amer. bor., Australia.

3. **Poronia pileiformis** (Berk.) Fr. Nov. Symb. 129, *Sph. pileiformis* 1323 Berk. Lond. Journ. Bot. 1842, I, 155, t. VIII, f. 6, Curr. Comp. Sph. n. 3, t. 45, f. 4. — Stromate ramoso, leviusculo, ramis in cupulas pileiformes terminatis; ascis cylindræeis breve stipitatis, octosporis; sporidiis oblique monostichis, ovoideis utrinque acutiusculis, guttulatis, fuligineis, 7-8 μ . longis.

Hab. in insulis Philippinis. — Sec. Cesat., Myc. Born. p. 14, hæc non differt a forma cladonioide *Poroniæ Œdipodis*. E contra Tul. Carp. II, 29, novi generis typum censet, in nonnullis notis *Xylariæ pedunculatæ* analogum. Certe *Poroniæ Œdipodis* sporidia quadruplo majora sunt.

4. **Poronia Heliscus** Mont. Syll. Crypt. n. 709, Curr. Comp. Sphær. 1324 n. 12, f. 13, Cent. II, n. 44, t. 10, f. 5, sub *Hypoxylo*. — Cæspitosa, minima, gomphodes, suberosa, leproso-scabriuscula, atra, intus alba, disco placentæformi, peritheciis globosis immersis supra colliculoso, ostiolis prominulis umbonatis; sporidiis (ut videtur) monostichis, naviculari-pyriformibus, 7,5-10 μ . long., atro-fuligineis.

Hab. ad truncos emortuos, Cayenna (LEPRIEUR). — Cl. Montagne l. c. sporidia bilocularia describit, sed continua pingit cl. Currey sec. specimina originalia.

5. **Poronia macrorrhiza** Speg. Fungi Argent. Pug. III, n. 43 et IV, 1325 n. 140, — Sclerotio horizontali, coriaceo-tenaci, plus v. minus profunde delitescente, sæpius subrhizomorphaideo, crasso, elongato, 2-5 cent. long., 2-4 mill. cr., intus albo, carnosocoriaceo, compacto, extus atro, levi v. ruguloso; ramulis solitariis, vel 2-5 gregariis

e sclerotio exsurgentibus, gracilibus, atris, coriaceo-tenacibus, 1-3 cent. long., 0,5-1,5 mill. cr., longiusculis, apicē abrupte in stromata perithecigera dilatato-capitatis; stromatibus cupulato-patellaribus, applanatis, v. (in juventute) subconvexis, superne albis, atque ostiolorum apicibus, laxē scabre atro-punctatis, 2-6 mill. d., margine integro, rotundato, crassiusculo, inferne sordide fusco-rufescentibus; peritheciis carne alba stromatis profundiuscule immer-sis, atris, globosis v. subellipticis sursum in ostiolum longiusculum superficiem attingens ac prominulum desinentibus, $\frac{1}{3}$ - $\frac{1}{2}$ mill. diam., ascis cylindraccis, abrupte breve stipitatis, 150-160 \approx 15-25, paraphysatis, octosporis; sporidiis monostichis v. subdistichis, ellipsoideis v. subrhomboideis, 28 \approx 13-14, fulvo-fuligineis, 1-guttatis, mucō hyalino obductis. In juventute stromata pruinula albo-carnea, conidiifera obtecta, ex hyphis repentibus crebre ramosis ac toruloso-septatis, hinc inde inordinate in superficiem ramulorum papillosis, ac conidia globosa, hyalina, 3-4,5 μ . diam., gerentibus composita.

Hab. in fimo equino vetusto in ollis plantarum en el patio del señor Coni, Buenos Aires, Argent. Amer. austr. — *Por. Edipodi* valde affinis.

6. **Poronia scutellata** Fr. S. V. Scand. p. 382, *Lichen-Agaricus scutellatus albus* Mich. Nov. pl. gen. p. 105, t. 54, II, f. 3. 1326

Hab. in agris prope Telamonem Etruriæ et in Scandinavia. — Sessilis, tota alba, disciformis, ostiolis majusculis nigris punctata.

7. ? **Poronia cupularis** (Fr.) Rabh. Deutsch. Crypt. Fl. I, 824. *Sph. cupularis* Fr. Linnæa 1830, p. p. 530, *Sph. pallida* Willd. — Stromate carnoso, cupulari, marginato, luteo, extus villosa, disco depresso; peritheciis periphericis tecto. 1327

Hab. ad ligna putrida agri berol. (WILDENOW.). — Sec. Nits. Pyr. Germ. p. 21 ad Pyrenomycetes non pertinet.

USTULINA Tul. Sel. Fung. Carp. II, p. 23 (Etym. *ustulatus*, ob stroma veluti deustum). — Stroma superficiale, subeffusum, crassissimum, determinatum, primo suberinum, hymenio conidifero, concreto undique vestitum ejusque conidiis pulverulentum, albido-cinerascens, deinde rigidum, carbonaceum, atrum, nudum, intus denique sæpius subvacuum. Perithecia immersa, magna, cornea, ostiolis papillæformibus. Asci pedicellati, octospori, paraphysibus obvallati. Sporidia ovoideo-fusiformia, continua, fuliginea. — Genus ægre

ab *Hypoxylo* distinguendum et re vera *Hypoxyli* plures species æquo fere jure *Ustulinæ* adscribi possent.

1. **Ustulina vulgaris** Tul. Sel. Fung. Carp. II, p. 23, t. III, f. 1-6, 1328
Sph. maxima Web. Spic. Gott. n. 301, *Sph. deusta* Hoffm. Veg. Crypt. I, p. 3, t. I, f. 2, *Sph. versipellis* Tode, *Hypoxyton ustulatum* Bull. — Stromate superficiali, subeffuso, repando-pulvinato, maximo, crasso, undulato-tumuloso, tandem aterrimo, carbonaceo, fragili, intus denique excavato; peritheciis magnis, ovatis, dense stipitatis, monostichis, periphericis, ostiolis solum punctiformibus prominentibus; ascis anguste cylindricis, pedicellatis, octosporis, 250 \approx 8-10 p. sporif.; paraphysibus tenuissimis, simplicibus, unicellularibus, mox diffluentibus; sporidiis oblique monostichis, fusiformibus, inæquilateralibus, immo curvulis, nigricantibus, 32-40 \approx 8-10; hymenio conidifero stroma initio vestiente, albido-cinerascente: conidiis ovoideis, minutis, subhyalinis breve stipitatis.

Hab. ad caudices carie vexatos Fagi, rarius Tiliæ, Carpini etc. in tota Europa, Cuba, Guyana, Venezuela, Juan Fernandez, Amer. bor., Ceylon.

2. **Ustulina brasiliensis** Speg. Fungi Arg. Pug. IV, n. 136. — Stro- 1329
matibus repando-pulvinatis, magnis, 20-40 mill. diam., exertis, crassis, 5-8 mill. crass., inferne applanatis, late laxèque adnatis, ambitu liberis, irregulariter repando-sinuosis, margine crasso, obtusissimo, disco parce undulato-gibboso, cortice crassiusculo, fragili, atro, opaco, inferne irregulariter ruguloso-scruposo, superne plano sed densiuscule papilloso-aspero; carne infera, cortici basali adnata, tenui, alba, fibrosula, mox evanida; peritheciis densissime constipatis, verticalibus, cylindricis, e mutua pressione angulosis, 2 mill. long., 0,3-0,4, mill. crass., tenui-pelliculoso-membranaceis, subcoriaceis, griseo-plumbeis, basi rotundatis, vertice in ostiolum carbonaceum, corticem perforans exertumque, obtusulum productis; ascis cylindræis sursum truncato-rotundatis, crasse tunicatis, deorsum breviter attenuato-stipitatis, 250-280 \approx 12, octosporis, paraphysibus filiformibus obvallatis; sporidiis naviculari-fusoideis, utrinque attenuato-rotundatis, primo grosse 2-guttulatis, 40-45 \approx 10, opace fuliginis.

Hab. in truncis dejectis putrescentibus prope Freguesia de Ribeira, Apiahy, Brasilia meridionali (ROCHA et J. PUIGGARI).

3. **Ustulina macrosperma** (Mont.) Sacc. *Hypo. macrospermum* Mont. 1330
Syll. Crypt. n. 724, Cent. II, n. 39, in Ann., l. c., p. 351, t. 10, f. 6. — Hemisphærico-subglobosa, depressa, crustaceo-laccata, ni-

gricans, intus lurida; peritheciis amplis erectis oblongis, ostioliis exertis conico-truncatis pertusis; sporidiis cymbiformibus, maximis, 60 μ . longis, opacis.

Hab. ad lignum putridum secus ripam annis Conana, Guyana (LEPRIEUR).

4. **Ustulina zonata** (Lév.) Sacc. *Sph.* (globosa) *zonata* Lév. Ann. Sc. nat. 3, 1845, p. 48, — Effusa, undula, zonata e fusco nigricans, peritheciis oblongis stromate nigro carbonaceo immersis, ostioliis minimis punctiformibus nigris; ascis paraphysatis, cylindræis, octosporis; sporidiis ovoideo-oblongis, continuis, monostichis.

Hab. Java, ad palmas (ZIPPÉL). — Affinis *Ustul. vulgari*.

BOLINIA Nits. ut subg. Pyr. Germ. p. 26 (Ety. *bolinos*, glebosus ob stromatis formam). — Stroma superficiale, effusum. Perithecia stromate alte immersa, collo elongato ostioloque umbilicato instructa. Asci cylindræi, octospori, paraphysati. Sporidia ovoidea, continua, fuliginea.

1. **Bolinia Tubulina** (Alb. et Schw.) Sacc. II. *Tubulina* Alb. et Schw., 1332 Fr. Summ. Veg. Scand. p. 383, Nits. Pyr. Germ. p. 26, *Sph. Tubulina* Alb. et Schw. Consp. Nisk. p. 6, t. IV, f. 4. — Stromate effuso, determinato, oblongo v. ovali, ligno duriori, tandem superficie nigricanti adnato, omnino superficiali, ligno putredine molliori vero basi plus minus immerso, crasso, superficie, peritheciis omnino extantibus, planiusculo, v. tumuloso-undulato, primo intus extusque ex terreo ferrugineo, deinde nigricante fragili, margine repando; peritheciis maximis, monostichis, stromate omnino immersis, densissime stipatis, ovatis v. mutua pressione angulatis, subprismaticis, in collum longum sensim attenuatis, ostioliis haud prominentibus, pertusis ac stromatis superficiem porosam efficientibus instructis; ascis cylindræis longe pedicellatis, octosporis, 36-45 \approx 5 p. sporif.; sporidiis oblique monostichis, exiguis, ovatis, utrinque obtusissimis, rotundatis, vel rarius ovoideis, rectis, nigricantibus, 6-7 \approx 3-4.

Hab. in truncis putridis Abietis, rarius Jugandis et Alni in Lusatia (Germ.), Suecia et America boreali, raro.

HYPOXYLON Bull. Champ. de Fr. I, p. 168 (1791), p. p. — Stroma nunc subsphæroideum vel hemisphæricum, nunc plus minus effusum, crustiforme, primitus e conidiis jam primo nudis, sphæroideis vel ovoideis, varie coloratis, minimis pulverulentum, dein nudum,

lignoso-suberosum, extus intusque fusco-nigricans vel rubiginosum. Perithecia periphærica, monosticha, rarius polysticha, concentrica, stromati plus minus immersa, forma varia. Asci pedicellati, cylindracei, octospori, paraphysati. Sporidia continua, ovoidea vel oblonga, fuliginea. — Pyrenomycetes majores vel mediocres, sæpius lignicolæ vel corticolæ, ubique terrarum copiosi.

I. *Eu-hypoxylon*: stromate globoso, pulvinato v. subeffuso, superficiali.

A) Stroma extus rubescens v. ochraceum v. saltem non nigrum
v. pruina pallidior obductum.

1. **Hypoxylon coccineum** Bull. Champ. Fr. p. 174, tab. 345, f. 2 (1791), 1333
Nits. Pyr. p. 28. *Sph. fragiformis* Pers. Syn. p. 9, nec Hoffm.
Lycop. pisiforme Sow., *Sph. rubra* Willd. — Stromate per peridermium erumpente dein superficiali, subgloboso, nunc fusco-vio-
laceo v. cervino, hymenio conidifero pulveraceo concolori, cinereo
v. æruginoso primum vestito, nunc contra lateritio, maturo vero
semper rubiginoso, intus atro-fuligineo, mox solitario, mox con-
nato, subcæspitoso; conidiis (*Institale acariforme* Fr. et *Anthina
flavo-virens* Fr.) obovatis, minimis; stromatibus rite evolutis, ma-
turis, minute mammillosis, fragiformibus; peritheciis minutis, ova-
tis periphericis, monostichis, confertis, nonnihil extantibus; ascis
cylindricis, longissime pedicellatis, octosporis, paraphysibus longis-
simis, filiformibus, simplicibus, stipatis, 70-88 \approx 5-7 p. sporif.; spo-
ridiis oblique monostichis, obovatis, inæquilateralibus, nigricantibus,
10-12 \approx 4-5, sæpe 2-guttulatis.

Hab. in ramis Fagi, rarius Quercus, Pruni, Salicis, Car-
pini, Ostryæ, Betulæ, Coryli et (teste Berk.) etiam in Ustul-
lina parasiticum in tota ferme Europa, Amer. bor., Cuba, Tasma-
nia, Amer. arctica, India or.

2. **Hypoxylon Scleroderma** Mont. Syll. Crypt. n. 716. Cent. II, n. 37, 1334
t. 10, f. 1. — Carnoso-suberosum, obpyriforme globosumve, spu-
rie stipitatum, basi attenuatum sessile, intus determinate cavum
extusque læve, rubro-sanguineum; peritheciis heteromorphis ob-
longis globosisve, polystichis, cellulæformibus, in strato concolori
peripherico (lineam crasso) nidulantibus, ostioliis demum prominu-
lis confertis nigris perforatis, ascis breviter clavatis, 30 \approx 4-5 p.
sporif.; sporidiis octonis oblongis, 5 \approx 2-2,5.

Hab. ad lignum emortuum in sylvis Cayennæ (LEPRIEUR).

3. **Hypoxylon pulchellum** Sacc. Fungi Ven. Ser. IV. p. 21 et F. ital. 1335

t. 117. — *Stromatibus* typice globoso-hemisphaericis, parvis, $1\frac{1}{2}$ -2 mill. diam., v. quandoque effuso-pulvinatis, ambitu elongato variove. initio rubiginosis extusque velutino conidiophoris, tandem cupreo-fuscis, intus cinnamomeis; conidiis minimis ovoideis, $3 \approx 2$, hyalinis, hyphis fasciculatis, pallide fuliginosis, filiformibus, $60 \approx 2$, suffultis; peritheciis in stromatis periphæria distiche v. subtristichæ crebre stipatis, exiguis, subrotundis, atris in ostiolum acute conoideum prominulum desinentibus; ascis cylindræis, $60 \approx 5$, p. sporif., pseudoparaphysibus guttulatis obvallatis, 8sporis; sporidiis oblique monostichis, naviculari-fusoideis, $8 \approx 4$, utrinque acutiusculis, plerumque 2-guttulatis, fuliginosis.

Hab. in ramis semidecorticatis putrescentibus *Fagi sylvaticæ*, in sylva Cansiglio, Treviso, Italiæ bor. — *Stromatibus* parvis typice semiglobosis, peritheciis minutis subtristichis et præsertim ostioli acute papillatis prominulis a cæteris speciebus mihi notis distinctum.

4. **Hypoxylon hypomiltum** Mont. Syll. Crypt. n. 733, Berk. Fungi of Ceylon n. 1072. — Convexo-applanatum, orbiculare, effuso-confluens, minutissime granulosum, atro-purpureum, lignum circum circa rubigine tingens, intus manifeste rubiginosum, peritheciis colliculosum prominulis monostichis ovato-oblongis, intus nigris pulvere rubiginoso interspersis, collabentibus, ostioli punctiformibus vix conspicuis; sporidiis $8,5-10 \approx 5$.

Hab. ad lignum putridum. Cayenna (LEPRIEUR), ad ramos putres, Central province, Ceylon (BERK.).

5. **Hypoxylon argillaceum** (Pers.) Berk. Outl. 387. Nits. Pyr. Germ. p. 1337 29, *Sph. argillacea* Pers. Syn. p. 10, nec Friesii quæ ad *H. multiforme* spectat. — Stromate peridermio erumpente, deinde superficiali, subgloboso, discreto, rarius connato, argillaceo, intus nigricante, maturo peritheciis monostichis, raro irregulariter polystichis, ovatis, exiguis, confertis, prominulis minute mammilloso, fragiformi; hymenio conidifero ex albido cervino v. pallide argillaceo; conidiis exiguis, ovatis, hyalinis; sterigmatibus longis, parvis ramosis, septatis; ascis cylindricis, longissime ac tenuiter pedicellatis, octosporis, paraphysibus tenuissimis, simplicibus longe superatis, $140 \approx 16$ p. sporif.; sporidiis monostichis, late ovatis, obtusissimis, inæquilateralibus, nigricantibus, strato mucoso, hyalino, tenui cinctis, $22-24 \approx 10-12$.

Hab. in truncis præcipue *Fraxini*; rarius *Fagi* et *Betulæ* in Germania, Britannia, Belgio, Italia, St. Unit., Canada. —

Var. *abyssinicum*, Pass. F. Abiss. p. 186, differt sporidiis minoribus. In corticibus Keren, Abyss.

6. **Hypoxylon Howeianum** Peck 24 Rep. p. 98. — Globosum sessile, 1338
crusta rubra ostiolis minutis nigris dense punctulata tectum, dein
lutescens, vel atrum, 6-12 mill. diam., peritheciis, densis, ovatis,
nigris, nitidis, stromate denso æneo-nigricante, lucido non v. vere
obsoleto zonato, radiato-fibroso.

Hab. in Amer. bor. Center, in ramis dejectis arborum frondosarum, novembri. — Affine *H. coccineo*, sed majus, punctatum, leve, sporidiis minoribus.

7. **Hypoxylon palumbinum** Quel. Champ. Jura 491, t. IV, f. 6. — Glo- 1339
bulosum v. hemisphæricum, 2-5 mill. diam., sæpe confluens, colore
palumbino, pruinatum, dein granulosum, griseo-cervinum, intus
incarnatum denique griseolum; peritheciis globulosis, minutis, pe-
riphericis, nigris, ostiolis punctiformibus, albis; ascis; spori-
diis amygdaloideis, nucleatis, olivaceis, 12 μ . longis.

Hab. in ramis emortuis Fraxini in Vogesis. — Cl. Quelet ut var. *H. argillacei* censet, sed in hoc sporidia subduplo longiora sunt.

8. **Hypoxylon distillatum** B. et Br. Fung. of Ceylon. n. 1062. — Ex- 1340
tus pulverulentum coffeicolor, basi dilatatum, peritheciis prominu-
lis dein papillosum, apice planum, ostiolo depresso, intus nigrum.

Hab. in ligno putri, Ceylon. — Subaffine *Hyp. fusco*.

9. **Hypoxylon sclerophæum** B. et C. Austral. Fungi n. 234. — Expan- 1341
sum, pulvinatum, crassum, superficie rubiginosa subtiliter e peri-
theciis prominulis rugosa, contextu duro nigro; peritheciis oblongis.

Hab. in truncis, Adelaide Australiae et Surinam. — Affine *H. multiformi*.

10. **Hypoxylon lycogaloides** B. et Br. Fungi of Ceyl. n. 1058. — Sub- 1342
globosum, luteum, e mycelio contexto lutescente oriundum; peri-
theciis nigris, ostiolis prominulis, carne alba; sporidiis ellipticis
verruculosis.

Hab. in corticibus, Central Province, Ceylon. — Stroma 8 mill. diam. *Xylariae punctate* subaffinis, etsi multo minor. Mycelium *Geasterem mirabilem* in memoriam revocat.

11. **Hypoxylon Blakeii** B. et C. North Am. Fungi n. 842. — Erum- 1343
pens; peritheciis minoribus congestis ferrugineis; ostiolo papillæ-
formi prominulo; ascis linearibus; sporidiis oblongis, 20 μ . long.
1-2-nucleatis.

Hab. in Salicibus, Maine Americae borealis.

12. **Hypoxylon rutilum** Tul. Sel. Fung. Carp. II. p. 38, Nits. Pyr. 1344
 Germ. p. 32. — Stromate in ramis corticatis erumpente mox libero, superficiali, pulvinato; plerumque forma irregulari, sæpe vertice depresso, discreto, connato v. confluyente in ligno nudato contra plus minus effuso; hymenio conidifero cervino; conidiis ovatis, minutissimis, in sterigmatibus parce ramosis fasciculatim acrogenis; stromatibus junioribus argillaceis, cervinis v. læte rubris, maturis fusco- v. atro-rubris; peritheciis monostichis v. pro parte irregulariter polystichis, exiguis, subglobosis, densissime stipatis, nonnihil prominulis minutissime mammillosis: ascis cylindricis, longissime ac tenuiter pedicellatis, octosporis, paraphysibus prælongis, filiformibus, stipatis, 56-80- plerumque 70 \approx 5-8 p. sporif.; sporidiis oblique v. recte monostichis, ovatis, obtusis, inæquilateralibus, nigricantibus, 8 \approx 4-5.
Hab. in ligno et cortice Fagi pr. Münster, Cappenberg, Nienberge, (Estrich Germaniæ, Rockhampton Australiæ. — *Hypoxylti coccinei* æmulum.
13. **Hypoxylon Laschii** Nits. Pyr. Germ. p. 36. — Stromate pulvi- 1345
 nato, deplanato, basi orbiculari v. late elliptica, per peridermium fissum erumpente ejusque laciniis cincto, superficie ferrugineo-rubro, intus læte rubro, peritheciis pro ratione majusculis, subdistichis, periphericis, vertice rotundatis prominulis mammilloso, plerumque discreto, rarissime connato; ascis longissime pedicellatis, cylindricis, octosporis, paraphysibus obvallatis, 80 \approx 7 p. sporif.; sporidiis monostichis, ovatis, subrectis v. plus minus inæquilateralibus, nigricantibus, 10-12 \approx 5-6.
Hab. in ramis crassioribus Populi, Driesen Germaniæ (Lasch). — Inter *H. rutilum* et *H. multifforme* medium.
14. **Hypoxylon suborbiculare** Peck 30 Rep. on the St. Mus. New 1346
 York, pag. 62, nec Curr. — Stromate tenui, applanato, erumpente, suborbiculari; peridermio erupto cincto e libro oriundo, purpureo-fusco dein nigro, superficie inæquali subareolato-rimosa; peritheciis monostichis subglobosis, ostiolis impressis perforatis, subinde albidis: sporidiis inæqualiter ellipsoideis, 10-14 μ . longis, fuliginis.
Hab. in cortice Aceris saccharini, Sandlake Amer. bor. — *Hypoxylti Laschii* Nits. affine et nonnullis notis ad *Nummularias* nutans. *Sph. suborbicularem* Curr. videas inter *Nummularias*.
15. **Hypoxylon luridum** Nits. Pyr. Germ. p. 31, Sacc. Fungi it. t. 568. 1347
 — Stromate erumpente, deinde libero, superficiali, raro discreto, hemisphærico v. subgloboso, plerumque connato v. in crustam cras-

sam, tumulosam subeffuso, ex ochraceo sordide umbrino, peritheciis irregulariter polystichis, majusculis, globosis, obtusissimis, vertice pertusis, prominentibus rugoso; ascis cylindricis, longe pedicellatis, octosporis, paraphysibus longissimis, filiformibus obvallatis, $90 \simeq 6-7$ p. sporif.; sporidiis monostichis, late ovatis, obtusissimis, inæquilateralibus v. subrectis, nigricantibus, muco hyalino tenui involutis, $12 \simeq 5-6$.

Hab. in ramis exsiccatis Coryli et Carpini, Münster, German., Treviso, Italia bor. — *Hypox. leucostigmati* affine.

Var. *minus*: acervulis constanter minoribus; ascis p. sporif. $70-80 \simeq 7$; sporidiis octonis oblique monostichis ovoideis inæquilateralibus, $9-11 \simeq 5-6$, 2-guttulatis, fuligineis, quandoque (an ex ascis secedentibus?) muco hyalino parce involutis. — In ramis corticatis Populi nigræ, Vittorio (Italia boreali).

16. **Hypoxylon Bagnisii** Sacc. Mich. I, p. 24, Fungi ital. t. 148. — 1348

Acervulis subglobosis, superficialibus, basi coarctatis, superne complanato-convexis, minutis, $2\frac{1}{2}-2\frac{3}{4}$ mill. diam., atrorufis, intus nigrescentibus, stromate parco, ideoque a peritheciis fere omnino constantibus; peritheciis in quoque acervulo paucis (7-10), majusculis, $\frac{1}{2}-\frac{3}{4}$ mill. diam., verticaliter ovoideis, vertice conoideis papillatisque; ascis cylindricis fasciculatis, $90 \simeq 4\frac{1}{2}$, p. sporif., 70 longa, stipitatis, paraphysatis, 8sporis; sporidiis monostichis, oblongo-coffeeformibus, $9-10 \simeq 4$, 2-guttatis, fuligineis.

Hab. in ramis corticatis fagineis, S. Onofrio prope Romam, socia *Quaternaria Persoonii* Tul. (C. BAGNIS). — Ab *H. Botry* Nits. peritheciis papillatis, ab *H. cohærente* (Pers.) Fr., acervulis minoribus, atrorufis, quasi coarctatis, sporidiis minoribus etc. differt.

17. **Hypoxylon Botrys** Nits. Pyr. Germ. p. 34, *Sph. botryosa* Fuck. 1349

nec Fr. — Stromate per peridermium erumpente, deinde libero, superficiali, forma varia, nunc maculæformi, pulvinato v. fere globoso, connato v. confluyente, rarius discreto, nunc plus minus effuso, crustiformi, crasso, tumuloso, peritheciis majusculis, globosis, maxime protuberantibus, sæpe tamquam coacervatim conglomeratis, irregulariter monostichis botryoso, ex aureo furrugineo-rubro, hymenio conidifero concolore, pulverulento tecto, tandem glabro, aterrimo; ascis longe pedicellatis, cylindricis, octosporis, paraphysibus filiformibus stipatis, $76-80 \simeq 6-7$ p. sporif.; sporidiis monostichis, ovatis, obtusissimis, inæquilateralibus v. fere rectis, nigricantibus $12-14 \simeq 5\frac{1}{2}-7$.

Hab. in ramis salicinis, quercinis et acerinis, Schwe-

- rin, Münster, (Æstreich (Germania). — *Sph. botryosa* Fr. S. M. II, 342. Curr. Linn. Trans. XXII, t. 46. f. 46: ascis clavatis corpusculis innumeris hyalinis faretis, adhuc mihi incerta manet. Hæc lecta est in Vogesis, in Britannia et in ramis decorticatis Mori, Malaga New Jersey Americæ borealis.
18. **Hypoxylon commutatum** Nits. Pyr. Germ. p. 33, Sacc. Fungi it. 1350
t. 567. — Stromate peridermio erumpente, deinde libero, superficiali, plerumque pulvinate, depresso, rarius hemisphærico v. fere globoso, aggregato, discreto v. connato, superficie ex argillaceo rubro-ferrugineo, intus nigricante, peritheciis majusculis, globosis, laxe ac subdistiche stipatis, periphericis, prominulis, rotundatis mammoso; ascis longissime ac tenuiter pedicellatis cylindricis, octosporis, paraphysibus, filiformibus obvallatis, 88-92 \approx 7 p. sporif.; sporidiis monostichis, ovatis, obtusis, inæquilateralibus, fuscis, 10-12 \approx 6.
Hab. in ramis corticatis Carpini Betuli, prope Æstreich, Rhenogovia et prope Treviso, Italia boreali.
19. **Hypoxylon sclerotioideum** B. et C. Exot. Fungi Schw. p. 286. 1351
— Pulvinate, læve, vinosum; intus concolor; peritheciis oblongis stipatis, ostioliis obsoletis.
Hab. in cortice fibroso, Surinam (Amer. austr.). — Pulvinate, 4 mill. lat., 2 mill. cr.
20. **Hypoxylon solidum** B. et C. Exot. fungi Schwein. p. 286. — Or- 1352
biculare, lobatum, irregulare, rubiginosum, ex ostioliis minute punctato-papillatum; intus subconcolor; margine libero; peritheciis oblongis minutis, gelatina rubida faretis (immaturis).
Hab. in cortice muscoso, Surinam (America austr.). — Stroma 20-25 mill. cr. intus primitus spongiosum.
21. **Hypoxylon gilvum** (Jungh.) Sacc. *Sph. gilva* Jungh. Præm. flor. 1353
Jav. p. 20. — Globosum, atrum, helvolum, intus concolor, peritheciis ovatis magnis periphericis, dein papilloso-prominulis.
Hab. in ramis dejectis, in monte Merapi Javæ. — *Hypox. coccineo* proximum, semine sinapeos paullo majus, globosum, basi affixum, sordide gilvum subochraceum, primum læve, dein ostioliis prominentibus papillosum.
22. **Hypoxylon decorticatum** (Schw.) Berk. North Amer. Fungi in Gre- 1354
vill., *Sph.* (Pulvinate) *decorticata* Schw. Syn. Amer. bor. n. 1179. — Subpulvinate, applanatum præsertim in ligno decorticato, rarius in cortice; externa superficie griseo-rubiginosa, tuberculis rugosis, spherulæformibus dense tecta, ad instar ostiolorum, et pro-

inde veluti exasperata nigris granulis, exterioris corticis ceterum experti; peritheciis periphæricis, pluribus seriebus in stromate rubiginoso-fuligineo immersis, ovato-globosis; pulvinulis subrotundis aut difformibus, $\frac{1}{4}$ uncialibus, sæpe confluentibus.

Hab. ad ligna et in cortice, in Nova Anglia (Dr. TORREY), Bethlehem (SCHW.), Carol. inf. (BERK.). — *H. rubiginoso* subaffine.

23. **Hypoxylon enteromelum** (Schw.) Berk. North Amer. Fungi p. 161, 1355
Sph. enteromela Schw. New Amer. Sphær. p. 10 et in Linnæa IV, Litt. p. 46. — Ovatum, oblongum, pulvinatum subconfluens, rubiginoso-brunneum, e peritheciis vix prominulis granulatum intus nigricans; peritheciis immersis minutis subglobosis, ostioliis obsoletis.

Hab. in cortice rimoso Fraxini, seriatim erumpens prope Bethlehem, in Fago Pensylvaniæ et Novæ Scotiæ, Amer. boreali. — Affine *H. coccineo*, 7-8 mill. diam.

24. **Hypoxylon vividum** B. et Br. Fungi of Ceylon n. 1070. — Pulvi- 1356
 natum, extus aurantiaco-ferrugineum, pulverulentum, intus nigrum; peritheciis oblongis; ostioliis abditis; sporidiis 18 \approx 8-9.

Hab. in ligno putri in Ceylon. — Sæpius confluens et irregulare, subinde per aliquot centimetra effusum.

22. **Hypoxylon ceramichroum** B. et Br. Fungi of Ceylon n. 1059. — 1357
 — Globosum, superficiale, facile caducum, coccineum, carne pallida subconcolori, ostioliis punctiformibus.

Hab. ad ramos plantæ cujusdam scandentis monocotyledoneæ. — Inter *Hypoxylon* et *Hypocream* fere medium. Stroma 6-7 mill. diam. Fructificatio ignota.

26. **Hypoxylon? Gangræna** Ces. Myc. Born. p. 19. — Tuberculis con- 1358
 fluentibus, gyrosis, ramulos ambientibus præcipue ad axillas, e stromate sterili pulverulento efformatis, illa *Hypoxyli fusci* vel congenerum steriliscentia colore et velo pruinoso simulantibus, intus aterrimis, compactis, cultro sat duris.

Hab. ad Sarawak Bornei, in ramulis.

27. **Hypoxylon suberosum** B. et C. Cuban Fungi n. 823. — Globosum, 1359
 superficie minutissime areolato-rimosa subruginosa, contextu albo suberoso; peritheciis globosis immersis, ostioliis latentibus.

Hab. in ligno putri. — Stroma 3-4 mill. diam.

28. **Hypoxylon notatum** B. et C. North Amer. Fungi n. 835. — Peri- 1360
 theciis paucis majoribus in pulvinulos congestis, rubiginosis, ostiolo demum truncato perforato; sporidiis breve cymbiformibus, magnitudine variis.

Hab. in ramis Celtidis, Viburni dentati in Carolina et Pennsylvania, Amer. boreali.

29. **Hypoxylon Peckianum** Sacc., *H. xanthocreas* Curt. in herb., nec 1361
B. et C. North Amer. Fungi n. 839. — Pulvinatum, indumento mucedineo compacto flavido conidiophoro initio obductum; conidiis ellipsoideis 4-5 μ . longis, dein denudatum, purpureo-brunneum, luteo-marginatum, superficie inæquali, intus pallidum, prope corticem flavum; ascis.....; sporidiis oblongis 10-15 μ . longis, fuscis.

Hab. in truncis Alni prostratis, Center, Amer. bor. — Ab *H. xanthocreate* mox dignoscendum. Cfr. Peck in 31 Rep. on the St. Mus. p. 49.

30. **Hypoxylon endoxanthum** Mont. Syll. Crypt. n. 725, Guy., mss., 1362
n. 528. — Erumpens, subglobosum, fragile, subsimplex, aut confluen-
do compositum, fusco-atrum, opacum, velo argillaceo insper-
sum, intus pallidum; peritheciis globosis endoxanthis, ostioliis cras-
sis prominulis obtusis.

Hab. e rimis corticis longitrorsum erumpens, Cayenna (LEPRIEUR).

31. **Hypoxylon discolor** B. et Br. Fungi of Ceylon n. 1076. — 1363
Pulvinate-effusum, albo-vestitum; peritheciis materie citrina vel can-
dida colligatis; ascis linearibus; sporidiis late ellipticis utrinque
apiculatis, 9 = 6-6.5.

Hab. in lignis putridis, Central province, Ceylon.

32. **Hypoxylon glomiforme** B. et C. North Amer. Fungi n. 828. — 1364
Hemisphæricum, ferrugineo-pulveraceum, demum denudatum, niti-
dum, leve; peritheciis conditis; stromate atro-fusco; ascis.....

Hab. in cortice Quercus nigrae, Connecticut, Amer. boreali (WRIGHT). — Stroma 6-7 mill. diam. Ostiola obsoleta.

33. **Hypoxylon vinosum** Mont. Syll. Crypt. n. 734, Cent. II, n. 46, 1365
l. c. — Orbiculare effusumque ad cortices, unciale, tenue, granu-
losum, pulvere vinoso-violaceo conspersum, intus luteo-cerinum,
margine sterilis; peritheciis confertis minutis oblongis prominulis
intus atris, apice umbilicato pertusis.

Hab. ad cortices dejectos in sylvis, Cayenna (LEPRIEUR).

34. **Hypoxylon quisquiliarum** Mont. Syll. Crypt. n. 727 et in Cent. 1366
II, n. 52, in Ann., Ser. 2, XIV, p. 321, Berk. Fungi of Ceylon
n. 1065. — Erumpens, hemisphæricum, liberum, simplex vel com-
positum, stromate corticali primitus luteo dein fusco farfuraceo-
velatum; peritheciis magnis crassis conceptaculo integro circum-
scriptis, globosis, intus atro-fuscis, ostioliis papillatis, papilla cin-

gulo albo cincta; ascis (sec. Berk.) linearibus, amplis; sporidiis cymbiformibus acutiusculis, $30 \approx 12-13$, binucleatis.

Hab. ad ramos dejectos, Guyana (LEPRIEUR), in corticibus et lignis, Peradeniya, Ceylon (BERK.). — Perithecia late ovata, ostiolo furfure luteo vestito, teste Berk.

35. **Hypoxylon majusculum** Cooke Grev. VII, p. 80, *H. multiforme* var. 1367
Cooke Fungi Brit. I, 374, *H. fragiforme* v. *major* Berk. — Globosum v. confluens, rubro-fuscum, dein nigrum; peritheciis ovoideis, stromate fuligineo-nigro; ostiolis denique prominulis; sporidiis ellipsoideis, sæpe curvulis, utrinque leniter acutis, atro-fuligineis, $18 \approx 7$.

Hab. in lignis putrescentibus in Britannia. — Ab *H. coccineo* sporidiis multo majoribus mox dignoscitur.

36. **Hypoxylon fuscum** (Pers.) Fr. Summ. Veg. Scand. p. 384, Nits. 1368
Pyr. Germ. p. 35. *Sph. fusca* Pers. Syn. p. 12. *Sph. fragiformis* Hoffm. Veg. Crypt. I. 20, nec Pers., *Sph. confluens* Willd. Fl. Berol. p. 416. — Stromate sæpius per peridermium erumpente, deinde superficiali, libero, maculiformi, depresso pulvinate, hemisphærico v. rarius subgloboso, discreto, connato v. confluyente, rarius in ligno nudo, rarissime in cortice omnino superficiali, plus minus effuso, ex purpureo fuscescente, tandem aterrimo, maturo peritheciis globosis, irregulariter monostichis, stipatissimis, verticibus rotundatis prominulis minute mammilloso; hymenio conidifero pallide argillaceo fuscescente, pulveraceo; conidiis minimis ovatis, in sterigmatibus brevibus, parce ramosis solitarie acrogenis; ascis cylindricis, longe pedicellatis, octosporis, paraphysibus filiformibus, superatis, $84-110 \approx 6-8$ p. sporif.; sporidiis monostichis, ovatis obtusis, plus minus inæquilateralibus, nigricantibus, $12-16 \approx 5-7$.

Hab. in cortice Alni, Coryli, Betulæ, Fagi, Cratægi, Carpini, Castaneæ, Fraxini, Quercus, Ulmi, Corni, Lauri etc., in tota Europa, Africa et Amer. boreali.

37. **Hypoxylon gemmatum** B. et Rav. North Amer. Fungi n. 831. — 1369
Parvum, pulvinatum, rubiginosum, ostiolis prominulis nigris, centro perforatis gemmatis.

Hab. in ramis Liquidambaris Carolinæ inf., Amer. bor. — Stroma vix 2,5 mill. lat. pulvinate-applanatum.

B) Stroma extus atrum, v. initio fuscescens, dein atrum.

38. **Hypoxylon cohærens** (P.) Fr. Summ. Veg. Scand. p. 384. Nits. 1370
Pyr. Germ. p. 42. Sacc. Fung. ital. t. 750. *Sphæria cohærens* Pers.

Synop. p. 11. — Stromate erumpente, mox omnino superficiali, libero, subgloboso v. deplanato-pulvinateo, crasso, arcte approximato v. connato, rarius confluenta, primo sordide fusca, deinde nigricante, lævi. peritheciis monostichis, grandiusculis, globosis v. ovatis, parum tantum prominentibus, minutissime papillatis, obtuse mammilloso; hymenio conidifero pallide argillaceo, cinerascente; conidiis obovato-subglobosis, minimis; ascis cylindricis, longissime ac tenuiter pedicellatis, octosporis, paraphysibus filiformibus simplicibusque stipatis, 80-92 \approx 7 p. sporif.; sporidiis monostichis, ovatis, obtusissimis, inæquilateralibus, nigricantibus, 12 \approx 6.

Hab. in ramis crassioribus corticatis Fagi sylvaticæ, rarius Quercus, Nyssæ, Aceris in Britannia, Belgio, Germania, Gallia, Suecia, Italia, Helvetia, Java, Borneo, Carolina, New-Jork. — *Var. minor.* In Polyporo putri in Borneo.

39. **Hypoxylon smilacicum** Howe, New Fungi, Hedw. 1875, p. 188. — 1371
Minutum, nigrum, subrotundum, v. ellipticum, irregulariter confluens, pulvinatum; peritheciis subglobosis; ascis cylindræcis subclavatis; sporidiis subnavicularibus, fuliginæis, 15-20 \approx 7,5, sæpe nucleolatis.

Hab. in trunculis emortuis Smilacis, Yonkers, New-York, America boreali. — *Sphæria smilacicola* Schwein., Fr. Elench. Fung. II, pag. 71, aliena est et sistit *Diatrypem smilacicolam*. Cfr. n. 739.

40. **Hypoxylon sertatum** Dur. et Mont. Fl. Alg., I, p. 455, sub *Sphæria*, Mont. Syll. Crypt. n. 732. — Orbiculare ellipticumve, confluens, cupulæforme, atrum, extus margineque elevato rugosum, intus concolor; peritheciis oblongis paralleliter stipatis erectis, ostiolis prominulis hemisphærico-conicis; sporidiis fuscis oblongo-ellipticis, 18-20 μ . longis. 1372

Hab. in ramis Quercus Suberis, La Calle; Juglandis regiæ, Perigueux (DURIÉU). — An *Nummularia*?

41. **Hypoxylon pauperatum** Karst. Enum. Fung. Lapp. p. 211. Myc. 1373
Fenn. II, p. 42. *Sphæria mammata* Nyl. Not. pro Fauna et Fl. Fenn. n. 7 (1869), p. 88. — Stromate per peridermium transversim erumpente, lateribus ab laciniis ejus arcte adherentibus cincto, orbiculari vel subellipsoideo, deplanato-pulvinateo, crasso, cortici interiori vel rarius ligno adnato; peritheciis protuberantibus tuberculoso, atro, discreto, raro connato, longit. 4-10 mill., latit. 2-4 mill.; peritheciis irregulariter monostichis, subsphæroideis, vertice rotundato plus minus prominulis, papilla minuta subconoidea instructis, fuscis, paucis, 1-16, in quovis stromate, magnis diam.

1-2 mill.; ascis cylindraceis, octosporis, pedicellatis, obturaculo apicali minuto jodo cœrulescente, 120-160 \approx 11-12 p. sporif.; sporidiis monostichis, oblongatis vel subellipsoideis vel subcylindraceis, rectis vel nonnihil inæquilateralibus, 1-2-guttulatis, fuscis, 18-31-, plerumque 19-26 \approx 8-12; paraphysibus filiformibus, gracilescentibus 2-3 μ . cr.; hymenium conidiferum pulveraceum, tandem fuscescens; conidia subsphæroidea, minima.

Hab. in cortice truncorum ramorumque Salicis phylicifoliæ, Salicis nigricantis et Sorbi Aucupariæ in Fennia et Lapponia.

42. **Hypoxylon pavimentosum** Ces. Myc. Born. p. 18. — Glebis dif- 1374
formi-orbicularibus depressis, in crustam effusam applanatam stipatis, tuberculosis, ostiolis subtectis nigro-punctatis, intus concoloribus; ascis ob nimiam maturitatem speciminum nullis observatis; sporidiis ovoideo-oblongis, fuscis 9-17 \approx 4-7.

Hab. ad Sarawak, Borneo, ad cortices.

43. **Hypoxylon pauxillum** Ces. Myc. Bor. p. 18. — Glebulis pusil- 1375
lis, e peritheciis 5 vel 6 (ubi plura adsint, biseriatis), stromate atro-nitenti tenuissimo obvolutis, tuberculosis, applanatis, intus albidis, puncto centrali matrici (ligno mucido) adfixis; fructificatione non visa.

Hab. ad Sarawak, Borneo, ad truncos.

44. **Hypoxylon multiforme** Fr. Summ. Veg. Scand. p. 384. Nits Pyr. 1376
Ger. p. 43. *Sph. multiformis* Fr. S. M. II, 334. *Sph. rubiformi* Pers. Syn. p. 9. *Hyp. granulorum* Bull. Champ. t. 487, f. 2. — Stromate in ramis corticatis per peridermium erumpente, lateribus, ab ejus laciniis cincto v. tandem libero superficiali, hemisphærico, crasso, subglobosum, elliptico ac deplanato v. convexo, sæpissime autem deformi, in ligno denudato contra plus minus effuso, omnino superficiali; stromatibus raro discretis, plerumque connatis v. confluentibus, primo rubiginoso-fuscescentibus, deinde atris, lævibus, peritheciis majusculis, globosis, irregulariter monostichis, vertice papillatis, protuberantibus tuberculosis; hymenio conidifero sordide luteo, deinde fuscescente; conidiis minimis, obovatis; ascis cylindricis, longissime pedicellatis, octosporis, paraphysibus tenuissimis, filiformibus, simplicibus, superatis, 72-100 \approx 6 p. sporif.; sporidiis monostichis, fusiformibus, inæquilateralibus, fuscis, 10-12 \approx 4-5.

Hab. in ramis truncisque Betulæ, Alni, Sorbi, Quercus, Castaneæ, in tota Europa, India or., Nepal, Amer. bor., Kamts-

chatka. Adest var. *granulosa*, effusa subnuda, peritheciis ad dimidium liberis papillatis; habitu *H. serpenti* simillima, sed ascis cylindricis longissime stipitatis, 70-80 \approx 4 p. sporif.; stipite usque 100 micr. long.; sporidiis fusiformibus, 12-15 \approx 3 $\frac{1}{2}$ -4 $\frac{1}{2}$, sæpius curvulis, utrinque longiuscule attenuatis, 2-guttulatis, pallide fusco-olivaceis statim dignoscenda. In lignis Italiæ bor. etc.

45. **Hypoxylon Kalchbrenneri** Sacc. *Hypoxylon Placenta* Kalch. in 1377
Grev. 1880, p. p. 28 (nec Link et Fr.). — Corticolum, applanatum, atrum, erumpens; stromate discoideo, margine tenui, sterili, centro ostiolis punctiformibus punctato; ascis cylindræis; sporidiis uniseriatis, ellipticis, atro-fuscis, 12 \approx 6.

Hab. in ramis in Africa australi. — *Anthostomati exultanti* Cooke (n. 1105) affine, immo forte varietas, sec. Cooke.

46. **Hypoxylon stigmaideum** Ces. Myc. Corn. p. 17. — Glebis tenui- 1378
bus, complanatis, determinatis, nigris, e cortice erumpentibus, ostioliis latentibus; sporidiis ovoideis, utrinque obtusis, 5 \approx 2.

Hab. in Sarawak, ad corticem mollem, pseudosuberosum.

47. **Hypoxylon Pseudo-tubulina** Ces. Myc. Born. p. 17. — Acervulis 1379
atris, e subiculo concolori tenui hypophlæode per corticem ramorum, ad arborem mihi ignotam spectantium, erumpentibus, *Hypoxyllo serpenti* subaffinibus; singulis glebis applanatis, circumscriptis, elongatis, obtusis, sæpius rimosis magisque sensu longitudinalis, omnino *Tubulinam* præmature exsiccatam referentibus; sporidiis (teste Cooke) oblongis, 35 \approx 13.

Hab. ad Sarawak, Bornei.

48. **Hypoxylon heterostomum** Mont. Syll. Crypt. n. 739, Cent. II, n. 49, 1380
l. c., p. 358, t. 10, f. 8. — Erumpens, convexo-planum, suborbiculare, læve, atrum; peritheciis confertis, oblongis, erectis, monostichis, ostioliis polymorphis, centralibus annularibus, cæteris aut canterios, aut puncta admirandi, aut et lirellas opographæ e centro radiantes referentibus, anguli apice aut lineæ parte incrassata ad peripheriam versis; ascis elongato-clavatis, sporidia 6-8 elliptico-subreniformia foventibus.

Hab. ad corticem truncorum dejectorum in sylvis Montis *Tigre* insulæ Cayennæ (LEPRIEUR).

49. **Hypoxylon porosum** Mont. Syll. Crypt. n. 723, Guy., mss., n. 523. 1381
— Stromate pulvinato, carbonaceo, crasso, hemisphærico, extus intusque atro; peritheciis elongatis erectis phialiformibus, ostioliis erumpentibus tandem late porosis; ascis clavatis, 30 μ . longis, octosporis; sporidiis ovoideis, minimis, 5 \approx 3,5.

Hab. ad cortices? Guyana (LEPRIEUR).

50. **Hypoxylon Javanicum** (Zipp. et Lév.) Sacc. *Sphæria* (pulvinata) 1882
Javanica Zipp. mss. Lév. Ann. Scienc. nat. 3, 1845, p. 46. — Convexum suborbiculare, verrucis prismaticis asperum, fuscum; peritheciis subglobosis stromate albo immersis, ostioliis obsoletis; sporidiis monostichis ellipsoideis.

Hab. ad truncos in Java. — Corticolum, centro adfixum.

51. **Hypoxylon anthracodes** (Fr.) Mont. Ann. Sc. nat. 1840, XIII, p. 1383
 359. *Sph. anthracodes* Fr. in Linnæa 1830, p. 544. — Subeffusum, contiguum, leve, aterrimum, stromate carbonaceo; peritheciis irregularibus; ostioliis minimis punctiformibus; ascis; sporidiis (sec. Speg.) elliptico-limoniiformibus, sæpius inæquilateris, 12-14 \approx 6-8, 2-guttulatis, atro-fuligineis.

Hab. in ramis dejectis in Brasilia, Argentina, Borneo; in trunco Tiliæ, Trenton Falls, Amer. bor. — Linea nigra stromatica de cortice per lignum excurrit.

52. **Hypoxylon annulatum** (Schw.) Mont. Syll. Crypt. p. 213. *Sph. annulata* Schw. New. Sph. Am. p. 11. t. 2. f. 8 et Fr. Elench. II, 64. — Hemisphærica, confluens, nigricans, intus concolor; peritheciis subglobosis, ostioliis in disco dilatato, annulato-marginato prominulis; ascis cylindræis; sporidiis ovoideis, curvulis fuligineis.

Hab. ad cortices et ligna Quercus, Magnoliæ etc. Carolina, Georgia, Florida, Chili et Nova Zelandia. — Singulari caractere ab omnibus recedit, ceterumque nobilissima species. Pustulæ superficiales (etiam in cortice) hemisphæricæ, subregulares, 2-4 lin. latæ, mox confluentes, opacæ, atræ, sed juniores procul dubio pruinosa et purpurascens; stroma carbonaceum, nigrum; perithecia numerosa, magna, subglobosa aut obovata; discus dilatatus, planus, annulato-marginatus supra singulum perithecium huic speciei privus est; ostiolum, in medio disci elevatur, papillæforme.

Var. *depressum* Welw. et Curr. Fungi Angol. p. 283, *Sph. annulata* β . *depressa* Fr., irregulariter effusum, crassiusculum, innato-pruinosa purpurascens-nigrum, peritheciis prominulis, amplis dein apice lato depresso-truncato marginato papillatis; sporidiis ovoideis inæquilateralibus, 7-8 μ . long., fuligineis. — In corticibus Pennsylvaniae et Angolæ, Africae occid.

52. **Hypoxylon diathrauston** Rehm, Ascom. n. 274 et Diagn. n. 274. 1385
 — Peritheciis carbonaceis, fragilibus, in corticis superficie sessilibus, solitariis vel plerumque in plagas irregulares, usque ad 1 cent. longas latasque conglobatis, itaque vario modo angulatis, globosis,

apice in papillam conicam, obtusam protractis, atrocinereis, nitentibus, c. 1 mill. diam.; ascis cylindræis, apice valde incrassatis, jodoque cærulescentibus, 200 \approx 12, 8-sporis; sporidiis oblongo-ellipticis, nucleo centrali magno instructis, circulo mucoso angusto circumdatis, 1-stichis, 20 \approx 10; paraphysibus teneris, articulatis, c. 6 μ . crassis.

Hab. ad ramos emortuos Pini Mughi et pumilionis in alpe Kühtai Tyrolensi.

53. **Hypoxylon areolatum** B. et C. Cuban Fungi n. 824. — Hemisphaericum, pulvinatum, superficie areolata, cute durissima, contextu nigro; ostioliis sparsis demum prominulis; sporidiis utrinque obtusis, 30-35 μ . long. 1386

Hab. in cæspitibus, in sylvis Cubæ. — Stroma 8-10 mill. latum.

54. **Hypoxylon exsurgens** Mont. Syll. Crypt. n. 728 et Guy., mss., n. 532. — Erumpens, oblongum, pulvinatum, convexum, marginulatum, atrum, opacum; peritheciis in stromate fuligineo-atro zonato periphericis ovoideis ostiolatis, ostioliis prominulis confertis minimis. 1387

Hab. ad cortices, Guyana (LEPRIEUR).

55. **Hypoxylon leucocreas** B. et Rav. North Amer. Fungi n. 837. — Parvum pulvinatum e peritheciis prominulis papillatum, nitidum, intus niveum; ascis linearibus; sporidiis parvis, ellipticis, monostichis, fuligineis. 1388

Hab. in truncis cæsis Quercus in Carolina infer., Amer. bor. — Stroma minutum $1\frac{1}{2}$ mill. diam.

56. **Hypoxylon comedens** Ces. Myc. Born. p. 19. — Tuberculis, penitus *Nummulariæ* facie, fossulas ab ipsius pyrenomycetis prostromate excavatas replentibus, ovalibus vel elongatis, rarius difformibus, $\frac{1}{2}$ -3 pollices longis, vel confluentibus convexis, plano-marginatis, a basi solubilibus (dimidiatis), et tunc superficiem internam planissimam, e basi peritheciorum magnorum crassiorumque disrupta, grosse ocellatam ostendentibus, extus nigris albo-pruinatis si zonulam marginalem demas; ascis,....; sporidiis (teste Cooke) 20 \approx 8. 1389

Hab. ad Sarawak, Borneo. — Comparandum cum *H. exsurgente* Montagne (Cesati).

57. **Hypoxylon lucidulum** Mont. Syll. Crypt. n. 729, Cent. II, n. 43, in Ann., 2, XIII, p. 354. — Sessile, orbiculare, subcupulæforme, centro umbonato, extus intusque carbonaceum, atro-nitidum; peritheciis paucis amplis globosis, concoloribus, ostioliis punctiformi-prominulis; sporidiis cymbiformibus, elongatis. 1390

Hab. ad ligna in sylvis prope amnem Conana, Guyana (LE-PRIEUR), Cuba (BERK.).

58. **Hypoxylon leucostigma** (Lév.) Sacc. *Sph. leucostigma* Lev. Fragm. 1391
mycol. p. 142. — Stromatibus subglobosis cohærentibus, fusco-nigricantibus, intus nigris; peritheciis periphericis prominulis, ostioliis pertusis albis; ascis cylindræis, tenuibus, octosporis, parce paraphysatis; sporidiis ovoideis inæquilateralibus, opacis, monostichis, subinde uniguttatis.

Hab. ad corticem *Quercus*, Vincennes prope Parisios.

59. **Hypoxylon xanthocreas** B. et C. North Amer. Fungi n. 839. — 1392
Pulvinatum, nigrum, demum confluens e peritheciis prominulis papillosum; stromate flavo; ascis linearibus; sporidiis uniserialibus ellipticis 7,5 μ . longis.

Hab. in truncis, New England Amer. bor. — Stromata confluentia 12–15 mill. lata. Differt ab *H. endoxantho* Mont.

60. **Hypoxylon Fragaria** Ces. Myc. Born. p. 18. — Globosum, sparsum, 1393
singulis glebis a pisi ad majoris avellanæ magnitudinem, nunc omnino sphæricis ad basim parum contractis, nunc basi applanata ad cortices adfixis, tuberculoso-rugosis, umbrinis vel atris, sæpe rore vel pulvere lætius colorato velatis; ostioliis papillæformibus atris quandoque emergentibus; stromate duro intus nigrescente, fere ex toto a peritheciis repleto; peritheciis magnis, imo ubi paucioribus maximis, minoris nempe pisi magnitudine, pyriformibus vel globosis, ex mutua pressione obtuse angulosis, pellicula fibrillosa sericea umbrina indutis; parietibus crassis carbonaceis; intus hyphasmate quodam luteolo fartis; sporidiis maximis, 12–14 \simeq 7–8 (?), cylindræis utrinque obtusis, nigro-brunneis, subopacis, ascorum vestigiis nullis.

Hab. in Ceylon ad *Pedrotallagalla* et ad Sarawak. — Conferendum cum *Ustulina macrosperma*.

61. **Hypoxylon Glomus** B. et C. North Amer. Fungi n. 836. — Erumpens, pulvinatum, subangulare, nigrum; peritheciis paucis; ostioliis hic illic erumpentibus perforatis. 1394

Hab. in corticibus, New England Amer. bor. — Stroma nigrum, apice subrubescens; perithecia 5–6 in quoque stromate, majuscula. Fructificatio jam dispersa.

62. **Hypoxylon Berterii** Mont. Syll. Crypt. n. 719 et Fl. J. Fern., 1395
n. 58, sub *Sphaeria*, et Fl. Chil., VII, p. 538, t. 9, f. 3. — Orbiculare, subsessile; peritheciis globosis, prominulis, papillatis in stro-

mate crasso albo. plano-convexo. undulato. atro-corticato immersis; sporidiis cymbiformibus.

Hab. ad ligna in insula Juan Fernandez (BERTERO).

63. **Hypoxylon monticulosum** Mont. Syll. Crypt. n. 731 et Guy., mss., 1396
n. 538. — Pulvinatum, carbonaceum, pulvinis convexis orbicularibus confluentibus colliculosis extus intusque atris; peritheciis periphericis monostichis obovoideis sursum prominulis, ostiolo mammillari; sporidiis cymbiformibus.

Hab. ad ligna, Cayenna (LEPRIEUR).

64. **Hypoxylon Murrayi** B. et C. North Am. Fungi n. 829. — Subglo- 1397
bosum, gregarium, extus intusque nigrum, ostiolis dense papillosum.

Hab. in corticibus putridis, Boston Amer. bor. — Stroma 2,5-3 mill. diam. Ostiola minuta. Affine *Hypoxylon Bombæ* Mont. sed dense mammillosum.

65. **Hypoxylon Comaropsis** Mont. Syll. Crypt. n. 720 et Cent. II, 1398
n. 36, in Ann., Ser. 2., XIII. p. 350. — Globosum, fragilissimum intus et extus atro-fuscum; peritheciis erectis globosis discoideo-prominulis fuscis collabascentibus, ostiolis in disco applanato papillatis; sporidiis cymbiformibus, fuscis.

Hab. ad ligna putrida in sylvis Sinnamariensibus (LEPRIEUR).

66. **Hypoxylon Bomba** Mont. Syll. Crypt. n. 720 et Cuba, pag. 338, 1399
t. 12, f. 3. — Caspitosum, raro solitarium; peritheciis amplis globosis lævibus, apice poro sensim ampliato regulariter terebratis, basi anfractuoso-vacua lignum nigrefactum penetrantibus.

Hab. ad cortices dejectos circa S. Marcos Cubæ insulæ (AUBER) et in Brasilia (BLANCHET).

67. **Hypoxylon carabayense** Mont. Pl. cellul. cent. VII. p. 372. — 1400
Erumpens, initio globosum, dein supra deplanatum, subdisciforme marginatum, fuscum, intus pallidum, margine disci fuliginèi repandum; peritheciis sphericis 1 ad 8, immersis intus nitidis, nucleo atro fæctis, ostiolo punctiformi instructis; ascis magnis cylindræcis 8-sporis, paraphysibus stipatis; sporidiis amygdalinis brunneis granulosis, oblique uniseriatis.

Hab. in cortice ramorum in provincia Barabaya, Peruvia. —

H. Comaropi Mont. subaffine. — An *Nummularia*?

68. **Hypoxylon obesum** Fr. Nov. Symb. 129. — Carbonaceo-durissimum, nudum, atrum, stromate pileato lentiformi, immarginato parum excedente stipitem crassissimum breve, intus radiante cinereo-atro, peritheciis immersis periphericis bullato-prominulis, ostiolis papillatis, area orbiculari elevato-marginata cinctis. 1401

Hab. ad truncos in Costa Rica (ERSTED.). — Ob areolas circa ostiolum *H. annulato* affine.

69. **Hypoxylon congestum** B. et Br. Fungi of Ceylon n. 1054. — In 1402
glebas elevatas multipartitas congestum; peritheciis in stromate viridi sitis; sporidiis subglobosis, 12–17 μ . diam.

Hab. in ligno putri Ceylon. — Sporidia illis *Nummulariæ* speciei conformia.

70. **Hypoxylon deciduum** B. et Br. Fungi of Ceylon n. 1057. — Pul- 1403
vinatum, pruinatum vel scabrum, facile deciduum; peritheciis immersis; ostiolis abditis vel tantum prominulis.

Hab. in foliis Palmarum, Central province, India or. (BERK.), Bintula, Borneo (BECCARI).

71. **Hypoxylon Placenta** (Link. et Fr.) Sacc. *Sph. Placenta* Link. et 1404
Fr. in Linnæa 1830, p. 539. — Hemisphærico-globosum, extus intusque atrum, intus azonum; peritheciis periphericis, polystichis, globosis; ostiolis papuloso-hemisphæricis.

Hab. in trunco ad Friburgo novo Brasiliæ (BEYRICK). — Species habitu fere *Daldiniæ concentricæ*, sed intus azona; perithecia in hac tribu majuscula.

72. **Hypoxylon Scriblita** Mont. Syll. Crypt. n. 730 et Guy., mss., n. 1405
537. — Orbiculatum, placentæforme, ambitu depressum, atro-fuscum; peritheciis magnis ad marginem attenuatum sphericis, cæteris subcubicis, ostiolo annulari in depressionibus stromatis carbonacei subconfluentibus prominulo; sporidiis subfusiformibus.

Hab. in cortice ramorum, Cayenna (LEPRIEUR).

73. **Hypoxylon Petersii** B. et C. Cuban Fungi n. 822. — Stromate 1406
pulvinato hemisphærico duro, ex umbrino nigro, intus umbrino; peritheciis stratosi elongatis; superficie papillosa, ostiolis minutis nigris; sporidiis 7–8 μ . longis.

Hab. in ligno putri *Quercus* etc., Cuba et Alabama. — Stromata 25 mill. lat., 9 mill. cr., interdum diffractum.

74. **Hypoxylon turbinulatum** (Schw.) Berk. North Am. Fungi in Grev. 1407
Sph. (*Hypoxyl.*) *turbinulata* Schw. Syn. Amer. bor. n. 1204. — Turbinato-pulvinatum, applanatum, subconfluens, tamen pulvinulis semper distinctis; peritheciis non periphericis sed per totum stroma ad basim usque dispersis, majoribus; superficie externa granulata, pulveraceo-rugosa; ostiolis minutis prominulis; stromate parco pro magnitudine perithecorum, e fuliginoso albedo.

Hab. in ligno fagineo montis Pocono, Pennsylvania, Ame-

rica hor. — Pulvinuli seriatim siti quasi litteras hebraicas formant, et insident crustæ nigræ in cortice effusæ.

75. **Hypoxylon Cycliscum** Mont. Syll. Crypt. n. 742, Guy., mss., n. 511. 1408

— Orbiculare, applanatum, læve, aterrimum; stromate carbonaceo; peritheciis ovoideis, ostioliis minutissimis, depressionibus punctiformibus immersis; sporidiis generis.

Hab. in cortice ramorum, Cayenna (LEPRIEUR).

76. **Hypoxylon campotrichum** Mont. Syll. Crypt. n. 14', Cent. VI, 1409

n. 96, in Ann., Ser. 3., XII, p. 314, sub *Sphæria*. — Globosum, extus intusque atrum; peritheciis paucis amplis, membranaceis, furfure pallescente obductis crustaque tectis, ostioliis prominulis rugosis; paraphysibus uncinatis.

Hab. e cortice ramorum prorumpens in insula Mascarena (ADOLPHE DELESSERT).

77. **Hypoxylon undosum** (Lév.) Sacc. *Sph.* (pulvinata) *undosum* Lév. 1410

Ann. Sc. nat. 3, 1845, p. 46. — Convexum, pulvinatum, undulatum, nigrum, nitidum; peritheciis oblongis stromate fibroso-celluloso immersis; ostioliis obsolete; ascis linearibus, paraphysatis; octosporis; sporidiis continuis opacis.

Hab. in Java ad truncos (ZIPPÉL). — Corticolum, 5-6 mill. lat., 2-3 crass., basi centro fixum.

78. **Hypoxylon Macrocenangium** Ces. Myc. Bórni. p. 19. — Tuberculis 1411

a matrice ignota solutis *Cenangium* quoddam dimensionibus insigne in mentem revocantibus, applanatis, orbicularibus v. ellipticis, pollicaris diametri, margine rotundato sterili distincto, disco depresso æquabili ostioliis vix conspicuis punctato, colore pyreniorum *Coffeæ* adustorum, obscuriori, fere atro in disco; stromate intus concolori, gleba perithecorum difformium stipatorum discreta, compagem verticaliter lamelloso-cellulosam sistenti, strato crustaceo involuta; sporidiis (teste Cooke) oblongis, 6 ≈ 3.

Hab. in truncis, Sarawak Bornei. — Cl. Cesati fructificationem spermogonicam tantum reperit.

79. **Hypoxylon macromphalum** Mont. Syll. Crypt. n. 740, Guy., mss., 1412

n. 543, t. 5, f. 8. — Erumpens, orbiculare, plano-convexum, lenticulare, atrum, nitidum, centro determinate discoideo-umbilicatum; peritheciis ovoideis erectis monostichis, centralibus ostiolatis, ostioliis 5-6 centro disci prominulis; sporidiis oblongis, fuscis, opacis.

Hab. in cortice ramorum circa Cayennam (LEPRIEUR).

80. **Hypoxylon Malleolus** B. et Rav. North Amer. Fungi n. 827, II. 1413

concentricum Rav. Fungi Amer. n. 181, nec aliorum. — Globo-

sum confluens, ostiolis annulo depresso circumdati, stromate nigerrimo.

Hab. in truncis quercinis et populinis in Carolina, Am. boreali. — Globosum 20 mill. diam. subinde lateraliter confluens. Ostiola fere *H. marginati*.

81. **Hypoxylon marginatum** (Schw.) Berk. Cuban Fungi n. 830, *Sph.* 1414
marginata Schw. Syn. Amer. bor. n. 1176. — Hemisphæricum, confluens, denique nigrum, intus concolor, ostiolis singulis in areola disciformi marginata sitis; ascis cylindræis, breve stipitatis, octosporis; sporidiis subreniformibus, sæpe 2-nucleatis, 6–9 μ . longis, pallide fuliginæis.

Hab. in cortice et ligno denudato in Britannia, Ceylon, Cuba, Borneo, Amer. bor., Venezuela, Africa occid. præcipue in *Quercu*, *Myrica*, etc. — *Sph. marginata* Fr. Elench. fung. II, 69, ni fallor, ad *Nummulariam discretam* est referenda. — Adest forma *effusa*.

82. **Hypoxylon microstictum** Mont. Syll. Crypt. n. 741, Cent. II, n. 50, 1415
sub *Sphæria*, l. c., p. 358. — Erumpens, orbiculare vel oblongum, applanatum, punctis minutissimis exasperatum, extus albo-pruinosum, intus nigrum; peritheciis ovoideis membranaceis, immerso-latentibus, ostiolis papillatis, papilla marginata; ascis linearibus sporidia cymbiformia utroque fine acuminata, hinc caudata, quaterna foventibus.

Hab. ad cortices dejectos in sylvis Sinnamariensibus (LEFRIEUR). — An *Nummularia*?

83. **Hypoxylon culmorum** Cooke in Rav. Fungi Amer. in Grevill. VII, 1416
p. 51. — Parvum, convexum, ellipsoideum, atrum, nitidum; ostiolo papilliformi; ascis cylindræis; sporidiis navicularibus, curvulis, nucleatis, brunneis, 15–18 \approx 5.

Hab. in culmis *Arundinariæ*, Darien, Georgia Amer. bor.

84. **Hypoxylon microsporum** Ces. Myc. Born. p. 17. — Pulvinulis nigris, opacis, late effusis, minutis 3–4 mill. latis, rarius confluentibus, orbicularibus, depressis, peritheciis 10–20 minutis nisi ostiolis punctiformibus emergentibus; ascis linearibus 50 μ . longis; sporidiis monostichis, ovoideis opacis, 6–7 \approx 3.

Hab. ad Sarawak, Borneo, ad lignum nudum durum.

85. **Hypoxylon mauritanicum** Dur. et Mont., Fl. Alg., I, p. 45, sub 1418
Sphæria, Mont. Syll. Crypt. n. 718. — Tuberculis in crustam crassam margine repandam subtus productam tandem fusco-nigricantem connatis; peritheciis periphericis ovatis, stromati immersis,

ostiolo papillato; ascis cylindræis 120 \approx 10, sporidia 20 \approx 5, oblonga serie simplici duplicive soventibus.

Hab. in caudicibus robustis Chamæropis. La Calle (DURIER). 1419

86. **Hypoxylon Melanaspis** Mont. Syll. Crypt. n. 738, Cent. II, n. 48, sub *Sphæria*, in Ann., Ser. 2., XIII, p. 357, t. 10, f. 7. — Erumpens, ellipticum, planum, centro subumbonato, extus et intus atrum; peritheciis centralibus ovoideis, ostioli punctiformibus in areolis vix prominulis orbicularibus confluentibus; sporidiis monostichis, navicularibus, octonis, 22-24 \approx 6-7, fuscis, hyalino-caudatis.

Hab. ad cortices ramorum emortuorum in sylvis Guyanæ centralis et circa Cayennam (LEPRIEUR).

87. **Hypoxylon pachyloma** (Lév.) Mont. Speg. Fungi Arg. IV, n. 132. 1420
— Stromatibus suborbicularibus, 5-20 mill. diam., superne inferneque applanatis, tenuiusculis, 1 mill. crass., erumpentibus, cortice laciniatim disrupto cinctis, subtruncato-marginatis, disco densiuscule papillulato-aspero, ambitu obtusiusculo latiuscule sterili ac levi, intus extusque atro-carbonaceis, opacis, glaberrimis; peritheciis immersis, globosis, e mutua pressione ellipticis, 300 \approx 200, monostichis, a margine stromatis remotiusculis, ostiolo subconico, prominulo, subexerto, latiuscule umbilicato; ascis cylindræis, sursum rotundatis crasseque tunicatis, deorsum breve attenuato-stipitatis, 80-85 \approx 4-5, paraphysibus longioribus, filiformibus, guttulis obvallatis, octosporis; sporidiis rectis v. oblique monostichis, elliptico-elongatis, inæquilateralibus, subcurvulis, utrinque obtusiusculis, 8-12 \approx 3-3,5, 1-vel 2-guttatis, fuliginis.

Hab. in ramis, a Thermitibus necatis, Erythrinæ Crista-galli en las Conchas, Argent. Amer. austr. — An *Nummularia*?

88. **Hypoxylon Moselei** Berk. Fungi Chall. n. 74. — Orbiculare, 1421
erumpens, leviter depressum, marginatum, primum cortice velatum, margine tenui circumdatum, peritheciis oblongis; ostioli papillæformibus deciduis; strato exteriori rigido.

Hab. in lignis putrescentibus in insulis Athlanticis. — Stroma 6-7 mill. diam. Affine *Hyp. subaffixo* Schw., sed substantia firmitior. In utroque asci nulli reperti.

89. **Hypoxylon turbinatum** Berk. Fungi Chall. Exp. II, p. 4, n. 72. 1422
Speg. Fungi Arg. IV, n. 134. — Laccatum, erumpens, coffeicolor dein nigricans, demum omnino liberatum; receptaculo exacte turbinato deorsum attenuato, apice convexo, centro supra perithecia oblonga membranæ a leviter depresso; ascis ellipsoideis breve pe-

dicellatis, paraphysatis; sporidiis oblongis 12-14 \approx 8-10, pallide fuliginosis e latere leniter compressis.

Hab. in lignis truncisque dejectis in Brasilia prope Apiahy. — Stromata 7-14 mill. alt., 8-16 cr., intus ad basim albo-flocculosa, parte intermedia compacta, castaneo-brunnea, subfibrosa, superiore peritheciophora. — Generi *Phylaciæ* Lév. toto habitu accedit nec differt nisi præsentia ascorum: *Phylacia* ergo sistit forte statum pycnidicum ejusdem.

90. **Hypoxylon? Aceris** (C. et E.) Sacc. *Melogramma Aceris* C. et E. 1423
New Jersey Fungi, Grevill. VII, p. 8. — Irregulariter erumpens; peritheciis confluentibus, subdepressis, atris; ascis clavatis; sporidiis longe ellipticis, subcurvulis, brunneis, 35-40 \approx 15.

Hab. in ramis *Aceris*, New Jersey Amer. bor. — An *Hypoxylon?* sed profecto non *Melogramma*, nec *Botryosphæria*.

91. **Hypoxylon irradians** Mont. Syll. Crypt. n. 717 et Cent. II, n. 38, 1424
t. 10, f. 2. — Pulvinatum, basi constrictum, obtuse marginatum, papulatum, cinereo-umbrinum; stromate fuliginoso-olivaceo e fibris discoloribus a basi ad peripheriam flabellatim radiantibus composito; peritheciis globosis in strato peripherico (millimetrum crasso) monostichis, ostioliis brevissimis in papilla poro pertusis.

Hab. in sylvis montosis secus amnem Conana in Guyana (LEPRIEUR).

92. **Hypoxylon Avellana** Ces. Myc. Born. p. 18. — Globosum, læve, 1425
nigrum, a pisi ad avellanæ majoris magnitudinem; peritheciis globosis periphericis atris; stromatis strato corticali tenui sed sat duro, subcorneo, extus nunc glabro, nunc pulverulento, sed minime rugoso; intus suberoso ex alutaceo albido; peritheciis ab invicem dissitis, parum numerosis, ostioliis ad stromatis superficiem vix conspicuis punctiformibus; ascis linearibus, 40 μ . longis, paraphysum loco mucilagine plus minus hyalina interposita; sporidiis uniseriatis, opacis, navicularibus, utrinque acutis, (teste Cooke) 35 \approx 10.

Hab. ad Sarawak, Borneo. — Ab *H. globoso* sat diversum præsertim superficie non rugosa.

93. **Hypoxylon globosum** Fr. Nov. Symb. p. 130, *Sph. globosa* Fr. S. 1426
M. II, 331, *H. pilæforme* Berk. et Curt. Sillim. Journ. 1850, p. 95. — Globosum, rugosum, atrum, intus suberosum album fibroso-radians; peritheciis globosis periphericis atris.

Hab. in truncis emortuis Portorici et in insula oceanica Oahu. — Solitarium, pisi v. nucis majoris magnitudine, nudum, tubercu-

losum, opacum: perithecia majuscula. subconferta, tota immersa, passim disticha. Ostiola latentia. Subinde stipitatum, transitumque præbens ad *Xylarias*.

94. **Hypoxylon aggregatum** Welw. et Curr. Fungi Angol. pag. 282, 1427
t. 17. f. 22. — Aquilum, late cæspitosum, sessile; stromatibus sphæroideis conico-rostratis vel irregulariter expansis, plurima ostiola præstantibus; sporidiis

Hab. ad truncos vetustos, totam eorum superficiem obtegens, prope Bumba, Golungo alto, Angola (Africa). — Affine *H. cænopodi* sed sessile.

95. **Hypoxylon tuberiforme** (Wallr.) Mont. Pl. Cell. Cent. VIII, p. 70, 1428
Sph. tuberiformis Wallr. MS. — Globoso-depressum, supra convexum, subtus cavum, extus tuberculosum, atrum, opacum. intus suberosum, pallidum: peritheciis periphericis amplis obovoideis, ostioliis exsertis, minutis confertis, ascis . . . ; sporidiis fusiformibus continuis inæquilateris, fuscis, 20–30 \approx 5, 1–2-guttatis.

Hab. rarissime sub terra in Germania. — Magnitudo nucis juglandinæ. An *Ustulina* species?

96. **Hypoxylon Kurzianum** Curr. Linn. Trans. (non vidi). — Stroma- 1429
tibus minutis, gregariis, depresso-pulvinatis ex 2–6 peritheciis constantibus, atro-fuscis; peritheciis globoso-depressis, contiguis vel subdiscretis, breve papillatis, sæpe annulo minuto corticali cinctis, fragilibus; ascis jam resorptis; sporidiis ellipsoideo-oblongis, fuligineis, 10–12 \approx 5–5,5.

Hab. in ramis putrescentibus, Pegu, Asia. — Descripsi sec. exemplaria a Cookeo benevole communicata. Perithecia $\frac{1}{2}$ mill. diam. Ad *Roselliniam* vergit.

H. Placocylum: stromate late et vage effuso, subsuperficiali.

A) Stroma rubescens v. ochraceum, v. saltem non nigrum, pruina pallidiore obductum.

97. **Hypoxylon purpureum** Nits. Pyr. Germ. p. 37. Sacc. F. it. t. 571. 1430
— Stromate in ligno superficiali, late ac tenuiter effuso, ex fusco-purpureo tandem nigricante, peritheciis dense stipatis, minutis, globosis, prominulis, vertice rotundatis, poro perforatis mammilloso; hymenio conidifero pulveraceo-floccoso, primo pulchre virente deinde fulvo v. læte ochraceo, demum purpureo-fuscescente; conidiis minutis, obovatis in sterigmatibus longis, septatis, simpliciter v. sæpius verticillato-ramosis solitarie acrogenis; ascis cylindricis, longe pedicellatis, octosporis, paraphysibus simplicibus, tenuissimis

obvallatis, 80–88 \approx 6–7 p. sporif.; sporidiis monostichis, ovatis, inæquilateralibus v. subrectis, nigricantibus, 12 \approx 5.

Hab. in truncis decorticatis Fagi sylvaticæ prop. Treviso, Italia bor., pr. Münster, Germania, socio *Dematio virescente* A. et S. (= *Botrytis geniculata* Corda?).

98. **Hypoxylon perforatum** (Schw.) Fr. Summ. Veg. Scand. pag. 384. 1431
Nits. Pyr. Germ. pag. 40. *Sph. perforata* Schwein. Syn. Carol. n. 45. — Stromate in ligno v. rarius in cortice superficiali, effuso maculiformi, brevi, immo subhemisphærico, crasso, contiguo, peritheiorum in stromatis superficie ceterum, sæpe omnino non discernibilium foraminibus minute cribroso-perforato, rubiginoso- v. purpureo-fusco, tandem nigricante sæpe confluyente, hymenio conidifero, cinereo-albido, dilute rubescente, pulveraceo; conidiis minutissimis, ovoideo-subglobosis; sterigmatibus breviusculis, subsimplicibus v. ramosis septatis; peritheciis monostichis, stipatis, ovatis v. subglobosis mutuaque pressione haud raro compressis, nunc omnino immersis, nunc contra prominulis, ostiolis umbilicatis, hymenii reliquiis primo sæpe albido-pulverulentis, in stromatis superficie apertis; ascis longe pedicellatis, cylindricis, octosporis, paraphysibus tenerrimis, filiformibus simplicibus superatis, 60–90 \approx 7–9 p. sporif.; sporidiis oblique monostichis, ovatis, utrinque obtusis, rarius acutiusculis, subrectis, v. inæquilateralibus, nigricantibus plerumque 12- rarius 10–14 \approx 5–7.

Hab. in lignis putridis Betulæ, Corni, Arundinarie, Bambusæ, Liquidambaris, Fagi, Salicis, Fraxini in America bor., India orient., Ceylon, nec non pr. Münster et Cappenberg Germaniæ.

99. **Hypoxylon miniatum** Cooke, Grev. VII, p. 80. — Effusum, irregulare, convexum, lateritio-brunneum; peritheciis connatis, ovoideis, leviter papillatis; stromate vivide aurantio-rubro; sporidiis late ellipsoideis, inæquilateralibus, 10 \approx 5–6, brunneis. 1432

Hab. in lignis decorticatis in Britannia. — Stromate miniato mox dignoscenda species,

100. **Hypoxylon atropurpureum** Fr. Summ. Veg. Scand. p. 384, Nits. 1433
Pyr. Germ. p. 48. Sacc. F. ital. t. 577. *Sphæria atropurpurea* Fr. S. M. II. 340, an Tode? — Stromate in ligno nigrificato longe lateque effuso, ambitu vario sæpeque interrupto, superficiali tenui, tamquam ex peritheciis, basi plerumque applanatis, vertice depresso rotundatis, prominulis, minutissime papillatis, majusculis, ordine sæpe irregulari connatis formato, primo purpureo-fusce-

scente, deinde atro, subnitido; ascis pedicellatis, cylindricis, octosporis. $52-62 \approx 6-7$ p. sporif.; sporidiis oblique monostichis, ovatis, utrinque acutiusculis, nonnihil inæquilateralibus v. subrectis, nigricantibus, $10-12 \approx 5-6$, 2-guttulatis.

Hab. ad ligna putrescentia Fagi, Aceris et Quercus, in Suecia, Gallia, Italia, Britannia, Java, Amer. bor.

101. **Hypoxylon rubiginosum** (Pers.) Fr. Summ. Veg. Scand. p. 384, Nits. 1434

Pyr. Germ. p. 38, Sacc. F. it. t. 574, *Sph. rubiginosa*. Pers. Syn. p. 11, *Rosellinia Delcourei* Fabr. Sph. Vaucl. p. 78 (teste auct.). — Stromate in ligno, rarius in cortice crassiore superficiali plerumque longe lateque effuso, v. brevius, maculiformi, læte ferrugineo-rubro, tandem nigricante, crassiusculo, peritheciis densissime atque irregulariter monostiche stipatis, obovatis v. subglobosis, majusculis, vertice rotundatis, pertusis, plus minus prominentibus, mammoso; hymenio conidifero pulveraceo, tenui, initio sordide lutescente deinde læte rubiginoso; conidiis obovatis v. ovalibus, minimis in sterigmatibus parce ramosis, brevibus acrogenis; ascis cylindricis, longissime pedicellatis, octosporis, paraphysisibus filiformibus, tenuissimis, simplicibus stipatis, $60 \approx 6$ p. sporif.; sporidiis monostichis, ovatis, inæquilateralibus v. subrectis, nigricantibus $10 \approx 5$.

Hab. in ramis emortuis Fagi, Fraxini, Pruni, Quercus, Coryli, Salicis, Betulæ, Populi, Pini, Oreodaphnes, Aceris, Pyri, Tiliæ in tota fere Europa, California, Texas, Carolina, Ceylon, Java, Tauria, Algeria et Cuba.

102. **Hypoxylon hæmatostroma** Mont. Syll. Crypt. n. 737, Cuba p. 344. 1435

— Irregulariter effusum, confluens, convexum, purpurascens-nigrum; peritheciis periphericis elongato-clavatis, immerso-prominulis, stromate sanguineo junctis, intus nucleo celluloso griseo fartis, tandem apice poro pertusis; sporidiis navicularibus, hinc gibbosis.

Hab. ad cortices dejectos, Cuba (RAMON DE LA SAGRA).

103. **Hypoxylon chrysoconium** B. et Br. Fungi of Ceyl. n. 1064. — 1436

Effusum, e mycelio albo, pulvere aurantiaco insperso, oriundum; peritheciis hemisphæricis, demum emergentibus, ostiolo prominulo; ascis linearibus; sporidiis $9 \approx 5$.

Hab. in ligno putri, Central province, Ceylon. — Format crustas minutas secernibiles.

104. **Hypoxylon crocopezum** B. et C. North Amer. Fungi n. 830. — 1437

Irregulare, depressum, pulvere crocino tectum; peritheciis prominulis, ostiolo minuto; sporidiis breve cymbiformibus, atro-fulgineis.

Hab. in corticibus emortuis in Carolina inf. America boreali. —
Stroma 12 mill. latum.

105. **Hypoxylon crocatum** Mont. Syll. Crypt. n. 735 et Fl. Chil. VII, 1438
p. 343. — Late effusum, tenue, planum, superficiale, pulvere (velo)
croceo tectum; peritheciis oblongis vel obovatis vix prominulis,
ostiolo minutissimo atro papillatis.

Hab. ad lignum, Monte la Leona Chiles (BERTERO).

106. **Hypoxylon trugodes** B. et Br. Fungi of Ceyl. n. 1073. — Effu- 1439
sum, pulvere vinoso hic illic transversim deficiente ornatum; pe-
ritheciis oblongis brevibus, sursum papillatis, hic illic undatis; spo-
ridiis cymbiformibus, 7,6 μ . longis.

Hab. in ligno putri in Ceylon. — Superficies stromatis, pul-
vere nuda, nitet. Initio *Reticulariam* fere æmulatur.

107. **Hypoxylon florideum** B. et C. North Amer. Fungi n. 833. — 1440
Effusum undulatum vinoso-pulverulentum; peritheciis abditis; ascis
linearibus; sporidiis cymbæformibus, uninucleatis, 9-10 μ . longis.

Hab. in *Acere* rubro, Carolin. infer. Amer. bor.

108. **Hypoxylon Morsei** B. et C. North Amer. Fungi n. 841. — Erum- 1441
pens; peritheciis magnis congestis rubiginosis; ostiolo papillæfor-
mi; ascis linearibus; sporidiis oblongis, monostichis, 1-2-nuclea-
tis, 25 \approx 8.

Hab. in ramis Alni, Sandlake, Center, New England, Maine
(Amer. bor.). — Adest quoque forma stromatibus in crustas, 20-
25 mill. extensas confluentibus.

109. **Hypoxylon anthochroum** B. et Br. Fungi of Ceyl. n. 1063. — 1442
Pulvinatum effusumque, pulverulentum, basi plerumque dilatatum,
atropurpureum; contextu nigro; peritheciis prominulis; ostiolo pa-
pillæformi; sporidiis 10 μ . longis.

Hab. in ligno putri, Ceylon.

110. **Hypoxylon subgilvum** B. et Br. Fungi of Ceyl. n. 1060. — Ef- 1443
fusum, tenue, rubiginoso-pulveraceum; peritheciis subprominulis,
ostiolo perforato minuto; sporidiis 10-13 \approx 5-6.

Hab. in corticibus, Ceylon. — Format stratum tenue, quod
mox funditur et decorticatur, dein crassius fit. Habitus *H. corruga-
gati*, sed superficies non corrugata.

111. **Hypoxylon epiphæum** B. et C. North Am. Fungi 843. — Peri- 1444
theciis paucis connatis e maculâ rubiginosa oriundis; ostiolo pa-
pillæformi; ascis cylindræceo-clavulatis breve stipitatis, 72-75 \approx 5-
6, octosporis; sporidiis breviter cymbæformibus, inæqualibus, 7-8
 \approx 3-4, fuligineis, monostichis.

Hab. in cortice Magnoliæ glaucæ Carolina infer. et New Jersey Americæ borealis.

112. **Hypoxylon jecorium** B. et Rav. North Amer. Fungi n. 832. — 1445
Effusum pulvere fulvo primum tectum ostiolis obscurioribus, demum jecorinum; ostiolis prominulis punctatum.

Hab. in ligno Aceris rubri in Carol. infer. Amer. bor. — Adest quoque forma in Platano peritheciis magis prominulis.

113. **Hypoxylon fusco-purpureum** (Schw.) Berk. Cub. Fungi n. 835. 1146
Sphæria fusco-purpurea Schw. New Am. Sphær. t. II, f. 1, et in Linnæa IV, Litt. p. 48. — Late expansum, maculas varie effiguratas, monstrosas, margine sæpius steriles sistens, superficie purpureo-fuscum, interdum tomentellum, intus nigrum; peritheciis immersis, prominulis, hinc inde tubercula varia, grandi-granulata exerentibus, oblongo-ovoideis pluriseriatis, atronitentibus; sporidiis (teste Berk.) 12-13 μ . longis.

Hab. in ligno molliori corticibusque, in quibus subsuperficiale sed non separabile, Sandlake, Bethlehem in Amer. bor. et in Cuba. — Matricem atroinquinat.

114. **Hypoxylon durissimum** (Schw.) Sacc. *Sph. durissima* Schw. Car. 1447 n. 46. Fr. S. M. II. 335. Curr. Comp. Sph. n. 29, fig. 29. — Effusum, irregulare, ligneum, rubiginosum, intus nigrum, peritheciis globosis immerso-periphericis; ascis cylindricis, stipitatis, octosporis; sporidiis elliptico-curvulis, 7,5-10 μ . longis, fuligineis, sæpe 1-guttatis.

Hab. in cortice Cercidis canadensis in Carolina Amer. bor. — Affine *II. multiformi*, sed obscurius, stromate in ambitu lutescente, ostiolis minus papillatis etc.

B) Stroma nigricans v. initio fuscescens.

115. **Hypoxylon serpens** (Pers.) Fr. Summ. Veg. Scand. p. 384, saltem p. p., Nits. Pyr. Germ. p. 45, Sacc. Fungi it. t. 575, *Sph. serpens* Pers. Syn. p. 20, *Sph. Macula* Tode Meckl. II, f. 106. — Stromate in ligno, rarissime in cortice in crustam plerumque angustam ac sæpissime brevem, tenuem effuso, superficiali, forma varia, irregulari, plerumque longitudinaliter expanso, nunc ovali v. elliptico ac minuto nunc contra fere lineari, plus minus elongato, discreto, v. confluyente, primo hymenio conidifero pulverulento cinereo vestito, deinde nudato, glabro, fusco-atro v. aterrimo, opaco; peritheciis subglobosis, densissime stipatis, majusculis, verticibus rotundatis v. rarius circa papillam mediam, exiguam nonnihil de-

planatis, paullo tantum prominentibus et stromatis superficiem verruculosam efficientibus; conidiis subglobosis, minutissimis in sterigmatibus longiusculis, ramosis, septatis acrogenis; ascis cylindricis, longe pedicellatis, octosporis, paraphysibus filiformibus, stipatis, 75-100 \approx 6-8 pars sporif.; sporidiis oblique monostichis, oblongis utrinque rotundatis, inæquilateralibus v. fere curvulis, rarius rectis, nigricantibus, 12-14 \approx 5-6.

Hab. in ligno putri Salicis, Aceris, Fagi, Alni, Quercus, Celtidis, Populi, Coryli, Ailanthi, Oreodaphnes, Carpini etc. in tota Europa, Sibiria, Borneo, California, New Jersey, Alabama, Argentina.

116. **Hypoxylon Archeri** Berk. Fl. Tasm. II. p. 280. — Aterrimum; 1449
peritheciis subglobosis, truncatis, rugosiusculis, umbilicatis, ostiolo papillæformi; sporidiis brevibus, 10 \approx 4-5, fuliginis.

Hab. in ligno putri in Tasmania (ARCHER). — Ostiola in centro areolæ depressæ sita.

117. **Hypoxylon effusum** Nits. Pyr. Germ. p. 48. Sacc. F. ital. t. 572. 1450
— Stromate in ligno superficiali, longe lateque effuso, tenui, fusco-atro v. tandem aterrimo, lævi, nitido; peritheciis prominulis densissime stipatis, majusculis, subglobosis, vertice rotundatis v. sæpius depressis, disciformi-planis, medio papillatis; ascis cylindricis, pedicellatis, paraphysibus tenuissimis, simplicibus stipatis, 44-60 \approx 5 p. sporif.; sporidiis monostichis, ovatis, utrinque obtusissimis, rectis v. nonnihil inæquilateralibus, fuscis, minimis, 6-8 \approx 3-4.

Hab. in ramis decorticatis corticatisque Salicis et Castanæ pr. Coburg, Cæstrich, Germaniæ et Padova Italiæ bor. — In exemplaribus italicis ascis 50 \approx 3,5; sporidia 5-5,5 \approx 3. Toto habitu *Hypoxylon Archeri* accedit.

118. **Hypoxylon Sassafras** (Schw.) Berk. N. Amer. Fungi p. 162. 1451
Sph. Sassafras Schwein. Syn. Car. n. 10. — Erumpens, nigra, peritheciis paucis maximis, stromate fulvo-ferrugineo cinctis, ostioli minimis deciduis; ascis; sporidiis oblongis, 20 μ . longis.

Hab. in cortice Sassafras officinalis et Perseæ, Georgia, Carolina, Yonkers, Americæ borealis. — Intra rimas longitudinaliter effusum, demum ubi cortice orbatur dilatatum; perithecia pisi fere magnitudine, globosa, extus intusque atra; raro e mutua pressione varia, superne stromate tenui bicorticato tecta; ostiola minuta, distantia, decidua, unde superficies pertusa; occurrit etiam subsimplex.

119. **Hypoxylon stygium** (Lév.) Sacc. *Sphæria* (connata) *stygia* Lév. 1452

Ann. Scienc. nat. 5, 1846, pag. 258. — Stromate effuso applanato nigro, conceptaculis globosis immersis circa ostiolum papilliforme nitidum in orbem depressis; ascis parvis linearibus; sporidiis ovoideis, continuis, hyalinis (?).

Hab. in Guadelupa ad cortices, (Poiteau, herb. mus. Par.).

120. **Hypoxylon stigmatum** Cooke, Calif. Fungi in Grev. VII, p. 4. 1453

— Effusum, nigrum, incrustans, ex ostioliis prominulis papillosum; ascis linearibus; sporidiis lanceolatis, brunneis, $28 \approx 8$, rectis vel leniter curvulis.

Hab. in cortice putrescente quercino in California America borealis.

121. **Hypoxylon vogesiacum** Pers. in Curr. Comp. Sphær. n. 64, t. 1454

XLVI, fig. 67-68. — Affine *Hypoxylon serpenti*; ascis.....; sporidiis prob. monostichis, ellipticis, inæquilateralibus, subinde pyriformibus, $17-20 \approx 6-9$, pallide brunneis, dein fuligineo-opacis, granulosis.

Hab. ad truncos emortuos *Aceris Pseudoplatani* in Vogesis (Moug. et Pers.) et in Italia (Ces. et De Not.). — Sec. Tul. (Cfr. Nits. Pyr. Germ. p. 35) esset mera forma *H. fusci*, sed Ces. et De Not. in Schema sfer. ital. distinguunt. *Sph. vogesiaca* in Roum. F. G. n. 249, ad *H. atro-purpureum* potius spectare mihi videtur.

122. **Hypoxylon fossulatum** Mont. Syll. Crypt. n. 743 et Guy., mss., 1455

n. 545. — Erumpens, longe lateque effusum; stromate carbonaceo, applanato, subundulato, atro-fusco, foveolato; peritheciis oblongo-ovoideis concoloribus, ostiolo in quaque fovea primo albo-pruinosa dein nuda punctiformi-prominulo, centrali.

Hab. ad cortices arborum, Cayenna (Leprieur).

123. **Hypoxylon oodes** B. et Br. Fungi of Ceyl. n. 1071. — Late ef- 1456

fusum, coffeicolor; peritheciis parce confluentibus globosis opacis; ostiolo papillæformi, annulo parvo impresso circumdato; ascis linearibus; sporidiis breviter subcymbiformibus, binucleatis, $12-13 \approx 6,5$.

Hab. in ligno putri, Central province, Ceylon.

124. **Hypoxylon epirrhodium** B. et Rav. North Amer. Fung. n. 840. 1457

— Effusum tenue, parvum, nigrum, ex ostioliis prominulis papillosum; ascis linearibus; sporidiis ellipticis, uniseriatis.

Hab. in ramis Rosarum Carolinae infer., America boreali. — Crustæ 5 mill. lat.

125. **Hypoxylon Lenormandi** B. et C. Cuban Fungi n. 831. — Peri- 1458

theciis parvis, connatis, coffeato-pruinosis, ostiolo parum notato;

ascis linearibus; sporidiis uniseriatis, cymbiformibus, 25 μ . longis.

Hab. in ligno putri in Cuba, Tahiti.

126. **Hypoxylon fragile** Nits. Pyr. Germ. p. 39. — Stromate in ligno 1459
nigrificato superficiali, effuso, maculiformi, ex fusco tandem ater-
rimo, lævi, contiguo v. rimis diffracto atque areolato, e peritheciis
densissime ac monostiche stipatis tamquam integro composito; pe-
ritheciis ovatis mutuaque pressione angulatis, vertice liberis, circa
porum medium sæpe deplanatis; immo impressis; ascis pedicellatis,
cylindricis, octosporis, paraphysibus filiformibus, simplicibus ob-
vallatis, 80 \approx 7 μ . sporif.; sporidiis oblique monostichis, ovatis v.
late fusiformibus, utrinque acutiusculis v. obtusis, inæquilateralibus
v. rarius subrectis, nigricantibus, 10-12 \approx 4 $\frac{1}{2}$ -6.

Hab. in ligno putri salicino prope Münster, Germ. — *Hyp.*
purpureo subaffine.

127. **Hypoxylon Broomeanum** B. et C. North Amer. Fungi n. 851. 1460
— Crassum, fuscum, marginatum, ostiolis punctatum; stromate fu-
sco; peritheciis ostiolo excepto abditiis; ascis linearibus; sporidiis
ellipticis, monostichis.

Hab. in lignis putrescentibus Carol. infer. Amer. bor. — Ir-
regulare, 30 mill. lat. margine subelevato, 8 mill. cr. An *Num-*
mularia?

128. **Hypoxylon bicolor** B. et C. North Amer. Fungi n. 838. — Ir. 1461
regulare, undulatum, placentæforme, granulatum, intus niveum.

Hab. ad Vermout Amer. bor. — Stroma 25-30 mill. lat., varie
undulatum. Etsi sterile, prædistinctum.

129. **Hypoxylon subterraneum** Fuck. Symb. mycol. p. 235. — Peri- 1462
theciis liberis, sparsis confluentibusque, magnitudine plerumque va-
ria, *Rosellinia aquilæ* forma magnitudineque, sed vertice non ap-
planatis, minute papillatis, nigris, stromati tenui, concolori insiden-
tibus, subtilissime rugulosis; ascis cylindræis, stipitatis, 8sporis;
sporidiis monostichis, oblongo-ovatis, inæquilateralibus, monoplas-
tis, fuscis 1-2guttulatis, 8 \approx 4.

Hab. in radicibus putridis muscosis Fagi, in Hallgarter Schirm,
Rhenogovia. — *H. crustaceo* affine videtur.

130. **Hypoxylon crustaceum** (Sow.) Nits Pyr. Germ. p. 49. *Sph. cru-* 1463
stacea Sow. t. 372, fig. 11, *Sph. serpens* Fr. p. p. — Stromate in
ligno, longe læteque nigrificato, superficiali, plus minus effuso, cras-
siusculo, fuligineo, opaco, interdum griseo-pruinoso, tamquam ex
peritheciis connatis solum formato; peritheciis grandiusculis, ex-
acte globosis, nunc dense stipatis, nunc contra laxiuscule confertis

inmo saepe subliberis, vertice rotundato, libero, minute papillato, raro solito duplo minoribus; ascis cylindricis, longissime pedicellatis, octosporis, paraphysibus prælongis, filiformibus, obvallatis, 76-80 \approx 6 p. sporif.; sporidiis oblique monostichis, ovatis, utrinque obtusis, inæquilateralibus v. subrectis, fuscis, 8-10 \approx 4-5.

Hab. in ligno quercino et fagineo nec non in Polyporo resinoso putri prope Münster, Schwerin, Hattenheim (Germania) raro.

131. **Hypoxylon reticulatum** Karst. Myc. Fenn. II, pag. 43. *Sphaeria* 1464
 et *Hypoxylon crustaceum* Sow. et Nits p. parte. — Stromate superficiali, effuso, plerumque plus minus elongato, sublineari, reticulatim confluyente, subinde crustam latam, forma varia, irregularem formante, fusco- v. fuligineo-atro, opaco, longit. 1-3 cent., lat. circiter 2 mill.; peritheciis dense stipatis subsphæroideis, verticibus rotundatis, paullo v. vix exstantibus, papilla perexigua instructis, majusculis; ascis cylindræis, 65-76 \approx 6-7 p. sporif., octosporis; sporidiis oblique monostichis, oblongatis v. subellipsoideis, interdum ovoideis, inæquilateralibus, 2-guttulatis, fuscis, 10-13 \approx 5.

Hab. in Polyporo pinicola indurato in Fennia, rarius, — Ab *H. crustaceo* forte haud satis diversum.

132. **Hypoxylon tormentosum** Ces. Myc. Born. p. 19. — Effuso, tenui, subareolato, peritheciis ovatis v. conoideis vertice emergentibus, ostiolo acutiuscolo, sed oranino carbonaceis sterilescentibus; colore, compage, toto habitu *H. serpentis* æmulum a quo, quoad characteres exteriores, peritheciis ex dimidio emergentibus acute ostiolatis differt.

Hab. ad Sarawak Bornei, in truncis.

133. **Hypoxylon Phænix** (Fr.) Berk. et Curt. Exot. Fung. Schwein. 1466
 p. 287, t. XXV, fig. 7. *Sphaeria Phænix* Kunze et Fr. Linnæa 1830, p. 541. — Stromate subcarnoso extus umbrino intus albo; peritheciis mediis, globosis, centro papillatis semi-prominulis nigris umbrino-velatis; ascis linearibus; sporidiis ellipsoideis, utrinque acutiusculis, atro-fuligineis, 20-22 μ . longis.

Hab. in radicibus graminum combustis, Surinam (Amer. austr.), — Accedit ad *Roselliniam subiculatam*, sed mollius fere hypocreaceoides.

134. **Hypoxylon bipapillatum** Berk. et Curt. Exot. Fungi Schwein p. 1467
 286. — Effusum, connatum, nitidum, intus pallidum; peritheciis globosis sursum prominulis et prominentias latiusculas efficientibus; ostiolo papillæformi.

Hab. in lignis putridis Surinam (Amer. austr.). — Subaffine *H. lucido* Mont., sed minus nitidum, et elevationes minus latæ.

135. **Hypoxylon? arecarium** Bory, Fr. in Linnæa 1830, p. 543 (sub 1468
Sphæria). — Effusum, applanatum, crassiusculum, rigidum; peritheciis stipatis linearibus, ostiolis demum cingulo albo cinctis.

Hab. in ligno Palmarum emortuo, Insul. Bourbon (Bory).

136. **Hypoxylon gregale** (Schw.) Berk. N. Am. Fungi in Grev. *Sph.* 1469
(connatæ) *gregalis* Schw. Syn. Am. bor. n. 1211. — Late effusum super crustam inæquabilem et nigrofusciscentem; peritheciis tamen majusculis valde prominulis quasi applanato-convexis, ex approximatione varie compressis, crusta tenui connexis, nigrofuscis, primum papillatis demum pertusis, papilla decidua, superficie rugosis, stromati rubro-fusco aut nigro simplici seriatim insertis.

Hab. raro in Carolina in ligno udo molli. — Sporidia, sec. Berk. anguste oblonga, 12–14 μ . longa, (spurie?) 1-septata; perithecia destructa et diffracta sæpe dimidiata manent in crusta.

137. **Hypoxylon investiens** (Schw.) Berk. Cub. n. 837. *Sph.* (connatæ) 1470
investiens Schw. Syn. Am. bor. n. 1210. — Crusta atra, tenui, in ambitu sterili longe lateque lignum atrotingente, pallio granuloso aterrimo, sensim in crustam abeunte; peritheciis dense stipatis, regulariter oblongis, ad basin stromatis parcissimi et tantum superne perceptibilis penetrantibus; in superficie externa, rugulosa, subconice elevatis, ostiolo papillato deciduo præditis.

Hab. in lignis non duris, exsiccatis, decorticatis, Bethlehem, Salem, Texas et Cuba. — *Hyp. fuscopurpureo* affine. Plagas sistit 2–3 unciales.

138. **Hypoxylon hydnicolum** (Schw.) Sacc. *Sph. hydnicola* Schw. New. 1471
Amer. Sphær. t. II, f. 9 et in Linnæa IV, Litt. p. 47. — Undulatum, effiguratum, crassum, breve, elevatum, subinde confluens, extus atro-corticatum, granulosum inque tubercula elevatum, intus album; peritheciis immersis, globosis, nigris, ostiolis prominentibus.

Hgb. in subulis Hydni emortui substantiam ejus sæpe penetrans. Proximum *H. confluenti* et *udc.* — Tubercula 3–4 mill. cr.

139. **Hypoxylon callostroma** (Schw.) Berk. North Am. Fung. in Grev. 1472
Sph. callostroma Schw. New Am. Sphær. t. II, f. 10 et in Linnæa, IV, Litt. p. 48. — Late expansum, maculas irregulares 30–50 mill. longas sistens, extus nigrum, corticatum, intus viride rubro-ochraceum, crasso-pulverulentum; peritheciis confertis globosis, atris, apice truncatis, ostiolo conico obtuso, leniter elevato; sporidiis (teste Berk.) oblongis, 10 μ . long.

Hab. in cortice emortuo Coryli, Benzoin, Prini in Pennsylvania, Alabama etc. Americæ borealis.

140. **Hypoxylon macrosporum** Karst. Enum. Fung. Lapp. p. 211 et 1473

Myc. Fenn. II, p. 40. — Stromate per peridermium erumpente, ab laciniis ejus cincto, tandem libero, superficiali, effuso, forma varia, plerumque longitudinaliter expanso, lineari, plus minus elongato, contiguo, discreto vel confluyente, atro, intus fusco, long. circiter 2-4 cent., 2-10 mill. lat.; peritheciis densissime monostiche stipatis, obovoideis vel subsphæroideis, vertice rotundatis vel truncato-subconice coarctatis, plus minus prominulis, pertusis, minutis; ascis pedicellatis octosporis; sporidiis oblongatis vel fusosideo-subelongatis, 2-3-guttulatis, fuscis, vix translucidis, rectis v. inæquilateralibus, 24-37 \approx 8-13. — Hymenium conidiferum cinereo-albidum.

Hab. in ligno salicino juxta mare glaciale in Fennia.

141. **Hypoxylon concurrens** B. et C. North Amer. Fungi n. 845. — 1474

Peritheciis minutis confluentibus, sursum tantum denudatis, minutissime granulatis; ostiolo minuto, papillæformi; sporidiis breve cymbiformibus, 1-nucleatis.

Hab. in lignis in Carolina infer. Amer. bor. — Format stratum granulatum, nigrum, semiemersum.

142. **Hypoxylon umbrino-velatum** B. et C. Cuban Fungi n. 834. — 1475

Peritheciis subhemisphæricis, subapplanatis, circa ostiolum papillæforme leviter depressis, umbrino-velatis, parce confluentibus; sporidiis magnis cymbiformibus, 40-42 μ . longis.

Hab. in lignis putridis in Cuba.

143. **Hypoxylon unitum** Nits. Pyr. Germ. p. 44, Fungi ital. t. 578, 1476

Sph. unita Fr. Elench. II, 67. — Stromate in ligno v. in cortice, plerumque longe lateque nigrificato superficiali, effuso, contiguo, brevi, maculæformi, tenui v. rarius tumidulo, ex fuligineo v. purpureo-nigro tandem aterrimo, peritheciis vix extantibus læviusculo, ostiolis minimis, prominulis punctulato; hymenio conidifero pulcherrime aureo, rubescente, floccoso; sterigmatibus longiusculis, ramosis; conidiis ovatis, exiguis; peritheciis majusculis globosis, v. compressis, subcubicis, monostichis, stromati omnino immersis v. parum tantum protuberantibus, semper autem stromatis strato supremo, continuo tectis atque conjunctis, ostiolis papillæformibus; ascis cylindricis, longe pedicellatis, octosporis, paraphysibus tenuissimis, simplicibus longe superatis, 80-100 \approx 8 p. sporif.; sporidiis monostichis, ovatis subrectis v. inæquilateralibus, obtusis v. acutiusculis, nigricantibus, 12-16- plerumque 14 \approx 5-6.

Hab. in ligno et cortice Coryli, Alni etc. in Gallia, Germania et Italia.

144. **Hypoxylon colliculosum** (Schw.) Nits. Pyr. Germ. p. 44, *Sph.* 1477
colliculosa Schw. Syn. Carol. n. 82, Fr. S. M. II, 341. — Effusum, tenue, colliculosum, rugosum, nigrum, peritheciis maximis crusta tectis, ostiolis minutis papillatis.

Hab. in truncis Quercus in Vogesis et in Carolina. — Sec. Nits. l. c. differt ab *H. unito* ostiolis in medio areolæ depressæ sitis. — Præcedentibus maxime affine, sed perithecia majora, irregularia, fragilia, basi applanata (non ligno immersa v. linea ambiente cincta) subdistantia, sed stromate tenui suffuso cohærentia. Maculas sistit margine varias, nitore quasi oleoso, superficie valde inæquali, rimosa.

145. **Hypoxylon murcidum** B. et Br. Fungi of Ceylon n. 1077. — 1478
 Late effusum; peritheciis oblongis in strato fusco, pulverulento insidentibus; ostiolo papillæformi.

Hab. in ligno putri, Central province, Ceylon.

146. **Hypoxylon polyspermum** Mont. Syll. Crypt. n. 736 et Cuba p. 1479
 345. — Effusum, convexum, crassum, subtus applanatum; stromate crustaceo atro rigido fragili secedente; peritheciis immersis stipatis linearibus, mollibus stromate, parco, fusco, junctis, ostiolis punctiformibus annulo prominulo marginatis; ascis subhorizontalibus octosporis lineari-subclavatis, sporidia oblonga, opaca, uniseriata foveatibus.

Hab. ad cortices et ligna, S. Marcos insulæ Cubæ (RAMON DE LA SAGRA).

147. **Hypoxylon allantoidium** Cooke N. Zeal. Fungi in Grevill. VIII, 1480
 p. 66. — Parallelum, convexo-planum, atrum, elongatum, utrinque truncatum; ostiolis punctiformibus; intus fuligineo-atris; ascis cylindræis; sporidiis anguste ellipticis, continuis, atro-brunneis, 12-14 \approx 4,5.

Hab. in ligno denudato Waitaki Novæ Zelandiæ.

148. **Hypoxylon approximans** Ces. Myc. Born. p. 18. — Ab *H. serpente* cui valde affine differt quia minus, simplicius, tuberculis magis applanatis sessilibusque, ostiolis minime exertis; ascis 90-100 μ . longis; sporidiis uniseriatis spadiceis, irregulariter lanceolatis, obscure binucleatis, 1481

Hab. Singapore, Sarawak ad Etich-River, ad cortices vetustos.

149. **Hypoxylon Michelianum** Ces. et De Not. Schm. Sfer. 25 et Sfer. 1482
 ital. p. 16, tab. 13, *Lichen-agaricus crustaceus* etc. Mich. Nov.

Plant. gen. 104, tab. 55, fig. 1. — Stromate in ligno superficiali, longe lateque effuso, atro, levi, opaco; peritheciis densissime stipatis, grandiusculis subglobosis v. mutua pressione angulatis, vertice rotundatis, liberis, prominulis, circa papillam minutissimam impressis; ascis longe pedicellatis, cylindricis, octosporis, paraphysibus tenuissimis, filiformibus simplicibusque stipatis, 88-100 \approx 8 p. sporif.: sporidiis monostichis, late fusiformibus, utrinque acutiusculis, rectis v. plus minus inæquilateralibus, fuscis, 16 \approx 5-6.

Hab. in basi truncorum emortuorum Lauri nobilis, Pisa, Treviso (Ital. media et sup.).

150. **Hypoxylon bifrons** De Not. Sfer. ital. p. 18, t. 16, Sacc. Fungi 1483
ital. tab. 579. — Stromate effuso, subspongioso, tenui, superficie crustaceo-corticato, scabro, fusco-atro, perithecia majuscula, discreta, pustulæformi-protuberantia excipiens; peritheciis 1,1 $\frac{1}{2}$, 2 mill. diametro, medullæ stromatis ipsius basi insidentibus, discretis, rarius geminatis, tota parte superiore emergente velo grumoso late aurantiaco intercedente, strato superficiali crustaceo stromatis oblectis, verrucas hemisphæricas, atras, scabridas, astomas in cubillum superficie portendentibus, speciem simplicem facile mentientibus; ascis, teretibus, 8-sporis, paraphysatis; sporidiis ellipsoideis, oblongis, 20-25 μ . long. dilute fuligineis, translucidis.

Hab. in ramis Lauri nobilis Locarno Ital. bor. (DALDINI). Romæ (BAGNI).

151. **Hypoxylon æneum** Nits Pyr. Germ. p. 47. — Stromate in ligno 1484
denudato v. in cortice crassiore immaculato superficiali, effuso, tenui, margine plerumque sterili, æneo, nitido, peritheciis exiguis, globosis, papillatis, dense stipatis, prominentibus tuberculoso; hymenio conidifero virescenti-cinereo, pulveraceo; conidiis subglobosis, minimis, in sterigmatibus longiusculis, simpliciter v. apice verticillato-ramosis, septatis acrogenis; ascis cylindricis, longe pedicellatis, octosporis, paraphysibus tenerrimis, simplicibus, eseptatis superatis, 124-140 \approx 9-10 p. sporif.; sporidiis oblique monostichis, ellipticis, obtusis, inæquilateralibus v. rectis, fuscis, 20-24 \approx 7-8.

Hab. in ligno fagineo, coryleo, quercino, pr. Münster et Schwerin Germaniæ. — Stromata 1-4 cent. longa, 2-10 mill. lata.

III. *Endoxylon* Nits.: stromate matrice plus v. minus immerso, nigricante.

152. **Hypoxylon udum** (Pers.) Fr. Summ. Veg. Scand. p. 384. Nits. Pyr. 1485
Germ. p. 52. *Sph. uda* Pers. Syn. 33. *Sph. confluens* Tode Meckl. p. 19, *Sph. albicans* Pers. Syn. 70, *Sph. ordinata* Fr. S. M. II.

454. *Sph. lineata*. DC. — Stromate ligno, rarius cortice crassiori immerso, forma varia, irregulari, plerumque elongato, perithecia perpauca tantum v. plura (2–30) cingente, raro plus minus emerso v. denudato, verruciformi, ex brunneo tandem aterrimo; hymenio conidifero floccoso, ex albido cinerascete; conidiis subglobosis v. obovatis, minimis in sterigmatibus ramosis solitarie acrogenis; peritheciis minutis, subglobosis, papillatis v. papillis tantum v. ipsis plus minus prominulis; ascis longissimis, 150 \approx 15 cylindricis, pedicellatis, paraphysibus prælongis immixtis; sporidiis recte v. oblique monostichis, oblongis v. subcylindricis, obtusissimis, raro obtuse fusiformibus, rectis v. nonnihil inæquilateralibus, ex hyalino tandem fuscescentibus, 28–30 \approx 10–11.

Hab. ad ligna arida Quercus, Fagi, Coryli, Populi in Britannia, Germania, Belgio, Fennia, Gallia, Suecia, Italia, India orient. et Borneo. — Spermogonia (sec. Fuck.) peritheciis ascigeris multo minora; spermatiis allantoideis 6–8 \approx 2–3, hyalinis.

153. **Hypoxylon minutum** Nits. Pyr. Germ. p. 54. *Sphæria confluens* 1486
Fr. S. M. II, 342 (ut videtur p. p.). — Peritheciis minutis, globosis, vertice conico-attenuato, minutissime papillato emersis, ceterum ligno superficie immaculato v. dealbato ac fungi stromate, omnino immerso, parum tantum mutato insculptis, binis ternisve in seriem simplicem, linearem brevem confluentibus, rarius pluribus (–6), ordine vario conglomeratis v. solitariis, primum brunneis, mox autem aterrimis, opacis; hymenio conidifero albido, byssino, cæspitulum juniorem vestiente; conidiis ovato-subglobosis, exiguis; sterigmatibus longis septatis, ramosis; ascis cylindricis pedicellatis, octosporis, paraphysibus filiformibus, obvallatis, 72–80 \approx 8; sporidiis monostichis, ovalibus v. fere globosis, rectis, fuscescentibus, 10 \approx 6–7.

Hab. in ligno putri quercino prope Münster, Germania. — Stromata 2–5 mill. longa.

154. **Hypoxylon semiimmersum** Nits. Pyr. Germ. p. 50 *Sphæria uda* 1487
Auct. p. p. — Peritheciis paucis stromate brevi, basi solum ligno immerso conjunctis, tractu lineari, simplici v. sine ordine gregatim dispositis, parte superiore protuberantibus, tamquam confluentibus v. subliberis, grandiusculis, globosis, apice sæpius depressis, fusco-nigris, tandem aterrimis, papillatis; hymenio conidifero albido, tenuissimo, byssino; conidiis obtuse ellipticis v. subcylindricis, minutis; ascis cylindricis, pedicellatis, octosporis, paraphysibus filiformibus superatis, 120–140 \approx 10–12 p. sporif.; sporidiis oblique

monostichis, late ellipticis, utrinque acutiusculis, rectis v. parum inæquilateralibus, ex hyalino tandem obscure fuscis, 16-18 \approx 8-9.

Hab. in ligno duriore fagineo pr. Münster, Œstrich Germaniæ et in ligno putri Novæ Zelandiæ.

IV. *Cænopus*: stromate, effuso supra tuberculoso v. subfruticuloso.

(Ad *Xylariam* vergit; cfr. *Xylaria digitata* v. *dubia*, *Xyl. Puiggarii* etc.).

155. **Hypoxylon cænopus** (Fr.) Mont. Cub. p. 341. *Sphæria cænopus* 1488

Fr. in *Linnaea* 1830, vol. V. p. 542. — Nigrum, tuberculis planis deorsum angustatis substipitatis in crustam undulatam stipatis; peritheciis subimmersis; ostioliis punctiformibus; ascis; sporidiis 10 μ . longis (teste Berk.).

Hab. ad cortices et ligna putrescentia in Cuba, Surinamo, Ceylon, Brasilia, Borneo. — Perithecia in singulo tuberculo pauca, magna, ovoidea. Adest v. *apoda* et var. *major* (Brasilia).

156. **Hypoxylon cetrarioides** Welw. et Curr. Fungi Angol. p. 282, 1489

tab. 18, fig. 5-6. — Stromate decumbente, laciniato, habitu et crescendi modo *Cetrariam tristem* simulante; laciniis dilatatis, multifidis, apicem versus in perithecia transeuntibus; peritheciis dense aggregatis aliquando complanatis, irregularibus, plurima ostiola præstantibus; sporidiis

Hab. ad truncos magnos putrescentes in sylvis primitivis prope Quilanga, Pungo Andongo, Quibolo, Golungo alto (Africa occ.). — Species pulchella *H. cænopodi* subaffinis.

157. **Hypoxylon xylarioides** Speg. Fung. Arg. I, p. 179. — Stromatis 1490

tubus parvulis, 2-4 mill. d., globosis v. depressis, densiuscule gregariis, numquam vel rarissime confluentibus, intus albis extus atris, gibbulosis, sessilibus vel stipite 1-3 mill. long. $\frac{1}{4}$ - $\frac{3}{4}$ crass. lateraliter compresso, kevi, glabro. atro fultis; peritheciis paucis in eodem stromate 18-24 gregariis, minutis $\frac{1}{2}$ - $\frac{1}{4}$ mill. non vel vix prominulis ostiolo minutissimo, vix sub microscopio perspicuo, perforatis, atris; ascis cylindræo-clavatis sursum acutiuscule rotundatis deorsum in stipitem longiusculum desinentibus, p. sporif. 70-75 \approx 12-15; stip. 30-35 \approx 5, octosporis, paraphysibus filiformibus, guttulatis longioribus obvallatis; sporidiis oblique monostichis rarius distichis, elliptico-subnavicularibus, primo 1-magni-guttatis, opace fuliginis, 16-18 \approx 8-9.

Hab. in caulibus dejectis putrescentibus *Jussieuæ* (?) in paludosis secus Rio de la Plata a la Recoleta, Argent. Amer. Austr.

— Species dubia inter genus *Xylaria* et genus *Xyposylon*; huic vero propius accedit ob stromata sæpius stipite carentia.

158. **Hypoxylon micropus** (Fr.) Sacc. *Sphæria micropus* Fr. in Lin- 1491
næa 1830, p. 542. — Nigra; peritheciis stipatis ovali-oblongis, apice liberis conico-papillatis, deorsum stipitato-productis, basi stromate effuso conjunctis; ascis.....; sporidiis cymbiformibus 30-38 \approx 9-12.

Hab. ad truncos et ligna arborum in Brasilia, Borneo, Cuba, Peradenya Ceylon. — Adest quoque forma pycnidica.

159. **Hypoxylon Colensoi** Berk. in Hooker Handb. of N. Zeal. Fl. 1492
p. 756. — Stromate e densis clavatis massulis constante, extus atropiceo, intus sæpe stratoso, rugoso, punctato; peritheciis oblongis.

Hab. in truncis, Northern Island, N. Zeland. (COLENZO). — *X. cænopodi* affine etsi exemplaria imperfecta observata.

160. **Hypoxylon teres** (Schw.) Sacc. *Sph. teres* Schw. New Am. Sphær. 1493
p. 10, t. II, f. 7. — Subtereti-cylindricum, apice obtuse rotundatum, superficiale, sparsum, extus rubiginosum; prominentiis, vix elevatis sed latiusculis rugosum, intus fuligineo-nigrum, substratosum; peritheciis immerso-protuberantibus, majusculis, confertis.

Hab. in cortice ignoto in Amer. boreali. — Tota planta 7-8 mill. alta, 2½ cr. Quodam modo *H. rubiginoso* affine.

161. **Hypoxylon glebulosum** Ces. Myc. Born. p. 17. — Stromatis ef- 1494
fusi vix vestigium; tuberculis stipatis et stipitellatis, a grani canabini ad pisi magnitudinem, umbrinis, levibus, glebulosis e peritheciis amplis globosis protudentibus; ostiolis e conica basi punctiformibus nitidis; ascis anguste clavatis 70 μ . longis; sporidiis octonis, biseriatim dispositis, lanceolatis, asymmetricis, interdum curvulis, opacis, 30-32 \approx 7,5; tuberculorum substantia alutaceo-albida; stipitello haud raro obsoleto.

Hab. ad truncos Ceylon ad Pedrotallagalla. — Nonnullis notis ad *H. cænopodem* et ad *Kretschmarium Clavum* vergit (CESATI).

X. Species desciscentes v. dubiæ.

162. **Hypoxylon palmigena** B. et C. Cuban Fungi n. 32. — Effusum; 1495
peritheciis depressis, furfuraceo-subtomentosis, rugosis, nigris in glomerulos parvos congestis, ostiolo papillæformi; sporidiis hyalinis, gibbosis 15-20 μ . longis.

Hab. in foliis Palmarum, interdum cum *Meliola glabra*, Cuba. — Perithecia 5-6 in quoque soro.

163. **Hypoxylon? Ravenelii** Sacc., *Hyp. erinaceum* B. et Rav. North 1496

Amer. Fungi n. 850, nec Mont. — Peritheciis ovatis, connatis pulverulentis, collo elongato; sporidiis clavatis, infra attenuatis.

Hab. in trunco Liquidambaris in Carol. inf., Amer. bor. — Vere curiosum et ex brevissima diagnosi vix hujus generis.

164. **Hypoxylon erinaceum** Mont. Syll. Crypt. n. 726 et Cent. II, n. 47, 1497
in Ann., l. c., p. 356. — Erumpens, convexo-pulvinatum, colliculosum, confluens, tomento cinereo-fuscescente vestitum, intus corneum; peritheciis ovoideis oblongisve polystichis prominentibus, evacuatis intus albis, ostioliis exsertis teretibus lævibus, longissimis, flexuoso-divergentibus atris; ascis brevissimis clavæformibus, sporidia globosa 6-8 hyalina includentibus.

Hab. ad truncos dejectos in sylvis Sinnamariensibus (LEPRIEUR).

— Species abnormis vix hujus loci. An *Cryptosporella* affinior?

165. **Hypoxylon allantosporum** B. et C. Cuban Fungi n. 836. — Effusum; peritheciis parvis innumeris dense catervatis obovatis fuscis; ostiolo papillato; sporidiis allantiformibus, magnis, 50 μ . longis. 1498

Hab. in cortice putrescente in Cuba.

166. **Hypoxylon lobatum** (Fr.) Sacc. *Sphæria lobata* S. M. II, 343. — 1499
Atrum, stromate crustæformi tenui, ramoso-lobato; peritheciis connatis globosis, pertusis.

Hab. in cortice Pini sylvestris in Kamtschatka (WORMSK.). — Species elegans. Crusta plane superficialis, effusa, effigurata, opaca, atra, sæpe ramosa et lobata, inæquabilis. Perithecia nuda. connata, lævia, opaca, semine Sinapeos minora, non e crusta emergentia. Crusta numquam, vel rarissime, deest.

167. **Hypoxylon Uraniæ** Mont. Syll. Crypt. n. 721 et Cent. IV, n. 91, 1500
in Ann., Déc. 1843 (sub *Sphæria*). — Stromate carnoso, orbiculari, basi coarctato, disco plano, atro-virente; peritheciis periphericis globosis monostichis immersis atris, in collum attenuatis; ostioliis prominentibus, atro-nitentibus.

Hab. ad folia Uraniæ guyanensis, in consortio *Meliolæ Musæ*, Surinam (SPLITGERBER). — An *Hypocrea* species?

168. **Hypoxylon exertum** Fr. Elench. II, 65 (*Sph. exserta*). — Subrotundum, depressum, demum late confluens, atrum, stromate crasso pulveraceo-fuliginoso; peritheciis superficialibus minutis pertusis. 1501

Hab. ad cortices arborum in Helvetia (SCHLEICHER). — Primitus per epidermidem erumpentis apparent tubercula valde inæquabilia, opaca, atra, mox superficialia evadunt, *H. fusco* subsimilia, hemisphærica, subdepressa, dein late supra epidermidem effusa, in plagas latas interruptas confluent, magis liberata. Stroma quoque cras-

sum et omnino proprium, pulveraceum, primo olivaceum, dein fuliginosum, cortice tectum peritheciophoro. Perithecia cortici stromatis adnata, pæne superficialia, stipata, at non confluentia, minuta, subglobosa, lævia, atra, raro papillata, sæpius pertusa.

169. **Hypoxylon afflatum** Schwein. Syn. Carol. n. 68. (*Sph. afflata*) 1502

Effusum, tenuissimum, effiguratum, nigerrimum, peritheciis confertissimis, minimis prominulis dense punctatum.

Hab. in lignis siccis Carolinæ Amer. bor. — Omnium hujus seriei specierum tenuissima, maculas atramentosas opacas variæ figuræ et sæpius lobatas exhibens, ligno quasi afflata (nullo modo immersa), uti mappa geographica effigurata; perithecia minima superficialia, stipatissima, plane concreta stroma sistunt.

170. **Hypoxylon atramentosum** Fr. S. M. II. 344. (*Sph. atramentosa*) 1503

Sph. insidens Schwein. in litt. — Atrum, peritheciis confertis hemisphæricis lævibus substromis, e stromate crustaceo tenui inæquabili nigro prominulis.

Hab. in asseribus et ligno decorticato Mali in Suecia et America bor. — Crescendi modus maculæformis omnino *H. rubiginosi*, sed minus et perithecia prominent omnino ut in ejus ætate vetusta, in ambitu sterile; perithecia perexigua.

171. **Hypoxylon incrustans** (Pers.) Mont. Ann. Sc. nat. 1855, III. 119. 1504

Sph. incrustans Pers. Syn. p. 62 et Fr. S. M. II. 343. — Crusta effusa nigra; peritheciis subrotundis rugosis, subconfluentibus, atris, ostiolis crassiusculis conicis obtusis.

Hab. ad truncos populinos, acerinos in Gallia et Germania. — Crusta late effusa, contigua, indeterminata, glabra, tenuis, aterrima, etiam supra cortices superficialis; perithecia ampla, superficialia, rugosa, nunc solitaria, nunc omnino connata, extus intusque atra; pro more bicorticata, exteriori in crustam extenso; ostiola perforata, demum decidua.

172. **Hypoxylon transversum** (Schw.) Sacc. *Sph.* (Hypoxyl.) *transversa* Schw. Syn. Am. bor. n. 1180. — Magnum, subpulvinatum, cortice subimmersum et pulvinatum prorumpens, difformiter aut turbinatim angulatum, superficie irregulariter rugosum aut æquabile, 1505

nigrum; peritheciis ovatis, periphæricis, intus splendenti-nigris; stromate nigro-fusco pulverulento; ostiolis manifestis prominentibus plano-conicis.

Hab. in trunco *Betulæ carpinifoliæ* rarius, Mauch, Chunk, America borealis. — Stromata transverse erumpentia unciam longa, $\frac{1}{4}$ unc. crassa.

173. **Hypoxylon exaratum** (Sekw.) Sacc. *Sph.* (Hypoxyl.) *exarata* 1506
Schw. Syn. Am. bor. n. 1206. — Effiguratum effusum, longitudinaliter sulcis profundis parallelis in superficie exaratum, primum epidermide (in sulcis persistente) subtectum; peritheciis valde promiculis in summis jugis sulcorum, irregularibus, nigrofuscis, nigropapillatis, majusculis, monostichis, stromate parco circumdati; sulcis subinde confluentibus.
- Hab.* in cortice ramorum juniorum Juglandis tomentosæ, Salem et Bethlehem, Amer. bor. — Stromata margine sterili subrepando instructa; crustæ subjacenti, ex substantia corticali nigricata formata, insident.
174. **Hypoxylon xanthostroma** (Schw.) Sacc. *Sph.* (Hypoxyl.) *xanthostroma* 1507
Schw. Syn. Am. bor. n. 1212. — Insidens crustæ tenui nullimodo effusæ; tuberculis serie simplici valde elevatis difformibus, subconfluentibus, fusco-nigris, vix ostiolatis, majoribus mixtis minoribus in eodem cæspite; peritheciis singulis vel pluribus in eodem tuberculo, majusculis, globosis, omnino immersis in stromate lutescenti, grumosis.
- Hab.* seriatim erumpens e rimis ramorum decorticatorum Quercus, Bethlehem, Amer. bor. — Tubercula extus nigra; passim ad uncialem longitudinem protracta est series.
175. **Hypoxylon sphæriostomum** (Schw.) Sacc. *Sph.* (Hypoxyl.) *sphæriostoma* 1508
Schw. Syn. Am. bor. n. 1213. — Breve, subpulvinatum, carbonaceum, aterrimum, 2-3 lineas longum, oblongum, utrinque acuminatum, superficie externa longitudinaliter striatum; ostioliis sphæriomorphis, sparsis, globosis, ore rotundo pertusis, ductu longiusculo connexis cum peritheciis internis, ipso ligno immersis, absque ullo stromate genuino, tamen externo cortici communi tennerrimo superficiali nigro tectis; peritheciis ipsis majusculis et massa atra repletis, ovatis.
- Hab.* in ligno carioso emollito rarius, Bethlehem Amer. bor. — Nucleus perithecorum, sub lente argentissima, ex sporidiis fere *Melanconiorum* constat.
176. **Hypoxylon Catalpæ** (Schw.) Sacc. *Sph.* (Hypoxyl.) *Catalpæ* Schw. 1509
Syn. Am. bor. n. 1214. — Seriatim e rimis corticis erumpens, primum rubiginosum, demum nigrum; cæspitulis aut potius pulvinulis longitudinaliter confluentibus; cortice externo subtenui superficie a subjacentibus peritheciis granuloso rubiginoso, quasi pulverulento, demum nigro rugoso; peritheciis crebris, stromate parco nigro, primum ostioliis papillatis, tum pertusis, ostioliis nempe deciduis.

Hab. in cortice Catalpæ non raro, Bethlehem, sed plerumque statu subexoleto obvium. — Multam habet affinitatem cum *H. multiformi*, sed minus nec effusum.

177. **Hypoxylon Caries** (Schw.) Sacc. *Sph.* (Glebosæ) *Caries* Schw. 1510
Syn. Am. bor. n. 1222. — Vix separabile, subrotundum aut elongatim effusum, crassiusculum, ambitu sublobato, aterrimum, superficie undulatim inæquali, rugosa; ostiolis crebris, obtuse conicis, demum pertusis; peritheciis majusculis, subdepressis, in stromate parco nigrescente.

Hab. in lignis cariosis, Bethlehem Amer. bor. — *Hypoxylon serpens* primo adspectu referens nec dissimile ab *Ustulina*. Longitudo stromatum semi- aut uncialis.

178. **Hypoxylon illitum** (Schw.) Sacc. *Sph.* (Hypoxyl.) *illita* Schw, Syn. 1511
Am. bor. n. 1205. — Latissime effusum, confluens, stratis sæpe superimpositis, sistens plagas subeffiguratas, ligno emollito quasi illitas; superficie undulata inæquabili, primum eleganter olivaceo virente, demum nigra; peritheciis majusculis, granulatim prominentibus; ostiolis acutis, conicis aut indistinctis coronatis; ceterum crasse corticatis, intus cavis e stromate parco albescente circumdatis.

Hab. non infrequens ad latera perpendicularia truncorum præsertim Platani, quos plagis latis inæqualibus confluentibus investit, Bethlehem in America boreali.

179. **Hypoxylon cupreum** Fr. Summa V. S. p. 384. In Suecia merid. 1512
180. **Hypoxylon stereoides** Fr. S. V. S. p. 384. In Finlandia. 1513
181. **Hypoxylon omphalostoma** Fr. S. V. S. p. 384. In Suecia boreali. 1514
Hæ tres species nomine tantum notæ sunt.

DALDINIA De Not. et Ces. Schema Sfer. ital. in Comm. Critt. I. 197. (Etym. a cl. Abb. *Daldini* Locarnensi). — Stroma superficiale, subsphæroideum, cortice carbonaceo, nigricante, intus fibrosum, concentricè discolori-zonatum. Asci cylindræci, octospori, pedicellati. Sporidia ovoidea v. oblonga, fusca. Perithecia stromati omnino immersa nec protuberantia; ostiolis umbilicatis.

1. **Daldinia concentrica** (Bolt.) Ces. et De Not. Schema Sf. it. in Comm. 1515
I, 198. *Hy. concentricum* (Bolt.) Grev. Scot. Flor. VI, t. 324. Nits. Pyr. Germ. p. 25. *Sph. concentrica* Bolt. Fung. Halif. t. 180. *Hemisphæria concentrica* Kl. Ex. fungi p. 241. — Stromate sphæroideo vel subsphæroideo vel hemisphærico, raro obovoideo, intus stratis concentricis zonato, nigro v. fusco-nigricante, latit. 2-5 cent.;

peritheciis monostichis, obovoideis, mutua pressione angulatis, ostioliis vix prominentibus, punctiformibus, minimis; ascis longissime pedicellatis, 80-110 \approx 8-10 p. sporif.; sporidiis oblique monostichis, ellipsoideis, sæpe inæquilateralibus, fuscis, 12-15 \approx 7-10; paraphysibus longissimis, filiformibus. — Hymenium conidiferum ex cinereo fuscescens. Conidia ovoidea.

Hab. ad truncos Fraxini, Alni, Betulæ, Juglandis, Aceris, Coryli, Salicis, Ulmi, Fagi, etc. in tota Europa, Sibiria, America boreali et australi, India, Ceylon, Borneo, Tasmania, Nova Zelandia, Java. — Adest var. *obovata* (Nees Syst. f. 308), basi angustata substipitata et var. *Eschscholzii* (Ehrenb. F. Cham. p. 59, t. XVIII, f. VIII) extus cuprea, peritheciis oblongis. Brasilia.

2. **Daldinia vernicosa** (Schw.) Ces. et De Not. Schema Sf. in Comm. 1516
critt. I, 198 *Sph. vernicosa*. Schw. New. Am. Sph. p. 9, t. 1. fig. 2 et in Linnæa IV, Litt. p. 46. — Maxima, 25-30 mill. alta, 12-14 cr., subturbinata, subito in stipitem crassum attenuata, superficie atra, vernicosa, levis, intus alba, concentricè stratosà; peritheciis polystichis, crebris, minutis, nigris, ostioliis perexiguis; ascis teretiusculis, 8-sporis; sporidiis oblongis, 20 \approx 6,5-7.

Hab. ad truncos, in partibus sepimentorum prope terram, Salem, Poughkeepsie Amer. bor., Gallia, Valentienne, Suecia, Algeria, Cuba, Ind. or. — *Dald. concentricæ* var. *obovata* affinis, sed differt cortice laccato-nitente undulato, stratis interioribus albis linea atra sejunctis concentricis transversisque. Sec. Berk. Cub. F. n. 819 datur variatas ostioliis prominulis, altera ostioliis impressis.

3. **Daldinia durissima** (Fr.) Sacc. *Sph. concentrica* Wahl. nec Auct. 1517
Hyp. durissimum Fr. S. V. S. et Nov. Symb. p. 130, nec Schw. (Cfr. n. 1447). A *Dal. concentrica* differt quia semper atra, rigidodurissima, persistens (nec demum fragilis), perennis, sporidiis fœde atroinquinans.

Hab. in Smolandia et Uplandia ad truncos (FRIES).

4. **Daldinia Asphaltatum** (Link et Fr.) Sacc. *Sphæria Asphaltatum* 1518
Link et Fr. in Linnæa 1830, p. 540. — Globoso-diformis, crusta atra, nitida, discreta obducta; intus fuliginoso-atra, obsolete zonata, peritheciis linearibus peripherico-immersis, ostioliis minimis punctiformibus.

Hab. in truncis emortuis arborum Brasiliæ (BEYRICH.) — *Daldiniæ concentricæ* valde affinis, 25-30 mill. diam.

5. **Daldinia angolensis** (Welw. et Curr.) Sacc. *Hypoxylon angolense* Welw. et Curr. Fungi Angol. p. 282, t. 17, f. 19. — Clavi-

formis, nigerrima, lucida; peritheciis dense aggregatis, ostioliis minutis parum prominentibus; sporidiis nigro-fuscis, ovatis vel leviter curvulis, 12–15 μ . longis.

Hab. in cortice putrescente, Guibolo, Golungo alto, Angola Africæ occidentalis.

6. **Daldinia Féei** Sacc. *Sphæria vernicosa* Fée not. sur trois esp. 1520
nouv. de *Sphæria* exot. p. 2, nec Schw. — Suberosa, simplex, fragilis, dura, torulosa, vernicosa, glaberrima, apice subacuta; peritheciis latissimis, distinctis; sporidiis ovoideis.

Hab. in S. Domingo Antillarum, supra arborum truncos emortuos.

7. **Daldinia cingulata** (Lév.) Sacc. *Sphæria* (concentrica) *cingulata* 1521
Lév. Ann. scienc. nat. 3, 1845, p. 47. — Obovata, erecta, substipitata crustaceo-laccata, e fusco nigra nitida, cingulis peritheciis notata: peritheciis interioribus demum albis, stromate immersis, ostioliis obsolete.

Hab. ad truncos prope New-York (MENAUD.). — Stroma 1–2 dec. alt., 1 dec. crass.

8. **Daldinia loculata** (Lév.) Sacc. *Sphæria* (concentrica) *loculata* Lév. 1522
Ann. Scienc. nat. 3, 1845, p. 47. — Globosa, substipitata, atra, opaca; peritheciis obovatis stromate nigro immersis, ostioliis prominulis, nitidis, subhemisphæricis; ascis sporidiisque generis.

Hab. in America, ad truncos. — Stipes brevis asperulus.

9. **Daldinia Thouarsiana** (Lév.) Sacc. *Sphæria Thouarsiana* Lév. 1523
Ann. Scienc. nat. 5, 1846, p. 258. — Stromate hemisphærico, carbonaceo-fibroso, fusco-nigricante; peritheciis ovatis immersis prominulis circa ostiolum papilliforme applanatis; ascis minutis, linearibus; sporidiis oblongis continuis curvulis, fuligineis.

Hab. in insulis Galapagos ad truncos (DU PETIT-THOUARS), — Affinis *Dald. concentrica*.

NUMMULARIA Tul. Sel Fung. Carp. II, p. 42 (Etym. *nummus*, quia stroma sæpius nummiforme). — Stroma orbiculare, cupuliforme, intus in matrice nigrolimitatum superficie, nigricans, marginatum, margine substerili. Perithecia stromati peripherice et monostiche immersa, magna, numerosa, atra. Ascii breve stipitati, cylindrici octospori. Sporidia monosticha subellipsoidea, continua fusca. — Conidia sub stromatis immaturi strato supremo nata, deinde libera, sphæroidea, hyalina, minutissima. — Genus ab *Hypoxylo* ægre distinctum, et verisimiliter plures *Hypoxyli* species, e. g. *H. Broo-*

meanum. *H. marginatum* etc. rectius inter Nummularias adnumeranda.

1. **Nummularia Bulliardi** Tul. Sel. Fung. Carp. II, p. 43, tab. V, f. 11-19. Nits. Pyr. Germ. p. 60. *Sphaeria nummularia* DC. Fl. fr. II, 290. *Sph. anthracina* Schm. Myk. I, 55. *Hypoxylon nummularium* Bull. Champ. t. 468, fig. 4. *Sph. Clypeus* Schw. — Stromate, peridermio destructo, emergente, fere superficiali liberoque, planissimo, plerumque determinato, orbiculari, v. ovali, rarius forma irregulari, longe lateque effuso, extus intusque aterrimo, peritheiorum ostioliis minutissimis, prominulis punctulato, primitus strato carnosio, varie tuberculoso, sordide albido, peridermio adhærente tecto; hymenio conidifero strato singulari corticali, cervino, stroma recens perithecigerum vestienti imposito; conidiis globosis, minimis in sterigmatibus densissime stipatis, breviusculis, parce ramosis, septatis solitarie acrogenis; peritheciis majusculis, ovatis, atris, stromatis locellis confertis inclusis, subliberis; ascis cylindricis, brevissime pedicellatis, octosporis, paraphysibus filiformibus, longe superatis 100-120 \approx 10; sporidiis monostichis, ovali-subglobosis, rectis, nigricantibus, 12-14 \approx 9-10. 1524

Hab. in ramis crassioribus Fagi, rarius Carpini, Castaneæ, Quercus, Aceris, Tiliæ, Platani in Britannia, Gallia, Suecia, Germania, Italia, Belgio, California, Carolina.

2. **Nummularia repanda** (Fr.) Nits. Pyr. Germ. p. 57. *Sphaeria repanda* Fr. S. M. II, 346. — Stromate cortice interiori lignoque innato, nigro-limitato, parte superiore erumpente v., cortice dejecto, in ligno superficiali libero, orbiculari, cupuliformi; stromatis superficie undique nigricante et excepto disco subrotundo, concavo, rimuloso, sublævi corrugata; substantia partis immersæ a substrato specie immutato v. tandem fucato formata, erumpentis vero propria, albida, cinerascens; peritheciis sub disco peripherice ac monostiche nidulantibus, omnino immersis, ovatis v. subglobosis, conferta mutuaque pressione haud raro angulatis, collis brevibus ostioliis rotundatis, poro angustissimo pertusis, subprominulis, nitidulis instructis; ascis cylindricis subsessilibus, octosporis, membrana crassiuscula textis, paraphysibus filiformibus, vix longioribus stipatis, 112 \approx 8; sporidiis oblique monostichis, anguste ovatis, utrinque obtusis, nonnihil inæquilateralibus v. rectis, sæpe guttulatis, fuscis, 15-16-(rarius 12) \approx 6-7. 1225

Hab. in ramis et truncis Sorbi Aucupariæ in Suecia, Germania, Helvetia, Fennia, Ruthenia, raro.

3. **Nummularia repandoides** Fuck. Symb. 236, t. II, fig. 46, Sacc. Myc. 1526
 Ven. Spec. t. XV, fig. 37-40. — Stromatibus erumpentibus, demum liberis, orbicularibus elongatisve, $\frac{1}{2}$ -2 uncias latis, planis subconvexisve, margine distincto, subrepando, lacerato, primo atro-fuscis, dein aterrimis; peritheciis immersis, ovatis, verticalibus, majusculis, ostiolis valde prominulis, conico-apiculatis; ascis cylindraceutis, stipitatis, 8sporis, 120-126 \approx 8-10; sporidiis suboblique monostichis, oblongo-ovatis, opacis, 16-20 \approx 7-8 (« 15-16 \approx 8-9 »).
- Hab.* in cortice duriore Fagi, Populi etc. in Rhenogovia et in Italia boreali.
4. **Nummularia succenturiata** (Tod.) Nits. Pyr. Germ. p. 58. *Sphæria succenturiata* Tode Meckl. II, 37, fig. 109. 1527
 — Stromate parte inferiore ligno innata eique concolori sed strato extimo nigricante circumscripta, superiore primo per peridermium arcte adhærens erumpente, deinde, cortice putredine consumpto, in ramis decorticatis superficiali nunc e basi oblonga rarius suborbiculari v. elliptica pulvinata, crassa, deplanata, nunc contra e basi plus minus contracta cupuliformi, orbiculari, intus ex griseo-fusco nigricante extus fuliginoso-atra, corrugata v. callosa; peritheciis ovatis v. oblongis, sæpeque compressis, verticalibus v. ascendentibus, irregulariter polystichis v. submonostichis, majusculis, pariete, crassissimo præditis, stromati omnino immersis et in collum pro situ plus minus longum attenuatis; ostiolis poro angusto pertusis, haud prominentibus; ascis cylindricis subsessilibus, octosporis, paraphysibus filiformibus obvallatis, 120 \approx 8-9; sporidiis oblique monostichis, fusiformibus v. ovatis, utrinque obtusis, rectis v. parum inæquilateralibus, fuscis, 16-(rarius 18) \approx 5-7 (Sec. Berk 12-15 μ . long.).
- Hab.* in ramis quercinis et acerinis in Germania et Britannia. — Var. *lævis*; elliptica, lævis, nigra, intus albida, peritheciis immersis ovatis, astomis. — *Sowerb.* t. 394, f. 8. — Ad ligna in Anglia. An hujus loci?
5. **Nummularia lutea** (Alb. et Schw.) Nits. Pyr. Germ. p. 59, *Sph.* 1528
lutea Alb. et Schw. Consp. Nisk. p. 10, t. I, fig. 1, Curr. Linn. Trans. XXII, t. 46, fig. 56. — Stromate in ligno decorticato superficiali, orbiculari, crasso, cupuliformi, margine rugoso, superficie ex fusco nigricante, intus luteo; peritheciis polystichis, dense stipatis, ovatis v. subglobosis, magnitudine variis, superioribus tantum collis ostiolisque subprominulis instructis; ascis cylindricis, subsessilibus, octosporis; sporidiis monostichis, exiguis, ovatis, rectis, fuscescentibus, 5-6 \approx 3.

- Hab.* in ligno truncorum Alni, Salicis etc. in Germania, Britannia, Suecia, raro.
6. **Nummularia discreta** (Schw.) Tul. Sel. Fung. Carp. II, p. 45, t. V, 1529
fig. 1-10, Nits. Pyr. Germ. p. 60, *Sph. discreta* Schw. Syn. Am. bor. p. 195. — Stromate peridermio erumpente, determinato, orbiculari, disciformi, margine incrassato, cinereo-fusco, tandem aterimo; hymenio conidifero ob conidia numerosissima pulveraceo, cinereo-albido, in stromatis strato corticali, mox secedente expanso, primo strato carnoso tecto; peritheciis atris, numerosissimis, locellis inclusis, stromate omnino immersis, collis brevibus ostiolisque haud prominentibus instructis; ascis cylindricis, pedicellatis, octosporis, paraphysibus longissimis filiformibus, stipatis, 150-180 \approx 13; sporidiis monostichis, subglobosis, nigricantibus, 13 \approx 10 (α 15-18 \approx 12 »).
- Hab.* in ramis crassioribus Mali, Sorbi, Cercidis, Magnoliæ, Ulmi in Germania, Gallia, Italia, Carolina, Alabama, New-York, Cuba.
7. **Nummularia dryophila** Tul. Sel. Fung. Carp. II, p. 48. — Stroma- 1530
te pulvinate, ambitu subcirculari, 1-3 cent. extenso, 2-3 mill. crasso, atro; peritheciis immersis, ostiolis non prominentibus; ascis cylindricis, 50-80 \approx 10-13, octosporis; sporidiis distichis, 16 \approx 6,5, fuliginis, muco destitutis.
- Hab.* in cortice quercino in Gallia.
8. **Nummularia gigas** Plow. Grebill. VIII, p. 106, t. 130, fig. 3. — 1531
Erumpens, e cortice interiore lignoque subjacente oriunda, initio suborbicularis, denique elliptica v. elongata; extus nigra, concava, subrepanda, ob ostiola prominula rugulosa, intus fibrosa albido-cinerea; peritheciis periphericis, densis, pyriformibus, mutue compressis, collis longis, ostiolis prominulis, rotundis nigris; ascis cylindricis, stipitatis 120-150 \approx 12-15, p. sporif. 50-60 μ . longa; sporidiis octonis monostichis, ovoideis v. subrotundis, subinde nucleatis, 10-12 \approx 8-10.
- Hab.* in cortice Betulæ, Ringstead Downs, Britannia. — Stroma 3-4 cent. long. 1 cent. lat., 3-4 mill. crass.
9. **Nummularia frustulosa** (B. et C.) Sacc. *Hyp.* (Glebosæ) *frustulosum* 1532
B. et C. Cuban Fungi n. 817. — Minor, gregaria, irregularis, depressa, subtus, centro excepto, libera, intus alba suberosa; peritheciis immersis vel semiimmersis; ostiolis prominulis; ascis filiformibus rectis; sporidiis brunneis, minutis 5 \approx 2,5.
- Hab.* in ligno putri in Cuba.
10. **Nummularia Wrightii** (B. et C.) Sacc. *Hyp.* (Glebosæ) *Wrightii* B. 1533

et C. Cuban Fungi n. 816. — Pulvinata, margine inflexo libero, intus basim versus e flavo ferruginea, vel brunnea; contextu radiante, superficie papillata; peritheciis subglobosis parvis, ostioliis latentibus.

Hab. in ligno et cortice in Cuba et Brasilia. — Stroma 35–40 mill. lat., 8 mill. cr.

11. **Nummularia punctulata** (B. et Rav.) Sacc. *Diatrype punctulata* 1534

B. et Rav. in Grev. IV, p. 94, *Hyp. punctulatum* Berk. — Latissime effusa, nigra, peridermio rupto cincta, levissima; peritheciis exiguis ovoideis, stipatis; ostioliis punctiformibus, impressis, crebris signata; «ascis tereti-clavatis, longe stipitatis, p. sporif. 90 \approx 9, octosporis; sporidiis monostichis ellipsoideis, utrinque subtruncatis, 7–8 \approx 4,5, asco diu inclusis, initio hyalinis, dein fuscidulis».

Hab. in ramis subputridis *Quercus albæ* etc., in New Jersey, Carolina, Amer. bor. — Ad *Anthostoma nutat.* Stroma centimetra aliquot extensum.

12. **Nummularia placentiformis** (B. et C.) Sacc. *Hyp.* (Glebosæ) *pla-* 1535

centiforme B. et C. Cuban Fungi n. 815. — Magna, depresso-pulvinata, margine inflexo libero, contextu nigro, superficie e rubiginoso nigra; peritheciis oblongis immersis, ostioliis papillæformibus; sporidiis subellipticis, fuliginis, 12–14 μ . longis.

Hab. in ligno putri in Cuba. — Stroma 40–50 mill. long.

13. **Nummularia suborbicularis** (Welw. et Curr.) Sacc. *Hypoxylon* 1536

suborbiculare Welw. et Curr. Fungi Angol. p. 281, Tab. 17, fig. 18. — Stromate suborbiculari, 1½ unc. lato, 3/8–5/8 unc. crasso, subtus leviter concavo, centro adfixo; super plano vel plano-convexo et leviter undulato, intus favoso et albido, extus nigro, pulvere rubiginoso consperso; margine inverso et crassescente; peritheciis stipatis, immersis, stromatis faciem superiorem et marginem inversum occupantibus; ostioliis prominentibus, papillatis; sporidiis nigro-fuscis, ellipticis vel cymbiformibus, 12–13 μ . longis.

Hab. in truncis vetustis in sylvis inter Monino et lacum Ivan-tâla, Huilla, sed rarum, Angola (Africa occid.). — Var. *Cookeanum* Sacc. Stromate fibroso-compacto, intus ochraceo-fuligineo, extus rubiginoso, margine non incrassato vix obtusiusculo; ostioliis non v. vix extantibus; sporidiis 10–12 \approx 6–7. — Ad truncos in Pegu (Asia). Dedit M. C. COOKE.

14. **Nummularia tenuis** Pass. Funghi Abiss. p. 186, t. IV, fig. 6. — 1537

Stromate ligno adnato, effuso, peridermio, quo tegitur, tandem evanido, denudato, tenui, fusco-rubiginoso, opaco; peritheciis oblongis

parallele stipatis, erectis, ostioliis prominulis hemisphæricis, punctiformibus; sporidiis elliptico-oblongis, regularibus vel lateribus vix inæqualibus, junioribus sordide flavicantibus, medio ample guttulatis, translucidis; maturis fuscis opacis, 16-20 \approx 6-7 (ex icone); ascis et paraphysibus non visis.

Hab. in fragmentis ligneis secus flumen Kelseret (Abyssinia).

15. **Nummularia regia** (De Not.) Sacc. *Hypoxyylon regium* De Not. 1538

Sfer. ital. p. 15, t. 12. — Stromate cortice innascens, epidermide qua primitus tegitur, varie secedente, denudato, crustiformi, late lineari-oblongato, planiusculo, 7 cent. longit. attingente, centimetrum lato, vel elliptico, ovato, convexo, 3 cent. latit. æquante, ceterum crassiusculo, carbonaceo, fragili, extus, intusque fusco, toto ambitu margine undulato, repando, erosove, adpresso, atque halone sterili limbato, disco verruculis minutis, hemisphæricis, vertice papillatis, crebre tuberculato, intus loculoso, oculis exiguis e mutua pressione subprismaticis, innumeris; peritheciis ovoideis, vertice in collum breve attenuatis, tenuiter membranaceis, subtilissime lineolato-reticulatis; ascis copiosissimis, 8-sporis, teretibus, cito evanidis; paraphysibus tenuissimis, filiformibus, guttuliferis; sporidiis ellipsoidis, badiis, translucidis, 15 μ . long.

Hab. in trunco Juglandis, Valle Intrasca, Italiæ borealis.

16. **Nummularia mediterranea** (De Not.) Sacc. *Sph. mediterranea* 1539

De Not. Micr. ital. Dec. VI, p. 96, fig. II. — Denudata adnato-superficialis, diam. bi-tripollicaris, crass. vix mill., planiuscula v. subundulata, atra, ambitu sinuosa v. sublobata, margine sterili nigricante, stromate carbonaceo, fragillimo; peritheciis minutis, numerosis, arcte stipatis, atris, mutua pressione oblongo-prismaticis, vertice breve attenuato in ostiolum erumpens, punctiforme, bullula cinctum desinente; ascis cylindræo-clavatis, paraphysatis, octosporis, 140-150 \approx 10; sporidiis ellipsoideis, utrinque rotundatis, badio-fuscis, guttulatis, monostichis, 16 \approx 7,5.

Hab. in truncis decorticatis quercinis prope Iglesias (Sardinia).

17. **Nummularia obularia** (Fr.) Sacc. *Hyp. obularium* Fr. Nov. Symb. 1540

130. — Immersa, erumpens, demum late effusa, determinata, applanata, impolita, stromate proprio atro, peritheciis immersis oblongis, ostioliis hemisphærico-prominulis umbilicatis; sporidiis atris.

Hab. in truncis emortuis arborum in Costa Rica (ÆRSTED). — Proxima *N. Bulliardii*, at diversa stromate cum matrice connato, nec demum secedente.

18. **Nummularia Glycyrrhiza** (Berk. et Curt.) Sacc. *Hypoxy. Glycyrrhiza* B. et C., Exot. Fungi Schw. p. 285, *Sph. nummularia* Schw. nec Auct. — Suborbicularis, margine tenui, centro pulvinata punctis papillæformibus centro depressis notata; peritheciis oblongis. 1541
Hab. in corticibus, Surinam, Amer. merid. — Pulvinata, 25 mill. longa, 12 mill. lat. A *N. Bulliardi*, cui valde affinis, peritheciis oblongis stipatissimis recedit.
19. **Nummularia spondylina** (Fr.) Sacc. *Sph. spondylina* Fr. S. M. II, 347, *Hypoxyton spondylinum* Fr. Summ. Veg. Scand. p. 383. 1542
 — Erumpens, difformis, convexa, subrugosa, extus intusque atra, peritheciis demersis, ostioliis latentibus.
Hab. in cortice Fraxini, rarissima, in Suecia. — Quamvis erumpens, omnino libera evadit nec basi adnata. Minor, 1-2 lin. lata et crassa, bullata, situ admodum gregario et sæpius confluenta, unde difformis v. spondylorum instar seriata; specimina solitaria regularia, convexa, cortice duro leviusculo. Perithecia ovata, demersa; vetustate corrupta, rigidum-fragilia, ut *Ustulina*.
20. **Nummularia constricta** (Fr.) Sacc. *Sph. constricta* Fr. Elench. II, 70. — Effusa, crustacea. plana, secedens, tuberculosa, atra, intus concolor; peritheciis stipatis, parallelis, oblongo-linearibus; ostioliis in tuberculis pertusis. 1543
Hab. ad ligna denudata Galliæ (GUEPIN, MOUGEOT). — Stroma tenue, rigidum, atrum, ut videtur, latissime effusum et incrustans, indeterminatum; superficies opaca, adulta saltim nuda et atra, supra perithecia tuberculosa, sed perithecia non prominent. In his tuberculis adsunt ostioli simplicia (non papillata), pertusa; perithecia atra, stipata, oblongo-linearia, collo brevi, sed stromati nulli substrato imposita. Affinis *Numm. Bulliardi*.
21. **Nummularia Artemisiæ** (Schw.) Sacc. *Sph. (Glebosæ) Artemisiæ* Schw. Syn. Am. bor. n. 1227. — Minor, bilinearis, ovata, subangulata, subcupulata et marginata ex epidermide stellatim revoluta erumpens, interdum confluens, aterrima, disco rugoso opaco, ostioliis parum prominentibus umbilicatis crebris; stromate aterrimo, in quo nidulant perithecia globosa minuta cava. 1544
Hab. in ramis emortuis *Artemisiarum*, Bethlehem, Am. bor. — Stroma quasi liberum, insidens libro corticali, utrinque nigrum, rugosum. Non omnino confluens sed potius perithecia invicem adpressa. *Nummulariæ repandæ* proxima.
22. **Nummularia subaffixa** (Schw.) Sacc. *Sph. (Glebosæ) subaffixa* Schw. Syn. Am. bor. n. 1226. — Transversim ramulos subambiens, 1545

crassa, elevata, ligno adnata more *Nummulariæ Bulliardi*, applanata, plerumque orbiculata, margine sterili, sed non libero, superficie externa subrugosa atra; peritheciis stipatis, oblongis, stromate parco circumdatis; ostioliis crassiusculis, non impressis, conice protrusis.

Hab. frequens in ramis dejectis pyrinis, Bethlehem Amer. bor. — Long. et lat. $\frac{1}{2}$ –1 uncialis. Sæpe confluens; primum epidermide cincta, demum denudata.

REPERTORIUM

SPHÆRIACEARUM | PHÆOSPORARUM

SECUNDUM MATRICES

Obs. A. indicat *Anthostoma*. — Al. *Anthostomella*. — As. *Astrocystis*. — B. *Bombardia*. — Bl. *Bolinia*. — C. *Ceratostoma*. — Ca. *Camillea*. — Ch. *Chetomium*. — Co. *Coprolepa*. — D. *Daldinia*. — H. *Hypoxylon*. — Ha. *Hypocopra*. — He. *Helminthosphæria*. — N. *Nummularia*. — Ph. *Philocopra*. — Po. *Poronia*. — R. *Rosellinia*. — S. *Sordaria*. — U. *Ustilina*. — X. *Xylaria*.

Monenda. Numeri specierum post 1000, brevitatis causa, citantur omisso mille; e. g. 1005, 1252, citantur: 5, 252. Iterum moneo matrices non specifice definitas v. zoogenas — in hac sectione copiosissimas — ut fimum, ligna etc. consulto omissa esse.

- | | |
|---|--|
| Abies — Ch. 818. 823. — Al. 75. — X. 249. — Bl. 332. | Artemisia — N. 544. |
| Acanthus — Al. 89. | Artocarpaceæ — X. 157. |
| Acer — R. 952. 671. — Al. 62. 63. — A. 106. 126. 144. — X. 239. 240. — H. 346. 349. 370. 423. 433. 434. 440. 445. | Arundinaria — H. 416. 431. |
| Agave — Al. 48. | Arundo — S. 860. — R. 941. — Al. 29. 31. 34. 50. 83. |
| Ailanthus — H. 448. | Aspicilia — R. 16. |
| Alnus — R. 940. 968. 978. 991. 1. 9. — A. 97. 138. 143. 146. — Bl. 332. H. 361. 368. 376. 441. 448. — D. 515. | Atropa — A. 117. |
| Aloe — Al. 32. | Bambusa — R. 979. — Al. 38. 73. 74. As. 96. — H. 431. |
| Ananas — Al. 70. | Baptisia — Al. 60. |
| Andromeda — R. 948. 999. | Benzoin — H. 472. |
| Andropogon — C. 781. | Berberis — R. 992. |
| Angelica — Al. 55. | Betula — R. 922. 968. 11. — B. 26. — A. 99. 126. 127. 143. — H. 333. 337. 868. 376. 431. 434. 505. — D. 515. — N. 529. |
| Apeiba — X. 302. | Brassica — S. 859. |
| Aralia — Ch. 825. | Buxus — R. 920. |
| Arbutus — Al. 58. | Calamagrostis — Al. 30. |
| Arctostaphylos — A. 120. | |

- Canna — Al. 69.
 Carex — Al. 28. 34.
 Carpinus — C. 790. — B. 26. — Al. 53. — A. 99. 111. 126. 129. — X. 272. — U. 328. — 333. 347. 350. 468. 448. — N. 524.
 Carlina — Al. 76.
 Castanea — R. 917. — Al. 66. 68. — A. 97. 129. — H. 368. 450. — N. 524.
 Catalpa — H. 509.
 Celtis — H. 360. 448.
 Genomyce — R. 19.
 Cerasus — R. 973. 990.
 Cercis — H. 447. — N. 529.
 Chamærops — Al. 35. 36. 95. — H. 418.
 Cichorium — Al. 59.
 Cirsium — 863.
 Cladium — Al. 45.
 Cladonia — R. 14.
 Clavaria — He. 837.
 Cocos — C. 776. 809.
 Coffea — R. 965.
 Coniferæ — A. 115.
 Cornus — R. 922. 956. — Al. 55. — H. 368. 431.
 Corticium — Ha. 895.
 Corylus — C. 783. — R. 921. 939. 11. — H. 333. 347. 368. 434. 448. 472. 484. 485. — D. 515.
 Cratægus — R. 972. — A. 118. 121. X. 271. — H. 368.
 Cullenia. — X. 254.
 Cupressus — R. 991.
 Cyperus — R. 948.
 Cytisus — R. 671. — Al. 79.

 Desfontainea — Al. 72.
 Dianthus — Ch. 799. 830.
 Diospyros — X. 270.
 Dipteryx — Al. 78.

 Erica — Al. 87.
 Erigeron — Ch. 814.
 Erythrina — H. 420.
 Eupatorium — R. 981.

 Fagus — C. 790. — S. 856. — R. 968. 991. 994. — B. 26. — A. 97. 103. 125. 126. 128. 139. 144. 145. — X. 239. 240. 270. 305. 306. — U. 328. H. 335. 337. 344. 348. 355. 368. 370. 407. 430. 431. 433. 434. 448. 462. 463. 484. 485. 487. — D. 515. — N. 524. 526.
 Ferula — Ha. 894.
 Ficus — R. 935.
 Fraxinus — C. 792. — Ch. 828. — A. 97. — H. 337. 339. 355. 368. 431. 434. — D. 515. — N. 542.

 Galium. — Al. 72. 76.
 Genista — Al. 77.
 Georgina — Ch. 819.
 Goniothalamus — X. 270.
 Graminaceæ — C. 793. — Ch. 812. 832. Al. 45. 49. — X. 286.
 Guttiferæ — X. 263.

 Hedera — R. 921. — A. 124.
 Helianthus — Ch. 796. — S. 859.
 Hierochloa — Al. 34.
 Hydnum — H. 471.
 Hymenæa — X. 282.
 Hyssopus — Ch. 835.

 Ilex — Al. 54.
 Inula — Al. 68.
 Juglans — C. 779. — R. 968. — Bl. 332. — H. 372. 506. — D. 515. — N. 538.
 Iuncaceæ — Al. 45.
 Iuncus — Al. 46.
 Iungermannia — R. 19.
 Juniperus — R. 961. 998.
 Iussieua — H. 490.

 Kerria — Al. 55.

 Lantana — X. 169.
 Laurus — Al. 88. — H. 368. 483.
 Liquidambar — R. 969. — A. 147. — X. 270. — H. 369. 431. 496.
 Liriodendron — R. 925. — X. 279.

- Lonicera — R. 857. 974. 3. — Al. 80.
 — A. 122. 123.
 Luzula — Al. 92. — A. 112.
- Magnolia — A. 137. — H. 384. 444.
 N. 529.
- Melampyrum — Al. 76.
- Monocotyledoneæ — Al. 91.
- Morus — R. 950. — A. 129.
- Myrica — H. 414.
- Myricaria. — R. 12.
- Nephroma — R. 15.
- Nyssa — H. 370.
- Olea — Al. 56.
- Orchidaceæ — X. 276.
- Oreodaphne — H. 434. 448.
- Ostrya — H. 333.
- Paliurus — Al. 86.
- Palmaceæ — R. 929. — Al. 82. 85.
 — H. 403. 468. 495.
- Pandanus — R. 976. — Al. 90.
- Persea — H. 451.
- Persica — X. 268.
- Philadelphus — R. 922.
- Phillyrea — A. 116.
- Phœnix — Al. 35.
- Phormium — Al. 39.
- Pinus — C. 785. 786. 791. — Ch. 811.
 823. — R. 949. 991. 993. 994. 995.
 998. — Al. 52. — A. 118. — X.
 285. — H. 385. 434. 499.
- Pircunia — S. 839. 862.
- Pistacia — A. 132.
- Platanus — C. 782. 969. — R. 2. —
 H. 445. 511. — N. 524.
- Polyporus — R. 958. — H. 463. 464.
- Populus — H. 893. — R. 955. 960.
 968. 986. 994. — X. 239. 261. — H.
 345. 347. 413. 434. 448. 485. 504.
 N. 526.
- Prinos — R. 959. — H. 472.
- Prunus — C. 771. — R. 950. 9. 25. —
 A. 108. — H. 333. 434.
- Pyrus — A. 97. 100. 104. — H. 434.
 503. — N. 529. 545.
- Quercus — C. 772. 787. — Ch. 802.
 810. — R. 917. 925. 946. 951. 964.
 968. 969. 977. 988. 994. — A. 97.
 102. 105. 114. 119. 126. 129. 130.
 149. — X. 238. 266. 306. — H. 333.
 349. 364. 368. 370. 372. 376. 384.
 388. 491. 406. 413. 414. 433. 434.
 448. 453. 463. 477. 484. 485. 486.
 507. — N. 524. 527. 529. 534. 539.
- Rhamnus — A. 97. 129.
- Robinia — R. 968.
- Rosa — R. 968.
- Rubus — C. 778. — R. 928. 939. —
 Al. 51. 55. 64.
- Ruscus — R. 929. — Al. 55.
- Sabal — Al. 47.
- Saccharum — Al. 73.
- Salix — C. 789. — S. 857. — R. 956.
 991. 993. 1000. — B. 26. — Al. 55.
 57. — A. 99. — X. 289. 290. 306.
 — H. 333. 343. 349. 373. 431. 434.
 450. 45?. 473. — D. 515.
- Salsola — R. 982.
- Salvia — R. 989. — Al. 76.
- Sambucus — S. 859. 861. — R. 997.
- Sapindus — Al. 65.
- Saponaria — S. 859.
- Sassafraß — H. 451.
- Scirpus — Al. 71.
- Secale — Ch. 793.
- Serratula — S. 859.
- Smilax — Al. 40. 41. 42. 43. — H. 371.
- Sparganium — Al. 92.
- Spiræa — Al. 67.
- Solanum — Ch. 804. 806. 807. 829.
- Sorbus — R. 968. — H. 373. 376. —
 N. 525. 529.
- Syringa — R. 13.
- Tamarix — R. 671.
- Tanacetum — C. 780.
- Tetradenia — R. 930.

Tilia — U. 328. — H. 383. 434. — N. 524.	Vaccinium — Al. 93.
Typha — Ch. 836. — Al. 45.	Viburnum — Al. 55. — H. 360.
	Vinca — Al. 55.
	Viscum — Al. 94.
	Vitis — C. 784. — R. 6.
Ulex — A. 134.	
Ulmus — S. 859. — R. 1000. — A. 101. 118. — H. 368. — D. 515. — N. 529.	Yucca — Al. 32. 33. 44.
Urania — H. 500.	Zea — Ch. 816.
	Zygodon — R. 19.

Sect. 3. Hyalosporæ Sacc.

Sporidia ovoidea v. oblonga v. fusoides, continua, hyalina v. subhyalina.

Clavis analytica generum.

A) Simplices.

a) Perithecia rostrata (Asci 8-spori).

Ceratostomella. Perithecia subcarbonacea, insculpto-superficialia, glabra, v. nigropilosa, sæpius xylogena.

Camptosphaeria. Perithecia subcarbonacea, innato-erumpentia, sulphureo-tomentella, caulogena.

Gnomoniella. Perithecia submembranacea, initio epidermide tecta, sæpius phyllogena.

b) Perithecia erostrata.

1. Tectæ.

† Asci 4-8-spori.

§ Perithecia pseudostromate radioso nullo adnata.

Læstadia. Perithecia lenticularia membranacea, poro minuto pertusa. Asci clavulati, aparaphysati. Sporidia mutica.

(*Stigmatula*. Est *Stigmatea* amerospora, ad interim huic generi subjuncta, quod videas inter *Didymosporas*).

Phomatospora. Perithecia globulosa, membranacea, papillata. Asci cylindrici, aparaphysati. Sporidia mutica.

Physalospora. Perithecia globulosa, solidiuscula papillata. Asci clavulati, typice paraphysati. Sporidia mutica.

Urospora. Perithecia globulosa papillata. Asci clavulati, aparaphysati. Sporidia longe caudata.

§§ Perithecia pseudostromate radioso nigro phyllogeno adnata.

Trabutia. Perithecia innato-erumpentia, pertusa. Asci et sporidia *Physalosporæ*.

†† Asci polyspori.

Ditopella. Perithecia peridermio tecta, glabra.

Polytrichia. Perithecia innato-erumpentia, strigoso-pilosa.

2. Nudæ, subsuperficiales. (Asci 8-spori).

Trichosphaeria. Perithecia setulosa, pilosa v. byssiseda, subcarbonacea.

Wallrothiella. Perithecia glabra, subcarbonacea.

(*Zignoia*. Est *Zignoella* amerospora, ad interim huic generi subjuncta, quod videas inter *Phragmosporas*).

B) Cæspitosæ v. stromaticæ (Asci 8-spori).

Botryosphaeria. Perithecia erumpenti-superficialia, basi stromaticâ suffulta, cæspitosa; collis perithecorum nullis.

Cryptosporella. Perithecia peridermio tecta, valseo-aggregata, collis perithecorum manifestis.

CERATOSTOMELLA Sacc. Mich. I, 370 (Etym. a *Ceratostomale*, cuius est analogum genus). — Perithecia subcarbonacea, subsuperficialia v. basi insculpta, glabra v. vestita; ostiolo tereti v. filiformi peritheciis plerumque longiore. Asci typice aparaphysati, octospori. Sporidia continua, globosa, ovoidea v. suboblonga, hyalina. Spermogonia et conidia in nonnullis nota.

1. **Ceratostomella rostrata** (Fr.) Sacc. *Sphaeria rostrata* Fr. S. M. II, 473. *Ceratostoma rostratum* (Fr.) Fuck. Symb. myc. p. 127. — Peritheciis sparsis, semiimmersis, sphaeroideis, glabris, atris, rugosis, latit. 0,3–0,7 mill.; rostro stricto, bisulcato v. quadrangulati; ascis sessilibus, cylindraco-clavatis, octosporis, 45–46 \approx 9; sporidiis oblongatis vel subellipsoideis, eguttulatis vel guttulis 2 praeditis aut spurie tenuiter uniseptatis, rectis, chlorino-hyalinis, 9–12 \approx 4. — Spermogonia peritheciis similia (perithecia juvenilia?); spermatidiis ellipsoideis, hyalinis, 5–6 \approx 2–3.

Hab. in ligno carioso molli praesertim Alni, Quercus, Aceris, Fagi, Betulae, in Suecia, Germania, Gallia, Italia, Fennia, Cuba, Amer. bor. — Var. *levirostris* rostro non v. vix sulcato. Cum specie. — *C. cirrhosa* ab hac praecipue differt sporidiis monostichis.

2. **Ceratostomella cirrhosa** (Pers.) Sacc. *Sphaeria cirrhosa* Pers. Syn. Fung. p. 59 Fr. S. M. II, 475, *Ceratostoma cirrhosum* Pers. Fuck. Symb. myc. p. 127. — Peritheciis sparsis, subinde conglomeratis, primitus immersis, demum semiimmersis, subsphaeroideis, fibrillis ligno irrepentibus, fuscis obsitis, deinde parte denudata glabris, atris, levibus, latit. 0,4 mill. vel ultra, rostro rudi, noduloso, subfalcato, glabro, longiusculo; ascis sessilibus, cylindraco-subclavatis, 65–75 \approx 7–9, octosporis; sporidiis monostichis, ellipsoideis vel suboblongatis, guttulis 1–4, plerumque 2 praeditis, chlorino-hyalinis, 9–12 \approx 3,5. — Spermata in peritheciis immaturis (?) ovoideo-cylindraco, hyalina, 4 \approx 2 μ .; conidia in fibrillarum apicibus, ovata, 3septata, atro-fusca, 28 \approx 14.

Hab. in ligno carioso Quercus, Carpini, Alni, Pini in Germania, Suecia, Fennia, Britannia, America.

3. **Ceratostomella lejocarpa** Sacc. Mich. I. 370 et F. ital. 345. — Peritheciis laxe gregariis, ligno infossis, globulosis, $\frac{1}{3}$ mill. diam., nigris, contextu minute parenchymatico, solido, ostioliis cylindricis, exertis, glabris $\frac{1}{2}$ – $\frac{3}{4}$ mill. longis; ascis cylindricis, sessilibus, 75–85 \approx 6, apice lumine 2-crenulato, rotundatis, aparaphysatis, octosporis; sporidiis oblique monostichis, ovoideo-oblongis utrinque ro-

tundatis, 9-11 \approx 4 $\frac{1}{2}$ -5, nubilosus v. 2-guttulatus hyalinis (rarissime extra ascos obsolete 1-3-septatis).

Hab. in ligno putri fagineo in sylva Cansiglio, Ital. bor. — A *C. cirrhosa*, cui valde affinis, imprimis ostioliis glabris, ascis angustioribus diversa.

4. **Ceratostomella ampullasca** (Cooke) Sacc. *Sphæria ampullasca* 1549
Cooke Hand. n. 2628. — Peritheciis gregariis v. subsparis, ligno immersis, globulosis, nigris; ostioliis perithecio subtriplo longioribus, cylindricis, flexuosis; ascis clavatis, breve attenuato-stipitatis, sursum subconstrictis truncatisque (h. e. fere ampulliformibus) 60-70 μ . long.; sporidiis 2-3-stichis, inordinatis, oblongo-cylindraceis, utrinque rotundatis, 2-guttatis, 12-13 μ . longis, hyalinis.

Hab. in ligno putri quercino, Shere, Britannia (CAPRON). — Forma ascorum mox dignoscenda species.

5. **Ceratostomella vestita** Sacc. Mich. I. 370, F. ital. t. 344. — Peritheciis sparsis, subsuperficialibus, globulosis, $\frac{1}{3}$ - $\frac{1}{2}$ mill. diam., pilis tortuosis, septulatis, 200-250 \approx 3, laxe vestitis, in ostiolum cylindraceum denudatum, perithecium subæquans desinentibus; contextu distincte parenchymatico fuligineo; ascis cylindricis, 50-55 \approx 4, apice obtusis, breve stipitatis aparaphysatis, octosporis; sporidiis monostichis ellipsoideis, 6 \approx 3 $\frac{1}{2}$ -4, sæpe inæquilateralibus, distincte 2-guttulatis, hyalinis. 1550

Hab. in ligno fagineo putri, denigrato, socia *Bispora pusilla* Sacc., pr. Treviso, Ital. bor. — A *Ceratostomate Notarisii* Sacc. habitu subsimilis pluribus notis differt.

6. **Ceratostomella De Baryana** (Auersw.) Sacc. *Gnomonia De Baryana* 1551
Auersw. in Myc. Eur. Pyr. p. 23, t. 10, fig. 140 (nec 138). — Peritheciis ligno immersis, sparsis v. gregariis, atris, globulosis ovatisve, 140 μ . diam.; contextu subalutaceo; rostro subcylindraceo, rigido, perithecium subæquante, ex ligno emergentibus; ascis cylindraceis breve stipitatis, octosporis, 68 \approx 6; sporidiis monostichis, ellipsoideis, utrinque rotundatis, continuis, granulosis, subhyalinis, 9-10 \approx 3-4.

Hab. in ligno putri fagineo, am Inselsberge, Germania (FLEISCHHAK).

7. **Ceratostomella rhenana** (Auersw.) Sacc. *Gnomonia rhenana* Auersw. 1552
Mycol. Eur. Pyr. p. 23, t. 10, fig. 139. *Sph. cirrhosa* Fuck. F. rhen. 1804, p. p. — Peritheciis ligno immersis, sparsis v. gregariis, atris, globulosis, 300 μ . diam.; rostro cylindrico, rigido, perithecium subæquante emergente; ascis cylindraceis, in stipitem

brevem attenuatis, octosporis, $154 \approx 12$; sporidiis distichis elongato-oblongis, utrinque rotundatis, curvulis, continuis, $24 \approx 7$, subhyalinis, 4-nucleatis.

Hab. in ligno putri molli quercino, carpineo etc. — A *Cer. cirrhosa* abunde diversa.

8. **Ceratostomella dubia** Sacc. *Melanomma dubium* Sacc. F. Ven. 1553

Ser. III, p. 5. F. ital. fig. 299. — Peritheciis remote sparsis, superficialibus, subglobosis, vix $\frac{1}{3}$ mill. diam., in ostiolum cylindraceo-conoideum perithecium æquans attenuatis, minutissime rugulosis basi hyphis brevibus cinctis, ceterum glabris, carbonaceis, atris; ostiolo obtuso dein minute perforato; ascis cylindraceis, angustis; $150 \approx 8$, paraphysisibus nullis visis, 8-sporis; sporidiis oblique monostichis, oblongo-fusoideis, $20-25 \approx 7-8$, plerumque curvulis, utrinque acutiusculis, majuscule 1-2-guttulatis, hyalinis.

Hab. in ligno denudato putrescente fagineo in sylva Cansiglio Treviso, Ital. bor. parcissime.

9. **Ceratostomella barbirostris** (Duf.) Sacc. *Sph. barbirostris* Duf. in 1554

Turp. Icon. fig. 1, Fr. S. M. II, 473. — Conglomerata, atra, peritheciis globosis scabris, ostiolo elongato clavato patentim pubescente; «ascis tereti-clavatis, deorsum attenuatis $36-40 \approx 5-6$, octosporis; sporidiis subdistichis oblongo-ovoideis, $5-6,5 \approx 2-3$ granulosis, hyalinis».

Hab. ad ligna Galliæ et New Jersey, Amer. bor. — Perithecia plura, conglomerata in cæspites subregulares, exacte globosa, minoris magnitudinis. Ostiola peritheciis sextuplo longiora, apice incrassata, subincurva, tota pubescentia.

10. **Ceratostomella stricta** (Pers.) Sacc. Mich. II, 53. *Ceratostoma* 1555

strictum Pers. Fuck. Symb. myc. p. 127. *Sph. stricta* Pers. Syn. p. 59. — Peritheciis confertis vel seriato-conglomeratis, mox emerisis, sphaeroideis, levibus, rigidis, fragilibus, glabris, atris, rostro stricto, rigido, obtusiusculo, perithecio vix duplo longiore; ascis in pedicellum gracillimum attenuatis, cylindraceo-clavatis, $30-35 \approx 5$ p. sporif., octosporis; sporidiis distichis, elongatis, leviter curvatis, simplicibus, $6-8 \approx 1,5-2$, 2-4-guttulatis, hyalinis.

Hab. ad ligna putria quercina in Suecia, Germania, Gallia, Fennia, Amer. bor. — β . *cingulata* Fr. S. M. II, 474. Peritheciis nigris, apice cingulo fusco, ostiolo longitudine perithecii, incurvo. In Suecia.

11. **Ceratostomella? trichina** (Moug.) Sacc. Mich. II, 53. *Sph. tri-* 1556

china Pers. in Moug. Stirp. Vog. n. 666 et Roum. F. Gall. n. 187.

— *Cer. strictæ* paraffinis, a qua differt præsertim peritheciis setulosis. Nucleum vero albo-cellulosum asporum tantum vidi.

Hab. in ligno putri quercino in Vogesis.

12. **Ceratostomella dispersa** (Karst.) Sacc. *Ceratostoma dispersum* 1557

Karst. Fung. Fenn. exsicc. 966 et Myc. Fenn. II. p. 116. — Peritheciis sparsis, immersis, deinde erumpentibus, interdum demum subsuperficialibus, sphæroideis, atris, glabris, parte superiore interdum fusco-fibrillosis, latit. 0,6–0,7 mill., rostro emerso, subfalcato, rigido, obtuso, pilis brevibus fuscis obsesso, perithecio vix duplo longiore; ascis fusoides-clavatis, pedicello filiformi, 45 ≈ 4,5 octosporis; sporidiis, distichis, elongatis vel oblongatis, rectis, guttulis 4 majusculis præditis, chlorino-hyalinis, 6–8 ≈ 2 paraphysibus nullis.

Hab. in pagina interiore corticis Betulæ vetusti ad Mustiala Fennicæ. — *Cerat. strictæ*, præcipue quoad partes internas, proxime accedit, notis vero allatis facile distinguitur.

13. **Ceratostomella subpilosa** (Fuck.) Sacc. *Ceratostoma subpilosum* 1558

Fuck. Symb. mycol. p. 128. — Peritheciis sparsis, subsuperficialibus, magnitudine formaque ut in fungo spermogonio, nec non extus subtiliter fusco-pilosis, dein glabris, rostroque breviori, obtuso, perforato, glabro; ascis cylindræis, stipitatis, 8spor. 58 ≈ 5; sporidiis oblique monostichis, ovatis, uniguttulatis, hyalinis, 7 ≈ 4; peritheciis spermogonicis, sparsis gregariisque, subsuperficialibus, media magnitudine, carbonaceis, aterrimis, globosis, rostro gracili, plerumque abrupte cylindræo, perithecium æquante, ostiolo perforato, plerumque subtiliter bilabiato, obtusove; spermatis ovatis, biguttulatis, hyalinis, episporio crasso, 8 ≈ 4.

Hab. in ligno putri salicino pr. Hattenheim Germaniæ; æstate spermogonia, hieme insequente perithecia ascophora.

14. **Ceratostomella multirostrata** (Fuck.) Sacc. *Ceratostoma multirostratum* Fuck. Symb. myc. p. 127, t. IV, fig. 41. — Peritheciis 1559

subsuperficialibus, rugulosis, globosis, aterrimis, magnitudine valde varia, $\frac{1}{4}$ – $\frac{1}{2}$ lineæ diam., cum rostro perithecio plerumque æquali, cylindræo, obtuso, perforato, antice plerumque cupulato-dilatato, aliis 2–6rostratis, rostris divergentibus, peritheciis 2–6nucleatis; ascis stipitatis, obliquis, oblongis, 8spor. 44 ≈ 10; sporidiis distichis, oblongis, continuis, 10 ≈ 4, hyalinis. — Spermogonia *Sphæronematis* speciem sistunt, ostiolis acicularibus; spermatis cylindræis 6 ≈ 2 (nec 3 ≈ 2 ut in *Sph. cylindrico* Tode).

Hab. in ligno putri Pini sylvestris prope Budenheim, Germania.

15. **Ceratostomella subsalsa** (Crouan) Sacc. *Sph. subsalsa* Crouan Fi- 1560
nist. p. 25. — Peritheciis sphaeroideis, in rostrum longum curvum
attenuatis, 1-2 mill. diam., fusco-virescentibus; ascis crasse cla-
vatis, octosporis; sporidiis ovoideis hyalinis, crasse 2-guttatis.
Hab. in caulibus emortuis putridis Obiones, Finistere Galliae.
16. **Ceratostomella sphærosperma** (Fuck.) Sacc. *Ceratostoma sphæ-* 1561
rospermum Fuck. Symb. myc. pag. 127. — Peritheciis gregariis
semiimmersis vel totis liberis, globosis, atris, in rostrum conicum
seu abrupte cylindraceum, perithecium æquans attenuatis; ascis
stipitatis, cylindraceis, 24 μ . long. p. sporif., sporidia 8, monosti-
cha, simplicia, globosa, hyalina, 3 μ . diam., includentibus.
Hab. in truncis putridis Pini sylvestris prope Johannisberg
Germaniæ.
17. **Ceratostomella Stevensoni** (B. et Br.) Sacc. *Sph. Stevensoni* B. 1562
et Br. Ann. Hist. Nat. n. 1728. — Peritheciis sparsis v. hinc inde
aggregatis, ovoideis, sursum attenuatis; ascis angustis; sporidiis
monostichis, anguste ellipticis, 5 μ . long., 2-3-nucleatis.
Hab. in ligno putri, Glamis Britanniae.
18. **Ceratostomella canulata** (Preuss) Sacc. *Sph. canulata* Preuss, 1563
Fungi Hoyersw. n. 296. — Sparsa; peritheciis immersis globosis;
ostiolis superficialibus, cylindricis, supra calvis, ad basin hyphis
longis vestitis, ligno penetrantibus, atris, intus albis; ascis cylin-
dricis, octosporis; sporidiis ovatis, albis, nucleum continentibus.
Hab. in ligno vetusto, Hoyerswerda Germaniæ.
19. **Ceratostomella nyssæcola** (B. et C.) Sacc. *Sph. Nyssæcola* B. 1564
et C. North Am. Fungi n. 917. — Semiimmersa, subglobosa; collo
elongato; sporidiis ellipticis, vel brevissime cymbæformibus, 7-8
 μ . longis.
Hab. in ramis Nyssæ in Pensylvania Amer. bor. — Spori-
diorum color non indicatus.
20. **Ceratostomella leptorrhyncha** (Dur. et Mont.) Sacc. *Sph. leptor-* 1565
rhyncha Dur. et Mont. Fl. Alg. p. 510 et Syll. Crypt. n. 817. —
Gregaria; peritheciis minutis, basi immersis, sphaericis, atris, opa-
cis, ostiolo longissimo, tereti, flexuoso nodosoque; ascis minimis, cla-
vatis, 17 \approx 4, innumeris; sporidiis continuis, oblongis, 4-5 μ . long.
hyalinis.
Hab. in cortice Chamæropis humilis, La Calle Algeriæ.

CAMPTOSPHÆRIA Fuck. Symb. myc. p. 140 (Etym. *camptos*, flexus
ob rostellum curvum). — Perithecia carbonacea, innato-erumpen-

tia, pyriformia, in collum obliquum, truncatum, cernuum, perforatum sensim attenuata, extus tenuissime sulphureo-villosa. Asci elongati, 8spori. Sporidia oblique monosticha, pyriformia, sæpe obliqua, continua, hyalina. Paraphyses filiformes.

1. **Camptosphæria sulphurea** Fuck. l. c. t. III, fig. 18. — Caulicola; 1566
peritheciis gregariis, majusculis, tectis, sulphureo-villosis, dein glabris, atris, ostioliis prominulis, crassis, cernuis, atris; ascis $148 \approx 16$; sporidiis oblique monostichis, subpyriformibus, hyalinis, $27 \approx 10$ (in parte latiori).

Hab. in caulibus putridis Peucedani officinalis, prope Hattenheim, Germania. — An *Sph. curvirostra* Sow. huc spectet improbable videtur. Curiosum quod forma peritheciorum illam sporidiorum fere æmulatur.

GNOMONIELLA Sacc. Mich. II, p. 312 (Etym. a *Gnomonia*, cujus generis pars erat). — Perithecia submembranacea, subglobosa, subcutaneo-erumpentia, ostiolo rostellato centrali v. laterali. Asci cylindraceo-clavati, octospori, paraphysati, sæpius lumine apice bifoveolati. Sporidia continua, hyalina, ovoidea v. oblonga, v. rarius subfiliformia. Spermogonia in nonnullis nota.

1. *Eugnomoniella*: peritheciis discretis; sporidiis oblongis, nec bacillaribus.

1. **Gnomoniella tubiformis** (Tode) Sacc. *Gnomonia tubiformis* (Tode) 1567
Auersw. Syn. Pyr. p. 22, t. 8, fig. 121, *Sph. tubæformis* Tode Meckl. II, 51, fig. 128, *Ceratostoma tubæforme* Ces. et De Not. — Peritheciis hypophyllis, parenchymate innatis, gregariis vel subsparis, subsphæroideis, brunneis, rostro stricto, cylindraceo, rigido, obtuso, perithecium fere æquante, concolore, epidermidem fuscata et utrinque inflatam ad inferiorem folii paginam perforantibus, 0,4 mill. latit.; ascis oblongatis, e basi ampliata, paullisper attenuatis, subsessilibus, $45-70 \approx 10-14$, 8sporis; sporidiis subdistichis, oblongatis vel ellipsoideo-oblongatis, ut plurimum inæquilateralibus, simplicibus, vulgo guttulis minutis 2-4 præditis, hyalinis s. chlorino-hyalinis, $13-15 \approx 5,5-6,5$. — Spermogonia (*Leptothyrium cylindrospermum* Bon.) epiphylla, convexa, depressa, orbicularia s. ovoidea, scutiformia, atra, nitida, ore simplici pertusa; spermatidis elongatis, simplicibus, hyalinis, $8-11 \approx 1,5-2$.

Hab. in foliis Alni glutinosæ (rarius Betulæ, Carpini, Ulmi?) in tota fere Europa et Amer. boreali.

2. **Gnomoniella amœna** (Nees) Sacc., *Gnomonia amœna* (Nees) Fuck. 1568
Symb. myc. p. 120, *Sph. amœna* Nees Act. Nat. Cur. IX, n. 4, t. 6, f. 24. — Peritheciis tectis subglobosis, ostiolis duplo longioribus filiformibus compressiuseulis, discum elevatum roseum perforantibus, fragilissimis; ascis stipitatis oblongis, octosporis, $36 \approx 4$; sporidiis distichis fusiformibus, ellipticis, curvatis, continuis, $8 \approx 4$, 2-4-guttulatis, hyalinis.
Hab. in petiolis foliorum Coryli Avellanæ in Germania, Suecia, Belgio, Gallia. — Var. *petiolorum* Schw. Syn. Car. n. 153. Peritheciis tectis, tuberculo albicante immersis atris, ostiolo tereti longiusculo rigido. In petiolis foliorum Liquidambaris, Fraxini etc. in Amer. boreali.
3. **Gnomoniella Avellanæ** (Schm.) Sacc. *Sph. Avellanæ* Schm. Myc. 1569
Heft. I, 84. — Sparsa, subhemisphærica, nigra, villis griseo-fuscis radiatim divergentibus obducta, ostiolo papillæformi atro-nitente; ascis cylindræceo-clavatis; sporidiis ovoideis, majusculis.
Hab. ad folia decidua Coryli in Suecia, Britannia et Germania. — Perithecia exigua, opaca, intus lutescenti-alba.
4. **Gnomoniella spilita** (Lév.) Sacc. *Sph.* (epiphylla) *spilita* Lév. Ann. 1570
Scienc. nat. 5, 1846, p. 162. — Peritheciis gregariis minutissimis innatis nigris, ostiolis exsertis spinosis; ascis clavatis, paraphysatis (?), 8sporibus; sporidiis ovoideis, continuis, hyalinis.
Hab. ad folia ignota.....
5. **Gnomoniella emarginata** (Fuck.) Sacc. *Gnomonia emarginata* Fuck. 1571
Symb. myc. p. 122. — Peritheciis sparsis, tectis, majusculis, lenticularibus, latere emarginatis, atris; ostiolis 1-1½ lin. longis, gracilibus, peritheciis latere emarginato insertis, atris, teretibus, acutis; ascis ellipticis, stipitatis, 8sporibus; sporidiis fusiformibus, sæpe curvatis, simplicibus, biguttulatis, hyalinis. — Status spermogonicus *Discosiam Artocreas* f. *Betulæ* sistit.
Hab. in Betulæ albæ petiolis foliisque putridis raro, prope Æstrich Rhenogovia. — Perithecia in nervis foliorum jam putredine exesorum tantum maturant. — Sec. Auersw. forma *G. setacea* (Pers.). An?
6. **Gnomoniella mirabilis** (Peck) Sacc. *Sph. mirabilis* Peck, 28 Rep. 1572
on the St. Mus. Now York, p. 80, t. 2, fig. 18-21. — Peritheciis sparsis, innatis, subglobosis, membranaceis, nigris; ostiolis longis tenuibus curvis v. flexuosis, lateralibus; ascis late fusoideis; sporidiis stipatis, elongato-fusoideis, 25-30 μ . longis, 4-pluriguttulatis, hyalinis, hinc v. utrinque breve appendiculatis.

Hab. in foliis dejectis Betulæ, Bethlehem, Amer. bor. — Species ostiolo laterali, peritheciis æquante mox dignota.

7. **Gnomoniella nervisequa** (Wall.) Sacc. *Sph. nervisequa* Wallr. Fl. 1573

Crypt. n. 3879. *Gnomonia nervisequa* (Wallr.) Fuck. Symb. myc. p. 122. — Peritheciis depresso-globosis exiguis atris erumpentibus, sparsis nervisequis, e vertice umbonato collum setaceum cylindricum triplo longius nitidum flexuosum libere prominens exserentibus; ascis curvato-stipitatis, oblongis, $36 \approx 4$, 8sporis; sporidiis ellipticis vel fusiformibus, $8 \approx 2$ simplicibus, hyalinis.

Hab. ad nervos foliorum putridorum Salicis, Coryli, Alni, Carpini, in Germania frequens.

8. **Gnomoniella fasciculata** (Fuck.) Sacc. *Gnomonia fasciculata* Fuck. 1574

Symb. myc. p. 121. — Peritheciis gregariis, fasciculatis seu seriatim dispositis et confluentibus, tectis, media magnitudine, globosis; ostiolis longissimis, 1 lineam altis, fasciculato-exertis, rigidis, nudo oculo facile discernibilibus, atris; ascis amplis, utrinque acuminatis, 8sporis, $28 \approx 8$; sporidiis cylindræis, utrinque obtusis (non acuminatis), curvatis, simplicibus, hyalinis, $12 \approx 2$.

Hab. in petiolis nervisque primariis foliorum Quercus, rarius, pr. Æstrich Rhenogoviæ.

9. **Gnomoniella lugubris** (Karst.) Sacc. *Gnomonia lugubris* Karst. 1575

Myc. Fenn. II, p. 121. — Peritheciis sparsis parenchymate innatis, sphæroideis, siccis depressis, atris, rostro cylindræo, obtuso, perithecii diametrum fere æquante, subconcolore, latit. 200–225 mill.; ascis sessilibus, fusoideo-oblongatis, $65-70 \approx 12-15$, octosporis; sporidiis distichis, fusoideo-oblongatis, inæquilateralibus, guttulis 4 majusculis, subchlorinis præditis, hyalinis, $18-20 \approx 6$.

Hab. in foliis Comari palustris putridis socia *Sphærellæ innumerellæ* prope Mustiala Fennia.

10. **Gnomoniella Comari** (Karst.) Sacc. *Gnomonia Comari* Karst. Myc. 1576

Fenn. II, p. 122. — Peritheciis sparsis, epidermide subimmutata tectis eique detractæ subtus adhærentibus, sphæroideis, siccis depresso-sphæroideis, basi cupulæ instar collapsis, atris, rostro brevissimo, conoideo, epidermidem breviter perforante, $0,2-0,3$ mill. diam.; ascis brevissime pedicellatis fusoideo-elongatis vel fusoideo-bacillaribus, $30-39 \approx 6-7$; sporidiis distichis, fusoideo-elongatis, vulgo rectis, guttulatis, chlorino-hyalinis, $6-9 \approx 2$.

Hab. ad petiolos Comari palustris vetustos in insulis Quarken, circa Mustiala et in regione aboënsi (Fennia). — Facile jun-

gitur cum *Gnomoniella devexa* (Desm.) a qua fere modo sporidiis ascisque minoribus recedit.

11. **Gnomoniella? circinata** (Fuck.) Sacc. *Sph. circinata* Fuck. Symb. myc. p. 111. — Peritheciis gregariis, minutis, tectis, circa maculam fuscam circulariter dispositis, papillatis, atris, ostioliis prominulis; ascis oblongis, 8sporis; sporidiis oblongis, triguttulatis, hyalinis. — Sec. Fuck, st. conidicus sistit *Gleosporium Ribis* (Lib.).
Hab. in pag. sup. fol. Ribis alpini prope Johannisberg Germaniæ. — An *Physalospora?*
12. **Gnomoniella vulgaris** (Ces. et De Not.) Sacc. *Gnomonia vulgaris* 1578
 Ces. et De Not. Schem. Sfer. p. 57, *Sph. Gnomon* Tode Meckl. II, 50, fig. 125, *Cryptosphaeria Gnomon* Grev. — Peritheciis sparsis, hypophyllis, primitus sphæroideis, innatis, tectis, deinde emergentibus, cupulato-collapsis (saltem in statu sicco), atris, rostro elongato, recto, sæpe apicem versus paullisper incrassato, perithecium æquante v. paullo excedente. concolore instructis, circiter 0,2 mill. diam.; ascis fusoido-elongatis breviter et acute pedicellatis, 32-42 = 5-6; sporidiis conglobatis, bacillaribus, utrinque acutiusculis, 4-guttulatis, rectis vel leniter curvulis, hyalinis, 12-18 = 1-2.
Hab. in foliis deciduis Coryli Avellanæ, Ostryæ virginicæ, in tota fere Europa et Amer. boreali.
13. **Gnomoniella Rosæ** (Fuck.) Sacc. *Gnomonia Rosæ* Fuck. Symb. mycol. p. 122. — Peritheciis sparsis, hypophyllis, tectis, majusculis, epidermidem pustulatim infantibus; ostioliis perithecio triplo longioribus, exsertis, atris, strictis; ascis longe anguste stipitatis, ellipticis, 8sporis; sporidiis anguste cylindræis, curvatis, 3-4guttulatis, hyalinis, asco duplo brevioribus. — Status spermogonicus, sec. Fuck., sistit *Discosiam clypeatam* f. *Rosæ*.
Hab. in foliis dejectis Rosæ rubiginosæ, rarius, prope Cëstrich, Rhenogovia.
14. **Gnomoniella Pruni** (Fuck.) Sacc. *Gnom. Pruni* Fuck. Symb. myc. 1580
 p. 122. — Peritheciis sparsis, tectis, majusculis, globosis, atris, ostioliis perithecio duplo longioribus, strictis, rectis, aterrimis; ascis minutissimis, clavatis, in stipitem anguste protractis, 24-27 = 5-6, 8sporis; sporidiis anguste cylindræo-fusifformibus, curvatis, sæpe 2- rarius 3-4-guttulatis, hyalinis, 10 = 1,5.
Hab. in foliis putridis Pruni domesticæ et P. spinosæ, pr. Cëstrich, Rhenogovia. — Var. *Padi* Lib. Lamb. Myc. Belg. II. p. 255, ostioliis perithecio triplo v. quadruplo longioribus, In foliis Pruni Padi in Belgio.

15. **Gnomoniella perfidiosa** (Karst.) Sacc. *Gnomonia perfidiosa* Karst. 1581
Symb. myc. II. p. 119. — Peritheciis sparsis, erumpentibus, dein liberis, sphæroideis, rostro brevi, conoideo, atris, latit. circiter 0,4 mill.; ascis subsessilibus, cylindraceis, 50-75 \approx 6-7, octosporis; sporidiis monostichis, ellipsoideis, inæquilateralibus, simplicibus, hyalinis, eguttulatis, 6-9 \approx 3-4.
Hab. in culmis foliisque graminum (Poæ?) exsiccatis prope Mustiala, Fennia, raro.
16. **Gnomoniella Angelicæ** (Fuck.) Sacc. *Sph. Angelicæ* Fuck. Symb. 1582
Mycol. p. 113. — Peritheciis sparsis, laxe seriatis, profunde, recte immersis, globosis, parvis, in collum aciculare, perithecio duplo longius, apice vix prominulum, ut punctiforme appareat, attenuatis, atris; ascis elongatis, 8sporibus; sporidiis subdistichis, oblongoovatis, utrinque obtusis, simplicibus, 10 \approx 3, hyalinis. — Spermogonium, sec. Fuck., sistit *Phomam complanatam* (Tode) Desm.
Hab. in caulibus putridis *Angelicæ sylvestris*, rarius, pr. Œstrich, Rhenogovia; forma spermogonica quoque in Belgio.
17. **Gnomoniella devexa** (Desm.) Sacc. *Gnom. devexa* (Desm.) Auersw. 1583
Myc. Eur. 23, fig. 58, 126, 137. *Sphæria devexa*, Desm. 24 Not. 1857, p. 21. — Caulicola, tecta; peritheciis minutis, gregariis vel sparsis, nigris, subhemisphæricis, inclinatis, intus griseis; ostioliis obliquis conico-elongatis, obtusis, subnitidis, epidermidem perforantibus; ascis subfusiformibus, clavatis, 35-40 \approx 7-8; sporidiis octonis, rectis, utrinque obtusis, 4-guttulatis, 15 \approx 2-3.
Hab. in caulibus exsiccatis *Polygoni Persicariæ*, *P. Fagopyri* etc. in Gallia, Germania, Belgio, Britannia. — Var. *media* Sacc. (nec *Sph. Euphorbiæ* Fuck.). Ascis clavatis, apice subtruncatis lumineque 2-foveolatis, 50 \approx 14 p. sporif., deorsum attenuatis octosporis; sporidiis fusoideis curvulis v. rectis, medio constrictis, 18-20 \approx 4, 4-guttulatis, utrinque breviter apiculatis, hyalinis, perithecorum ostioliis, rectiusculis. In caulibus *Euphorbiæ dulcis* et *palustris* in Italia bor. et Gallia.
18. **Gnomoniella curvicolla** (Peck) Sacc. *Sphæria curvicolla* Peck 1584
31 Rep. on the St. Mus. New York. — Peritheciis minutis, 80-100 μ . diam., sparsis v. 2-3 confluendo aggregatis, erumpentibus, denique nudis, hemisphæricis, nigris; ostioliis brevibus subcylindricis, leniter curvis; ascis oblongis; sporidiis stipatis v. distichis, 15-23 \approx 7,5, hyalinis.
Hab. in caule putri *Polygoni articulati*, Center, Amer.

hor. — Ostiolo curvulo tereti v. compressiusculo, sapius versus plantæ matricis apicem inclinato mox dignoscenda species.

19. **Gnomoniella excentrica** (C. et P.) Sacc. *Sphæria excentrica* C. 1585
et Peck. 25 Rep. on the St. Mus. — Peritheciis sparsis, depressis, nigris, initio epidermide tectis, dein ostiolo acuto rostellato laterali erumpentibus et subsuperficialibus; ascis subelavatis; sporidiis stipatis v. distichis, fusoideis, 8,5–9 μ . longis, 4-nucleatis, hyalinis.

Hab. in caule putri Polygonorum, Albany et Portville, America boreali.

20. **Gnomoniella Amygdalinæ** (Fuck.) Sacc. *Gnomonia Amygdalinæ* 1586
Fuck. Symb. myc. p. 121. — Peritheciis sparsis, tectis, globosis, *Pleosporæ herbarum* magnitudine, atris, ostiolis exertis, perithecio duplo longioribus, concoloribus, cylindraceis, rectis; ascis oblongis, 46 \approx 8, 8spor. sporidiis distichis, fusiformibus, parum curvatis, utrinque subtilissime apiculatis, 4guttulatis, hyalinis, 14 \approx 4.

Hab. in caulibus siccis Euphorbiæ amygdalinæ in Jura Helvetiæ (MORTIER). — *Gnomonia deveææ* v. *medicæ* et *Gn. Euphorbiæ* valde affinis, at distinguenda.

21. **Gnomoniella Euphorbiæ** (Fuck.) Sacc. *Gnomonia Euphorbiæ* Fuck. 1587
Sacc. Mich. II, 312, *Sphæriæ Euphorbiæ* Fuck. Enum. Fung. Nass. p. 69, t. I. fig. 23. — Peritheciis tectis, subtus collabascendo excavatis, *Pleosporam herbarum* subæquantibus, aterrimis, ostiolis papillatis, obliquis, epidermidem perforantibus; ascis tereti-clavatis, deorsum attenuatis, apice 2-foveolatis truncatisque, 90 \approx 20; sporidiis distichis, breve fusoideis, inæquilateralibus, 20 \approx 8, 2–4-guttatis, hyalinis.

Hab. in caulibus Euphorbiæ palustris et verrucosæ in Nassovia et Helvetia. — A *Gnom. deveææ* præcipue sporidiis duplo crassioribus differt.

22. **Gnomoniella idæicola** (Karst.) Sacc. *Gnomonia idæicola* Karst. 1588
Symb. myc. II, p. 126. — Peritheciis epidermide plerumque infuscata tectis eique solutæ adherentibus, solitariis vel 2–5 in soros stipatis, sphaeroideis, siccis, collapsis, nigris, ostiolis sphaeroideis, per epidermidem erumpentibus, subinde confluentibus, concoloribus instructis, latit. 0,2 mill.; ascis fusoideo-clavatis, 30–40 \approx 6–7 octosporis; sporidiis distichis, fusoideo-elongatis, rectiusculis vel leviter curvulis, guttulatis, chlorino-hyalinis, 8–12 \approx 2–2,5.

Hab. ad ramulos emortuos Rubi idæi circa Mustiala Fenniæ.

II. *Mamiania*: peritheciis sub pseudostromate phyllogeno nigro hinc inde congregatis; sporidiis ovoideis.

23. **Gnomoniella fimbriata** (Pers.) Sacc. *Sph. fimbriata* Pers. Symb. 1589
 p. 36. *Gnomonia fimbriata* (Pers.) Fuck. Symb. myc. pag. 120.
Mamiania fimbriata (Pers.) Ces. et De Not. — Tecta, peritheciis confertis in tuberculum nigrum confluentibus, ostiolis erumpentibus spinulosis, basi fimbria albicante cinctis; ascis fusoido-oblongis, 45–50 \approx 10–12, octosporis; sporidiis distichis, ellipsoideis, hic obtusiusculis hinc acutiusculis, 2-guttulatis, hyalinis v. dilute chlorinis, 10–11 \approx 5. St. conidicus refert *Glaeosporium Carpini* Desm.
Hab. in foliis Carpini Betuli in tota fere Europa et Amer. bor. — Tubercula in utraque folii pagina prominent, primo planiuscula atra, demum convexa, ob epidermidem cinerascenti-atra; perithecia in parenchymate folii nidulantia globosa; ostiola in pagina inferiori tantum erumpunt distantia, teretia, lævia, æqualia v. clavata, recta v. deflexo-flexuosa.
24. **Gnomoniella Coryli** (Batsch.) Sacc. *Gnomonia Coryli* Batsch. 1590
 Auersw. Syn. Pyr. eur. p. 23, t. 8, f. 123. *Sphæria Coryli* Batsch. El. Fung. Cont. II. fig. 231. — *Mamiania Coryli* De Not. Schema p. 57. — Peritheciis hypophyllis, distinctis, in circulum dispositis, parenchymati innatis, epidermide atrata et inflata utrinque tectis, depresso-sphæroideis, subincoloratis, rostro crasso, cylindraceo, atro, perithecii altitudinem feræ æquante, discum minutum, pallidum perforante præditis, latit. 0,3 mill.: ascis clavatis, in pedicellum brevem, tenuem acuminatis, 36–40 \approx 7, 8sporis; sporidiis distichis, obovoideis, simplicibus, subhyalinis, intus granulosus, 7 \approx 3. — Spermogonia (*Leptothyrium Coryli* Fuck.) scutiformia, in macula exarida, obscuriori sparsa, demum applanata plicataque, atrofusca, nitida, minutissima; spermatis vermicularibus, curvatis, linearibus, multiguttulatis, hyalinis, 18 \approx 2.
Hab. in pag. inf. foliorum Coryli Avellanæ in tota fere Europa et Amer. bor., plerumque in montosis.

III. *Ophiognomonia*: sporidiis bacillari-filiformibus.

25. **Gnomoniella melanostyla** (DC.) Sacc. *Gnomonia melanostyla* (DC.) 1591
 Fuck. Symb. myc. p. 122. *Sph. melanostyla* DC. Fl. Fr. VI. p. 129. — Peritheciis subrotundis tectis e rufescente-nigris, ostiolo gracili æquali nigro, 5–6-plo longiore; ascis elliptico-oblongis, deorsum attenuatis, stipitatisque, 60 \approx 5, apapophysatis, tunica apice in-

crassata; sporidiis octonis, elongato-filiformibus, 25-35 \approx 1-2, parallelis, utrinque acuminatis, hyalinis.

Hab. in foliis dejectis Tiliæ europææ et americanæ sæpius hypophylla in Suecia, Germania, Gallia, America boreali. — Ostiola modo stricta, modo subtorta. Asci jodi ope apice leniter cœrulescunt.

LÆSTADIA Auersw. in Hedw. 1869, p. 177 reform. (Etym. a Doct. C. P. Læstadio, Sueco). — Perithecia lenticularia, innata, membranacea, typice poro simplici pertusa, subinde subastoma. Asci paraphysati, octospori, sæpius clavulati. Sporidia ovoidea v. oblonga, continua, hyalina. — Fungilli minuti, sæpius foliicolæ, *Sphærella* analogi, sed amerospori,

1. **Læstadiæ punctoidea** (Cooke) Auersw. in Hedw. 1869, n. 12, p. 178 1592
et in Myc. Eur. t. 1, fig. 8, *Sphærella punctoidea* Cooke Handb. n. 2751. — Peritheciis epiphyllis rarius hypophyllis, epidermidi innatis, in maculas minores collectis, humidis depresso-sphæroideis, siccis pezizoideo-collapsis, atris, nitidis, 180 μ . latit.; ascis cylindraceo-clavatis, curvulis, octosporis, 50-60 \approx 10; sporidiis subdistichis, oblongatis, utrinque attenuatis, simplicibus, eguttulatis, hyalinis, 10-16 \approx 4-6.

Hab. in pag. superiore foliorum *Quercuum* in Britannia, Belgio et Fennia.

2. **Læstadiæ alnea** (Fr.) in Hedw. 1869, n. 12, p. 177 et in Myc. Eur. 1593
Pyr. t. II, fig. 15. *Sph. alnea* Fr. S. M. II, 520. — Peritheciis hypophyllis, sparsis, epidermide tectis eaque sublata liberis, depresso-sphæroideis, siccis cupulæ instar collabentibus, 0,2 mill. latit. ostiolo papillato, erumpente, dein, in peritheciis collapsis, obsoleto, ascis clavatis in pedicellum tenuem attenuatis, 60-80 \approx 10-12, octosporis; sporidiis distichis, fusoides-oblongatis v. fusoides-elongatis, utrinque acutiuseculis, rectis, 2-4-guttulatis, hyalinis, 14-18 \approx 3-4.

Hab. in foliis putridis *Alni glutinosæ* in Suecia, Fennia, Germania, Belgio.

3. **Læstadiæ Rosæ** Auersw. Hedw. 1869, p. 178, *Sph. Rosæ* Auersw. 1594
in Myc. Eur. t. 7, fig. 97. — Peritheciis hypophyllis, epidermidi adnatis, nigris, nitidulis, siccis rugulosis, *Discosiam* fere æmulantibus, gregariis, 100 μ . fere latis; ascis amplis obovato-oblongis, brevissime stipitatis octosporis, 50 \approx 18; sporidiis distichis, ellipticis utrinque rotundatis, continuis, granulosis, 15 \approx 7, hyalinis.

Hab. in pag. infer. foliorum Rosæ caninæ prope Arnstadt Germaniæ (FLEISCHHACK).

4. **Læstadia Cerris** Pass. Micr. ital. n. 2, in Rev. myc. II, p. 33. — 1595
Maculis discoideis in foliis vivis expallentibus; peritheciis immersis globosis, atris, luce transversa præsertim perspicendis, cellulis amplis irregulariter hexagonis vel trapezoideis contextis; ascis clavatis basi attenuato-stipitatis, numerosis, cæspitosis, $42 \approx 7$, 8-sporis; sporidiis ovalibus, integris, endoplasmate granuloso opaco, $10 \approx 5$; paraphysibus non visis.

Hab. in foliis vivis Quercus Cerris, per hyemem tantum humi maturans, Collechio Parmæ, in Italia boreali.

5. **Læstadia Cookeana** (Auersw.) Sacc. Fungi Ven. Ser. V, p. 175, 1596
Fungi ital. t. 544, *Sphærella punctiformis* Cooke Handb. n. 2750, nec Pers. *Sph. Cookeana* Auersw. in Myc. Eur. Pyr. 2, t. 1. f. 6. — Sparsa; peritheciis innatis, punctiformibus, globoso-lenticularibus, dein umbilicatis; ascis clavulatis $40-45 \approx 9-10$, aparaphysatis, octosporis; sporidiis ovoideo-oblongis, $6-9 \approx 3-4$, continuis, granulosis, chlorino-hyalinis.

Hab. in foliis dejectis quercinis in Britannia, Germania, Gallia et Italia.

6. **Læstadia radiata** (Wallr.) Sacc. *Sphæria radiata* Wallr. Crypt. 1597
n. 3729, Mont. Pl. Cellul. VIII, p. 66. — Peritheciis hypophyllis minutissimis sparsis, nigris, hemisphæricis, summam epidermidis pelliculam tenuissimam hyalinam veluti in fibrillulas radiantes divulsam elevantibus; ascis exiguis clavato-lanceolatis, obtusis, octosporis; sporidiis fusiformi-oblongis, conformibus, continuis, hyalinis.

Hab. ad folia Sorbi torminalis in Germania. — *Læstadia Cookeanæ* peraffinis videtur.

7. **Læstadia Niesslii** Kunze Fungi sel. exsic. n. 241, Rehm. Ascom. 1598
n. 593, Hedw. 1881, p. 53. — Peritheciis sæpius epiphyllis, hinc inde dense gregariis, initio epidermide velatis, globoso-depressis, 150μ . diam., ostiolo obsoleto, denique subumbilicatis, nigris; ascis clavatis, crasse tunicatis, $60 \approx 9$, octosporis, pseudoparaphysatis; sporidiis elliptico-oblongis, rectis curvulisve, obtusiusculis $9-11 \approx 3,5-4$, hyalinis, distichis.

Hab. in foliis emortuis Populi dilatatæ prope Eislaben Germaniæ.

8. **Læstadia socia** Penz. Fung. Agrum. n. 20. — Peritheciis hinc 1599
inde laxiuscule gregariis, epidermide velatis, globoso-depressis, subinde umbilicatis, poro pertusis, $180-200 \mu$. diam., contextu paren-

chymatico. fusco; ascis clavulatis breve et crassiuscule stipitatis, 50-60 \approx 10-13, aparaphysatis, apice rotundatis, octosporis; sporidiis imbricato-distichis, ex oblongo breve fusoideis, subinde inæquilateralibus, utrinque obtusiusculis, 14-18 \approx 5-6, granulosis, hyalinis.

Hab. in utraque pagina foliorum Citri Limonii dejectorum, Carini, Sicilia (BELTRANI), sociis *Spharella sicula* Penz. et *Voluella fusarioide* Penz. — Partes foliorum expallentes inhabitat, dum *Spharella* maculas nigro-cinerascentes efficit.

9. **Læstadia Veneta** Sacc. et Speg. Mycoth. Ven. n. 1266, Mich. I, 1600
351, Fungi ital. t. 355. — Peritheciis sparsis, foliorum parenchymate immersis, denique epidermidem operculatim dirumpentibus, e globoso lenticularibus, nitidulis, 120-150 micr. diam., atris, ostiolo minutissimo papillulato, contextu dense parenchymatico, fuligineo; ascie late cylindræis v. cylindræo-clavatis breve attenuato-stipitatis, 48-55 \approx 12-13, apice tunica incrassata perforataque rotundatis, aparaphysatis, octosporis; sporidiis distichis vel inordinate tristichis, oblongo-fusoideis, 14-16 \approx 4-5, anguste limoniiformibus, utrinque obtusiusculis, raro leniter inæquilateralibus, non v. utrinque minute 1-guttulatis, hyalinis.

Hab. in foliis Platani occidentalis dejectis, Padova, Italiæ (C. SPEGGAZZINI). — Sporidia tandem prope basim (ex interruptione plasmatis) spurie septata fiunt, quo caractere ad *Apiosporam* nutant.

10. **Læstadia cylindrasca** Sacc. et Speg. Mich. I, 369, Fungi ital. 1601
t. 356. — Peritheciis ut præcedentis, diam. 100 μ ., ostiolo 30 diam. contextu laxe parenchymatico fuligineo; ascis cylindræis 75-80 \approx 5-6, aparaphysatis, octosporis; sporidiis monostichis, oblongo-limoniiformibus, 12-15 \approx 3-4, 2-guttulatis, hyalinis.

Hab. in foliis languidis Platani orientalis, Conegliano, Ital. boreali (SPEGGAZZINI). — A *L. Veneta*, cui peraffinis, præcipue ascis cylindræis angustis diversa.

11. **Læstadia contecta** (Desm.) Sacc. *Sph.* (Depazea) *contecta* Desm. 1602
14. Not. p. 37, 1847. — Maculis amphigenis, subrotundatis vel irregularibus, pallide rufescentibus, exaridis, ambitu brunneo-cinctis; peritheciis hypophyllis, subglobosis, demum depressis, epidermide tectis; ascis clavatis, subtorulosis 50 μ . longis; sporidiis ovoideis 20. μ . long. 1-2-globoso-guttulatis.

Hab. ad folia viva *Quercus cocciferæ*, in Gallia.

12. **Læstadia Areola** (Fuck.) Sacc. *Sphaerella Areola* Fuck. Symb. 1603
Myc. p. 105, Auersw. Myc. Eur. Pyr. 2, fig. 85. — Peritheciis

hypophyllis, in macula areolata, cinerascenti, gregariis, hemisphæricis, opacis, atris, subtilissime papillatis, 80–100 μ . diam.; ascis fasciculatis, oblongis, sessilibus, 8sporis, 40–60 \approx 10; sporidiis distichis, oblongo-ovatis subclavatisve, simplicibus, 12 \approx 4–5.

Hab. in foliis putridis Quercus, prope Budenheim Germaniæ.

13. **Læstadia acerifera** (Cooke) Sacc. *Sphærella acerifera* Cooke ¹⁶⁰⁴
Handb. n. 2755. — Hypophylla; peritheciis sparsis, innatis, globosis, minutis, nigris; ascis late cylindræis; sporidiis navicularibus, hyalinis, 2–guttulatis, 20 \approx 6–7.

Hab. in foliis putrescentibus Aceris campestris, Shere, Surrey, Britannia.

14. **Læstadia sylvicola** Sacc. et Roum. Reliq. mycol. Libert. II. n. ¹⁶⁰⁵
114, t. XIX, f. 8. — Peritheciis gregariis, innatis, globoso-depressis, 100–120 μ . diam., contextu parenchymatico ochraceo-fusco circa ostiolum punctiforme subhyalino; ascis cylindræis breve stipitatis, 80–90 \approx 9–10, aparaphysatis, octosporis; sporidiis sæpius monostichis ellipsoideo-oblongis, 10–12 \approx 5–6, hyalinis.

Hab. in foliis Quercus Roboris amphigena, Malmedys, Gallia et Germania.

15. **Læstadia Systema solare** (Fuck.) Sacc. *Sph. Systema-solare* ¹⁶⁰⁶
Fuck. Symb. Myc. p. 111, tab. III, fig. 27. *Depazea Systema-solare* Crié, Dep. p. 38, t. VI, fig. 5. — Peritheciis circa discum applanatum, orbicularem, lineam latum, atrum, glabrum gregarie-dispositis, pusillis, ab epidermide albicante tectis, globosis, ostiolis prominulis, parum setulosis, atris; ascis stipitatis, linearibus, rectis, 8sporis, 58 \approx 6; sporidiis monostichis, obovatis, simplicibus, uniguttulatis, dilute flavis, 7 \approx 5. — Spermogonium sistit *Phyllostictam cornicolam* (DC.) Rabh.

Hab. in pag. sup. Corni sanguineæ, rarius prope Hattenheim Germaniæ, Sarthe Galliæ.

16. **Læstadia excentrica** (Crié) Sacc. *Depazea excentrica* Crié, Sur ¹⁶⁰⁷
les Depazées, p. 38, tab. VI, fig. 8. — Maculis excentricis amphigenis albidis zona nigra cinctis; peritheciis epi-hypophyllis, nigris; ascis clavatis crassiusculis, breve crasse stipitatis, octosporis; sporidiis continuis, ovato-oblongis, hyalinis, 10–12 \approx 4–5. — Spermogoniis *Phomam cylindrosporæ* affinem sistentibus, spermatis cylindræis utrinque obtusis, 25–30 μ . long.

Hab. in foliis Buxorum hiemali tempore in Gallia.

17. **Læstadia perpusilla** (Desm.) Sacc. *Sphæria* (foliicola) *perpusilla*, ¹⁶⁰⁸
Desm. 13 Not. 1846, p. 80. — Epiphylla; peritheciis minutissimis

sparsis, nigro-fuscis, innato-prominulis, poro pertusis; ascis tubulosis, 50 μ . longis; sporidiis ovoideo-oblongis 5 μ . longis.

Hab. in foliis siccis Phragmitis et Graminum variorum in Gallia, Britannia, Belgio, Italia.

18. **Læstadia microspora** (Auersw.) Sacc. *Sphærella microspora* 1609

Auersw. Myc. Eur. Pyr. p. 16, fig. 76. — Peritheciis hypophyllis nigris, epidermide tectis translucentibus, undique dense sparsis v. inter fibras subseriatis, globosis, poro pertusis, 60 μ . diam.; ascis ovato-oblongis e basi ampliata, substipitatis, octosporis, 36 \approx 10; sporidiis subtristichis, stipatis, oblongo-fusoideis, utrinque acutiuseculis, rectis, continuis, 4-nucleolatis, 10 \approx 1,5, hyalinis.

Hab. in foliis siccis Milii effusi in Germania.

19. **Læstadia canificans** (Fuck.) Sacc. *Sphærella canificans* Fuck. 1610

Symb. myc. p. 101. — Peritheciis sparsis gregariisve, Sphæriæ punctiformis magnitudine, globosis, papillatis, dein liberis, atris; ascis fasciculatis, oblongo-clavatis, 8spor. 50 \approx 10; sporidiis subdistichis, ovato-oblongis, hyalinis, 10 μ . longis.

Hab. in foliis nondum emortuis Triticis repentis pr. Æstrich, Rhenogovia. — Folia fungillo infecta fere cana evadunt.

20. **Læstadia rhytismoides** (Berk.) Sacc. *Sphæria rhytismoides* Bab. 1611

et Berk. Brit. Fungi n. 178, *Sphærella rhytismoides* De Not. Recl. Pir. p. 12. *Sph. Dryadis* Fuck. Symb. myc. p. 108, t. II, fig. 41. — Epiphylla; peritheciis majusculis, in macula indeterminata, fusca semiimmersis, globosis, aterrimis, perforatis, demum depressis; ascis fasciculatis, stipitatis, clavatis, 8spor. 50–58 \approx 14–16; sporidiis distichis v. inordinatis, oblongo-ovatis, subinæquilateralibus, utrinque obtusis, guttulatis, 14–16 \approx 5–6, hyalinis.

Hab. in pag. sup. foliorum nondum emortuorum Dryadis octopetalæ in Britannia, Spitzbergia, Sibiria asiatica, Germania, Italia. — Nucleus perithecorum roseus.

21. **Læstadia attenuata** (Crié sub Dep.) Sacc. Crié Sur les Depazées 1612

pag. 39, tab. VI, fig. 7. — Maculis indeterminatis; peritheciis epi-hypophyllis nigris; ascis longe pedicellatis; sporidiis ellipticis, hyalinis, continuis v. diblastis, guttulatis, 13–14 \approx 4–5.

Hab. in Gallia, in foliis arborum nostratium, hieme, sociis spermogoniis (*Septoria*) et pycnidibus (*Hendersonia*).

22. **Læstadia angulata** (Fuck.) Sacc. *Sphærella angulata* Fuck. Symb. 1613

myc. App. II, p. 20. — Peritheciis hypophyllis, dense gregariis, gregibus inter foliorum nervos primarios maculas angulatas, a nervis limitatas, nigras formantibus, minutis, globoso-conicis, sub epi-

dermide natis, demum subliberis, perforatis, lævibus; ascis fasciculatis, subcylindraceis, sessilibus, plerumque curvatis, 8sporis, $40 \approx 8$; sporidiis distichis, lanceolato-clavatis, continuis, plerumque curvatis, hyalinis, $12 \approx 2$.

Hab. in pag. infer. foliorum putrescentium Berberidis vulgaris, raro prope Æstrich, Germania. — Peritheciis nitidis, densis, minutis a *Sphærella Berberidis* Nits. mox dignoscenda.

23. **Læstadia echinophila** (Ces.) Sacc. *Sphæria echinophila* Ces. Unio 1614
it. crypt. n. XXI, *Sphærella echinophila* Auersw. Myc. Eur. Pyr. p. 3, fig. 103. — Peritheciis nigris, adnatis, sparsis, depresso-globosis, poro pertusis, variæ magnitudinis; ascis clavato-teretibus, sessilibus, $27 \approx 4$, octosporis; sporidiis distichis cylindraceo-oblongis, utrinque rotundatis, curvulis, continuis, $4 \approx 1$, hyalinis.

Hab. in spinis capsularum Castaneæ vescæ in Italia.

24. **Læstadia Cephalariæ** (Auersw.) Sacc. *Sphærella Cephalariæ* 1615
Auersw. Myc. Eur. Pyr. p. 14, fig. 67. — Peritheciis epiphyllis olivaceis, epidermide tectis, centro maculæ minutæ pallidæ insidentibus, subglobosis, poro pertusis, subconfluentibus, $90-100 \mu$. d.; ascis clavato-oblongis, sessilibus, 8-sporis, $46 \approx 10$; sporidiis distichis obovato-oblongis, utrinque rotundatis, continuis, $12-14 \approx 4$, subluteolis, subinde 1-guttulatis.

Hab. in pag. sup. foliorum Cephalariæ alpinæ emortuorum in Germania. — An sporidia tandem septata?

25. **Læstadia lusitanica** (Auersw.) Sacc. *Sphærella lusitanica* Auersw. 1616
Myc. Eur. Pyr. p. 15, fig. 62. — Peritheciis nigris, epidermide tectis, depresso-globosis, poro pertusis, dense sparsis, copiosis, $60-100 \mu$. diam.; ascis obovatis, breve stipitatis, $55 \approx 21$, octosporis; sporidiis 2-3-stichis, obovatis, apice rotundatis, infra obtusis, continuis, $14 \approx 5-6$, pallidis, nubilosis.

Hab. in Dianthi lusitanici caule in Sierra nevada Lusitaniæ. 1617

26. **Læstadia Marii** (De Not.) Sacc. *Sphærella Marii* De Not. Recl. Piren. in Comm. II, p. 488. — Epidermide primum tecta, demum denudata, sparsa, punctiformis, atra; peritheciis rotundatis, vertice obtuse conoideis, ostiolo latiusculo dehiscentibus, basi cubilibus insculptis, fibris dematiaceis villosis, molliusculis, cellulis turgidis fusciscentibus contextis; ascis copiosis crassis, oblongatis, octosporis; paraphysibus nullis; sporidiis oblongatis, simplicibus, hyalino-luteolis, granulis exiguis fœtis.

Hab. in caulibus emortuis Nicotianæ Tabaci, Chiasso, Cantone Ticino, Italiæ bor. et Helvetiæ.

27. **Læstadia minutissima** (Auersw.) Sacc. *Sphærella minutissima* 1618
 Auersw. in Myc. Eur. Pyr. p. 3, fig. 89. — Peritheciis hypophyllis et epiphyllis, nigris, subnitidulis, epidermide innatis, gregariis, maculas nigras angulosas, minutas, nudo oculo inconspicuas, $\frac{1}{2}$ -1 mill. diam., formantibus, globosis v. depresso-globosis, poro pertusis, 70-80 μ . diam.; ascis clavatis, subsessilibus, 27 \approx 4-5; sporidiis distichis, stipatis, v. submonostichis, oblongis, continuis, hyalinis, 8-2, guttulatis.

Hab. in foliis Alni glutinosæ languidis in Germania.

28. **Læstadia carpinea** (Fr.) Sacc. F. it. t. 543. *Sph. carpinea* Fr. 1919
 M. II. 523. *Sphærella carpinea* (Fr.) Auersw. *Ascospora carpinea* Fr. S. V. S. p. 425 (Nec *Sphærella* (*Apiospora carpinea* Rehm, Asc. n. 496 (Cfr. *Hypospila*). — Gregaria, innata; peritheciis globoso-depressis, inæqualibus, nigris, ostiolo obsoleto; ascis cylindræo-clavatis, deorsum attenuatis, 50-60 \approx 8, aparaphysatis, octosporis; sporidiis oblongo-ellipsoideis, inæquilateralibus, hyalinis, 14-15 \approx 4-5, varie guttulatis.

Hab. in foliis exaridis Carpini Betuli et C. Americanæ in Britannia, Germania, Suecia, Belgio, Gallia, Italia et America boreali. — Perithecia, epidermide consumpta, subnuda, vix pertusa, late gregaria.

29. **Læstadia millepunctata** (Desm.) Sacc. *Dothidea millepunctata* 1620
 Desm. 14 Not. p. 177. *Stigmatea millepunctata* Kickx Fl. crypt. Fl. I. 366. — Peritheciis minutissimis punctiformibus, copiosis, sparsis v. aggregatis, nigris, erumpentibus epidermidem non atrantibus ostiolo obsoleto; nucleo albo; ascis subclavatis, 40 μ . longis; sporidiis ovoideis v. subcylindræis, brevibus, utrinque obtusis, 2-3-guttulatis, 7-10 μ . longis.

Hab. in utraque pagina foliorum Rhododendri arborei in hortis Galliæ et Belgii.

30. **Læstadia Pinastri** (DC.) Sacc. *Sphæria Pinastri* DC. Fl. Fr. VI. 1621
 p. 133. *Sphærella Pinastri* Cooke Handb. n. 2757. — Peritheciis globosis depressis immersis, in collum breve epidermidem perforans productis, ostiolo non prominulo; ascis clavatis; sporidiis stipatis, ellipticis, subinde acuminatis, hyalinis, 7,5-10 μ . longis.

Hab. ad folia dejecta Pinorum in Gallia, Britannia, Germania, Suecia. — Perithecia sparsa, in parenchymate foliorum nidulantur, plerumque ad alterutrum latus nervi medii disposita, nigra, collo brevi truncato in utraque folii pagina erumpente.

31. **Læstadia cooperta** (Desm.) Sacc. *Sphæria* (foliicola) *cooperta*, 1622

Desmaz. 17 Not. 1849, p. 29, *Sphærella cooperta* Auersw. in Myc. Eur. Pyr. p. 6 (nec fig. 13). — Hypophylla, sparsa; peritheciis minutis, numerosis, astomis, nigris, in parenchymate folii nidulantibus, epidermide tectis; ascis octosporis exacte clavatis 50 μ . longis; sporidiis ovoideo-oblongis, 7 \approx 3, hyalinis.

Hab. in foliis delapsis *Quercus cocciferæ* in Gallia.

32. **Læstadia? jasminicola** (Desm.) Sacc. *Sphæria* (follicola) *jasminicola* Desm. 13 Not. 1846, p. 83. — Amphigena, gregaria, innato-prominula, atra; peritheciis minutissimis poro apertis, intus cinereis, in macula albida insidentibus; ascis.....; sporidiis exillimis 4-5 μ . longis, oblongis, utrinque obtusis, 2-guttulatis. 1623

Hab. in foliis *Jasmini officinalis* in Gallia.

33. **Læstadia Bupleuri** (Dur. et Mont.) Sacc. *Sph.* *Bupleuri* Dur. et Mont. Fl. Alg. p. 538. Mont. Syll. Crypt. n. 876. — Amphigena; peritheciis gregariis epidermide sublevata decolorataque tectis, innato-prominulis, minutissimis subglobosis atris, intus albis, poro simplici pertusis; ascis sacciformibus, 50 \approx 20, sporidia 8 fusiformia hyalina granulosa, 25 \approx 6, foveolatis. 1624

Hab. in foliis *Bupleuri spinosi*, in summo monte *Atlante* *Algeriæ* (DURIEU).

34. **Læstadia Acetabulum** (Berk.) Sacc. *Sphæria* (foliicola) *Acetabulum* Berk. in Fl. Nov. Zel. II, 206, t. CVI, fig. 2. — Hypo- et epiphylla; peritheciis tectis depressis subirregularibus, omnino astomis, supra collapsis, subtus convexis; ascis oblongis attenuato-truncatis breve stipitatis; sporidiis (immaturis) oblongis, continuis, hyalinis. 1625

Hab. in foliis *Corynocarpi lævigatæ*, *Apiti Novæ Zelandiæ* (COLENZO).

35. **Læstadia fraxinicola** (Curt. et Peck) Sacc. *Depazea fraxinicola* Curt. et Peck 23. Rep. on the St. Mus. p. 65. — Maculis arecentibus, subcircularibus, subinde fusco-marginatis, 7-14 mill. diam.; peritheciis nigris, subumbilicatis, centroque papillatis; ascis fusoidis, 4-8-sporis; sporidiis dense stipitatis, oblongo- v. angusto-ellipticis, utrinque minute guttulatis, 12-15 \approx 4-5. 1626

Hab. in foliis *Fraxini americanæ*, Albany, Amer. bor.

35. **Læstadia minuscula** (Lév.) Sacc. *Sphæria* (foliicola) *minuscula* Lév. Ann. Scienc. nat. 5, 1846, p. 260. — Peritheciis epiphyllis, adnatis, sparsis, punctiformibus hemisphæricis nitidis, ostioliis nullis; ascis clavatis, octosporis, aparaphysatis; sporidiis ovoideis v. subpyriformibus, continuis, hyalinis. 1627

Hab. in Java ad folia *Codiai* variegati (ZOLLINGER).

36. **Læstadia Mappa** (Berk.) Sacc. *Depazea Mappa* Berk. Dec. n. 305, 1628
t. 1, fig. 3. Hook Journ. 1851, p. 18. — Amphigena; maculis sub-
annulatis, sinuosis versicoloribus fusco-limitatis; peritheciis pun-
ctiformibus, olivaceis; ascis brevibus fusoides, fasciculatis, subses-
silibus, octosporis; sporidiis distichis, tereti-oblongis, continuis,
hyalinis.

Hab. in foliis coriaceis, Caripi Brasiliæ (SPRUCE).

37. **Læstadia nebulosa** (De Not.) *Sphærella nebulosa veneta* De Not. 1629
in Hedw. vol. V. (1866) p. 44. — Peritheciis subepidermicis, rotun-
datis, vertice obtuse umbonato ostiolatis; ascis e placenta basali
grumosa, deorsum attenuatis, oblongatis, aparaphysatis, octosporis;
sporidiis fusoides, minute-pluriguttulatis, hyalinis, 10 ≈ 5.

Hab. in caulibus siccis *Peucedani Veneti* pr. Bolzano Ty-
rolia (HAUSMANN). — Habitus *Sphærellæ nebulosæ*, sed ame-
rospora.

38. **Læstadia fœda** (Lév.) Sacc. *Sphæria* (epiphylla) *fœda* Lév. Ann. 1630
Scienc. nat. 5, 1846, p. 261. — Peritheciis epiphyllis, gregariis, in-
natis, macula pallida insidentibus, globosis nigris, ostioliis punctifor-
mibus; ascis oblongis v. cylindræis, aparaphysatis, octosporis;
sporidiis monostichis, ovoideis continuis, hyalinis, 1-nucleatis.

Hab. in Chili ad folia Graminearum (GAY).

39. **Læstadia Melastomatum** (Lév.) Sacc. *Sphæria* (epiphylla) *Mela-* 1631
stomatum Lév, Ann. Scienc. nat. 3, 1845, p. 54. — Hypophylla,
peritheciis innatis gregariis globosis rugulosis nigris, ostioliis mi-
nimis papillatis; ascis linearibus, paraphysatis, octosporis; spori-
diis ellipticis continuis, monostichis, hyalinis.

Hab. in Bolivia, ad folia *Melastomatum* (PENTLAND).

40. **Læstadia Rhododendri** (De Not.) Sacc. *Sphærella Rhododendri* De 1632
Not. Sf. ital. p. 86, t. 96. — Peritheciis epiphyllis, parenchyma-
te innatis, dilute ferrugineis, vertice nigro epidermidem perforante,
sparsis, globosis, 200 μ . diam.; ascis elongatis, breve stipitatis,
120-140 ≈ 34, octosporis; sporidiis imbricato-distichis, cylindræo-
oblongis, utrinque rotundatis, continuis, 44-48 ≈ 10-12, intus gran-
ulosus, lutescentibus.

Hab. in foliis rufo-maculatis *Rhododendri* ferruginei in
Italia boreali. — An *Anthostomella*, an *Physalospora*?

41. **Læstadia Rouxii** (Mont.) Sacc. *Sphæria Rouxii* Mont. Ann. Sc. 1633
nat. 1858, XII, p. 184. *Sphærella Rouxii* Ces. et De Not. Schem-
ma Sfer. p. 237. — Peritheciis amphigenis, nigris, epidermide atra-

ta nitida tectis, gregariis v. subconfluentibus, depresso-globosis, poro simplici pertusis, 280-300 μ . diam.; ascis elongatis e basi turgidula sensim attenuatis, breve stipitatis, 85 \approx 17, octosporis; sporidiis mono-distichis, fusoido-oblongis, utrinque subacutis v. obtusatis, rectis v. curvulis, continuis, 27 \approx 8, nubilosus, hyalinis.

Hab. in foliis emortuis Ericæ multifloræ in Gallia. — An *Physalospora*?

42. **Læstadiæ maculiformis** (Bonord.) Sacc. *Carlina maculiformis* Bonord. Abhandl. p. 152, t. 1, fig. 21 (nec *Sph. maculiformis* Auct.) 1634
— Peritheciis minimis atris punctiformibus, epidermide tectis, ostio-
lo simplici apertis; ascis brevibus clavato-lanceolatis aparaphy-
satis; sporidiis fusiformibus ventricosus; utrinque obtusiusculis,
hyalinis.

Hab. in foliis vivis arborum in Germania. — Forma sporidio-
rum medio subventricosa facile species dignoscitur.

43. **Læstadiæ Oxalidis** (Rabh.) Sacc. *Carlina Oxalidis* Rabh. sec. Bonord. Abhandl. p. 152 et Fuck. Symb. 103 (*Sphærella Cartii* Fuck).. 1635
— Peritheciis nigris, minimis, globosis, epidermide tectis, prominu-
lis; ascis sessilibus, brevibus, lanceolatis et fasciculatim conjunctis,
32-36 \approx 8; sporidiis fusiformibus, ventricosus, 14 \approx 4, hyalinis.

Hab. in foliis Oxalidis Acetosellæ vivis in Germania; in
foliis Oxalidis corniculatæ Cairo (Thüm.) et Peradeniya, Cey-
lon (BERK. Ceyl. Fungi n. 1122). In hac forma perithecia basi hy-
phis paucis ramulosis instructa sunt; asci deorsum crassiores 37 \approx
10; sporidia oblonga, 10-14 μ . longa, 1-3-guttulata.

Species quoad genus dubiæ

44. **Læstadiæ? brunnea** (B. et C.) Sacc. *Depazea brunnea* B. et C. 1636
North Amer. fungi n. 974, *Sphærella brunnea* Cooke. — Macu-
lis orbicularibus brunneis; ascis clavatis; sporidiis distichis angu-
stis fusiformibus quadrinucleatis, subinde curvulis.

Hab. in foliis Aceris rubri in Carolina inferiore, Amer. bor.
Maculæ atro-brunneæ 6-7 mill. latæ.

46. **Læstadiæ glaucescens** (Cooke) Sacc. *Sphærella glaucescens* Cooke 1637
Rav. Fungi Grev. VII, p. 54. — Hypophylla; peritheciis semi-im-
mersis, in maculas orbiculares, minimas congestis; ascis clavatis
30 \approx 10; sporidiis ellipticis 5 \approx 3.

Hab. in foliis Aceris rubri, Aiken Carolinæ Amer. borealis.

47. **Læstadiæ epilobiana** Sacc. *Sphærella Epilobii* Fuck. Symb. p. 103, 1638
Dothidea maculæformis Desm. Ann. Sc. nat. 1847, VIII, p. 176,

sec. Fuck. F. rh. 1023. — Epiphylla; peritheciis innatis, prominulis, sparsis v. gregariis minutissimis, nigris, maculæ brunneæ insidentibus; ascis oblongis, sporidia 8, disticha, ovata, simplicia, multiguttulata, hyalina includentibus.

Hab. in pag. sup. foliorum *Epilobii montani* prope Æstrich Germaniæ. — Sec. Desm. l. c. asci sunt breves subclavati 50 μ . long.; sporidia oblonga obtusa, septata, olivacea 10 μ . longa. An ergo species diversæ? *Læst. Epilobii* (Wallr.) quoque diversa est.

48. **Læstadia Mali** (Fuck.) Sacc. *Ascospora Mali* Fuck. Symb. myc. 1639 p. 95. — Peritheciis sparsis, minutissimis, conicis, perforatis, atris, epidermidem radiatim tumefacientibus, dein erumpentibus; ascis oblongis, stipitatis, curvatis, minutis, sporidia 6, ovata, simplicia, hyalina, minuta includentibus; cirrhis candidis, fasciculatis. — Sec. Fuck. l. c. spermogonium sistit *Asteroma Mali* Desm.

Hab. in pag. sup. foliorum *Pyræ Mali*, rarius prope Æstrich, Germaniæ et in Belgio.

49. **Læstadia comedens** (Pass.) Sacc. *Sphærella comedens* Pass. Hedw. 1640 1878, p. 171. — Peritheciis minimis atris, in maculis aridis subcircularibus v. irregularibus insertis; ascis clavatis, in basim attenuatis, stipitatis, octosporis; sporidiis distichis fusoideis, continuis, hyalinis, triguttulatis (maturis?).

Hab. ad folia viva *Ulmi campestris* prope Parmam Italiæ. — Adsunt simul *Phomæ* et *Ascochylæ* species.

50. **Læstadia perusta** (B. et Br.) Sacc. *Sph.* (Depazea) *perusta* B. et Br. Fungi of Ceylon n. 1123. — Orbicularis, limitata, fusca, centro pallida; ascis oblongatis, 75 μ . longis; sporidiis ellipticis 12–13 μ . longis (maturis?).

Hab. in foliis *Dioscoreæ tomentosæ*, Ceylon.

51. **Læstadia caricicola** (Fuck.) Sacc. *Sphærella caricicola* Fuck. 1642 Symb. mycol. p. 101. — Peritheciis sparsis, tectis, minutissimis, globosis, atris, epidermidem pustulato-inflantibus, ostioliis subtilissime punctiformibus, prominulis; ascis fasciculatis, oblongis, 8sporis, 46 μ . long.; sporidiis ovato-oblongis, 9 μ . long., hyalinis.

Hab. in foliis exsiccatis *Caricis ripariæ*, Rauenthel Germ., Padova Italiæ.

52. **Læstadia Cicutæ** (Kirchn.) Sacc. *Sphærella Cicutæ* Kirchn. in 1643 Thuem. Fungi austr. n. 964. — Peritheciis gregariis, demum subliberis, multiformibus, depressis, papillatis, atris, ostioliis prominulis; ascis vermiculato-curvatis, fasciculatis, 8sporis, sporidiis ovatis, simplicibus, hyalinis.

Hab. in Bohemia merid. circa lacum «Plöckensteiner See» ad Cicutæ virosæ caules putridos (L. KIRCHNER).

53. **Læstadia œnanthicola** (Fuck.) Sacc. *Sphærella œnanthicola* Fuck. 1644
Symb. mycol. p. 102. — Peritheciis tectis, gregariis, demum subliberis, punctiformibus, depressis, papillatis, atris, ostioliis prominulis; ascis vermiculato-curvatis, fasciculatis, 8sporis; sporidiis ovatis, hyalinis, simplicibus(?).

Hab. in caulibus exsiccatis Phellandrii aquatici prope Æstrich Germaniæ.

54. **Læstadia Epilobii** (Wallr.) Sacc. *Sph. Epilobii* Wallr. Comp. II, 1645
p. 771, *Sphærella Epilobii* (Wallr.) Auersw. M. Eur. Pyr. p. 14, fig. 59. — Peritheciis nigris, epidermidi innatis, depressis, sublentiformibus, sparsis, poro simplici pertusis, 130–140 μ . latis; ascis clavatis breve stipitatis, 8–sporis, 50 \approx 10; sporidiis subdistichis, elliptico-oblongis, utrinque obtusatis, continuis, 17 \approx 4–5 subhyalinis.

Hab. in caulibus siccis Epilobii angustifolii, plerumque cum *Gnomonia Epilobii*, in Germania.

55. **Læstadia cocophila** (Cooke) Sacc. *Sphærella cocophila* Cooke in 1646
M. Un. n. 1452 et in Just Bot Yahresb. 1877, p. 186, Grevill. V, 102, tab. 86, fig. 7. — Hypophylla, gregaria; peritheciis minutis, atris, epidermide nigrificata tectis; ascis obclavatis sessilibus; sporidiis distichis minutis, tereti-oblongis, rectis, continuis, 10 μ . longis, hyalinis.

Hab. in foliis Cocos nuciferæ, Demerara in Guyana britannica. — Perithecia hinc inde maculiformi-aggregata, subinde linea nigra circumscripta, quæ vero ad alienum fungum (*Diaporthe?*) spectare mihi videtur.

56. **Læstadia? Vaginæ** (Lasch.) Sacc. *Sphærella? Vaginæ* Lasch. in 1647
Kl. Hb. myc. 663, Fuck. Symb. myc. p. 100. — Peritheciis ; ascis nondum visis; sporidiis fusiformibus, arcte curvatis, simplicibus, 14 \approx 3–4, hyalinis.

Hab. in vaginis Phragmitis communis in Germania et Italia.

57. **Læstadia Violæ** (Lib.) Sacc. *Coniosporium Violæ* Lib. Kickx, 1648
crypt. Flandr. I, p. 367. — Peritheciis minutis, innatis, dein erumpentibus, globulosis, nigris, in soros suborbiculares aggregatis, quandoque confluentibus, maculas in matrice olivascentes efformantibus; ascis fugacibus; sporidiis ovoideis.

Hab. in foliis languidis Violæ odoratæ in Belgio.

58. **Læstadia Rabenhorstii** (Ces. et De Not.) Sacc. *Sphærella Raben-* 1649

horstii Ces. et De Not., Schema Sf. it. p. 238, *Pleospora herbarum* var. *Euphrasie* Rabh. F. E. n. 258. — Peritheciis *Pleosporæ herbarum*: sporidiis oblongis, continuis, hyalinis.

Hab. in *Euphrasia* in Germania.

PHOMATOSPORA Sacc. Fungi Ven. Ser. II, p. 306. (Ety. a *Phoma*, quia ejusdem sporidia spermatiis *Phomæ* similia sunt). — Perithecia membranacea, minuta, tecta v. erumpentia, discreta, ostiolo papillato. Ascis cylindraceo-filiformes, aparaphysati, sporidia octona, monosticha, phomatoidea, continua, hyalina, 2-guttulata includentes. — Status spermogonicus *Phomam* referens.

1. **Phomatospora Berkeleyi** Sacc. F. Ven. Ser. II, p. 306, F. ital. 1650 t. 605, *Sph. phomatospora* B. et Br. Ann. N. II. n. 647, t. 11, fig. 33. — Peritheciis minutis, 140–200 μ . diam., sphæroideis, immersis v. epidermide tectis v. erumpentibus, ostiolo papillulato, punctiformi, nucleo roseolo; ascis cylindrico-filiformibus, basi longiuscule attenuato-stipitatis, 100–115 \approx 3 $\frac{1}{3}$, p. sporif. 50–60 \approx 3–3 $\frac{1}{2}$, 8-sporis, paraphysibus nullis obvallatis; sporidiis recte v. suboblique monostichis, oblongo-ellipsoideis v. subcylindraceis, 6–8 \approx 2–2 $\frac{1}{2}$, rectis, utrinque 1-guttulatis, hyalinis. — Spermogonium: peritheciis, ascophoris similibus sed magis superficialibus, spermatia cylindracea, 8–10 \approx 2, 2-guttulata, hyalina sed coacervata dilutissime lutescentia foveantibus.

Hab. in caulibus putrescentibus Solani tuberosi (sp. 7,5–10 μ . long.), Arabis (a. 60 \approx 3, sp. 6–8 \approx 2,5–3), Andropogonis (sp. 10 μ . long.), Scirpi lacustris (a. 80–90 \approx 3,5–4, sp. 7 \approx 3) Lapparum (sp. 8 \approx 2–2 $\frac{1}{2}$), Lathyri sylv. (sp. 6–7 \approx 2 $\frac{1}{2}$), Galeopsidis versic., in ramulis hornotidis Sambuci nigrae (sp. 7 \approx 2), Selva, Vittorio, Covolo, Padova, Ital. bor., Britannia, Gallia et Amer. bor. — Var. *macropoda* Sacc. Fungi it. t. 604; peritheciis sphæroideo-oblongis, subacervatis; ascis longius stipitatis 120 \approx 3, p. sporif. 60 μ . long.; sporidiis 6 \approx 2,5–3. In ramulis Hippophæis rhamnoidis in Italia boreali.

2. **Phomatospora Argentina** Speg. Fungi Arg. Pug. I, pag. 178. — 1651 Peritheciis gregariis, minutis, 120–150 μ . diam., lenticulari-globosis, tectis, ostiolo epidermidem perforante acutiuseculo donatis, atris, contextu membranaceo, densissime et indistincte parenchymatico-fuligineo; ascis cylindraceis, sursum obtuse rotundatis, deorsum in pedicellum desinentibus, 100–105 \approx 5, aparaphysatis,

octosporis; sporidiis recte monostichis, elliptico-elongatis, utrinque obtuse rotundatis, 12-13 \approx 3-4, bi-guttulatis, hyalinis.

Hab. ad caules emortuos putridos Jussienæ longifoliæ in paludosis secus Rio de la Plata, a la Recoleta, Argent., Americæ australis.

3. **Phomatospora therophila** (Desm.) Sacc. *Sph. therophila* Desm. XIX 1652
Nat. p. 16, *Leptosphaeria therophila* Auersw. Myc. Eur. Pyr. t. 12, fig. 158. — Peritheciis minutissimis, $\frac{1}{8}$ - $\frac{1}{10}$ mill. diam., ovoideis nigris, intus fulvis, sparsis v. subgregariis, immersis, macula minuta subnigra tectis, collo brevissimo, ostiolis superficialibus, nigris, nitidis, punctiformibus; ascis tenuibus, cylindricis 75 \approx 4; sporidiis octonis, ovoideo-ellipsoideis, 7,5 \approx 3,3, monostichis, hyalinis.

Hab. in culmis exsiccatis Junci articulati in Gallia.

4. **Phomatospora ovalis** (Pass.) Sacc. Fungi Ven. Ser. II, 303, *Sph.* 1653
ovalis Pass. Erb. critt. ital. Ser. II, n. 642 et N. G. bot. it. 1872 p. 296. — Peritheciis primo epidermide tectis, dein denudatis, oblongo-ovatis, ostiolo minuto præditis; ascis oblongo-linearibus, membrana tenuissima facile diffluente ægre conspicuis, 8-sporis; sporidiis subuniseriatis, oblongo-ellipticis, continuis, biguttulatis, hyalinis, « 10-12 \approx 4-4 $\frac{1}{2}$ ».

Hab. in Italia, Vigheffio presso Parma, in caulibus emortuis Dauci Carotæ, socia *Heterosphaeria*, Sept. 1871 (PASSERINI).

5. **Phomatospora argyrostigma** (Berk.) Sacc. *Sphaeria argyrostigma* 1654
Berk. Dec. n. 140. — Late dispersa; peritheciis minoribus depresso-globosis, epidermide tectis, astomis; maculis epidermicis punctiformibus nigris centro candidis; ascis octosporis; sporidiis cymbiformibus hyalinis.

Hab. in foliis putrescentibus *Yuccæ filamentosæ*, Cincinnati, Ohio, Amer. bor. (LEA). — Sporidia fere *Phomæ* sed asci ad sunt. In aversa *Yuccæ* pagina adest *Phoma dispersa*.

5. **Phomatospora Molluginis** (Mont.) Sacc. *Sphaeria Molluginis* Mont. 1655
Syll. Crypt. n. 849. — Peritheciis innatis, $\frac{1}{3}$ - $\frac{2}{3}$ mill. diam., gregariis aut sparsis, e rotundo oblongis, madidis convexis, siccitate collabentibus, astomis?, epidermide semper tectis, basi filis radiantibus instructis; ascis linearibus 70 \approx 2,5, 8-(12?)-sporibus; sporidiis globosis hyalinis uniseriatis 2 μ . diam.

Hab. in caulibus emortuis *Galii Molluginis* circa Sedanum, in Ardennis, Galliæ. — Quoad genus haud prorsus certa.

PHYSALOSPORA Niessl Notiz. neue und Kr. Pyr. p. 10 (Etym. *phy-*

sis vesica, quia sporidia vesiculosa). — Perithecia globulosa, tecta, membranacea v. coriaceo-membranacea, atra, ostiolo typice papillato erumpente. Asci paraphysati, tereti-clavati, paraphysati, crasse tunicati, octospori. Sporidia ovoidea v. oblonga continua, hyalina v. subhyalina. — A gen. *Lavstadia* paraphysibus, ostiolo etc. differt (ut *Didymella* a *Sphaerella*) sed plurimæ species, adhuc imperfecte descriptæ, ancipites manent, hinc in utroque genere quaerenda.

1. **Physalospora alpestris** Niessl Not. Pyr., p. 10. — Peritheciis sparsis 1656 in matrice immutata, tectis, globosis, minutissimis 90-120 μ . d., fuscis, membranaceis, ostiolo punctiformi prominulo, glabris; ascis oblongo clavatis stipite brevi 84-96 \approx 25-28; sporidis 8, stipatis 2-3-stichis, cuneato-oblongis vel dactyloideis, inæquilateralibus, curvatisve, utrinque rotundatis, continuis, dilute luteo-virescentibus. 22-26 \approx 7-9; paraphysibus superantibus tenuibus simplicibus.

Hab. in foliis Caricis sempervirentis et C. albæ in Pannonia et Helvetia.

2. **Physalospora Festucæ** (Lib.) Sacc. Mic. I, 27, F. it. t. 600. *Sphae-* 1657
ria Festucæ Lib. Exs. n. 246. *Sphaeria sancta* Rehm et Thüm. Myc. Univ. et in Giorn. bot. ital. 1866, p. 252. *Sphaerella Festucæ* Awd. Myc. Eur. 16, fig. 111, Cfr. Sacc. F. V. ser. II, 309 sub *Pleosp. pyrenophoroide* Sacc. — Peritheciis gregariis, epiphyllis, interdum amphigenis, globosis, innatis, papillatis, atris; ascis clavatis, crassis, crasseque tunicatis 90-100 \approx 16-8, octosporis; sporidiis subrhombico-ellipticis, 25-30 \approx 10-12, distichis grosse 1-3-guttatis, hyalinis initio strato mucoso obvolutis, denique (teste Rehm.) fuscidulis; paraphysibus crassis, ramosis perpaucis.

Hab. in foliis Festucæ, Arundinis, Phragmitis, Andropogonis, Holoschæni etc. in Gallia, Germania, Italia.

3. **Physalospora montana** Sacc. Mich. II, p. 378. — Peritheciis la- 1658
xiuscule et seriatim gregariis, globoso-lenticularibus, innatis, denique vix erumpentibus, $\frac{1}{6}$ mill. diam., ostiolo brevissimo obtuse conoideo; contextu laxiuscule celluloso fuligineo; ascis oblongo-clavatis. 50-60 \approx 12-14, breve stipitatis, apice rotundatis, paraphysibus bacillaribus asco longioribus guttulatis obvallatis, octosporis; sporidiis distichis, ovoideo-fusoideis, 15-18 \approx 6, quandoque inæquilateralibus, nubiloso-guttulatis, hyalinis.

Hab. in foliis exsiccatis Sesleriae cœruleæ in M. Generoso, Italia et Helvetia (PENZIG).

4. **Physalospora Corni** Sacc. Mich. I, p. 329, F. it. t. 182. *Sphaeria* 1659

corniella Cooke in Grev. *Botryosphaeria Corni* Sacc. Fungi Ven. Ser. IV, 4 (non *Sphaeria Corni* Sow.) — Peritheciis cortice nidulantibus, gregariis epidermide pustulatim tumidula, denique disrupta, velatis, globulosis, $\frac{1}{3}$ - $\frac{1}{2}$ mill., papillatis, nigris; ascis cylindræo-clavatis, 70-80 \approx 12, deorsum attenuatis, apice rotundatis, paraphysibus filiformibus guttulatis obvallatis, octosporis; sporidiis oblique monostichis v. distichis, oblongis v. subfusoides, utrinque obtusiusculis, 18 \approx 5, curvulis, 1-2-guttatis, hyalinis.

Hab. in ramulis Corni sanguinæ putrescentibus, Selva Ital. bor., Shrewsbury Angliæ. — A *Sph. Corni* Sow. sec. descrip. Cooke et Curr. etc. omnino diversa est.

5. **Physalospora gregaria** Sacc. F. ital. t. 432. Mich. I, 491, 506. — 1660

Peritheciis dense gregariis peridermio tectis, globosis, brevissime papillatis atris, intus candidis; ascis clavatis, rotundatis, crasse tunicatis, breve stipitatis, paraphysatis, octosporis; sporidiis distichis ovoideo-oblongis 30-40 \approx 6-8, granulosi, guttulisve hyalinis.

Hab. in ramis corticatis Pruni, Salicis, Alni, Corni, Eriobotryæ, Fici Caricæ, Rosæ etc. in Italia bor., Gallia, Sibiria Asiatica, Amer. austr. — Var. *foliorum*; peritheciis minoribus, innato-protuberantibus, epidermide subvelatis; ascis clavatis, 85-90 \approx 15; sporidiis distichis, ovato-oblongis, 20 \approx 7-8, granulosi hyalinis. — In foliis Taxi baccatæ dejectis, Padova, Italia borealis.

6. **Physalospora Wrightii** (B. et C.) Sacc. *Sphaeria Wrightii* B. et C. 1661

North Am. Fungi n. 970. — Subcuticularis, cupulari-collapsa; ascis lanceolatis obtusis; sporidiis biserialis oblongis curvulis 25-32 μ . long., subinde strato angusto hyalino obductis, hyalinis.

Hab. in foliis Statice Limonii, California, in America boreali (C. WRIGHT).

7. **Physalospora rosicola** (Fuck.) Sacc. *Sphaeria rosicola* Fuck. 1662

Symb. myc. p. 114. — Peritheciis gregariis, epidermide nitida, nigricata tectis, minutis, globosis, atris, nucleo albo, ostiolis prominulis, papillatis, perforatis; ascis fasciculatis, oblongo-ovatis, 8-sporis, 40 \approx 16; sporidiis obovato-oblongis, simplicibus, hyalinis.

Hab. in ramis siccis Rosæ caninæ in Germania, frequens.

8. **Physalospora pustulata** Sacc. *Botryosphaeria pustulata* Sacc. Fun- 1663

gi Ven. Ser. IV, pag. 3, F. it. t. 137. — Peritheciis subsolitariis in cortice nidulantibus et epidermidem infuscatam pustulatim elevantibus, ramulos late et dense ambientibus, globulosis, subdepressis, $\frac{1}{3}$ mill. diam., breve conico-papillatis, nucleo albo; contextu

peritheciis densiuscule parenchymatico fuligineo; hyphis ramosis anastomosantibus parce septatis, fuliginis inter perithecia undique repentibus; ascis clavatis, deorsum substipitatis, 110-120 \approx 16-20, crasse tunicatis, pseudoparaphysatis, 8sporis; sporidiis distichis, ovoideo-rhombeis, 26-30 \approx 13-15, episporio crassiusculo hyalino, dilutissime flavidis, granulosis, initio cymbiformibus hyalinis.

Hab. in ramis ramulisque Aucubæ japonicæ Patavii, Ital. bor., Coryli et Cerasi in Amer. bor. — Fabrica et colore sporidiorum et dispositione peritheciolorum *Phys. gregariae* cognata, etsi ab ea bene distincta.

9. **Physalospora alpina** Speg. in Roum. Rev. Mycol. II, p. 32. t. I, 1664 fig. C. Mich. II, p. 159. — Peritheciis sparsis, parenchymate foliorum immersis, globosis, $\frac{1}{3}$ - $\frac{1}{2}$ mill. diam., siccitate quandoque cupulatis, contextu crasse membranaceo, fulvo-fuligineo, ostiolo plus v. minus protuberante obtuso, atro, subcarbonaceo; ascis fusoidis, apice truncato-rotundatis crasseque tunicatis, 110-120 \approx 20, basi in stipitem brevem et nodulosum abrupte attenuatis, paraphysibus filiformibus, guttulatis, obvallatis, octosporis; sporidiis inordinate distichis, oblongo-ellipsoideis, utrinque acutiuscule rotundatis, 35-40 \approx 8-9, continuis, granuloso-farctis, hyalinis.

Hab. in foliis dejectis putrescentibus Rhododendri ferruginei, M. Serva (Belluno), Ital. bor., SPEGAZZINI — *Laestadiæ Rhododendri* affinis, sed paraphysum præsentia sporidiis minoribus etc. distinguenda videtur.

10. **Physalospora euganea** Sacc. Mich. I, 244, F. it. t. 601. — Peritheciis dense gregariis, subcutaneis, globoso-depressis, 130-150 micr. diam., pertusis; contextu parenchymatico fuligineo; ascis cylindraceo-clavatis, 80-100 \approx 17-18, apice tunica integra, rotundatis, brevissime crasse stipitatis, aparaphysatis, 8sporis; sporidiis distichis oblongo-fusoidis, utrinque obtusiusculis, 20-25 \approx 8, leniter curvulis, initio strato tenui mucoso obductis, intus granulosis, hyalinis.

Hab. in ramulis emortuis Spartii juncei in colle Venda, Euganeorum Ital. bor. (BIZZOZERO).

11. **Physalospora Euphorbiæ** (P. et Ph.) Sacc. *Sphaerella Euphorbiæ* Pl. et Ph. in Grev. VI, 28. — Peritheciis minutis, epidermide tectis, applanatis, gregariis sparsisve; ascis subcylindricis 70 \approx 10-15, octosporis; sporidiis distichis, ellipticis, utrinque acutis, 15-18 \approx 6-8, granulosis, hyalinis.

Hab. in caulibus Euphorbiæ amygdaloidis, Diumore Bri-

tanniæ. — Ostiolis brevibus, sporidiis majoribus etc. mox dignoscitur a *Gn. Euphorbiæ* (FUCK.).

12. **Physalospora minutula** Sacc. et Sp. Mich. I, 369. F. ital. t. 354. — 1667

Peritheciis hinc inde gregariis, epidermide velatis, punctiformibus, globoso-lenticularibus, 150–160 micr. diam., ostiolo 20 micr. diam. pertuso, vix papillato; perithecii contextu parenchymatico, atro, coriaceo-membranaceo; ascis cylindraceo-clavatis, 60 \approx 10–12, breve noduloso-stipitatis, apice tunica integra obtusatis, aparaphysatis, octosporis; sporidiis distichis, ovoideo-navicularibus, 12–16 \approx 4–6, 1–2-guttatis, hyalinis.

Hab. in caulibus emortuis *Euphorbiæ* *Cyparissiæ*, Conigliano, Majo 1877, socia *Phoma cyclospora* Sacc. (forte stat. spermogon. *Physalosporæ*) sic definienda; peritheciis lenticularibus, subcutaneis, distincte et firme parenchymaticis, pertusis; spermatis globulosis v. quandoque obtuse angulosis 1–3-pluriguttatis, 5½–6½ μ . diam., hyalinis, basidiis cylindraceis, 5 \approx 1½, facillime deciduis fultis.

13. **Physalospora Astragali** (Lasch) Sacc. Mich. I, 276, 121 (*Phys.* 1668

Kœhneana F. ital. t. 603. *Sph. Astragali* Lasch Auersw. Myc. Eur. Pyr. tab. 12, f. 160 (non *Sph. Astragali* Curr. Simpl. Sphær. n. 362 quæ *Diaporthis* spec.). — Peritheciis gregariis subcutaneis, tectis dein epidermide fissa semi-erumpentibus, aterrimis, globoso-lenticularibus, ⅓–⅙ mill. diam., contextu distincte celluloso fuligineo, ostiolo minutissimo papillato; ascis cylindraceis quandoque cylindraceo-fusoideis, 100 \approx 15–20, subsessilibus, apice, lumine leniter coarctato, obtusatis, paraphysibus filiformibus obvallatis, octosporis; sporidiis monostichis v. subdistichis, rarius transverse positis, ellipsoideis, 14–16 \approx 8, strato mucoso hyalino diu obvolutis, granulosis, hyalinis.

Hab. in pagina superiore foliorum languidorum *Astragali* cujusdam prope Fürstenwalde in Marchia Brandenburg (KOEHNE in herb. MAGNUS). — Perithecia epidermide leniter nigrificata tecta. Si sporidia dein fuliginea fiant, tunc species ad gen. *Anthostomellam* migraret.

14. **Physalospora megastoma** (Peck) Sacc. *Sph. megastoma* Peck, 1669

Bot. Gaz. 1879. — Peritheciis minutis, numerosis, amphigenis, initio epidermide tectis, dein erumpentibus, nigris; ostiolis amplis circularibus, intus pallidis; ascis subcylindricis; sporidiis monostichis v. inordinatis, oblongo-ellipticis, 10–15 μ . long., intus granulosis, chlorino-flavidis.

Hab. in foliis adhuc vivis *Astragali bisuleati*, Colorado Amer. bor. (JONES). — Folia viva adit, quæ deinde necantur.

15. **Physalospora fallaciosa** Sacc. Mich. I, 121, Fungi ital. t. 602. — 1670
Peritheciis sparsis gregariisque innato-erumpentibus e globoso lenticularibus 150 micr. diam., aterrimis, breve papillatis, contextu distincte celluloso fuligineo; ascis cylindraceo-clavatis breve crassiuscule stipitatis, 75-85 \approx 12-15, apice, lumine initio leniter coarctato, obtusis, paraphysibus filiformibus evanidis obvallatis, octosporis; sporidiis distichis vel oblique monostichis, ovato-oblongis, 15-18 \approx 5 $\frac{1}{2}$ -7, rectis curvulisve utrinque obtusiusculis, strato exiguo gelatinoso primitus obvolutis, granulosis, hyalinis.

Hab. in foliis bracteisque languidis *Aletridis* et *Musæ* in horto botanico Berolinensi, Germaniæ (P. MAGNUS).

16. **Physalospora citricola** Penz. Fung. agrum. n. 21. — Peritheciis 1671
laxe gregariis, epidermide velatis, denique subnudis, globoso-depressis, obtusis, ostiolo impresso pertusis, 180-220 μ . latis nigris, contextu parenchymatico fuligineo, solidiusculo; ascis tereti-fusoidis, brevissime stipitatis, sursum attenuatis truncatisque, 47-54 \approx 10-14, paraphysibus filiformibus asco longioribus obvallatis, octosporis; sporidiis stipate distichis ellipsoideo-oblongis utrinque rotundatis, subinde inæquilateralibus, 14-17 \approx 6-8, 2-guttatis v. granulosis, hyalinis.

Hab. in partibus arescendo dealbatis foliorum *Citri Limonii* in frigidariis, Strâ, Cattajo presso Padova Italiæ borealis (PENZIG).

17. **Physalospora disrupta** (B. et C.) Sacc. *Sph. disrupta* B. et C. 1672
North Amer. Fungi n. 946. — Peritheciis cuticala tectis, tumen-
tibus, ostiolo punctiformi perforante; ascis crasse obovatis; spori-
diis biseriatis ellipticis, hyalinis.

Hab. in caule *Smilacis* in Carolina infer. Amer. boreali. — Adest simul pycnidium: stylosporibus ellipticis fuscis 2-nucleatis.

18. **Physalospora disseminata** Sacc. Mich. II. 137. — Peritheciis hy- 1673
pophyllis dense et late gregariis, initio velatis, lenticularibus, $\frac{1}{10}$ - $\frac{1}{8}$
mill. diam., ostiolo impresso pertuso, contextu minute celluloso, fusco; ascis clavatis, breve stipitatis, apice tunica integra rotundatis, 50 \approx 8, paraphysibus filiformibus obvallatis, octosporis; sporidiis distichis, oblongo-cylindraceis, inæquilateralibus, 10 \approx 3, hyalinis.

Hab. in foliis *Clematidis glaucæ*, prope Minussinsk in Sibiria asiatica.

19. **Physalospora Claræ-bonæ** Speg. Dec. Mycol. 88, Mich. II, 159, 1674
Sphæria racciniicola Lib. Herb. — Peritheciis globoso-lenticula-

ribus, 150–180 micr. diam., parenchymate foliorum immersis, epidermideque minutissime bullulato-umbilicata, mellea tectis; contextu parenchymatico fulvo-fuligineo, ostiolo impresso saturatiore; ascis cylindraceis, $100 \approx 7-8$, paraphysibus obvallatis v. subnavicularibus, utrinque acutiusculis, $14-16 \approx 5$, crasse-1-guttatis, hyalinis.

Hab. in foliis aridis adhuc pendulis Vaccinii Vitis-ideæ in sylva Cansiglio, Ital. bor., Malmedy Galliæ et Germ.

20. **Physalospora pertecta** (Cooke) Sacc. *Sph. pertecta* Cooke Fungi 1675 of Texas 143. — Subtecta seriata; peritheciis globosis, atris, demum supra conspicuis, poro pertusis; ascis clavatis sessilibus; sporidiis ellipticis, utrinque attenuatis hyalinis, $20-23 \approx 10$.

Hab. in Texas, Galveston Bay, in ramis dejectis (RAVENEL).

21. **Physalospora hyalospora** (Ces.) Sacc. *Sphæria hyalospora* Ces. 1676 Hedw. 1859, n. 4. tab. II, fig. 11. — Peritheciis solitariis, majusculis depressiusculis, mollibus, papyraceis, fuscis, calvis; paraphysibus numerosis, crassis, rigidiusculis, clavulatis; ascis clavatis, octosporis, $90-100 \approx 16-24$, paraphyses æquantibus; sporidiis hyalinis, ellipsoideis, obtusiusculis, 2-guttatis, $20 \approx 10-15$.

Hab. in foliis Salicum cum *Venturia chlorospora*, in Ital. bor.

22. **Physalospora citrispora** (B. et B.) Sacc. *Sphæria citrispora* B. 1677 et C. North Amer. Fungi n. 938. — Epidermide omnino tecta; ascis clavatis; sporidiis hyalinis citriformibus, distichis, $30-32 \mu$. l.

Hab. in ramis Tiliæ glabræ in montibus Virginie Am. bor.

23. **Physalospora Salicis** (Fuck.) Sacc. *Sph. Salicis* Fuck. Symb. myc. 1678 p. 115, t. III, fig. 16. — Peritheciis tectis sparsis, atris, obtusis, minute papillatis perforatisque; ascis stipitatis, oblongis 8-sporis, $58 \approx 10$; sporidiis distichis, oblongis, vix curvatis, utrinque obtusis, simplicibus, guttulatis, hyalinis, $14 \approx 2$. — Spermogonium *Phomæ* speciem sistit: spermatiis $8 \approx 4$, 3-guttulatis hyalinis.

Hab. in ramis corticatis Salicis fragilis, rarius prope Æstrich Rhenogoviæ.

24. **Physalospora Cupressi** (B. et C.) Sacc. *Sph. Cupressi* B. et C. 1679 North Amer. Fungi n. 940. — Peritheciis epidermide tectis prominulis applanatis, ostiolo distincto; ascis clavatis; sporidiis hyalinis clavatis vel breviter fusiformibus.

Hab. in ramis Cupressi thyoidis in Carolina inferiore, America boreali.

25. **Physalospora gelsemiata** (Cooke) Sacc. *Sph. gelsemiata* Cooke, 1680 Rav. Fungi in Grev. VI, 145. — Tecta, sparsa vel subgregaria;

peritheciis subglobosis, prominulis; ostiolis papillatis; ascis clavatis; sporidiis breviter lanceolatis, hyalinis, $30-35 \approx 10-12$.

Hab. in ramis Gelsemii, Aiken, Carol. infer. Amer. bor.

26. **Physaloopora Lathyri** (Dur. et Mont.) Sacc. *Sph. Lathyri* Dur. 1681

et Mont. Fl. Alg., I, p. 488, Mont. Syll. Crypt. n. 862. — Follicola, tecta, colliculosa; peritheciis innatis pro ratione amplis, sphaericis, in utraque folii pagina atra prominulis, intus albis, poro vix conspicuo pertusis; ascis e placenta basilari erectis, $80 \approx 20$, initio utrinque acuminatis ventricosus apice truncatis, adultis late clavatis, sporidiis 8 ovato-oblongis, continuis, hyalinis, 10μ . longis.

Hab. in foliis Lathyri amphicarpi, Mascara (DURIEU).

27. **Physalospora hypericina** (B. et C.) Sacc. *Sph. hypericina* B. et 1682

C. North Amer. Fungi n. 947. — Stictioidea; peritheciis depressis epidermide cinctis; ascis clavatis; sporidiis cymbiformibus, hyalinis, 25μ . longis.

Hab. in caulibus Hypericorum in Carolina inf. Amer. bor.

28. **Physalospora phomatoides** (Mont.) Sacc. *Sph. phomatoides* Mont. 1683

Syll. Crypt. 784 et Cent. n. 62, in Ann., 2, XIV, p. 328, t. 19, f. 7, sub *Ascospora*. — Epiphylla, gregaria; peritheciis dimidiatis plano-convexis, epidermide tectis, astomis, atro-nitentibus, interdum confluentibus; ascis oblongis vel obovatis, $60-70 \approx 20$ breve stipitatis; sporidiis 8 ellipticis limbo lato pellucido cinctis, $16-18 \approx 8$, hyalinis.

Hab. ad folia delapsa in sylvis ad Oyapock Guyanæ (LEPRIEUR).

29. **Physalospora protuberans** (Fuck.) Sacc. *Sph. protuberans* Fuck. 1684

Symb. myc. 109, t. IV, fig. 12. — Peritheciis sparsis, tectis, globosis, atris, majusculis, ostiolis breviter conicis, prominulis, atris; ascis e basi lata breviter stipitata, amplis, ovato-oblongis, antice acuminatis, 8 sporis, $80 \approx 26$; sporidiis inordinatis, oblongis, utrinque obtusis, perparum curvatis, simplicibus, hyalinis, $24 \approx 7$.

Hab. in petiolis putridis nervisque foliorum Alni glutinosæ, rarius pr. Æstrich, Rhenogovia.

30. **Physalospora philoprina** (B. et C.) Sacc. *Sphæria philoprina* B. 1685

et B. North Am. Fungi n. 917. — Peritheciis nitidis centro e cuticula albis; ascis oblongis brevibus; sporidiis biseriatis cymbiformibus hyalinis.

Hab. in foliis Ilicis in Carolina sup. Amer. bor.

31. **Physalospora minutella** (Peck) Sacc. *Sph.* (caulicolæ) *minutella* 1686

Peck, 29 Rep. on the St. Mus. — Peritheciis minutis, subinde appianatis, nigris, parte superiore denique circumscissa, inferiore ma-

trici adhærente; ascis sublanceolatis; sporidiis oblongis, continuis, hyalinis, 7-8 μ . longis.

Hab. in caulibus emortuis herbarum, North Greenbush, America boreali.

32. **Physalospora *Ænotheræ*** (B. et C.) Sacc. *Sphæria ænotheræ* B. 1687
et C. North Am. Fungi n. 952. — Minutissima; ostiolo punctiformi prominulo; ascis clavatis; sporidiis hyalinis breviter fusiformibus utrinque obtusis.

Hab. in caule *Ænotheræ* sinuatae in Carolina infer. America boreali. — An *Læstadia*?

33. **Physalospora consociata** (Ell. et H.) Sacc. *Sphæria consociata* 1688
Ell. et Harkn. in Bull. Torr. bot. Cl. 1881 May. — Peritheciis depresso-mammiformibus, 370 μ . diam., ostiolo breve papillato, nigro; ascis angustis; sporidiis fusoides, acutis, 10-13 μ . long., 2-3-nucleatis subhyalinis v. luteolis.

Hab. in foliis *Sequojæ giganteæ*, California (HARKNESS). — An *Læstadia*?

34. **Physalospora uvispora** (Cooke) Sacc. *Sphæria uvæspora* Cooke 1689
Fungi of Texas 144. — Gregaria, tecta, peritheciis subglobosis, parvulis, brunneis, poro pertusis; ascis clavatis; sporidiis breviter clavatis, simplicibus, hyalinis, 12-15 \approx 5.

Hab. in pedunculis florum *Yuccæ*, Houston, Texas, America boreali (RAVENEL). — Sporidia (immatura?) pyrenia uvæ simulant. An *Læstadia*?

35. **Physalospora Bidwellii** (Ellis) Sacc. *Sph. Bidwellii*. Ellis Bull. 1690
Torrey Bot. Cl. Aug. 1880, p. 90. — Peritheciis minutis globosis epidermide tectis, demum suberumpentibus, apice poro pertusis; ascis clavato-cylindræis obtusis 67 \approx 12,5; sporidiis octo, irregulariter ellipticis vel oblongis, continuis, 12-17 \approx 4,5-5, intus granulosis, paraphysibus nullis.

Hab. in baccis *Vitis*, socia *Phoma uvicola*, quæ forte ejus spermogonium, Vineland New Jersey, America boreali (BIDWELL). — An *Læstadia*?

36. **Physalospora Althææ** (Kirchn.) *Sph. Althææ* Kirchn. in Thuem. 1691
F. austr. n. 1265. — Peritheciis gregariis, lentiformibus, convexis, atris; ascis cylindræis, stipitatis, 100 \approx 10, 8sporis; sporidiis monostichis, subobliquis, hyalinis, 20 \approx 8.

Hab. in Bohemia meridion. in horto ducali Krumauensi in *Althææ roseæ* caulibus emortuis (L. KIRCHNER).

37. **Physalospora ceanothina** (Peck) Sacc. *Sphæria* (obtectæ) *ceano-* 1692

thina Peck, 29. Rep. on the St. Mus. — Peritheciis minutis sparsis, raro 2-3 aggregatis, levibus, subglobosis; ostiolis epidermidem perforantibus, subinde rugolosis, v. inæqualibus; ascis octosporis; sporidiis stipatis v. distichis, oblongis obtusis, interdum inæquilateralibus, hyalinis, 12-15 μ . longis.

Hab. in ramis *Ceanothi* americani, Center Amer. bor.

38. **Physalospora Eunotia** (B. et C.) Sacc. *Sphæria Eunotia* B. et C. 1693
North Amer. Fungi n. 939. — Peritheciis peridermio tectis, erumpentibus; ascis clavatis; sporidiis oblongis, utrinque medio tumidis, hyalinis, 20-25 μ . long.

Hab. in caule *Hederæ* in Carolina Amer. bor. — Sporidia *Eunotiam* feræ æmulantur.

39. **Physalospora Echii** (Kirchn.) Sacc. *Sph. Echii* Kirchn. in Thuem. 1694
F. austr. n. 868. — Peritheciis gregariis, epidermide nitida tectis, minutis, globosis, atris, nucleo albo, ostiolis prominulis, papillatis, perforatis; ascis fasciculatis, oblongo-ovatis, 8sporis, 40 \approx 15; sporidiis obovato-oblongis, simplicibus, hyalinis.

Hab. in Bohemia merid., Krumau, in caulibus aridis *Echii* vulgaris (L. KIRCHNER).

40. **Physalospora Eupatorii** (Kirchn.) Sacc. *Sphæria Eupatorii* Kirchn. 1695
in Thuem. F. austr. n. 958. — Peritheciis sparsis, globosis, atris, nucleo griseo, demum evacuatis; ascis stipitatis, cylindræis, 80 \approx 12; sporidiis 8, oblongis, hyalinis.

Hab. in Bohemia merid., circa lacum «Plöckensteiner See» in caulibus putridis *Eupatorii* cannabini (L. KIRCHNER).

41. **Physalospora erratica** (C. et E.) Sacc. *Sph. (Otectæ) erratica* 1696
C. et E. New Jersey Fungi in Grev. VI, 95, t. 100, fig. 35. — Gregaria, subcongesta; peritheciis globoso-depressis, atris, demum erumpentibus, hinc inde confertis; ascis clavatis; sporidiis biserialis, ellipticis, simplicibus, hyalinis, 25-26 \approx 12-13, intus granulosis.

Hab. in ramis *Rosæ*, *Loniceræ*, caulibusque *Solidaginis*, New Jersey in America boreali.

42. **Physalospora palustris** (Mont.) Sacc. *Stigmatea palustris* Mont. 1697
Pl. Cell. Cent. VII, n. 45, pag. 36. — Amphigena; peritheciis conico-depressis atris opacis in macula brunnea congregatis, ore amplo tandem apertis, nucleo niveo; ascis cylindrico-clavatis; deorsum attenuato-stipitatis, 45 \approx 10 octosporis; sporidiis oblongo-fusoides, utrinque obtusis, 15 \approx 4, quadriguttulatis, hyalinis.

Hab. in foliis *Elodis* palustris (seu *Hyperici* *Elodis*) in Gallia (GUEPIN).

43. **Physalospora Melaleucæ** (Lév.) Sacc. *Sphæria* (epiphylla) *Melaleucæ* Lév. Ann. Scienc. nat. 5, 1846, p. 261. — Peritheciis epiphyllis, amphigenis, subglobosis, glabris, intus extusque nigris, macula pallida insidentibus, ostioliis obsolete; ascis clavatis, crassis, copiose paraphysatis, octosporis; sporidiis ovoideis v. subglobosis, hyalinis. 1698
- Hab.* in Manilla ad folia Melaleucæ Leucadendri (herb. Mus. Par.).
44. **Physalospora trochiformis** (Preuss) Sacc. *Sph.* (obtusatæ) *trochiformis* Preuss, F. Hoyersw. n. 293. — Gregaria atra; peritheciis primo subglobosis, obsolete papillatis, tum supra collabascentibus, concavis, trochiformibus, albo-farctis; ascis cylindricis, octosporis; paraphysibus furcatis mixtis; sporidiis globosis, albis, nucleum includentibus. 1699
- Hab.* ad caules herbarum majorum, Hoyerswerda Germaniæ.
45. **Physalospora atro-splendens** (Preuss) Sacc. *Sph.* *atro-splendens* Preuss F. Hoyersw. n. 291. — Gregaria minuta, erumpens; peritheciis subglobosis, lævibus, atris, nitidis, submicroscopicis, basi applanatis; ostiolo nudo; ascis ovatis, basi attenuatis; sporidiis albis continuis, ovatis. 1700
- Hab.* ad caules herbarum, Hoyerswerda Germaniæ.
46. **Physalospora subsolitaria** (Schw.) Sacc. *Sph.* *subsolitaria* Schw. 1701 in Fr. El. II. 86. — Stromate tenuissimo effuso tecto nigro, peritheciis erumpentibus subsolitariis, intus albis, ostiolo prominulo albo.
- Hab.* in ramis Rhois in Carolina et Pensylvania. — Stroma tantum est nigredo sub epidermide corticem interiorem penetrans. Perithecia geminatim connata aut omnino solitaria, globosa, atra. Asci elongati, suberecti.
47. **Physalospora eriostega** (C. et E.) Sacc. *Sph.* (obtectæ) *eriostega* C. et E. New Jersey Fungi in Grev. VI, p. 14, t. 95, fig. 2. 1702 — Gregaria, peritheciis leniter fusco-lanosis demum glabris, tectis, in maculas bullatas congestis; ascis clavatis; sporidiis biserialis, late lanceolatis, utrinque obtusis, 35 ≈ 12, granuloso-hyalinis.
- Hab.* in ramis Lauri Sassafras, New Jersey Amer. bor. — Extra ascos adsunt sporidia 2-septata, brunnea (« mihi visa potius stylosporea »). — Var. *glabrata*: peritheciis calvis. In sarmentis Rubi Idæi, ibidem.
48. **Physalospora entaxia** (C. et E.) Sacc. *Sph.* (obtectæ) *entaxia* C. et E. New Jersey Fungi in Grev. VI, p. 14, t. 95, fig. 14. — Pe-

ritheciis seriatis, erumpentibus, globosis, atris, papillatis; ascis clavatis; sporidiis lanceolatis, hyalinis, 30-32 \approx 12; pycnidiis in consortio perithecia ascophora imitantibus; stylosporidis diplodioideis, ellipticis, uniseptatis, brunneis, 22 \approx 10.

Hab. in ramis *Andromedæ*, New Jersey Amer. bor.

49. **Physalospora phomopsis** (C. et E.) Sacc. *Sph.* (obtectæ) *phomopsis* C. et E. New Jersey Fungi in Grev. VII, p. 41. — Peritheciis numerosis, minimis, membranaceis, brunneis, subapplanatis, epidermide tectis; ascis clavatis; sporidiis naviculoideis, hyalinis, nucleatis, 12-14 \approx 6.

Hab. in caulibus *Desmodii*, New Jersey Amer. bor. — An sporidia tandem 1-septata?

50. **Physalospora phlyctænoides** (B. et C.) Sacc. *Sph.* *phlyctænoides* B. et C. North Am. Fungi n. 953. — Irregularis, fusca, deplanata; ascis late lanceolatis brevibus; sporidiis biseriatis cymbæformibus, endochromate utrinque retracto, 12-14 μ . longis.

Hab. in caulibus *Dolichi*, Alabama Amer. bor. — Maculas format minutas, fuscas, varias in matrice dealbata.

51. **Physalospora crustulata** (Lév.) Sacc. *Sphaeria* (obturata) *crustulata* Lév. Ann. Sc. nat. 3, 1845, p. 52. — Peritheciis sparsis globosis, subiculo crustaceo cinerascete semi-immersis, ostiolis papillatis; nucleo albo; ascis cylindraceutis, paraphysatis; sporidiis ellipsoideis, continuis, hyalinis.

Hab. ad ramos *Xanthoxyli* (BERTERO).

52. **Physalospora Cassiæ** (Lév.) Sacc. *Sphaeria* (epiphylla) *Cassiæ* Lév. Ann. Scienc. nat. 3, 1845, p. 53. — Innata, epiphylla, sparsa, peritheciis hemisphæricis nigris nitidis, intus albicantibus, ostiolis prominulis conico-depressis; ascis clavatis, paraphysatis, octosporis; sporidiis monostichis, ellipsoideis, continuis, hyalinis.

Hab. in foliis *Cassiæ* (ubi?).

53. **Physalospora sporadina** (Lév.) Sacc. *Sphaeria* (epiphylla) *sporadina* Lév. Ann. Scienc. nat. 3, 1845, p. 53. — Epiphylla, peritheciis gregariis, basi applanatis, subglobosis, lævibus, demum cupulatis, crusta nigra, secedente insidentibus; ostiolis minimis papillatis; ascis brevibus, inflatis, paraphysatis; sporidiis elliptico-oblongis, continuis, inordinate dispositis,

Hab. in Insula Mauritiï, ad folia *Myristicæ aromaticæ* (COMMERSON).

54. **Physalospora depressa** (Berk.) Sacc. *Sphaeria* (foliicolæ) *depressa* Berk. Crypt. antarct. p. 60, t. LXVIII, fig. V. — Gregaria, minor,

atra, peritheciis tectis subglobosis, lævibus collo destitutis, siccitate depressis; ascis teretibus, paraphysatis; sporidiis distichis, lanceolatis, continuis, hyalinis, 2-nucleatis.

Hab. in foliis dejectis Luzulæ crinitæ in insula Campbell. 1710

55. **Physalospora Idæi** (Fuck.) Sacc. *Sphæria Idæi* Fuck. Symb. myc. p. 114, non *Sphæria clypeiformis* de Lacr. in Rabh. Fungi eur. 331. — Peritheciis gregariis, concavo-depressis, epidermidi nigricatæ innatis, tectis, ostiolis prominulis, minutissimis, papillatis; ascis cylindræis, stipitatis, 8sporis, $88 \approx 6$; sporidiis monostichis, ovatis, utrinque attenuatis, 4guttulatis, hyalinis, $12 \approx 4$.

Hab. in sarmentis Rubi idæi prope Æstrich, Rhenogovia.

56. **Physalospora fœniculacea** (Mont.) Sacc. *Sphæria fœniculacea* 1711
Mont. Syll. Crypt. n. 841 et Cent. VI, n. 29, Ann., 3, XI, p. 40. — Seriata, maculæformis, cinerea; peritheciis minimis, stromate fusco immersis, tectis, globoso-depressis, siccitate cupulari-collabentibus, ostiolo brevi, vix ullo; ascis oblongo-cylindræis, $125 \approx 15$, basi hinc gibbosa conjunctis, sporidiis 8 ellipticis, $20 \approx 10$, hyalinis, granulosis.

Gab. in caulibus Anethi Fœniculi apud Montaud-lez-Miramas Galliæ australis (CASTAGNE).

57. **Physalospora viscosa** (C. et E.) Sacc. *Sphæria* (Obtectæ) *viscosa* 1612
C. et E., Grev. V, p. 34, t. 75, fig. 3. — Gregaria; peritheciis tectis, applanatis, nigris; ostiolo erumpente; ascis crasse clavatis; sporidiis biseriatis, naviculoideis, hyalinis, $35 \approx 10$.

Hab. in ramis Azalæ viscosæ, Clethræ et Aceris, New Jersey, Amer. bor. — Perithecia lenissime prominula, ostiolis erumpentibus.

58. **Physalospora thyoidea** (C. et E.) Sacc. *Sph.* (Immersæ) *thyoidea* 1713
C. et E. New Jersey Fungi in Grev. VI, 14, tab. 96, fig. 19. — Gregaria; peritheciis semi-immersis, atris, collo elongato; ascis clavatis; sporidiis naviculoideis, hyalinis, $35 \approx 10$.

Hab. in ramis Cupressi thyoidis et Juniperi virginianæ, New Jersey Americæ borealis. — Sporidia subinde ellipsoidea et crassiora; an denique septata? Adsunt simul spermogonia et pycnidia.

59. **Physalospora microtheca** (C. et E.) Sacc. *Sphæria microtheca* 1714
C. et E. New Jersey Fungi in Grev. VI, p. 14. — A *Ph. thyoidea*, cui valde affinis, differt tantum peritheciis subnudis (e cortice secesso?).

Hab. in ligno quercino expallente, New Jersey, Amer. bor.

60. **Physalospora Ecastophylli** (Lév.) Sacc. *Sphæria* (epiphylla) *Ecastophylli* Lév. Ann. Scienc. nat. 3, 1845, p. 54. — Epiphylla, sparsa, innata; peritheciis conico-rotundatis. basi applanatis, nigris, nitidis, nucleo nigro; ostiolis prominulis; ascis ovoideis, paraphysatis, subsinuosis; sporidiis globulosis, hyalinis.

Hab. in Porto-Rico, in foliis *Pterocarpi Ecastophylli* (BERTERO).

61. **Physalospora nitens** (Lév.) Sacc. *Sphæria* (conferta) *nitens* Lév. Ann. Scienc. nat. 3, 1845, p. 51. — Innata, epiphylla, maculæformis, effusa, atra, nitida; peritheciis globosis, stromate cinerascente immersis, nucleo albo, ostiolis prominulis albis; ascis clavulatis, octosporis; sporidiis oblongis subvermicularibus, continuis, hyalinis.

Hab. in Peruvia ad folia *Psoraleæ* ignotæ (DOMBEY).

62. **Physalospora coccodes** (Lév.) Sacc. *Sphæria* (conferta) *coccodes* Lév. Ann. Scienc. nat. 3, 1845, p. 50. — Innata, epiphylla, subglobosa, nigra, nitida, peritheciis globosis, congestis, intus albis, ostiolis obsolete; ascis paraphysatis; sporidiis ellipticis, continuis hyalinis, inordinatis.

Hab. in Brasilia, ad folia *Leguminosæ* ignotæ.

63. **Physalospora subsimplex** (Schw.) Sacc. *Sphæria* (Obturatæ) *subsimplex* Schw. Syn. Amer. bor. n. 1679. — Primum tenerrima, epidermide alba tecta, ostiolis translucetibus, dein epidermide secussa, subdenudata; peritheciis dense aggregatis, cortici subimmersis, sæpe confluentibus, oblongo-hemisphæricis, depressis, rugosis, atris, papillatis, papilla decidua, tum pertusis; sporidiis (teste Berk.) ellipsoideis, hyalinis, 14-15 μ . long.

Hab. in junioribus ramis *Rhois glabræ* frigore emortuis, Bethlehem et New York., Amer. bor.

64. **Physalospora Bambusæ** (Rabh.) Sacc. *Sphæria Bambusæ* Rabh. Hedw. 1878, p. 45. — Peritheciis erumpentibus, numerosissimis, sparsis v. plus minus approximatis (passim stromate confluenta), rotundatis, oblongis, atris, parum nitentibus, ostiolo umbilicato; ascis elongato-linearibus, angustis, breviter stipitatis, octosporis; paraphysibus filiformibus, crispatis obvallatis; sporidiis (in ascis) monostichis, oblongis, utroque polo obtusis rotundatis, 9-11 \approx 5, hyalinis.

Hab. in horto botanico, Calcutta Ind. orient., in utraque pagina foliorum *Bambusæ spinosæ*.

65. **Physalospora Ludwigæ** (Cooke) Sacc. *Sphæria Ludwigæ* Cooke Hedw. 1868, p. 39. — Gregaria; peritheciis epidermide nigrificata

tectis elevatis; ascis clavatis; sporidiis ellipticis, vel pyriformibus, continuis, hyalinis, biseriatis, 25 ≈ 10.

Hab. in caulibus Ludwigiæ, in Carolina australi (RAVENEL).

66. **Physalospora Callunæ** (De Not.) Sacc. *Sphærella Callunæ* De Not. Sfer. it. p. 88, t. 100. — Peritheciis sparsis, innato-emergentibus, exiguis, punctiformibus, atris, nitidulis e basi applanatis, filamentis aliquot repentibus, fuliginis stipatis, hemisphæricis, vertice obtuso, osculo tornato, simplicis, vix prominulo dehiscentibus, cellulis ægre conspicuis, fuscis contextis; ascis e basi breviter tenuata oblongato-teretibus, obtusis, paraphysibus filiformibus stipatis 8-sporis; sporidiis elliptico-oblongis, 15 ≈ 5, hyalinis nucleis binis subpolaribus instructis. 1721

Hab. in ramis emortuis Callunæ vulgaris, Valle Intrasca, Lago Maggiore, in Italia boreali.

67. **Physalospora Laburni** (Bon.) Sacc. *Carlia Laburni* Bon. Abhandl. p. 152, t. I, fig. 23. — Peritheciis globosis, nigris, epidermide tectis, gregariis; ascis clavatis, ventricosis, brevibus; sporidiis fusiformibus, ventricosis, utrinque obtusiusculis granulosis, subhyalinis. 1722

Hab. in caulibus subvivi Cytisi Laburni prope Treviros Germaniæ.

68. **Physalospora Labecula** (Lév.) Sacc. *Sphæria* (conferta) *Labecula* Lév. Ann. Scienc. nat. 3, 1845, p. 51. — Innata, epi-hypophylla, maculiformis, lævis, nigra, nitida; peritheciis prominulis subglobosis, intus nigris, stromate albo immersis, ostiolis obsoletis; ascis paraphysatis, ovato-oblongis, octosporis; sporidiis monostichis, cylindraceis, continuis, hyalinis. 1723

Hab. in Nova Hollandia, ad folia Acaciæ verticillatæ.

69. **Physalospora Miconiæ** (Duby) Sacc. *Sphæria Miconiæ* Duby Crypt. de Bahia p. 3, tab. II, fig. 1. — Superficialis, orbicularis suborbicularisve demum diffracta, prominula, nigra, rugulosa punctata, punctis prominulis, peritheciis globosis subseriatis, astomis, albo-farctis; paraphysibus elongatis, asco subduplo longioribus; ascis clavatis longe stipitatis; sporidiis parvis globosis, monostichis, quaternis v. octonis. 1724

Hab. in foliis Miconiæ calvescentis Brasilæ, in prov. Bahia (SALZMANN). — An hujus loci?

70. **Physalospora inanis** (Schwein.) Sacc. *Sphæria inanis* Schw., in B. et C. Exot. Fungi Schw. p. 291, t. XXV, fig. 13. — Hypophylla, sparsa, tecta; peritheciis globosis, apicibus summis epidermide adnatis, demum cum epidermidis particula centro circumscissis; ascis 1725

tereti-oblongis, subsessilibus; sporidiis distichis, oblongo-linearibus, 25 μ . longis.

Hab. in pag. infer. Aroideæ cujusdam, Surinam. — An potius e genere *Massalongiella*?

71. **Physalospora *Ænanthes*** (Crouan) Sacc. *Sphæria* (*Ænanthes* Cr. 1726

Finist. p. 25. — Peritheciis inter fibras caulis subimmersis, nigris, sphaericis, $\frac{1}{5}$ mill. diam., ostiolo apiculato; ascis fusoideis, octosporis; sporidiis navicularibus, 2-guttulatis.

Hab. in caule emortuo *Ænanthes crocata*, Finistère Galliæ.

72. **Physalospora *Corallinarum*** (Crouan) Sacc. *Sphæria* *Corallinarum* 1727

Crouan Finist. p. 24. — Peritheciis hemisphaericis v. subconicis, nigris, solidiusculis, 1-2 mill. diam., ostiolo nullo; ascis crassis ovoideis vel pyriformibus, octosporis; sporidiis oblongis, hyalinis granulosisque.

Hab. in fronde *Corallinæ officinalis* et *Janiæ corniculatæ*, Finistère Galliæ.

73. **Physalospora *Obionis*** (Crouan) Sacc. *Sphæria* *Obionis* Crouan 1728

Finist. pag. 25. — Peritheciis nigris, sphaericis, 1-2 mill. diam., ostiolo brevi; ascis cylindraces elongatis, octosporis; sporidiis monostichis oblongis, crasse 2-guttutis.

Hab. in caule putri *Obionis*, Finistère Galliæ.

74. **Physalospora *Hepaticarum*** (Crouan) Sacc. *Sphæria* *Hepaticarum* 1729

Crouan Finist. p. 25. — Peritheciis hemisphaericis, nigris, $\frac{1}{5}$ mill. diam., epidermide pustulata tectis; ascis clavatis, octosporis; sporidiis oblongis, 4-guttulatis.

Hab. in thallo *Lunulariæ*, Finistère Galliæ.

Species imperfecte cognitæ.

75. **Physalospora *Veselskyi*** Auersw. Myc. Eur. Pyr. t. 12, fig. 157, 1730

(*Leptosphæria*). — Peritheciis; ascis clavatis, paraphysatis, brevissime stipitatis, octosporis; sporidiis subdistichis, obovatis, granulosis, hyalinis. — *Hab.*

76. **Physalospora *nubilosa*** Auersw. Myc. Eur. Pyr. tab. 12, fig. 159, 1731

(*Leptosphæria*). — Peritheciis; ascis crassis, clavatis, subsessilibus, octosporis; sporidiis tristichis, ovato-fusoideis, fuscidulis. — *Hab.*

UROSPORA H. Fab. Sphér. Vaucl. p. 75 (Etym. ab *oura*, cauda, ob sporidia caudata). — Perithecia simplicia, tecta. Asci octospori.

Sporidia continua, hyalina, oblongo-lanceolata, in caudam longe attenuata.

1. **Urospora Cocciferæ** H. Fab. Sphér. Vaucl. pag. 75, fig. 1. — Peritheciis sparsis, punctiformibus, minimis, globosis, atris, in cortice nidulantibus et epidermidem pustulatim infantibus, ostiolo erumpente, papillato; ascis cylindraceo-clavatis, breve et crasse stipitatis, 8-sporis, 50-55 \approx 6-8; sporidiis distichis, hyalinis, pluriguttatis, oblongo-lanceolatis, antice acuminatis, postice in setam vel caudam hyalinam multo longiorem productis, 10-15 \approx 3-4 (absque seta).

Hab. ad ramulos emortuos *Quercus cocciferæ* prope Orange, Vaucuse Galliæ.

TRABUTIA Sacc. et Roum. Rev. Mycol. 1881, p. 27, t. XIV, fig. 2. (Etym. a cl. Doct. L. TRABUT, Floræ Algeriensis indagatore). — Stroma phyllogenum, atrum, radio-asteromatoides, applanatum. Perithecia stromati adnata, discreta protuberantia, ostiolo pertusa. Asci octospori, obsolete paraphysati, facile fluxiles. Sporidia ovoideo-oblonga, continua, subhyalina. Genus habitu *Phyllachoræ* vel *Rhytismatis*, sed characteribus *Hypospilæ* magis affine, ideoque Pyrenomycetibus sphæriacæis genuinis adscribendum.

1. **Trabutia quercina** (Fr. et Rud.) Sacc. et R. *Rhytisma quercinum* Fr. et Rud. in Linnæa (1830), *Asteroma parmelioides* Desm. (1847). *Rhytisma riccioides* Let. Champ. Bull. t. 629, fig. 4 (1831). *Sphæropsis riccioides* Lév. A. S. N. 1848, IX, 257. — Peritheciis hemisphæricis, subcarbonaceis, atronitentibus, ostiolo rotundo minuto pertusis, denique collabascendo umbilicatis v. subplicatis; nunquam vero disco aperta ut in *Rhytismate*; ascis cylindraceo-clavatis, 100-110 \approx 18, paraphysibus vagis obvallatis, tunica apice integra præditis, breve stipitatis mox resorptis; sporidiis distichis, oblongo-navicularibus utrinque obtusiusculis, 28-30 \approx 8-10, granulosis e hyalino pallidissime melleis.

Hab. in pag. sup. foliorum *Quercus Ilicis* in Gallia, Italia, Germania, Algeria, *Q. laurifoliæ*. Florida Amer. bor. — Var. *Terraciani* Erb. cr. ital. II. n. 646; sporidiis utrinque paulo acutioribus (ascis vero similibus). In foliis *Quercus sessilifloræ* v. affinis in Italia meridionali.

2. **Trabutia? cayennensis** (DC.) Sacc. *Xyloma cayennense* DC. Mem. Mus. 11, p. 321, t. III, fig. 6. *Sphæria Cayannensis* (DC.) Fr. S. M. II, 438, Linnæa 1830, p. 546. — Innata, suborbicularis, con-

vxula; peritheciis, in macula atra innatis, superne tuberculato-prominulis; ascis elongatis; sporidiis late ellipticis 10 μ . longis.

Hab. in foliis Psidii, Myrtacearum, Fici Roxburghii in Brasilia, Surinam, India orient. — Pustulæ nigræ. 1 lin. latæ, mamillis 2-3 vix prominulis onustæ; folium circa pustulam decoloratum, parte limitata linea nigra. Subinde maculæ magis applanatæ et margine prominulo cinctæ. Ostiola obsoleta. Quoad genus mihi dubia species.

DITOPELLA De Not. Sfer. ital. pag. 42 (Etym. a *ditopa*, epitheton jam specificum speciei primariæ). — Perithecia corticola, tecta, ostiolo suberumpente. Asci subclavati, polyspori, aparaphysati. Sporidia oblonga v. fusoidea, continua, subhyalina.

1. **Ditopella fuispora** De Not. Sfer. ital. t. 48. *Sphæria ditopa* Fr. 1735
S. M. II. p. 481 p. p. *Cryptospora suffusa, minor, polyspora* Tul. Carp. II. 145. *Cr.?* *ditopa* (Fr.) Karst. Myc. Fenn. II. p. 80. — Peritheciis sparsis, peridermio tectis eique soluto adhærentibus, sphæroideis, mox collabentibus, cupuliformibus, glabris, nigris latit. 0.7 mill.; ostiolo in disco minimo, sordide pallido, demum per peridermium elevatum suberumpente, nigro; ascis cylindræo-clavatis, breviter tenuissimeque pedicellatis, polysporis, 90-115 \approx 15-18; sporidiis conglobatis, fusoideo-elongatis, plerumque rectis, 4-guttulatis, hyalinis, 16-24 \approx 2,5-3,5, paraphysibus nullis.

Hab. in ramis corticatis Alni glutinosæ in Succia, Britannia, Gallia, Belgio, Germania, Fennia, Italia bor. Sporidia, teste Rehmio, in quoque asco 24, subinde simulate (ob plasma divisum) 1-septata.

2. **Ditopella Cryptosphæria** (Fuck.) Sacc. *Sph. Cryptosphæria* Fuck. 1736
Symb. p. 110. *Gnomonia polyspora* Auersw. Myc. Eur. Pyr. p. 24. t. 9. f. 124. — Peritheciis sparsis, immersis, sphæroideis, rostro conoideo, emerso, dimidium perithecium longo vel paullo longiore, epidermidem immutatam leviterque inflatam perforantibus, atris, 0.3-0,5 mill. lat.; ascis polysporis, clavatis, breviter acuteque pedicellatis, 100 \approx 15-17; sporidiis conglobatis, fusoideo-elongatis, rectis vel rectiusculis, simplicibus, minute guttulatis, 15-20 \approx 2-3.

Hab. in petiolis foliorum Alni glutinosæ putrescentium, (Estrich Germaniæ et in Fennia.

3. **Ditopella farcta** (B. et Br.) Sacc. *Sph. farcta* B. et Br. Ann. N. 1737
II. n. 631. t. 10. fig. 15. Cooke Handb. n. 2659. — Tecta, sparsa; peritheciis solitariis, globosis, denique collabentibus, collis bre-

vibus, ostiolo obtuso, denique peridermium perforante; ascis clavatis, apice obtusis, brevissime stipitatis, polysporis; sporidiis terti-oblongis, utrinque obtusiusculis, 3-4-nucleolatis, hyalinis.

Hab. in ramis putridis Ulmi, Batheaston Britannicæ. — Habitu *Cryptosporellæ hypodermicæ* affinis. Sporidia (ex icone) 12 v. plura in quovis asco, hinc diversa a *Sph. farcta* Plowr. *Sph.* Brit. n. 68, quæ *Diaporthe*.

4. **Ditopella Vizeana** Sacc. et Sp. Mich. II, 248, F. it. t. 205. *Nectria* 1738
caulina Cooke Fung. Brit. Ser. II, n. 479. — Peritheciis gregariis, globoso-depressis, $\frac{1}{4}$ - $\frac{1}{3}$ mill. diam., epidermide sæpe cinerascens, dein fissâ, velatis, nigris; ostiolo exiguo obtuso; peritheciis contextu distincte parenchymatico, atro-fuligineo; ascis cylindraceo-clavatis, breviuscule stipitatis, 110-115 \approx 15-18, apice crassiuscule tunicatis, obtuseque rotundatis, aparaphysatis, polysporis; sporidiis (30-50) polystichis, fusoideis, utrinque obtusiusculis, rectis v. leniter inæquilateralibus, 15-18 \approx $4\frac{1}{2}$ - $5\frac{1}{2}$, pluriguttulatis v. nubiosis e hyalino dilute olivaceis.

Hab. in ramulis Buxi sempervirentis emortuis, Colfosco, Ital. bor. (SPEGAZZINI), Forden Britannicæ (VIZE).

5. **Ditopella Hosackiæ** (Cooke et Harkn.) Sacc. *Sphaerella?* *Hosackiæ* 1739
C. et H. in Grevill. IX, p. 86. — Sparsa, tecta, punctiformis; peritheciis globoso-depressis; ascis clavatis, sessilibus, polysporis; sporidiis circ. 16, ellipsoideis continuis, hyalinis, 6 \approx 2,5.

Hab. in ramis Hosackiæ in California (HARKNESS).

POLYTRICHIA Sacc. (Ety. *polys*, plures et *thrix* seta, ob perithecia setosa). — Perithecia subsecta, dein erumpentia, globulosa, coriacea, setis tortuosis obsita. Asci clavati, polyspori. Sporidia minuta continua, hyalina. — Genus mihi nondum observatum, fide diagnoseos accuratissimi Montagnei (qui specimina ex locis variis a Lacroix, Mougeot et Wallroth accepit) conditum.

1. **Polytrichia Wallrothii** Sacc. *Sphaeria polytricha* Wallr. Comp. 794. 1740
Mont. Cell. Cent. VIII, p. 60 (ex specim. Lacroix, Mougeot et Wallroth). — Peritheciis innato-erumpentibus, $\frac{1}{3}$ mill. diam., majusculis nigris, vertice convexo epapillato, pilis tortuosis concoloribus undique obsesso prominulis, ovato-subrotundis, hæmisphæricis, intus albo-farctis, ceraceis; ascis clavatis maximis, polysporis, 160-200 \approx 40; sporidiis minutis, continuis, hyalinis.

Hab. ad culmos secalinos et triticeos putres, in Germania et Gallia. — Setæ septatæ, fuliginæ, 300 μ . longæ. Cl. Tulas-

ne, Fuckel etc. ducunt *Sph. polytricham* Wall. ad *Pleosporam*, sed ab hoc genere descriptio supra data abhorret.

TRICHOSPHERIA Fuck. Symb. myc. p. 144, em. Sacc. Cons. gen. pyr. p. 6. (Etym. a *thrix*, seta, ob perithecia setulosa). — Perithecia globulosa superficialia, sparse v. dense pilosa, quandoque villo insidentia. Asci oblongi v. cylindracei, 8spori. Sporidia continua, ovata seu oblongo-ovata v. subcylindracea, rarissime appendiculata, semper hyalina. — Conidia et spermogonia in nonnullis nota.

1. **Trichosphæria pilosa** (Pers.) Fuck. Symb. myc. p. 145, *Sph. pilosa* 1741
Pers. Syn. Fung. p. 73. — Peritheciis sparsis vel confertis, superficialibus, rotundato-ovoideis, læviusculis, ostiolo simplici atris, breviter pilosis, 0,2 mill. latit., vel paullo ultra; ascis cylindraceis, 50-60 = 4-5, octosporis, spurie paraphysatis, brevissime stipitatis; sporidiis monostichis, ellipsoideis, guttulatis, chlorino-hyalinis, 5-8 = 3-4.

Hab. ad corticem et ligna Betulæ, Coryli, Quercus, Pini, in Suecia, Britannia, Germania, Belgio, Gallia, Fennia, Italia et America boreali.

2. **Trichosphæria tarda** Fuck. Symb. myc. pag. 145. — Peritheciis 1742
sparsis, seminis *Papaveris* magnitudine, globosis, undique strigoso-pilosis, olivaceo-fuscis, ostiolis minutissimis; ascis stipitatis, oblongis, 8sporis; sporidiis distichis, elongato-lanceolatis, simplicibus, hyalinis, 4guttulatis. — Spermogonia peritheciis ascophoris similia: spermatis suballantoideis 8 = 2, 4guttulatis, hyalinis.

Hab. in foliis putridis Coryli Avellanæ, raro, prope Johannisberg Germaniæ.

3. **Trichosphæria Punctillum** Rehm et Britz. Augsb. Pilzfl. p. 82. — 1743
Peritheciis minutissimis, globosis, papillatis, sessilibus in mycelio fusco tenerrimo sparsis; ascis sessilibus oblongis, 60-70 = 9, apice incrassatis truncatisque, paraphysatis, octosporis; sporidiis elliptico-oblongis, 15 = 5, distichis, subacuminatis, intus granulosis, hyalinis.

Hab. ad lignum pineum putrescens, Augsburg Germaniæ. — Pili perithecorum longi, simplices, fusci, 3-4 μ . cr.

4. **Trichosphæria superficialis** (Curr.) Sacc., *Sphæria superficialis* 1744
Curr. Linn. Trans. XXII, p. 317, tab. 57, fig. 25, Cooke Handb. n. 2567. — Peritheciis subglobosis, minutissimis, pilosis, subiculo villoso insidentibus; ascis cylindricis, breve stipitatis, octosporis;

sporidiis monostichis, ellipticis v. oblongo-ovoideis, rarius leniter curvis, 7,6–10 μ . longis, 2–4-guttulatis, hyalinis.

Hab. in ligno abietino in Britannia.

5. **Trichosphæria erythrella** (Wallr.) Fuck. Symb. p. 105, *Sph. ery-* 1745
thrella Wallr. Fl. crypt. II, n. 3839. — Peritheciis superficialibus minutis sparsis v. confertim gregariis, subglobosis, basi nuda leviter adfixis, nigro-fuscis, extus præter verticem tenuiter papillatum vel lere delicato rufo-ferrugineo, dein sordide fusco vestitis, demum calvis, nucleo albo tenui; ascis cylindræis, stipitatis, sporidia 8, monosticha, ovato-oblonga, hyalina includentibus. — Sec. Fuck. ejus status conidicus sistit *Acrostalagmum cinnabarinum*.

Hab. in caulibus valde putridis Brassicæ oleracæ in Germania et Belgio raro. — Status conidicus fere ubique.

6. **Trichosphæria cæsia** (Carm. et Curr.) Sacc. *Sph. cæsia* Carm. et 1746
Curr. Linn. Trans. XXII, p. 316, tab. 57, fig. 17, Cooke Handb. n. 2563. — Peritheciis albo-pilosis; ascis cylindræis, apice rotundatis, stipitatis, octosporis; sporidiis oblique monostichis elliptico-ovoideis, interdum inæquilateralibus, minutis, 5 \approx 2, 1-guttulatis hyalinis.

Hab. in ligno putri in Brittaniam.

7. **Trichosphæria fissurarum** (B. et C.) Sacc. *Sph. fissurarum* B. et 1747
C. North Amer. Fungi n. 921. — Peritheciis parvis, globosis, breviter villosis, collo crassiusculo, sursum attenuato; ascis parvis, sporidiis minutis, oblongis, hyalinis.

Hab. in ligno pineo in Carolina infer. America boreali.

8. **Trichosphæria exosporioides** Fuck. Symb. myc. p. 145 (nec *Sph.* 1748
exosporioides Desm. quæ *Venturia*). — Peritheciis minutissimis, superficialibus, aterrimis, globosis, pilis concoloribus-vestitis; ascis oblongis, substipitatis, 8sporibus, 28 \approx 7; sporidiis ellipticis, utrinque appendiculis fasciculatis, minutissimis, simplicibus, 8 \approx 3, hyalinis. — Spermogonia peritheciis ascophoris similia: spermatiiis ellipticis, 10 \approx 3, hyalinis.

Hab. in foliis putridis Caricis et Luzulæ, prope Æstrich, Rhenogovia.

9. **Trichosphæria nobilis** Sacc. et Speg. Mich. II, 247, F. ital. t. 306. 1749
— Peritheciis superficialibus, sparsis gregariisque globulosis, conico-papillatis, nigris, setulis filiformibus, obtusiusculis, rigidulis, continuis, fuliginis sursum pallidioribus undique vestitis; ascis cylindræis, breviuscule subnoduloso-stipitatis, apice rotundatis, 70–80 \approx 8–10, aparaphysatis, tetrasporis; sporidiis recte vel oblique mo-

nostichis, ellipsoideis, utrinque obtusis, 2-guttulatis, 14-17 \approx 8, e hyalino chlorinis.

Hab. in fragmentis ligneis Lauri nobilis vix putrescentibus, Conegliano, Italiae bor. (SPEGAZZINI). — Inter perithecia adsunt fasciculi hypharum (setulis perithecii similium) e ganglio stromatico (perithecio incipiente?) oriundis, forte statum conidicum sistentes: sed conidia huc usque non vidimus.

10. **Trichosphæria regulina** (B. et Br.) Sacc. *Sph.* (Byssisedæ) *regulina* B. et Br. Fungi of Ceylon n. 1095. — Peritheciis minutissimis ovatis obtusis e mycelio tenui oriundis; ascis clavatis, 75 μ . long.; sporidiis biseriatis oblongis curvatis tenuibus, 20 \approx 4.

Hab. ad ligna Peradeniya, Ceylon.

11. **Trichosphæria regulinoides** Sacc.? *Sph. regulina* B. et Br., Ces. Myc. Born. p. 21. — Peritheciis minutissimis, ovatis, obtusis ostiolo impresso, insidentibus subiculo intense brunneo ex hyphis dense septatis simplicibus constituto; ascis linearibus, 50 μ . longis, mox diffluentibus; sporidiis curvulis, tenuibus, altero fine crassiori, hyalinis, turbidulis, simplicibus (an guttulatis?) 7-8 \approx 2 $\frac{1}{2}$.

Hab. ad lignum denudatum, Sarawak, Borneo (BECCARI). — Sporidiis plus dimidio minoribus etc. a *Trich. regulina* differre videtur.

12. **Trichosphæria rhodochlora** (Mont.) Sacc. *Sph. rhodochlora* Mont. Syll. crypt. n. 795 et Ann. Scienc. nat. 2, I, p. 307, t. 12, f. 2. — Villosa; peritheciis globoso-ovoideis villo læte viridi tectis, intus sanguineis, ostiolis primo oblongis roseis demum papillula nigra decidua pertusis; ascis clavatis; sporidiis ellipticis, hyalinis, coarcervatis roseis, simulate (ob plasmatis partitiones?) clathratis.

Hab. in cortice Alni glutinosi emortuæ, ad Rohecardon Lugduni Galliae. — An novi generis typus? an *Teichospora* species?

13. **Trichosphæria subcorticalis** (Peck) Sacc. *Sphæria subcorticalis* Peck, 28 Rep. on the St. Mus. — Peritheciis pro genere majusculis, molliusculis, subinde collabascensibus, nigris, tomento fusconigro denso obductis, eodemque effuso insidentibus; ascis.....; sporidiis oblongis, hyalinis, 7-8 μ . longis.

Hab. in cortice interiore relaxato Carpini Americanæ, North Greenbush, Amer. bor. — Ubi perithecia conferta sunt, tomentum subiculum effusum sistit, ubi laxiora, sigillatim ea circumdat. An *Enchnoa*?

14. **Trichosphæria acanthostroma** (Mont.) Sacc. *Sph. acanthostroma*

Mont. Syll. Crypt. n. 792 et Guy., n. 558. — Byssiseda; peritheciis minutissimis globosis gregatim confertis, lævibus, nigris, epapillatis, mox centro depressis, late pertusis, subiculo concolori tenui cinctis; fibris subiculi septatis, in ramos breves aculeiformes divisus; sporidiis ovoideo-cymbiformibus, exiguis, 5-6,5 μ . longis, 2-guttulatis.

Hab. ad cortices et ligna arborum, Cayenna (LEPRIEUR), Ceylon (BERK.), in Acere, Quercu, Myrica in Amer. bor. (RAVENEL).

WALLROTHIELLA Sacc. (Etym. ab ill. *F. G. Wallroth*). — Perithecia superficialia, globulosa, glabra, nigra. Asci teretiusculi, octospori. Sporidia ovoidea vel suboblonga, continua, hyalina. — Est quasi *Rosellinia* (*Coniomela*) sed hyalospora.

1. **Wallrothiella congregata** (Wallr.) Sacc. *Sph. congregata* Wallr. 1755
Comp. 786, Mont. Pl. Cell. Cent. VIII, p. 61. — Peritheciis minutissimis, confertissimis, cubilibus laxè adhærentibus, subrotundis atris, nitidis, subtilissime rugulosis, vertice depresso tenuiter papillato demum pertusis, nucleo albido tenui faretis; ascis cylindricis, minutis 20 \approx 2, octosporis; sporidiis globulosis, 2 μ . diam., monostichis, hyalinis.

Hab. ad ligna salicina putredine exesa, Thuringia in Germania.

2. **Wallrothiella Arceuthobii** (Peck) Sacc. *Sph. Arceuthobii* Peck, 17 1756
Rep. p. 111, t. I, fig. 10-14. — Peritheciis minutis, dense cæspitosis, oblongis vel cylindræis, obtusissimis, nitidis, nigris; ascis subclavatis, fugacibus; sporidiis sparsis, globosis, hyalinis 4 μ . d.

Hab. in Amer. bor. Forestburgh in capsulis *Arceuthobii* pusilli. — Perithecia subastoma, bombardioidea.

3. **Wallrothiella minima** (Fuck.) Sacc. *Rosellinia minima* Fuck. Symb. 1757
myc. p. 149. — Peritheciis gregariis, minutissimis, globoso-conicis, subtilissime, papillatis, atris, opacis, parce concolori-setulosis, subglabrisve; ascis in cirrhos, candidos expulsis, cylindræis, stipitatis, 8spor. 48 \approx 4-6; sporidiis oblique monostichis, oblongo-ovatis cylindræisve, monoplastis, hyalinis, 8 \approx 3; paraphysibus linearibus seu attenuatis, ascis longitudine.

Hab. in ramis decorticatis *Betulae* albæ, rarius, prope Mappen Germaniæ.

4. **Wallrothiella macilenta** (Cooke) Sacc. *Cucurbitaria macilenta* 1758
Cooke Grev. VII, 4. — Cæspitulis minimis, erumpentibus; peritheciis atris, papillatis, sub-nitidis, sicco collapsis; ascis cylindra-

ceis; sporidiis uniseriatis, ellipticis, utrinque attenuatis, binucleatis, 15 ≈ 6.

Hab. in ramis Abietis et Libocedri in California Americæ borealis.

5. **Wallrothiella squalidula** (C. et P.) Sacc. *Sphæria* (Denudatæ) *squalidula* C. et Peck. 29 Rep. on the St. Mus. — Peritheciis gregariis globosis, semiimmersis, vertice pertusis, 300 μ . diam., nigris, ascis cylindricis; sporidiis monostichis, ellipticis, continuis, hyalinis, 12–17 μ long. 1759

Hab. in ligno putri Castaneæ, Portville, Amer. bor.

6. **Wallrothiella melanostigma** (C. et E.) Sacc. *Sphæria* (Pertusæ) *melanostigma* C. et E. New Jersey Fungi in Grev. VI, p. 13, t. 95, fig. 16. — Gregaria, minima, atra; peritheciis subglobosis, 150 μ . diam., papillatis, e ligni fibris emergentibus, submembranaceis; ascis cylindraceo-clavatis; sporidiis ellipticis, parvulis, hyalinis, nucleatis, initio 1–2-guttatis, 10 ≈ 8. 1760

Hab. in ligno quercino expallente, New Jersey Amer. bor. 1761

7. **Wallrothiella minutissima** (Crouan) Sacc. *Sphæria minutissima* Crouan Finist. p. 23. — Peritheciis subsphæricis, papillatis, nigris minutissimis, $\frac{1}{10}$ mill. diam.; ascis cylindricis, octosporis, paraphysatis; sporidiis ovoideis, hyalinis.

Hab. in fimo vaccino vetusto inter muscos et palmellas, Finistère Galliæ.

BOTRYOSPHÆRIA Ces et De Not. Schema Sfer. it. in Comm. I, p. 211, ex parte, Sacc. Mich. I, 42 (nota), *Melanops* Nits. in Fuck. Symb. p. 225 (Etym. *botrys*, racemus, ob perithecia botryoso-aggregata). — Perithecia stromate pulvinate v. discoideo instrata v. semiin fossa, erumpenti-superficialia, globulosa, atra, intus sæpius alba, subcoriacea, ostiolo minuto impresso v. breve papillato. Asci clavati, octospori, paraphysati. Sporidia ovoidea v. suboblunga, continua, granulosa, hyalina. — Cum multas species exoticas de visu non agnoscam, omnes admisi, sed pro certo habeo inter plures discrimina nulla v. nimis levia intercedere.

1. **Botryosphæria Quercuum** (Schw.) Sacc. *Sphæria Quercuum* Schw. 1762 Car. n. 125, p. 40, *Melogramma Quercuum* (Schw.) Berk., *Melanops Quercuum* (Schw.) Rehm., *Sph. fuliginosa* M. et N. nec Pers. Syn. quæ *Cenangium fulig.* immaturum videtur. — Subelliptica, planiuscula, fusca, nigra; peritheciis subglobosis albofaretis, connatis, papillis prominulis; ascis clavatis, crassis, 105 ≈ 27, sub-

octosporis, paraphysatis; sporidiis obtuse ellipticis, inæquilateris, continuis, bi-guttatis, $33 \approx 12$.

Hab. in cortice Quercus in Carolina, New York, New Jersey etc. in Amer. boreali. — Gregaria, minuta, lineam circiter longa, difformis, elliptica v. lanceolata, ostiolis prominulis rugulosa, opaca, tota atra. Perithecia stromate tenui insident, sed nullo tecta v. cincta, demum evacuata intus atra. — Cl. Ellis (Proc. Nat. Sc. Phil. 1879, p. 66), ad hanc speciem permultas ducit quæ fructificatione revera satis inter se conveniunt sed vegetatione nimis differunt ut tute conjungi possint.

2. **Botryosphæria Bèrengeriana** De Not. Sfer. ital. 82, fig. 90. Sacc. 1763
Myc. Ven. Spec. p. 116, t. XI, f. 45. — Stromatibus erumpentibus superficialibus, pulvinatis angulosis, v. circulari-discoideis; peritheciis stromati semiimmersis, globulosis, obtusiusculis v. acutiusculis, nigris, intus albis; contextu atro-fusco; ascis elongato-clavatis, basi attenuatis, $70-80 \approx 18$, paraphysibus filiformibus densis obvallatis, 8sporis; sporidiis primo sphæroideis, dein ovoideo-fusiformibus, $20-25 \approx 10-12$, subdistichis, hyalinis, nucleatis. — *Dothiorella Bèrengeriana* Sacc. sistit pycnidium.

Hab. in ramis corticatis Magnoliæ grandifloræ, Frangulæ, Deutzia scabræ, Menispermicanadensis, Rhois radicans, Tilia europææ, Ailanthi, Quercus sessilifloræ, Rosæ centifoliæ, Juglandis regiæ, Sophoræ japonicæ, Mori albæ, Æsculi Hippocastani, Populi, Polygalæ, Pruni, Aceris, Platani etc. in Gallia, Germania, Lusitania, Amer. austr. — **B. acutior* Sacc. Fungi ital. t. 431. Peritheciis liberis, subaggregatis, ostiolo acuto; cetera typi. In ramis Philadelphii, Selva, Ital. bor. — **B. melanommoides* Sacc. Fungi ital. t. 433. Peritheciis liberis, gregariis, ostiolo acutiusculo; cetera typi. In ligno nudo populino, Vittorio, Ital. bor.

3. **Botryosphæria Arctostaphyli** (Plowr.) Calif. Sphær. in Grev. VII, 1764
p. 73. — Peritheciis superficialibus, inæqualibus, varia magnitudine subglobosis, depressis, collabescentibus; ostiolis obsolete; ascis clavato-pyriformibus $70 \approx 15-20$; sporidiis continuis, ovoideis, subinde curvulis, $15-18 \approx 4-5$, hyalinis. — Spermogonia phomatoidea: spermatisis ovoideis, hyalinis $3-4 \approx 1$.

Hab. in ligno Arctostaphyli glauci, California Amer. bor. — Accedit ad var. *melenommoidem* *B. Bèrengerianæ*.

4. **Botryosphæria Juglandis** (Mont.) Sacc. *Dothidea Juglandis* Mont. 1765
Pl. cellul. Cent. VIII, p. 126 (1860), *Botr. juglandina* De Not.

Sfer. ital. p. 82, t. 89. — Erumpens; stromatibus subcutaneis rugosis, subrotundis, confluentibus extus intusque atris; peritheciis immersis, vel semiimmersis oblongis, ostiolis conicis, intus niveis; ascis cylindrico-clavatis, octosporis, 150 μ . longis, paraphysatis; sporidiis oblongis vel subcymbiformibus, continuis, medio subventricosis, 25 \approx 10, granulosis, hyalinis (sec. icon. De Not. utrinque obtusis).

Hab. in ramis corticatis Juglandis regiæ in Italia et Gallia. — Species Notarisiana vix differt a Montagneana peritheciis paulo magis prominentibus.

5. **Botryosphæria Cerasi** (C. et Ell.) Sacc. *Dothidea Cerasi* C. et E. 1766
New Jers. Fungi in Grev. V, p. 34, t. 75, fig. 2. — Stromatibus gregariis, partim erumpentibus, elongatis, peridermio cinctis, atris; peritheciis papillatis; ascis clavatis, breve stipitatis; sporidiis ellipticis, hyalinis, 25 \approx 12-14.

Hab. in ramis Pruni Cerasi, New Jersey, Amer. bor.

6. **Botryosphæria advena** Ces et De Not. Schema Sf. p. 212 Sacc. 1767
F. it. t. 434. *Dothidea advena* Ces. Erb. critt. ital. ser. I, n. 495.
D. melanops Tul. Carp. II. 73. *Melanops Tulasnei* Fuck. Symb. 225. — Stromatibus innato-erumpentibus, corticolis, 1-2 mill. diam., depresso-pulvinatis nigris, superficie vix tuberculosus; albo-farctis, $\frac{1}{4}$ mill. diam., ostiolis obtusis; ascis magnis, clavatis, 150 \approx 25, apice lumine leniter coarctato, breve crasse stipitatis, paraphysibus filiformibus obvallatis, octosporis, sporidiis distichis, oblongo-rhombis, 40-44 \approx 15, guttulatis, nubilosisque hyalinis; stylosporibus in peritheciis distinctis fusosideo-elongatis, 45-50 \approx 12, granulosis, hyalinis.

Hab. in ramis corticatis quercinis in Gallia, Britannia, Germania et Italia boreali.

7. **Botryosphæria aterrima** (Fuck.) Sacc. *Melanops aterrima* Fuck. 1768
Symb. myc. p. 225. — Stromatibus plerumque in corticis vetustis rimis nidulantibus, erumpentibus, aterrimis, 1-4 lineas latis, orbicularibus elongatisve, planis concavisque, subrepandis, corrugato-callosis, intus concoloribus, duris, epidermidis laciniis circumdatis; loculis macrostylosporiferis plane inordinate immersis, globosis oblongisve, verticaliter dispositis, nucleo albo; macrostylosporibus in cirrhis candidis, longis expulsis, oblique fusiformibus, monoplastis, hyalinis, in sterigmatibus ortis, 48 \approx 8; asci nondum visi.

Hab. in rimis corticis annosi Ulmi campestris pr. Œstrich

Rhenogoviæ. — Peraffinis *B. advenæ*, secund. Fuck., sed tantum pycnidica, ergo dubia.

8. **Botryosphæria Cratægi** (Schw.) Sacc. *Sph. Cratægi* Schw. Syn. 1769
Am. bor. n. 1445. — Cæspitulis plerumque ellipticis, prorumpentibus, nigris, aut fusciscentibus, laxè nempe ad dimidiam partem involutis tomento furfuraceo-fusco; peritheciis majusculis, paucis, difformibus, semilibris, demum pertusis (an primum papillatis?) intus albofartis, demum evacuatis.

Hab. in variis speciebus *Cratægi*, Bethlehem, Amer. bor. — Horizontaliter secto cæspitulo, perithecia subcircinnatim disposita, in ipsa massa corticali nidulantia conspiciuntur. Sec. Ellis fructificatio *Botryosphæriæ*.

9. **Botryosphæria pyriospora** (Ellis) Sacc. *Sphæria pyriospora* Ellis 1770
Bull. Torr. Cl. 1874, p. 46. — Peritheciis cortice interiore nidulantibus sparsis v. confluentibus, subinde seriate dispositis, peridermium longitudinaliter perforantibus, initio albo-fartis; ostiolis leniter prominulis, minutis; ascis turgidis cylindricis; sporidiis oblongo-pyriformibus, 30 μ . long., stipatis.

Hab. in ramis *Chionanthi virginicæ*, Newfield, New Jersey, in America boreali.

10. **Botryosphæria ambigua** (Schw.) Sacc. *Sph. (confluent.) ambigua* 1771
Schw. Syn. Am. bor. n. 1442. *Melogramma ambiguum* (Schw.) Berk. Grev. V, 34, t. 75, f. 5. — Prorumpens; cæspitulis subrotundis nigris, satis elevatis; peritheciis non ostiolatis, denique pertusis, subirregularibus, oblongis, imò sub flexuosis et globosis, paucis tantum confluentibus; extus quamquam non glabris, quasi nitentibus, intus albofartis; ascis tereti-clavatis, breve stipitatis, octosporis; sporidiis subdistichis oblongo-subrhombis, 32-37 \approx 12, hyalinis.

Hab. in sarmentis *Rhois radicans*, *R. copallinæ*, Carolina, New Jersey, Florida et Pennsylvania, Amer. bor.

11. **Botryosphæria Wisteriæ** (Rehm) Sacc. *Thuemenia Wisteriæ* 1772
Rehm Myc. E. n. 971. *Melogramma Wisteriæ* (Rehm) Cooke. — Peritheciis aggregatis, minimis, ex matrice nigerrima oriundis, dein elevatis, conoideo-subpapillatis, apice vix pertusis, nigerrimis, corticem, in plagas hysteriformes plerumque verticaliter diffidentibus itaque lirellas aterrimas, peritheciis mamillosas præbentibus; ascis clavatis, longè stipitatis, crassis, vertice præsertim incrassatis, 150 \approx 16-18, octosporis, parce ramoso-paraphysatis; sporidiis distichis, obtuse rhomboideis, uni-, tri-plurinucleatis, unicellularibus, 18-21 \approx 8.

Hab. in ramulis emortuis *Wisteriæ sinensis*, Aiken Carolina austr. Amer. bor. (H. W. RAVENAL).

12. **Botryosphæria Delilei** (Dur. et Mont.) Sacc. *Dothidea Delilei*. Dur. 1773 et Mont. Fl. Alg. p. 546. Syll. Crypt. n. 771. — Subcutanea, minuta, sparsa, aut lineari-seriata aggregataque, cuticula erosa arcte cincta, ostiolis tenuissimis granulosa, cellulis albo-farctis; ascis clavatis 70–100 μ . long., sporidiis 20 \approx 10, cymbiformi-ventricosis.

Hab. ad ramos salicinos, Monspelii Galliæ (DELILE); in ramis Ricini apud Alger (DURIEU).

13. **Botryosphæria Dothidea** (Moug. et Fr.) Ces. et De Not. Schema 1774 Sfer. p. 212 *Sph. Dothidea* Moug. in Fr. S. M. II. 423. *Dothidea Rosæ* Fr. S. V. S. p. 386. — Subrotunda, erumpenti-innata, stromate pallide fusco, peritheciis globosis subimmersis, albofarctis; ascis clavatis, crasse stipitatis, apice rotundatis, octosporis; sporidiis subdistichis, amygdaloideis, hyalinis v. pallide flavis, 17–20 \approx 8–9, intus granulosis.

Hab. in ramis Fraxini et Rosæ in Britannia, Germania, Belgio, Gallia, Italia. — Sub cortice tenui observantur tumores orbiculares, 2–3 lin. lat., epidermide in rimas flexuosas dehiscente tecti, sub qua latet stroma fusco-atrum, tuberculo corticali subprominente incumbens. Perithecia primo immersa, cellulas albas referunt; adulta procul dubio emersa.

14. **Botryosphæria Persimon** (Schw.) Sacc. *Sphæria* (confluentes) *Persimon* Schw. Syn. Am. bor. n. 1444. *Dothidea parsimons* Fr. Elench. II. 122. — Cæspitulis gregarie confluentibus, varie flexuosis, planiusculis, nigris, ex epidermide elevata prorumpentibus; peritheciis convexis, semiprominulis, papillatis, intus albo-farctis, demum evacuatis.

Hab. passim in cortice Diospyri virginianæ (vulgo *Persimon*) Salem, Amer. bor. — Differt a *B. Quercuum*, cui affinis, peritheciis valde prominulis et ostiolo manifestiori conico-papillato, nec non apice perithecorum subtruncato.

15. **Botryosphæria venenata** (C. et Ell.) Sacc. *Dothidea venenata* C. 1776 et E. New Jersey Fungi in Grev. V. 95. — Erumpens; pustulis parvulis, gregariis, convexo-planis, atris; epidermide fissa cinctis; ascis clavatis, stipitatis; sporidiis amygdaloideis, hyalinis, 45 \approx 12–15; microstylosporibus ovalibus, 8 μ . long.; macrostylosporibus ellipticis, brunneis, 30 \approx 10.

Hab. in ramis *Rhois venenatæ*, New Jersey Amer. bor. — Affinis *Botr. ambigua*, sed pustulæ multo tenuiores.

16. **Botryosphæria syconophila** (De Not.) Ces. et De Not. Schema p. 212. *Sphæria syconophila* Micr. ital. D. VI, p. 100, fig. V. *Dothidea syconophila* Dur. et Mont. Alg. 545. — Acervulis erumpentibus, atris, 1-2 mill. lat., parum prominulis, discoideis v. oblongis; peritheciis minutissimis, numerosis subastomis, atris, vertice sæpe acutis, nucleo albo, sæpius biseriatis; ascis clavatis, deorsum attenuatis, sæpe torosis, paraphysatis, octosporis, 140-145 \approx 20-25; sporidiis ovoideis intus guttulatis v. grumosis, pallidis, 25 \approx 8-10.
Hab. in cortice emortuo Fici Caricæ prope Genuam (Italia) et in Algeria. 1777
17. **Botryosphæria Meliæ** (Schw.) Sacc. *Sphæria* (confluent.) *Meliæ* Schw. Syn. Am. bor. n. 1443, Fr. El. II, 86. *Melogramma Meliæ* (Schw.) Berk. in Grev. — Satis polymorpha; junior ex epidermide prorumpens et ab ea cineta, cæspitulum sclerotioideum subrotundum, griseo-fuscum sistente; peritheciis in superficie vix prominentibus, intus albo-farctis; provectori ætate cæspitulis elongatim et seriatim confluentibus, peritheciis fere omnino liberatis, pluribus tamen in unum connatis, apice applanato, ceterum rugosis, difformibus vix albofarctis; ostiolis indistinctis hysteriimorphis: fructificatione (teste Ellis) *Botryosphæriæ*. 1778
Hab. vulgatissima in ramulis *Meliæ* *Azedarach*, Carolina, America boreali.
18. **Botryosphæria Hibisci** (Schw.) Sacc. *Sph.* (confluentes) *Hibisci* Schw. Syn. Am. bor. n. 1444. *Melogramma Hibisci* (Schw.) Berk. in Grev. — Cæspitulis elongatis confluentibus, sæpe varie flexuosis, ex epidermide prorumpentibus, epidermide substellatim fissa, circum circa erecta, sed non cæspitulum denudante; superficie cæspituli applanata; peritheciis nigris, pulvere parco fusco-atro adpersis, papillatis, ovatis intus albo-farctis, prominentibus. 1779
Hab. rarius in truncis emortuis *Hibisci rosei*, Salem, Amer. bor. — Fibræ corticales quibus adhærent cæspituli cum ligno nigrescunt. Fructificatio *Botryosphæriæ*, teste Ellis.
19. **Botryosphæria præstans** (Lév.) Sacc. *Sphæria* (cæspitosa) *præstans* Lév. Ann. Scienc. nat. 5, 1846, p. 259. — Stromate corticali effuso nigro, peritheciis erumpentibus, prominentibus, ovatis, rugulosis, atris; ostiolis conicis pertusis; ascis magnis clavatis, paraphysatis, octosporis; sporidiis ovoideis continuis, hyalinis. 1780
Hab. in Insula Galliæ ad cortices (A. DU PETIT-THOUARS).
20. **Botryosphæria sorosia** (Lév.) Sacc. *Sphæria* (cæspitosa) *sorosia* Lév. Ann. Scienc. nat. 3, 1845, p. 49. — Erumpens; peritheciis 1781

periphericis, globosis, nigris, intus albis, stromate proprio nigro carbonaceo suffultis, ostiolis pertusis punctiformibus, nucleo albo; ascis paraphysatis, 8sporis; sporidiis elliptico-oblongis, continuis, hyalinis.

Hab. ad caules Ricini.... ubi? (GAUDICHAUD).

21. **Botryosphæria lanaris** (Welw. et Curr.) Sacc., *Sphæria lanaris* 1782

Welw. et Curr. Fungi Angol. p. 283. — Peritheciis conicis, vel subglobosis, sub epidermide nigrificata in acervos vel tubercula irregulariter stipatis, ostiolis minutis prominentibus; stromate fusco, lanuginoso e folii substantia formato; sporidiis 1-2 seriatis, pallidis, ellipticis vel subpyriformibus, interdum 1-2 nucleatis, 15-18 μ . longis.

Hab. ad folia variarum specierum Fici, Golungo alto, Angola.

22. **Botryosphæria catervaria** (B. et C.) Sacc. *Diatrype catervaria* 1783

Berk. et C. in N. Pac. expl. p. 128, n. 156. — Stromatibus parvis in maculas aggregatis, papilla centrali notatis, quandoque confluentibus; ascis brevibus; sporidiis globosis.

Hab. in foliis Fici, Hong-Kong, Ceylon.

23. **Botryosphæria euomphala** (B. et C.) Sacc. *Sphæria euomphala* 1784

B. et C. North Am. Fungi n. 904. — Peritheciis cupularibus, congestis; ascis clavatis; sporidiis hyalinis, subellipticis, distichis.

Hab. in ramis dejectis in udis Carolinæ inferiore Americæ borealis (RAVENEL).

24. **Botryosphæria diplodioides** (Dur. et Mont.) Sacc. *Sph. diplodioides* 1785

D. et M. Fl. Alg. I. p. 480. Syll. crypt. p. 230, n. 810. — Innata, atra; stromate subepidermide effuso, atro-fusco; peritheciis globoso-depressis aut ovoideis, sparsis vel aggregato-confluentibus, epidermide rupta et adhærente cinctis, vix prominulis, albo-farctis, poro ostiolato albo instructis, tandem circumscissis, cupulas atro-nitentes relinquentibus; ascis magnis clavatis, 90 \approx 35; sporidiis 8, cymbiformibus, simplicibus, gibbis, 40 \approx 10, granulosis, hyalinis.

Hab. in cortice Quercus cocciferæ, La Calle (DURIEU).

25. **Botryosphæria rhizogena** (Berk.) Sacc. *Sphæria* (confluentes) *rhizogena* 1786

Berk. Dec. n. 99. *Melogramma rhizogenum* Berk. North Am. Fungi in Grev. — Suborbicularis, atro-fusca; stromate pallido; peritheciis globosis, primum croceo-pruinosis, demum supra atro-fuscis, subtus pallido-fuscis, papilla subtili abrupta quandoque depressa; intus pallido-fuscis; ascis cylindræis; sporidiis ellipsoideis.

Hab. in radicibus Gleditschiæ Triacanthi, Ohio et Carolina superiore Americæ borealis.

26. **Botryosphæria Vitis** (Schulz.) Sacc. *Gibbera Vitis* Schulz., Thuem. 1787
 Pitze d. Welist. p. 114. — Peritheciis nigris, globosis, $\frac{1}{8}$ – $\frac{1}{6}$ unc. latis, in stromate obsoleto sessilibus, denseque confertis, aculeatis, aculeis brevissimis, crassis, demum deciduis, vertice obtusissimo, rotundato, nucleo albo-griseo; ascis clavatis, 8-sporis, basalibus; sporidiis ovatis, 26–27 \approx 10–13, hyalinis vel dilutissime coloratis; paraphysibus articulatis, concretis.

Hab. in ramis emortuis *Vitis viniferæ* in Slavonia (SCHULZER). — A typo *Botryosphæriæ* differt peritheciis aculeolatis.

27. **Botryosphæria mascarensis** (Mont.) Sacc. *Sph. mascarensis* Mont. 1788
 Cent. II, n. 94, Ann., 2, XVI, p. 272, Syll. Crypt. n. 806. — Erumpens, subrotunda, plana; peritheciis sphæricis, in crustam colliculosam, stromate corticali junctis, intus albis, ostiolis prominulis; ascis amplis, clavatis, 200 \approx 40, octosporis; sporidiis, 50 \approx 20, ovoideo-oblongis altero fine mucronatis granulosis.

Hab. ad cortices arborum, insula Mascarena (BALBIS).

28. **Botryosphæria horizontalis** (B. et C.) Sacc. *Melogramma horizontalis* B. et C. North Am. Fungi n. 859. — Transversim erumpens; peritheciis subtiliter pulverulentis; ascis clavatis amplis; sporidiis fusiformibus, hyalinis.

Hab. in caule *Gossypii* in Carolina inferiore Americæ borealis (RAVENEL).

Minus certæ.

29. **Botryosphæria Trames** (B. et C.) Sacc. *Sph. Trames* B. et C. 1790
 North Amer. Fungi n. 908. — Peritheciis seriatis, globosis, subtiliter tomentosis; ascis clavatis; sporidiis cymbæformibus, hyalinis.

Hab. in ramis *Aceris* in Carolina inf. Amer. bor. — Sporidia illis *Botr. Quercuum* similia.

30. **Botryosphæria graphidea** (B. et Rav.) Sacc. *Melogramma graphideum* B. et Rav. North Amer. Fungi n. 860. — Brevis, graphidea, cortice marginata; sporidiis breviter fusiformibus, hyalinis, 20 μ . long.

Hab. in ramis corticatis *Myricæ ceriferæ* in Carolina Americæ borealis.

31. **Botryosphæria Gleditschiæ** (Schw.) Sacc. *Sph. Gleditschiæ* Schw. 1792
 Carol. n. 31. Fr. S. M. II. 421 *Melogramma Gleditschiæ* (Schw.) Berk. in Grev. — Difformis, atra, stromate spadiceo, peritheciis conicis, connatis, faretis, atris, astomis.

Hab. in cortice *Gleditschiæ* in Carolina Amer. bor. — Cæ-

spites sparsi, 2 lin. longi et infra, sparsim erumpentes. Stroma videtur corticale. Perithecia subdena.

32. **Botryosphæria? escharoides** (Fr.) Sacc. *Sph. escharoides* Fr. El. 1793 II. 84. — Emersa, subsuperficialis, convexa, tuberculoso-rugosa, opaca, atra, peritheciis minimis, nigrofartis, ostiolis prominulis.

Hab. ad cortices Juglandis in Gallia circa Angers (GUEPIN). — Variabilis. Tubercula tota e peritheciis connatis composita, nunc orbicularia, planiuscula. nunc elongata seriata, magis irregularia, 1-3 lin. longa. Perithecia exigua, connata, globosa, intus nucleo atro, cingulo albo cincto; adsunt vero simul alia dispersa solitaria.

33. **Botryosphæria polita** (Fr.) Sacc. *Sph. polita* Fr. S. M. II. 426. 1794 Stromate late effuso latente nigro; peritheciis cæspitose-erumpentibus subconnatis nitidis astomis.

Hab. in caulibus emortuis Heraclei Sphondylii, Dresden Germaniæ (SCHUBERT). — Stroma tenue, effusum, cortice interiori innatum et cum hoc a caule deciduum, tenerrima epidermide tectum. Perithecia seriata, primo immersa, dein cæspitose erumpentia, conglomerata, lævia, prominentia, intus albedo-cinerascentia.

34. **Botryosphæria chnaumatica** (Wallr.) Sacc. *Sphæria chnaumatica* 1795 Wall. Fl. Crypt. n. 4037. — Peritheciis rugulosis nigris minutis, confertissime conglomeratis, intus albidis, stroma carnosum viridiatrum carnosum, hypophlæodes obliterantibus grumulosque exiguos ovato-subrotundos planiusculos acinosos, epidermidem scissum reclinantes mentientibus.

Hab. ad corticem Populi tremulæ languidum, in Thuringia Germaniæ.

35. **Botryosphæria Calycanthi** (Schw.) Sacc. *Sph. Calycanthi* Schw. 1796 Syn. Carol. n. 126. *Melogramma Calycanthi* (Schw.) Berk. in Grev. — Subovata, prominens, atra, peritheciis confluentibus, depressis, lævibus, albo-fartis, subpapillatis.

Hab. in ramis emortuis Calycanthi in Carolina Amer. bor. — Cæspites minuti, lineam lati, parum prominentes, sparsim erumpentes, stromate byssoide. Perithecia minuta, opaca, parum difformia, circiter 12, alia astoma, alia papillata.

36. **Botryosphæria Castaneæ** (Schw.) Sacc. *Sph. Castaneæ* Schw. in 1797 Fr. S. M. II. 420. — Ovata, planiuscula, atra, peritheciis confluentibus truncatis, rugulosis, papillatis.

Hab. in cortice Castanearum in Carolina Amer. bor. — Cæspites difformes, ovati, 3 lin. longi, confertim nascentes, pro more erumpentes, epidermide cincti. Stroma tuberculorum, fusco-ni-

grum, subelevatum. Perithecia globoso-depressa, pauca v. numerosa 30-100, manifeste papillata, papilla cum superiore parte decidua, inania apum cellulas referunt. In juniore ætate intus albidofarcta.

37. **Botryosphæria Liriodendri** (Cooke) Sacc. *Melogramma Liriodendri* 1798
Cooke in Rav. Fungi Am. n. 353 (nec. *Sphæria Liriodendri* Schw.).

Hab. in cortice Liriodendri, Airken, Carol. inf. Amer. bor. — Specimina Ravenelii l. c. quæ observavi, sistunt *Dothiorellæ* formam; peritheciis in stromata appanata rimose erumpentia dense aggregatis, albo-farctis, vix papillatis; spermatiis oblongo-fusoideis 30 \approx 5, ganuloso-hyalinis, breve stipitatis.

Melogrammella: ostiolis subrostratis.

38. **Botryosphæria ferruginea** (Fuck.) Sacc. *Melanops ferruginea* 1799
Fuck. Symb. myc. App. II. p. 96. — Stromatibus primo subcorticalibus, demum liberis, effusis, nigro-limitatis, 2-9 cent. long., 2-5 mill. cr., intus ferrugineis, siccis, extus nitido-nigris, valde rimosis asperisque; peritheciis in stromatis superiori parte immersis, inordinate dispositis, majusculis, globosis, rostris plus minusve elongatis, rotundato-obtusis seu acute conicis, 4-5gonis, nitidis; ascis cylindraceutis, stipitatis, 8sporis, 144 \approx 12; sporidiis oblique monostichis, oblongo-ovatis, continuis, rectis, 4-6guttulatis, hyalinis, 20 \approx 8; paraphysibus linearibus, multiguttulatis.

Hab. in truncis putridis Alni glutinosæ, Neuchâtel Helvetiæ (MORTIER). — Ostiolis subrostratis et stromate ferrugineo etc. a generis typo recedit et potius *Silliacæ* analogon videtur.

39. **Botryosphæria Van Vleckii** (Schw.) Sacc., *Sph.* (cæspitosa) *Van Vleckii* 1800
Schw. Syn. Amer. bor. n. 1427, *Melogramma Van Vleckii* (Schw.) Berk. North Amer. Fungi. — Irregulariter cæspitosa, in stromate atro, subpulveraceo, cortici interiori, aut ligno ipso subaffixo, difformi et faciliter decedente; cæspitulibus crassiusculis, primo epidermide omnino tectis dein assurgentibus peritheciisque truncum infestatum longe lateque quasi variolosum reddentibus, corticemque dejicientibus; peritheciis ipsis cylindrico-globosis, nigris, intus albo-farctis, rugosis, vix inter se confluentibus sed a fibris solutis sæpeque separatis; ostiolis longis, rostellatis, intermixtis brevioribus, divergentibus, demum deciduis; sporidiis fusoides, hyalinis 15 μ . long.

Hab. passim prope Salem Amer. bor. in ramis corticatis *Bignoniae radicans*.

CRYPTOSPORELLA Sacc. Mich. I, 30. (Etym. a *Cryptospora*, cujus est analogum genus). — Perithecia valsiformiter aggregata, corticola. Asci 4–8-spori, aparaphysati. Sporidia ovata vel fusioidea, continua, hyalina. — A genere *Cryptospora* (sporidiis vermicularibus limitato) facillime dignoscitur sporidiis ovoideo-oblongis.

1. **Cryptosporella hypodermia** (Fr.) Sacc. Mich. I, 30 et 369, Fungi 1801 ital. t. 479, *Sphaeria hypodermia* Fr. S. M. II, 407, *Valsa hypodermia* Fr. S. V. S. 412, *Cryptospora hypodermia* (Fr.) Fuck. Symb. myc. p. 192. — Stromate valseo, cortici omnino immerso nec erumpente pustulato, strato summo centrali, pulveraceo, fucato, tenui, angusto excepto, substantia corticis omnino immutata formatum; peritheciis 3–6 in singulo stromate, circinantibus, cortici immersis, sphaeroideis, atris, pusillis, collis convergentibus junctis; ostioliis subsphaeroideis vel conoideis seu elongatis, nitidis, in discum per peridermium erumpens, minutum, 0,4 mill. lat, circiter, nigrum dense stipatis; ascis subsessilibus, elongatis, utrinque attenuatis, 100–125 \approx 16–20 p. sporif. octosporis; sporidiis tristichis vel subdistichis, fusioideo-elongatis, rectis, guttulatis, simplicibus, chlorino- vel luteolo-hyalinis, 34–50 \approx 7–9. — Spermogonium (*Fusicoccum?*) gelatina alba, in cellulis simplicibus, sub epidermide nidulans; conidiis ovatis, cum guttula oleosa magna et episporio crasso, hyalinis, 24 \approx 16, in stipitum simplicium apicibus.

Hab. in ramis corticatis Ulmi campestris in Suecia, Fenicia, Gallia, Germania, Belgio, Britannia et Italia.

2. **Cryptosporella Limminghii** (West.) Sacc. *Sphaeria Limminghii* 1802 Kickx Fl. crypt. Fl. I, 323. — Pustulis subrotundis v. transverse oblongis, peridermium pustulatim elevantibus, perforantibusque; peritheciis 6–12 in quaque pustula, sphaericis, minutis; collis cylindricis elongatis, ostioliis in discum subrotundum mamillosum, nigro-nitidulum junctis; ascis clavatis v. subfusioideis, aparaphysatis; sporidiis distichis elliptico-oblongis, acutiusculis, hyalinis.

Hab. in ramis emortuis Ulmi, S. Georges, Courtrai, in Belgio. — Peraffinis videtur *C. hypodermiae*, nisi eadem.

3. **Cryptosporella aurea** (Fuck.) Sacc. Mich. I, 30, Mich. 369, Fungi 1803 ital. tab. 425, *Valsa aurea* Fuck. Enum. Fungor. Nassov. p. 53, fig. 20 (1851), *V. amygdalina* Cooke Seem. Journ. (1866), *V. rutila* Tul. Carp. II, 196 (1863). — Stroma e basi orbiculari co-

nicum v. convexum, plerumque plus minus protuberans, pustulatum, peridermio arctissime adhærente tectum, disco lateritio v. rutilante, ostiolis tandem nigro-punctato, coronatum; perithecii in singulo stromate 4-10, corticis parenchymati immutato infossis, globosis, minutis, circinantibus, in collum tenuissimum attenuatis; ostiolis minimis, cylindricis nec incrassatis, obtusis, in margine disci exigui vix exsertis; ascis anguste oblongis v. fere cylindricis, sessilibus, octosporis, 108-160 \approx 16-18; sporidiis obliquis monostichis v. pro parte distichis, elliptico-ovatis, rectis, rarius inæquilateralibus, unicellularibus, subhyalinis, 24-30 \approx 8-12. — Status spermogonicus (*Fusicoccum*?). Pustulis minutis, siccis, demum epidermidem lacerantibus, intus niveis, simplicibus, siccis primo spermatis minutissimis, cylindræis, demum aliis majoribus, ascosporis valde similibus repletis.

Hab. in ramis corticatis Carpini Betuli in Germania, Gallia, Britannia et Italia.

4. **Cryptosporella Daldiniana** (De Not.) Sacc. Mich. I, 30, *Endothia* 1804
Daldiniana De Not. Recl. in Comm. II, 477. — Corticola; perithecii insculptis, circinatis, ovoideis, rotundatisve, rostratis, convergentibus, rostro toto elongato teretiusculo, clypeo stromatico aurantio conoideo-truncato, vertice mox denudato, ostiolisque punctiformibus atris notato exceptis; ascis coacervatis, teretiusculis, tetrasporis; sporidiis ellipsoideis, episporio crassiusculo limbatis, hyalino-luteolis, continuis.

Hab. in ramis siccis Coryli Avellanæ, Locarno Ital. bor. (DALDINI). — *Crypt. aurea*, cui affinis, differt sporidiis duplo fere majoribus et octonis.

5. **Cryptosporella chondrospora** (Ces.) Rehm, Ascom. et Diagn. n. 335, 1805
Cryptospora limitata Kunze F. sel. n. 155, *Sphæria chondrospora* Ces. Hedw. I, t. 11, fig. II. — Stromatibus sub peridermio nidulantibus, idque pustulatim elevantibus, depresso-hemisphæricis, intus extusque luteolis; perithecii in singulo stromate 1-3 globosis in collum breve conicum attenuatis, atris, 0,3 mill. diam.; ascis elongatis utrinque attenuatis, sessilibus, octosporis 95-100 \approx 15-18, paraphysatis; sporidiis subdistichis ovoideo-oblongis, 27-32 \approx 8-10, deorsum minus obtusis, continuis, initio nucleo crasso, dein bipartito, hyalinis.

Hab. in cortice ramulorum Tiliæ platyphyllæ in Italia et Germania.

6. **Cryptosporella populina** (Fuck.) Sacc. Mich. I, 509, *Cryptospora* 1806

pupulina Fuck. Symb. myc. p. 193. — Peritheciis in cortice interiori absque stromate nidulantibus, 4-12 irregulariter dispositis, decumbentibus, globosis, in rostrum attenuatis, ostiolis exsertis, globosis, perforatis, villosis; ascis amplis, stipitatis, 8sporis, breve et parce paraphysatis 110-115 \approx 12-16; sporidiis elliptico-oblongis, rectis v. perparum curvatis, simplicibus, 1-3guttulatis hyalinis, 14-18 \approx 4-5. — Spermogonium sistit *Cryptosporium coronatum* Fuck. Sacculis planis, magnis, griseis, tectis, dein erumpentibus, basi anulo floccoso-radiato, albo circumdatis; conidiis oblongo-fusiformibus, utrinque obtusiusculis, simplicibus, hyalinis, in hypharum simplicium apicibus.

Hab. in ramis corticatis Populi pyramidalis in Germania, Belgio et Gallia.

7. **Cryptosporella Veneta** Sacc. Mich. I, p. 31 et 100, Fungi ital. 1807 tab. 157. — Peritheciis corticulis, hinc inde in acervulos valseos, epidermide tumidula cinctos circinato-aggregatis, globosis, intus nitidis; ostiolis longiusculis, apice incrassatis, in fasciculum vix emergentem convergentibus; ascis fusoides aparaphysatis, 110 \approx 20, octosporis; sporidiis imbricato-distichis, fusoides rectiusculis, utrinque acutis, 35 \approx 10, granuloso-guttulatis, hyalinis.

Hab. in ramis Populi tremulæ, Cenegliano, Ital. bor. — (SPEGAZZINI). — Ab affini *C. Æsculi* (Fuck.) Sacc., differt sporidiis majoribus, ostiolisque minus exsertis, crassioribusque.

8. **Cryptosporella Æsculi** (Fuck.) Sacc. Mich. I, 30, *Cryptospora Æsculi* Fuck. Symb. myc. p. 193. — Peritheciis 6-8, sub corticis epidermide nidulantibus, absque stromate, irregulariter dispositis, globosis, media magnitudine, atris, ostiolis longe exsertis, gracilibus, teretibus; ascis amplis, oblongis, ad dimidiam partem sporidiis 8 repletis; sporidiis ellipticis, rectis vel perparum curvatis, 2-3 guttulatis, simplicibus, hyalinis, 26-28 \approx 7-8. — Status conidiophorus sub epidermide demum fissa nidulans, gelatinam rubescentem exhibens; conidiis oblongo-ellipticis, uniseptatis, hyalinis, 18 \approx 4.

Hab. in ramis dejectis Æsculi Hippocastani præcipue ad pulvinulos foliorum, prope Reichartshausen Germaniæ.

9. **Cryptosporella compta** (Tul.) Sacc. Mich. I, 30, *V. compta* Tul. 1809 Sel. Fung. Carp. II, p. 196, Nits. Pyr. Germ. 219. — Stromate e basi orbiculari convexo, pustulato-protuberante, pustulis circa discum deplanatis, immo impressis, peridermio arctissime adhærente et disco minutissimo, orbiculari pertuso, ceterum plerumque integro tectis; peritheciis in singulo stromate 6-9, majusculis glo-

bosis, cortici interiori haud mutato insculptis, circinantibus, in col- lum breve, tenue abrupte attenuatis; ostiolis exiguis, parum v. vix incrassatis, discum albido-pulverulentum, deinde cinereum vix su- perantibus; spermogoniis depresso conicis, truncatis, papilla per- tusa, unica, in disco centrali v. duabus instructis; spermatiis cy- lindricis, curvulis, minutissimis, $4 \approx 1$; sterigmatibus longis, tenuis- simis, subsimplicibus; ascis octosporis, sessilibus, nunc anguste cla- vatis v. oblongis, nunc cylindricis, $100 \approx 16$; sporidiis late ovatis, rarius subcylindricis, rectis, rarius nonnihil curvatis, monostichis v. sæpius pro parte distichis, unicellularibus, hyalinis, $16 \approx 8$, raro usque $28 \approx 16$.

Hab. in ramis corticatis Fagi sylvaticæ in Gallia et Ger- mania.

10. **Cryptosporella sphærostoma** (Nits.) Sacc. Mich. I, 30, *Valsa sphæ-* 1810
rostoma Nits. Pyr. Germ. p. 218. — Stromate e basi ovali conico-attenuato, depresso, minuto, in pustulas parum elevatas protuberante, peridermio arcte adhærente, disculis tantum lanceolatis v. ellipticis pertuso tecto; peritheciis in singulo stromate 3-12, corticis parenchymati immutato insculptis, circinantibus, globosis, col- lis brevibus instructis; ostiolorum disculo minutissimo, peridermii rimas angustas, transversim directas, plerumque nonnihil superante, ex albido cinereo v. fuscescente; ostiolis incrassatis, majusculis, globosis, atris, nitidis, in disci margine erumpentibus, poro minutissimo pertusis; spermogoniis stromatibus perithecigeris facie externa simillimis, papilla atra, pertusa, in disco elliptico v. sub-orbiculari, cinerascenti centrali instructis, multilocularibus, locellis radiatim dispositis; spermatiis cylindricis, nonnihil curvatis, $5-7 \approx 1$; sterigmatibus longiusculis, filiformibus, parce ramosis; ascis subclavatis, membrana apicem versus incrassata textis, deorsum longe attenuatis, octosporis, $60-80 \approx 10-12$; sporidiis subdistichis, ovatis v. cylindræis, rectis v. nonnihil curvatis, unicellularibus, hyalinis, $16 \approx 5-6$, raro $18-24 \approx 8$.

Hab. in ramis Pruni Padi prope Münster Germaniæ, raro.

11. **Cryptosporella leptasca** (P. et C.) Sacc. *Valsa leptasca* P. et C. 1811
29 Rep. on the St. Mus. — Subpustulata, nigricans; peritheciis minutis, numerosis, in ostiola papillata v. conoidea desinentibus; ascis elongato-cylindræis, tenuibus; sporidiis monostichis, continuis, oblongis v. elliptico-oblongis, plerumque 2-nucleatis, $7-8 \mu$. longis, hyalinis.

Hab. in ramis Rhois typhinæ, Buffalo Am. bor. (CLINTON).

12. **Cryptosporella Niesslii** (J. Kunze) Sacc. *Cryptospora Niesslii* J. 1812
Kunze Hedw. 1878, p. 46. — Pustulis corticolis, minutis, $\frac{1}{2}$ -1 mill. diam., peridermium hinc inde leniter bullatim elevantibus, depresso-conicis, intus melleis v. flavidis, medio subcavis conidiophorisque (?); peritheciis subcircinantibus globulosis in ostiola cylindrica fasciculato-divergentia erumpentia desinentibus; ascis oblongis $36 \approx 9$, octosporis; sporidiis elliptico-obtusis, subinde navicularibus, continuis, $12 \approx 3$, utrinque 1-guttulatis.
Hab. in ramulis Aceris Pseudoplatani prope Brünn Moraviæ (NISSL). — Cum *Diaporthe Niesslii* Sacc. non confundenda.
13. **Cryptosporella anomala** (Peck.) Sacc. *Diatrype anomala* Peck. 1813
28 Rep. on the st. Mus. New York. — Pustulis prominulis subrotundis v. ellipticis, erumpentibus, 2-5 mill. diam., ligno subinfossis, strato nigro cinctis, disco convexo v. leniter depresso, rugoso, brunneo v. nigricante, subinde albido-pruinoso; peritheciis crebris, stromate immersis, subinde elongatis; ostiolis stipatis v. laxis, sæpe radiato-sulcatis, nigris; ascis brevibus, crassis fugacibus; sporidiis dense stipatis ellipsoideis, continuis, 7-9 μ . longis, utrinque 1-guttatis, hyalinis.
Hab. in truncis Coryli Avellanæ, emortuis v. adhuc viventibus, Albany, Amer. bor.
14. **Cryptosporella innata** (B. et C.) Sacc., *Valsa innata* B. et C. 1814
North Amer. Fungi n. 874, Cooke Valsei of Un. St. 119. — Pustulis subcorticalibus, planis, ostiolis disco elevato brevi abditis; ascis cylindræis; sporidiis monostichis, oblongis, utrinque attenuatis, 7,6 μ . longis.
Hab. in ramis Castaneæ vescæ in montanis New York, Amer. bor. — Perithecia circa disculum digesta, in quo ostiola latent.
15. **Cryptosporella albofusca** (C. et E.) Sacc., *Valsa albofusca* C. 1815
et Ellis New Jersey Fungi Grev. V, p. 3, t. 75, f. 8. — Parva, epidermide tecta, erumpens; peritheciis paucis, ostiolis in disco fusco, primum albo-pulverulento, collectis; ascis arcte clavatis 100-120 μ . long.; sporidiis fuscoide-oblongis, utrinque attenuatis, continuis, multinucleatis, $40 \approx 5$, hyalinis.
Hab. in ramis Quercus obtusilobæ, New Jersey Amer. bor. — Ostiola in disco albo-pruinoso nitida.
16. **Cryptosporella Ehrenbergii** (Tul.) Sacc. *Valsa Ehrenbergii* Tul. 1816
in Ann. Sc. nat. Bot. 1856 (25). — Stromate hypodermico pulvinato, sulfureo, cavernulis spermatiferis labyrinthis copiosis exa-

rato; spermatiis cylindricis rectis perexiguis cirrhus rubros crassos deformesque (*Næmaspora Ribis* Ehrenb.) sistentibus; peritheciis circinantibus crassis globosis in collum breve productis, ostioliis vix prominulis; ascis longe lateque cylindricis deorsum breve attenuatis octosporis, copiose paraphysatis; sporidiis monostichis, late ovoideis continuis.

Hab. in cortice Ribis rubri et R. Uvæ-crispæ prope Parisios Galliæ.

17. **Cryptosporella platanigera** (B. et Br.) Sacc. *Valsa platanigera* 1817
 B. et Br. A. N. Hist. n. 851, t. 9, fig. 12, Cooke Handb. n. 2477.
 — Disco minuto albido; peritheciis globosis paucis; collis elongatis convergentibus, ostioliis obscuris; ascis clavatis breve stipitatis; sporidiis fusoideis, subdistichis, rectiusculis 17-18 μ . longis, intus granulosis.

Hab. in ramis Platani, Leicestershire Britannicæ. — Perithecia in quavis pustula 4-7.

18. **Cryptosporella foraminula** (Pers.) Sacc. Mich. I, p. 30, *Sph. fo-* 1818
raminula Pers. in Curr. Comp. Sph. n. 131, fig. 127 (sporidiis late navicularibus 28-40 μ . long., subinde nucleatis, hyalinis in ascis crasse clavatis distichis) mihi nunc videtur potius forma nondum plene evoluta *Pseudovalsæ lanciformis* seu *Sph. foraminosæ* Pers. et Moug.

Cryptosporella? erinacea (Mont.) Sacc. Videas *Hypoxyton erinaceum* Mont. (Cfr. Syll. nostra 1497).

REPERTORIUM

SPIÆRIACEARUM HYALOSPORARUM

SECUNDUM MATRICES

Obs. B. indicat *Botryosphaeria*. — C. *Ceratostomella*. — Ca. *Camptosphaeria*. — Cr. *Cryptospora*. — D. *Ditopella*. — G. *Gnomoniella*. — L. *Læstadia*. — P. *Phomatospora*. — Ph. *Physalospora*. — Po. *Polytrichia*. — T. *Trabutia*. — Tr. *Trichosphaeria*. — U. *Urospora*. — W. *Wallrothiella*.

- Abies — Tr. 744. — W. 758.
 Acacia — Ph. 723.
 Acer — C. 546. — L. 604. 636. 637.
 — Ph. 612. — Tr. 754. — B. 763.
 790. — Cr. 812.
 Æsculus — B. 763. — Cr. 808.
 Ailanthus — C. 763.
 Aletris — Ph. 670.
 Alnus — C. 546. 547. — G. 567. 573.
 L. 593. 618. — Ph. 660. 684. — D.
 735. 736. — Fr. 752. — B. 799.
 Althæa — Ph. 691.
 Andromeda — Ph. 703.
 Andropogon — P. 650. — Ph. 657.
 Anethum — Ph. 711.
 Angelica — G. 582.
 Arabis — P. 650.
 Araceæ — Ph. 725.
 Arceuthobium — W. 756.
 Aretostaphylos — B. 763.
 Arundo — Ph. 657.
 Astragalus — Ph. 668. 669.
 Aucuba — Ph. 663.
 Azalea — Ph. 612.
- Bambusa — Ph. 719.
 Berberis — L. 613. — D. 738.
 Betula — C. 546. 557. — G. 567. 571.
 572. — Tr. 741. — W. 757.
- Bignonia — B. 800.
 Brassica — Tr. 745.
 Bupleurum — L. 624.
 Buxus — L. 607.
- Calluna — Ph. 721.
 Calycanthus — B. 796.
 Carex — L. 642. — Ph. 656. — Tr.
 748.
 Carpinus — C. 547. 552. — G. 567.
 573. 589. — L. 919. — Tr. 753. —
 Cr. 803.
 Cassia — Ph. 707.
 Castanea — L. 614. — W. 759. — B.
 797. — Cr. 814.
 Ceanothus — Ph. 692.
 Cephalaria — L. 615.
 Chamærops — C. 565.
 Chionanthus — B. 770.
 Cicuta — L. 643.
 Citrus — L. 599. — Ph. 771.
 Clematis — Ph. 673.
 Clethra — Ph. 612.
 Cocos — L. 646.
 Codiaëum — L. 627.
 Comarum — G. 575. 576.
 Corallina — Ph. 727.
 Cornus — L. 606.
 Corylus — G. 568. 569. 573. 578. 590.

- Ph. 663. — Tr. 741. 742. — Cr. 804. 813.
- Corynocarpus — L. 625.
- Cratægus — B. 769.
- Cupressus — Ph. 679. 713.
- Cytisus — Ph. 722.
- Daucus — P. 653.
- Desmodium — Ph. 704.
- Deutzia — B. 763.
- Dianthus — L. 616.
- Dioscorea — L. 641.
- Diospyros — B. 775.
- Dolichos — Ph. 705.
- Echium — Ph. 694.
- Elodes — Ph. 697.
- Epilobium — L. 638, 645.
- Erica — L. 633.
- Eriobotrya — Ph. 660.
- Eupatorium — Ph. 694.
- Euphorbia — G. 583, 586, 587. — Ph. 666, 667.
- Euphrasia — L. 649.
- Fagus — C. 546, 548, 550, 551, 553. — Cr. 809.
- Festuca — Ph. 657.
- Ficus — Ph. 660. — T. 734. — B. 777, 782, 783.
- Frangula — B. 763.
- Fraxinus — G. 568. — L. 626. — B. 774.
- Galeopsis — P. 650.
- Galium — P. 655.
- Gelsemium — Ph. 680.
- Gleditschia — B. 786. 792.
- Gossypium — B. 789.
- Graminaceæ — L. 608. 630.
- Hedera — Ph. 693.
- Heracleum — B. 794.
- Hibiscus — B. 779.
- Hippophaë — P. 650.
- Hosackia — D. 739.
- Hypericum — Ph. 682.
- Iania — Ph. 727.
- Iasminum — L. 623.
- Ilex — Ph. 685.
- Iuglans — B. 763. 765. 793.
- Iuncus — P. 652.
- Iuniperus — Ph. 713.
- Iussiaea — P. 651.
- Lappa — P. 650.
- Lathyrus — P. 650. — Ph. 681.
- Laurus — Ph. 702. — Tr. 749.
- Leguminosæ — Ph. 617.
- Libocedrus — W. 758.
- Liquidambar — 568.
- Liriodendron — B. 798.
- Ludwigia — Ph. 720.
- Lunularia — Ph. 729.
- Luzula — Ph. 709. — Tr. 748.
- Magnolia — B. 763.
- Melaleuca — Ph. 698.
- Melastoma — L. 631.
- Melia — B. 778.
- Menispermum — B. 763.
- Miconia — Ph. 724.
- Milium — L. 609.
- Morus — B. 763.
- Musa — Ph. 670.
- Myristica — Ph. 708.
- Myrtaceæ — T. 734.
- Nicotiana — L. 617.
- Nyssa — C. 564.
- Obione — C. 560. Ph. 728.
- Enanthe — Ph. 726.
- Oenothera — Ph. 687.
- Ostrya — G. 578.
- Oxalis — L. 635.
- Peucedanum — Ca. 566. — L. 629.
- Phellandrium — L. 644.
- Phragmites — L. 608. 647. — Ph. 657.
- Pinus — C. 547. 559. 561. — L. 621. Fr. 741. 743. 747.
- Platanus — L. 600. 601. — B. 763. — Cr. 817.

- Poa — G. 581.
 Populus — L. 598. — B. 763. 795. —
 Cr. 806. 807.
 Polygala — B. 763.
 Polygonum — G. 583. 484. 585.
 Prunus — G. 580. — Ph. 600. 663. —
 B. 763. 766. — Cr. 810.
 Psidium — T. 734.
 Psoralea — Ph. 716.
 Pterocarpus — Ph. 715.
 Pyrus — L. 639.

 Quercus — C. 546. 547. 549. 552. 555.
 556. — G. 574. — L. 592. 595. 596.
 602. 603. 605. 622. — Ph. 714. —
 U. 732. — T. 733 — Tr. 741, 744.
 W. 760. — B. 762, 763, 767, 785.
 Cr. 815.

 Rhododendron — L. 620, 632. — Ph.
 664.
 Rhus — Ph. 701, 718. — B. 763, 771,
 776. — Cr. 811.
 Ribes — G. 577. — Cr. 816.
 Ricinus — B. 773, 781.
 Rosa — G. 579. — L. 594. — Ph. 662.
 696, 710. — B. 763, 774.
 Rubus — G. 588. — Ph. 702.

 Salix — C. 558. — G. 573. — Ph. 660
 676, 678. — W. 755. — B. 773.

- Sambucus — P. 650.
 Scirpus — P. 650. — Ph. 657.
 Secale — Po. 740.
 Sequoia — Ph. 688.
 Sesleria — Ph. 658.
 Smilax — Ph. 672.
 Solanum — P. 650.
 Solidago — Ph. 696.
 Sophora — 763.
 Sorbus — L. 597.
 Spartium — Ph. 665.
 Statice — Ph. 661.

 Taxus — Ph. 660.
 Tilia — G. 591. — Ph. 677. — B. 763.
 Cr. 805.
 Triticum — L. 610. — Po. 740.

 Ulmus — L. 567. — L. 640. — D. 737.
 B. 768. — Cr. 801. 802.

 Vaccinium — Ph. 674.
 Viola — L. 648.
 Vitis — Ph. 690. — B. 787.

 Wisteria — B. 772.

 Yucca — P. 554. — Ph. 689.

 Xanthoxylon — Ph. 706.

Sect. 4. Hyalodidymæ Sacc.

(*Didymosporæ* Sacc. Consp. gen. Pyr. p. 9, ex parte).

Sporidia ovoidea v. oblonga v. fusoidea, 1-septata, hyalina v. subhyalina.

Clavis analytica generum.

A) Simplices.

a) Tectæ v. subtectæ.

1. Perithecia erostrata.

Sphærella. Perithecia innata, laxè tenuiterque contexta. Asci aparaphysati. Sporidia prope medium septata.

Apiospora. Perithecia innata, solidiuscule contexta. Asci paraphysati. Sporidia prope basim septata.

Stigmatæa. Perithecia prominula, crassiuscule contexta, nucleo albo. Asci pseudoparaphysati. Sporidia didyma, luteola v. hyalina.

(*Hypospilina*. Est *Hypospila* hyalodidyma, ad interim huic generi subjuncta, quod videas inter *Hyalophragmias*).

Didymella. Perithecia solidiuscule v. tenuiter contexta. Asci paraphysati. Sporidia prope medium septata.

2. Perithecia rostellata.

Gnomonia. Perithecia submembranacea, ostiolo rostellato, centrali v. laterali. Asci aparaphysati, rarius paraphysati.

b) Subsuperficiales.

1. Perithecia erostrata.

† Perithecia glabra (v. initio pilis conidiophoris raris adpersa).

Epicymatia. Perithecia levia, lichenicola, solidiuscula, hemisphærica, exigua. Fructificatio fere *Sphærellæ*.

Lizonia. Perithecia levia, non lichenicola, sphæroidea v. ovoidea, prominula, obtusa, subcoriacea. Asci aparaphysati et sporidia majuscula.

Melanopsamma. Perithecia lævia sphæroidea, papillata, subcarbonacea. Asci (saltem spurie) paraphysati.

Bertia. Perithecia rugosa, carbonacea, majuscula, vix papillata. Asci non v. rarius paraphysati. Sporidia teretiuscula.

2. Perithecia rostellata.

Lentomita. Perithecia subcarbonacea, sæpius xylogena, ostiolo rostellato. Asci paraphysati.

†† Perithecia setis vestita.

Venturia. Perithecia typice phyllogena, minuta, submembranacea. Asci aparaphysati. Sporidia hyalina v. chlorina.

Eriosphæria. Perithecia typice ligni- v. corticola, subcarbonacea. Asci (saltem spurie) paraphysati.

B) Cæspitosæ.

Gibbera. Perithecia congregata, subsuperficialia, stromate parcissimo, subglobosa, solidiuscula, breve setulosa. Sporidia e flavido hyalina.

Myrmecium. Perithecia botryoideo-aggregata, glabra, intus alba, stromate depresso-pulvinato intus albido inserta. Sporidia hyalina.

C) Compositæ, stromaticæ.

Endothia. Stroma diatrypeum, crocatum. Perithecia immersa, nigricantia. Sporidia exigua.

Melanconis. Stroma valseum nigricans v. flavidum. Perithecia circinantia. Sporidia medioeria, mutica v. appendiculata. Status conidicus *Melanconium* sistens.

Hercospora. Stroma valseum nigricans. Perithecia circinantia. Sporidia mutica. Pycnidium *Rabenhorstiam* sistens.

Diaporthe. Stroma valseum v. diatrypeum v. eutypeum. Sporidia mutica v. appendiculata. Spermogonium *Phomæ* species (spermatiiis longe stipitatis) sistens.

SPHÆRELLA Ces. et De Not. Schema Sfer. p. 62 p. p., Sacc. Gen. Pyr. p. 9 (Etym. a *Sphæria*). — Perithecia tenui-membranacea, globoso-lenticularia, epidermide velata v. erumpentia, ostiolo impresso v. breve papillato pertusa. Asci aparaphysati, octospori. Sporidia elliptica v. oblonga, bilocularia, hyalina v. subhyalina. — Spermogonia et conidia in pluribus nota. — Fungilli numerosissimi, exigui, punctiformes, sæpissime foliicolæ raro clado-carpogeni. Conferantur genera, pluribus notis *Sphærellæ* affinia; *Stigmatea*, *Apiospora*, *Didymella* et *Epicymatia*.

1. In Dicotyledoneis parasiticæ.

a) Arboricolæ.

† Foliicolæ.

1. **Sphærella punctiformis** (Pers.) Rabh. Herb. myc. II, 264, *Sphæria punctiformis* Pers. Syn. p. 90, Fr. S. M. II, p. 525, nec Desm., nec Fuck., *Sphærella sparsa* Auersw. Myc. Eur. Pyr. p. 4 p. p. fig. 4, 27, 39, *Sphæria perezigua* Lév. Fragm. myc. p. 144. — Sparsa; peritheciis innatis punctiformibus, lævibus, subnitidis, nigris, prominulis, collabascendo umbilicatis, poro simplici pertusis, 60-120 μ . diam., ascis tereti-clavatis, subsessilibus basi attenuatis, 28-45 \approx 7-9; sporidiis distichis v. incumbenti-monostichis, obovato-oblongis, uniseptatis, constrictis, 6-9 \approx 2-3,5, hyalinis, loculo inferiore acutiore.

Hab. in pag. infer. foliorum Quercuum, rarius Fagi, Castaneæ, Esculi, Caryæ, Lyonie, Corni in tota fere Europa et Amer. boreali.

2. **Sphærella maculiformis** (Pers.) Auersw. Myc. Eur. Pyr. p. 5, f. 1 et 109, *Sph. maculiformis* Pers. Syn. p. 90, Fr. S. M. II, p. 524. 1820
 — Hypophylla; peritheciis innato-prominulis punctiformibus, globosis, nigris, in maculas inæquales conglomeratis, 70–80 μ . lat. poro pertusis; ascis tereti-clavatis, sessilibus, 50–60 \simeq 7–8, octosporis; sporidiis biseriatis, obovato-oblongis, uniseptatis, constrictis, 14 \simeq 3–4 (rarius 2). — Spermogonia sistunt *Septoriam quercinam* Desm. et probabiliter quoque *Sph. castanicolam* Desm.

Hab. in pag. inf. foliorum dejectorum Quercus, Castaneæ, rarius Æsculi, Carpini, Tiliæ, Platani, Fraxini, Vaccinii etc. in tota fere Europa et America boreali. — Maculæ $\frac{1}{2}$ –1 mill. diam., venulis limitatæ, hinc angulosæ.

3. **Sphærella nigrita** Cooke Some Extra-eur. Fungi in Grevill. VII, p. 13. — Hypophylla; peritheciis semiimmersis, in maculas orbiculares nigrescentes congestis; ascis clavatis; sporidiis elongato-ellipticis, uniseptatis, hyalinis, 15 \simeq 4. 1821

Hab. in foliis quercinis, New York Amer. bor. (GERARD.).

4. **Sphærella oblivia** Cooke Handb, n. 2746, *Sph. maculiformis* var. 1822
 Auersw. Myc. Eur. Pyr. fig. 7. — Peritheciis semiinnatis, nigris, hinc inde 10–20 in maculas minutas, crebras, atras, dense aggregatis; ascis cylindricis; sporidiis biseriatis, curvulis, uniseptatis loculo inferiore tenuiore, chlorinis 12–15 μ . longis. — Sec. Cooke l. c. *Septoria castanicola* Desm. est spermogonium.

Hab. in pag. infer. foliorum emortuorum Castaneæ vescæ in Britannia, socia genuina *Sph. maculiformi*, nec non in foliis Rhododendri maximi, Buffalo Amer. bor. (PECK, 28 Rep.).

5. **Sphærella familiaris** Auersw. Myc. Eur. pag. 6. fig. 10. — Peritheciis hypophyllis, nigris, opacis, epidermidi innatis, gregariis, sed non maculas formantibus, depresso-globosis, imo lentiformibus, poro simplici pertusis, 140 μ . latis; ascis creberrimis, tenerrimis, clavatis, in stipitem filiformem attenuatis, 8-sporis, 60 \simeq 10–12, p. sporif. 30–36 μ . longa; sporidiis biserialiter stipatis, obovato-oblongis, uniseptatis, pallide luteolis, 7–9 \simeq 4–5. 1823

Hab. in pag. infer. foliorum Quercus sæpius cinerascentium in Germania.

6. **Sphærella spleniata** C. et Peck. 25 Rep. 105. — Peritheciis minutis, dense aggregatis, maculasque latas subcirculares aut angulatas efficientibus, nigris, globosis, foliorum tomento nidulantibus; ascis linearibus; sporidiis oblongis, uniseptatis, 12–15 μ . long., hyalinis. 1824

Hab. in America boreali, Greenbush, in pagina infer. foliorum *Quercus bicoloris*.

7. **Sphærella Catesbeyi** Cooke Grev. VII, p. 53. — Hypophylla, im- 1825
mersa; peritheciis sparsis, sæpe 2-4 congestis, cuticula tectis, de-
mum rimose erumpentibus; sporidiis lanceolatis, uniseptatis 20-
22 \approx 4.

Hab. in foliis *Quercus Catesbeyi*, Darien Carol. Amer. bor. 1826

8. **Sphærella simulans** Cooke in Journ. of Bot. Aug. 1866, p. 246, 1828
t. 50, f. 2. Handb. n. 2784. *Sphæria maculiformis* Auersw. p. p.
M. Eur. Pyr. p. 5, fig. 7. — Peritheciis hypophyllis, in maculam
nigram inæqualem conglomeratis, per epidermidem laciniatim ru-
ptam leviter emergentibus, sphæroideis, poro pertusis, atris, latit.
circiter 90 μ .; ascis subsessilibus, fusoideo-bacillaribus elongatis,
38-50 \approx 7-8 octosporis; sporidiis distichis, subovoideo-elongatis,
curvulis, paullo extra medium uniseptatis, ad septum haud vel vix
constrictis, hyalinis, 14-20 \approx 3-4.

Hab. in foliis *Quercus* emortuis dejectis in Britannia et Fen-
nia. — A *Sph. maculiformi* præcipue sporidiis curvulis majori-
bus differt.

9. **Sphærella Ravenelii** Cooke Rav. Am. Fungi in Grevill. VII, p. 53. 1827
— Hypophylla, totam paginam occupans; peritheciis minimis, vix
conspicuis, brunneis; ascis clavatis; sporidiis ellipticis, uniseptatis,
superne leniter incrassatis, 8 \approx 4.

Hab. in foliis *Quercuum*, Aiken Carol. Amer. bor.

10. **Sphærella Ailanthi** Cooke Grev. VI, p. 146. Rav. Fung. Amer. 1828
Cent. III. — Gregaria, maculæformis; peritheciis parvis, atro-brun-
neis, in maculas irregulares congestis; ascis clavatis; sporidiis
ellipticis, uniseptatis, 6 \approx 3.

Hab. in foliis *Ailanthi*, Aiken, Carolina inf., Amer. bor.

11. **Sphærella Æthiops** Fuck Symb. Myc. p. 106, Auersw. Myc. Eur. 1829
Pyr. p. 5, fig. 86. — Peritheciis dense gregariis, subsuperficiali-
bus, minutis, planis, aterrimis, maculam usque lineam lat., atervi-
mam formantibus, dein ore longitudinali fissis; ascis clavatis, 24-
27 \approx 7-8, 8-sporis; sporidiis subclavato-oblongis, didymis, hyali-
nis, 8-9 \approx 2-3.

Hab. in foliis adhuc pendulis siccis *Quercus*, Judensand Ger-
maniæ. — Maculæ $\frac{1}{2}$ -1 mill. latæ.

12. **Sphærella harthensis** Auersw. Myc. Eur. p. 9, fig. 37. — Peri- 1830
theciis hypophyllis, nigris, opacis, epidermidi innatis, dense gre-
gariis, maculas cinereas, $1\frac{1}{3}$ - $1\frac{1}{2}$ μ . latas, angulosas, venulis plus

minus limitatas formantibus, globosis, poro simplici perforatis, 60–80 μ . latis; ascis clavatis, subsessilibus, 8–sporis, 50 \approx 8; sporidiis biserialibus, lanceolatis vel subfusiformibus, utrinque obtusis, leviter incurvis, uniseptatis, ad sepimentum non constrictis, hyalinis, 14 \approx 3.

Hab. in pagina inferiori foliorum Betulæ in Germania. — Peraffinis *Sphæriæ maculiformi*, a qua sporidiis æqualiter didymis præcipue differt.

13. **Sphærella Lantanæ** (Nits.) Auersw. Myc. Eur. Pyr. p. 6, fig. 31. 1831

Sphæria Lantanæ Nits. in Fuck. Symb. p. 105. — Peritheciis hypophyllis, nigris, epidermidi innatis, sparsis vel gregariis (gregibus venulis limitatis), globosis poro simplici pertusis, 80–100 μ . latis; ascis clavatis, sessilibus 8–sporis, 34 \approx 7; sporidiis elongato-oblongis, uniseptatis, ad sepimentum non constrictis, biserialiter stipatis, hyalinis 10 \approx 2 μ .

Hab. in pag. inferiore foliorum Viburni Lantanæ in Germania (FUCK. et AUERSW.).

14. **Sphærella Viburni** (Nitschke) Fuck. Symb. myc. 106 et Schröt. 1832

Hedw. 1876, p. 118. *Sphæria Viburni* Nits. herb. — Peritheciis hypophyllis, perexiguis, 60–80 μ . diam., velatis, prominulis, poro pertusis, nigris; ascis tereti-oblongis, 38 \approx 10, octosporis; sporidiis distichis, fusoideis, uniseptatis, vix constrictis, loculo sup. paulo crassiore, hyalinis, 15–17 \approx 4,5–5.

Hab. in foliis exsiccatis putridisque Viburni Opuli in Germania.

15. **Sphærella crepidophora** (Mont.) Sacc. *Depazea crepidophora* Mont. 1833

Syll. Crypt. n. 992 et in Berkeley, Fung. Lusit. Welwitschii, in Bot. Zeit., 1854, p. 95. — Maculis orbicularibus, fuscis, sero griseis, fusco-limitatis; peritheciis minimis; ascis soleæformibus minutis, sporidiis oblongis uniseptatis.

Hab. in foliis vivis Viburni Tini, in Lusitania (WELWITSCH).

16. **Sphærella Tini** Arcang. Erb. Cr. It. n. 822. — Maculas fusco- 1834

cinerascentes exaridas, margine purpureo cinctas efformans; peritheciis minutis punctiformibus subglobosis superne poro dehiscens; ascis subclavatis, vel ellipsoideo-oblongatis, apice subacutatis; sporidiis fusiformibus guttulas hyalinas nonnullas plerumque foventibus, bicellularibus. Pycnidia quoque adsunt immersa, stylosporis elongatis 22 \approx 1 bicellularibus.

Hab. in foliis Viburni Tini in horto Boboli, Firenze, Italia media. — Verisimiliter non diversa a *Sph. crepidophora* (Mont.).

17. **Sphærella topographica** Sacc. et Sp. Mich. I. 380 et F. it. t. 385. 1835
 — Peritheciis hypophyllis, hinc inde dense disseminatis, punctiformibus, epidermide initio velatis, globoso-lenticularibus, poro pertusis, $\frac{1}{10}$ mill. diam., contextu subcarbonaceo, atro, ascis cylindraceo-clavatis, 70-75 \approx 8-10, breve stipitatis; apice tunica incrassata integra rotundatis, aparaphysatis, octosporis; sporidiis 2-3-stichis, elongato-fusoideis, 28-30 \approx $3\frac{1}{2}$ -4, curvulis, 1-septatis vix constrictis, utrinque acutiuseculis, hyalinis.
Hab. in foliis languidiis Sorbi torminalis, ubi minimas urbium topographias æmulatur, prope Conegliano, vere 1878, sociâ *Septoria hyalospora* (Mont. et C.) Sacc. ejusdem probabili spermogonio. — A *Sphærella cinerascens* Fuck. valde differt.
18. **Sphærella Taxi** Cooke Grev. VI. p. 128. — Epiphylla; peritheciis gregariis, totam foliorum superficiem occupantibus, nigris, leniter prominulis; ascis cylindraceis; sporidiis ellipticis, denique uniseptatis (?). 1836
Hab. in foliis Taxi baecatæ, Cornwall Britannicæ (E. T. BOSCAWEN).
19. **Sphærella Pinsapo** Thüm Contr. Fungh. Lit. n. 301. — Peritheciis epiphyllis, sparsis vel subgregariis, minutis, epidermide primo velatis demum perforantibus, subconicis, nigris, sine macula; ascis sessilibus, anguste cylindraceis, apice acutato-rotundatis, basi angustatis, rectis vel subcurvis, achrois, 38-44 \approx 7, octosporis; sporidiis distichis, elliptico-cylindraceis, utrinque subacutatis, medio-septatis, sed non constrictis, bi-quadrinucleatis, rectis, achrois, 10 \approx 4. 1837
Hab. in Abietis Pinsapo foliis emortuis decoloratisve, Pola, Istria.
20. **Sphærella Ligustri** (Desm.) Cooke Handb. n. 2760 Auersw. Myc. 1838
 Eur. Pyr. p. 7, fig. 97. *Sphæria Ligustri* Rob. et Desm. Nouv. Not. 1843, p. 45. — Epirarius hypophylla; peritheciis minutissimis numerosis, dense sparsis, atris, subglobosis, poro pertusis, dein collabascendo umbilicatis, 100 μ . diam., ascis tereti-clavatis, subsessilibus, 30-34 \approx 5-7, octosporis; sporidiis monostichis v. subdistichis, obovato-oblongis, utrinque rotundatis, uniseptatis, leniter constrictis, hyalinis, 10 \approx 4.
Hab. in foliis exsiccatis Ligustri vulgaris, in Gallia, Germania, Britannia, Italia.
21. **Sphærella Laburni** Pass. in Erb. Cr. It. n. 1069. — Peritheciis sæpius epiphyllis, punctiformibus, atris, in maculis marginalibus ir-

regularibus, exaridis, mox corrosis, sparsis; ascis cylindrico-clavatis, rectis vel leniter curvis, basi abrupte breviterque stipitatis, $50 \approx 12$; sporidiis octonis, biserialibus, ovato-oblongis, utrinque rotundatis, uniseptatis, ad sepimentum non constrictis, loculis subæqualibus, hyalinis, $15-18 \approx 5$.

Hab. in foliis languidis, adhuc pendulis, Cytisi Laburni in horto botanico Parmensi, Ital. bor.

22. **Sphærella ilicella** Cooke New-York F. in Grev. VIII, 119. — 1840
Epiphylla; peritheciis punctiformibus, atris, in maculis orbicularibus, albis, sparsis; ascis clavatis; sporidiis fusoides, hyalinis, uniseptatis, constrictis, $20 \approx 6$, cellulis binucleatis.

Hab. in foliis Ilicis opacæ, New York Amer. bor. (GERARD). 1841

23. **Sphærella hedericola** (Desm.) Cooke in Grev. III, p. 93 *Sphæria hedericola* Desm. Ann. Sc. nat. XIV (1850), p. 115 et probabiliter Fr. S. M. II, 528. — Maculis albicantibus suborbicularibus v. irregularibus, late fusco-marginatis; peritheciis gregariis, minutis, globosis, opacis, nigris, denique erumpentibus, poro pertusis; ascis cylindræis, 50μ longis; sporidiis minutis, anguste ellipticis, uniseptatis, 10μ longis, hyalinis. — *Septoria Hederæ* sistit spermogonium.

Hab. in foliis Hederæ Helicis, sæpius epiphylla, in Gallia et Britannia; spermogonia vero in tota fere Europa.

24. **Sphærella Pomi** Pass. Hedw. 1878, p. 172. — Epiphylla; peritheciis minutis in maculis exiguis fuscis gregariis vel subsparis, primo tectis, dein ostiolo atro obtuso erumpentibus; ascis ovato-oblongis, superne angustioribus, membrana tenuissima evanida; sporidiis oblongo-ovatis extremo altero latiore, medio tenuissime septatis, locus inæqualibus, guttulatis.

Hab. in foliis Pyri Mali in Italia boreali.

25. **Sphærella Bellona** Sacc. Mich. I, p. 244. — Maculis arescendo dealbatis, sinuosis, epiphyllis; peritheciis punctiformibus remotiusculis, lenticularibus, pertusis; ascis oblongo-clavatis apice rotundatis, $60 \approx 15$, aparaphysatis, 8sporidis; sporidiis distichis inæqualiter didymis, utrinque obtusiusculis, $18-20 \approx 6-6\frac{1}{2}$, 4-guttulatis hyalinis.

Hab. in foliis languidis Pyri communis pr. Treviso Italia borealis, socia *Phyllosticta pyrina* Sacc. ejusdem spermogonio. — A *Sphærella Pyri* Auersw. ascis sporidiisque (non $27-31 \approx 4$) crassioribus et diverse efformatis statim dignoscitur. Propius ad *Sphærellam crassam* Auersw. accedit.

26. **Sphærella Pomacearum** (Crié sub *Dep.*) Sacc., Crié, Sur les Dep. 1844 p. 40, tab. VI, fig. 2. — Maculis valde variis epi-hypophyllis; peritheciis nigris; ascis cylindræis, rectis, octosporis; sporidiis sæpissime monostichis, obovatis, uniseptatis, vix constrictis, dilute virescentibus, $11 \approx 4-5$.

Hab. in Gallia in foliis Malorum, Pyrorum, Cydoniarum etc., hieme, sociis spermogoniis (*Septoria*) et pycnidibus (*Diplodia* etc.).

27. **Sphærella sentina** (Fr.) Sacc. (nec Fuck.) *Sphæria sentina* Fr. 1445 S. M. II, p. 520, sec. Desm. 22 Not. p. 15. — Peritheciis amphigenis subaggregatis, papillulatis, $\frac{1}{5}-\frac{1}{6}$ mill. diam., denique subsuperficialibus; ascis cylindræis, $75 \approx 10$; sporidiis monostichis, vel inferius distichis, 1-septato-biconicis, $15 \approx 5$, subolivaceis.

Hab. in Gallia, Germania, Belgio et Suecia, in foliis Pyri et Mali. — Videretur *Venturia* decalvata.

28. **Sphærella Pyri** Auersw. Myc. Eur. Pyr. p. 11, fig. 34, *Sphæria* 1846 *sentina* Wallr. Fl. crypt. p. 775, Fuck. Symb. p. 104 (nec Fr. nec Desm.). — Peritheciis hypophyllis, dense gregariis, nigris, epidermide velatis, dein suberumpentibus, globulosis, poro pertusis, $120-140 \mu$ latit.; ascis clavatis, subsessilibus, octosporis, $70 \approx 9$; sporidiis fusoidis, subcurvatis, v. subsigmoideis, utrinque obtusis, $27-31 \approx 4$, uniseptatis, non constrictis, hyalinis.

Hab. in foliis siccis Pyri communis in Germania, Italia, Amer. austr. frequens.

29. **Sphærella septorioides** (Desm.) Niessl in Kunze Fungi sel. n. 242, 1847 *Sphæria* (foliicola) *septorioides* Desm. 13 Not. 1846, p. 81. — Maculis amphigenis, minutis, viridulis, dein magnis suborbiculatis olivaceo-brunneis; peritheciis hypophyllis, microscopicis, numerosissimis, innato-prominulis, globosis, olivaceis, fuscis, intus albis, poro dilatato apertis; ascis tenerrimis, linearibus; sporidiis minutissimis, monostichis, cylindræis, $5-6 \mu$ long. plasmate bipartito.

Hab. in foliis languescentibus *Aceris campestris* in Gallia et Belgio.

30. **Sphærella latebrosa** Cooke Handb. n. 2754, Auersw. Myc. Eur. 1848 Pyr. p. 10, f. 26. — Hypophylla; peritheciis sparsis, innatis, minutis, globosis, nigris, in epidermide rupta, non conspiciendis; ascis cylindræis, ventricosis, $60 \approx 9$, aparaphysatis, octosporis; sporidiis elongatis, uniseptatis, constrictis, utrinque subattenuatis, 4-guttulatis.

Hab. in foliis emortuis *Aceris Pseudoplatani* in Britannia (COOKE), Germania (REHM) et Italia (BAGNIS).

31. **Sphærella pardalota** C. et E. New Jersey Fungi in Grevill. VI, 1840
p. 16, t. 96, fig. 23. — Peritheciis minutis, globosis, atris, semi-
immersis, in maculas irregulares venulis limitatas congestis; ascis
minutis clavatis; sporidiis anguste ellipticis, uniseptatis, $8 \approx 3,5$.

Hab. in foliis Myricæ, socia *Gnomon. Myricæ* in New Jersey, America boreali.

32. **Sphærella parvimacula** Pass. Diagn. Funghi nuovi n. 5. — Peri- 1850
theciis minimis gregariis in macula exigua, atra, irregulari, hypophyllis; ascis valde numerosis, brevibus, obovato-clavatis, 8sporis? vel oligosporis; sporidiis cylindrico-fusiformibus, medio septatis, hyalinis.

Hab. in foliis dejectis Fagi in M. Dosso, prov. Parma, Ital. bor. — *Sph. Atomus* Desm, et *Sph. Fagi* longe diversæ sunt.

33. **Sphærella Fagi** Auersw. in Mycol. Eur. Pyr. p. 6, t. II, f. 19-20, 1851
Sphærella Atomus plur. auct. non Desm. — Peritheciis vere punctiformibus, amphigenis, nigris, nitidulis, epidermide innatis sparsis v. gregariis subglobosis, vix perforatis 80-100 μ . diam.; ascis cylindræis, 30-45 \approx 4-5, subsessilibus, apice rotundatis; sporidiis distichis v. oblique monostichis oblongis, 7-8 \approx 2-2 $\frac{1}{2}$, constricto-1-septatis, utrinque obtusiusculis, hyalinis.

Hab. in foliorum languidorum Fagi sylvaticæ sæpius pagina infer., in Germania, Britannia, Helvetia, Gallia, Italia bor.

34. **Sphærella Cratægi** Fuck. Symb. myc. p. 105. — Hypophylla; 1852
peritheciis plerumque seriatis et maculas angulatas formantibus, nigris minutis, tectis, ostiolis, prominulis, atris, perforatis; ascis anguste elongatis, 55-65 \approx 13-14, 8sporis; sporidiis lanceolatis, rectis seu perparum curvatis, diu simplicibus, dein uniseptatis, 40 \approx 4. — Forte *Septoria Oxyacanthæ* sistit spermogonium.

Hab. in foliis exsiccatis Cratægi *Oxyacanthæ* in Germania et Britannia.

35. **Sphæria Ligea** Sacc. F. Ven. Ser. II, p. 300. — Maculis epiphyllis 1853
minutis subrotundis, saturate sanguineis, dein centro pallescentibus; peritheciis in centro maculæ paucis (1-8) e globoso lentiformibus, minutis, ca. 100 micr. diam., contextu pareachymatico, tenui, fuligineo, ostiolo impresso; ascis oblongo-clavatis, subsessilibus, 50 \approx 12, 8sporis; sporidiis distichis, ovoideis, didymis, 18-20 \approx 7, loculis subinæqualibus, hyalinis, 4-guttulatis. — Status spermogonicus: *Septoria Rubi* (Duby) West.

Hab. in foliis languentibus Rubi fruticosi, prope Treviso Ital. bor. socia *Septoria* et *Sphærella Chamæmori* Karst. M. F.

II. 173. differi a mea maculis hypophyllis fusciscentibus et sporidiis crassioribus.

36. **Sphærella Winteri** (Pass.) Sacc., *Stigmatva Winteri* Pass. Diagn. 1854
 funghi nuovi n. 3. — Peritheciis punctiformibus, in maculas suborbiculares fuscas tandem exaridas et mox laceratas sparsis, epidermide tectis, ostiolo ut plurimum nullo vel saltem imperspicuo; ascis clavato-lanceolatis, 8sporibus; sporidiis subdistichis, oblongo-fusiformibus, rectis vel curvulis, medio 1-septatis, loculo altero vix angustiore, hyalinis.

Hab. in foliis vivis Rubi corylifolii prope Collecchio prov. Parma in Italia boreali.

37. **Sphærella Chamæmori** Karst. Myc. Fenn. II. pag. 173. — Peritheciis hypophyllis, sparsis, maculæ fusciscenti plerumque insidentibus, vertice epidermidem excedente obtusissime unbonatis, sphæroideis, poro minuto pertusis, atris, vix 0,1 mill. lat.; ascis breviter pedicellatis, elongatis, deorsum oblique inflatis, 70-84 = 14-18 octosporibus; sporidiis supra monostichis, infra distichis, ovoideo-oblongatis, paulo extra medium uniseptatis, ad sepimentum vix vel levissime constrictis, luteolo-hyalinis vel hyalinis. 18-20 = 8-9. 1855

Hab. in foliis Rubi Chamæmori aridis frequens in Fennia.

38. **Sphærella circumdans** Pass. Diagn. Funghi nuovi n. 6. — Epiphylla; peritheciis laxè gregariis vel sparsis minutis, primo tectis, deinde denudatis, atris, globulosis, folii languidi zonam marginalem exaridam occupantibus; ascis brevibus subventricosus curvulis, apice rotundatis, 8sporibus; sporidiis oblongis, medio septatis, vix constrictis, loculis inæqualibus, hyalinis. 1856

Hab. in foliis languidis Platani adhuc pendulis, Parma Italiæ borealis.

39. **Sphærella Gibelliana** Pass. in Myc. univ. n. 462. Arch. Critt. p. 382, t. XXIII, fig. 5-6. — Peritheciis exiguis, 100-150 μ . diam. poro 10-15 μ . diam., pertusis, in macula exarida, plus minus ampla, sparsis, subglobosis, epidermide tectis, tandem denudatis, vertice collapsis; ascis, oblongo-clavatis, 40 = 6, crassiuscule breve stipitatis, octosporibus; sporidiis distichis, oblongo-fusiformibus utrinque obtusiusculis, medio constricto-1-septatis, hyalinis. 1857

Hab. ad folia emortua v. languida Citri Limonii et medicæ, in Italia bor., Austria merid., Lusitania.

40. **Sphærella sicula** Penz. Fung. Agrum. n. 27. — Peritheciis epidermide velatis amphigenis, punctiformibus, 72-90 μ . latis, in greges maculiformes, nigro-griseos, extensos densissime junctis, sphæ- 1858

roideo-depressis, poro pertusis, nigricantibus; ascis fasciculatis, aparaphysatis, clavulato-fusoideis, subsessilibus, apice subtruncatis, 24-26 \approx 6-7, octosporis; sporidiis subdistichis, breve fusoideis, 10-11 \approx 3,5-4, uniseptatis, non constrictis, hyalinis.

Hab. in foliis delapsis Citri Limonii cum *Læstadia socia*, Carini, Sicilia (BELTRANI). — Maculæ effusæ nebulosæ a peritheciis ipsis creberrimis formatae.

41. **Sphærella arcana** Cooke Handb. n. 2747, *Sph. maculæformis* 1859
var. Auersw. Myc. Eur. Pyr. p. 5, fig. 100. — Peritheciis minutis, subinnatis, modo maculiformi-congregatis, modo sparsis, nigris nitidisque; ascis late fusoideis; sporidiis linearibus utrinque obtusis, stipatis, uniseptatis, 4-guttulatis, hyalinis, 12-13 μ . longis.

Hab. in foliis emortuis Castaneæ vescae in Britannia, Germania et Italia. — Sec. Cooke l. c. bene distincta a *Sph. maculiformi*.

42. **Sphærella millegrana** Cooke Handb. n. 2753, Auersw. Myc. Eur. 1860
Pyr. p. 8, fig. 17 et 90. — Peritheciis hypophyllis, raro epiphyllis, nigris, opacis, epidermide velatis, dense sparsis vel gregariis, maculas griseas 2-3 mill. lat. non limitatas formantibus, globosis poro pertusis, 50-80 μ . diam.; ascis clavatis subsessilibus, octosporis 26-39 \approx 8-10; sporidiis distichis v. submonostichis, lanceolatis, supra medium uniseptatis, constrictis, utrinque acuminatis, 14 \approx 3-4, hyalinis.

Hab. in foliis dejectis Carpini Betuli et Tiliæ parvifoliæ in Britannia et Germania.

43. **Sphærella fennica** Karst. Myc. Fenn. II, pag. 173. — Peritheciis 1861
sparsis, epidermide tectis, sphæroideis, siccis depressis, ostiolo erumpente, nudo, papilliformi, atris, circiter 150 mill. lat.; ascis subsessilibus, elongatis vel cylindraceo-subclavatis, vulgo curvulis, 70-86 \approx 14-15 octosporis; sporidiis distichis, ovoideo-oblongatis, utrinque subacutatis, extra medium uniseptatis, ad septum leviter constrictis, hyalinis, 18-21 μ . long. (loculo superiori 12 μ . long. inferiori 9 μ . long.) 7 μ . cr.

Hab. ad petiolos Tiliæ parvifoliæ vetustos, in Fennia.

44. **Sphærella sparsa** (Wallr.) Auersw. Myc. Eur. Pyr. p. 4 (p. p.), 1862
fig. 27, Cooke Handb. n. 2743, *Sphæria sparsa* Wallr. Fl. Crypt. n. 3730. — Hypophylla; peritheciis innatis plus minus dense sparsis vel subgregariis, globosis, nigris; ascis cylindraceis 40 \approx 8; sporidiis distichis vel monostichis, obovato-oblongis 7 \approx 3, uniseptatis, loculo superiori crassiori.

Hab. in foliis *Tiliæ parvifoliæ* (et *Castaneæ*) in Britannia, Germania, Italia et Amer. boreali.

45. **Sphærella Grossulariæ** (Fr.) Auersw. Syn. Pyr. eur. p. 11, t. 4, 1863
f. 44, *Sphæria Grossulariæ* Fr. S. M. II, 521. — Peritheciis hypophyllis, innatis, gregariis, sphæroideis, poro minuto perforatis, atris, 155 mill. lat.; ascis brevissime pedicellatis vel subsessilibus, clavatis; 55-66 \approx 8-12; sporidiis subsenis tristichis, fusioideo-bacillaribus, leviter curvatis, uniseptatis, ad septum non constrictis, hyalinis, 26-35 \approx 3-4.

Hab. ad folia *Ribis nigri* et *Ribis Grossulariæ* vetusta in Suecia, Fennia et Germania.

46. **Sphærella assimilata** J. Kunze Fungi Sel. exsic. n. 246 (absque 1864
diagnosi). — Peritheciis hypophyllis, epidermide velatis, perexiguis, dense gregariis maculasque nubilosas formantibus, 90-108 μ . diam., poro pertusis; ascis clavulatis deorsum sensim attenuato-stipitatis 28-32 \approx 7-8, octosporis, aparaphysatis; sporidiis subdistichis perexiguis oblongo-fusioideis v. clavulatis, 1-septatis, vix constrictis 5-6 \approx 3-3,5, hyalinis.

Hab. ad folia putrescentia *Ribis alpini* prope Eisleben Germaniæ.

47. **Sphærella Ribis** Fuck. Symb. myc. pag. 108. — Peritheciis gre- 1865
gariis sparsisve, demum subliberis, macula deficiente, punctiformibus, conicis, aterrimis, perforatis; ascis oblongo-ovatis, stipitatis, tunica crassa, 8spor. 80 \approx 14; sporidiis subdistichis, oblongo-ovatis, utrinque attenuatis, uniseptatis, hyalinis, 16 \approx 4. — *Septoria Ribis* Desm. sistit, sec. Fuck., spermogonium.

Hab. in pag. plerumque superiori foliorum *Ribis rubri* pr. Æstrich Rhenogoviæ, raro.

48. **Sphærella genuflexa** Auersw. Myc. Eur. Pyr. p. 8, fig. 91. — 1866
Peritheciis hypophyllis, nigris, epidermidi innatis, sparsis vel subgregariis, globosis, poro simplici pertusis, 150 μ . latis; ascis ample clavatis subsessilibus, 8-sporis, 60-90 \approx 20-24; sporidiis biserialibus, elongato-cuneatis, utrinque rotundatis, uniseptatis, ad septimentum non constrictis, sed genuflexis, hyalinis, nucleo minute granulato, 24-30 \approx 8-9.

Hab. in pag. inferiore foliorum *Salicis albæ* in Germania.

49. **Sphærella polaris** Karst. Fungi Spetsb. pag. 108. — Peritheciis 1867
sparsis, epiphyllis, emergentibus, sphæroideis, poro vix conspicuo perforatis, glabris, nigris, 80-150 μ . latit.; ascis subsessilibus, oblongato-ellipsoideis, 100-110 \approx 38-40, octosporis; sporidiis disti-

chis, ovoideo-oblongatis, utrinque rotundatis, uniseptatis, ad septimentum vix constrictis, levissime flexis, nucleo minutissime granulato, 30-35 \approx 11-18; paraphysibus nullis,

Hab. in foliis Salicis polaris aridis ad Treurenbergbay, Spitzberg. — A *Sph. genuiflexa* cujus, sec. Karst, subspecies habenda, satis recedit ascis sporidiisque tertia parte crassioribus.

50. **Sphærella Capronii** Sacc. *Sph. salicicola* Cooke Handb. n. 2744, 1868 nec Rabh. — Maculiformis v. sparsa; peritheciis innatis, punctiformibus, globulosis, nigris, nitidulis; ascis cylindraceutis; sporidiis monostichis v. distichis, uniseptatis, hyalinis, 15 μ . longis.

Hab. in foliis Salicum, Shere Britannicæ (E. CAPRON). — Peritheciolorum ostiolis amplis, sporidiis triplo fere majoribus a *Sph. salicicola* differt.

51. **Sphærella salicicola** (Fr.) Fuck. Symb. myc. p. 106, *Sphæria salicicola* Fr. S. M. II, 530 p. p., Rabh. in litt. ad Auersw., Sacc. Rel. myc. Lib. Ser. II, n. 169, t. XX, fig. 9. — Peritheciis epiphyllis hinc inde maculiformiter dense gregariis, epidermide velatis, globoso-depressis, poro pertusis; ascis tereti-clavulatis, brevissime stipitatis, 40-45 \approx 5-6; sporidiis clavulatis, uniseptatis, non constrictis, hyalinis 6 \approx 2.

Hab. in pag. super. foliorum Salicis capreæ, S. nigricantis, S. triandræ in Germania, Gallia et Italia.

52. **Sphærella curvulata** Pass. Hedw. 1876, p. 106. — Amphigena, 1870 sparsa vel dense gregaria, peritheciis punctiformibus, atris; ascis ex ovata basi sursum attenuatis, 8sporis; sporidiis distichis vel inordinatis, oblongo-cuneatis, septatis, vix constrictis, loculis 1-2-guttulatis, hyalinis.

Hab. ad folia dejecta Salicis albæ, vere, Parma, Italia bor.

53. **Sphærella maculosa** Sacc. *Sph. macularis* Karst. Myc. Fenn. II, 1871 p. 174 nec Fr. — Peritheciis amphigenis, sæpissime tamen hypophyllis, parenchymati innatis subiculoque filamentoso, fusco insidentibus, epidermide cinerascete tectis, dein erumpentibus, gregatim sparsis, sphæroideis, ostiolo minuto, atris, 60-75 μ . latit.; ascis sessilibus, elongatis, basin versus inflatis, 70-95 \approx 11-14 octosporis; sporidiis in parte asci superiori monostichis, in inferiori distichis, late ovoideo-oblongatis, uniseptatis, ad septum leviter constrictis, flavescentibus vel luteolis, 14-16 \approx 6-7.

Hab. in foliis Populi tremulæ dejectis sat frequens in Fennia. — Species singularis. Maculas griseas angulosas vel suborbiculares, sæpe venis limitatas, variæ latitudinis format. — A *Sph.*

macularis peritheciis sæpius hypophyllis, ascis sporidiisque duplo majoribus certe distinguenda.

54. **Sphærella Populi** Auersw. Myc. Eur. Pyr. p. 11, fig. 93. — 1872
Peritheciis epiphyllis, epidermide innatis, sparsis, globosis, poro simplici pertusis, 140–150 μ . diam.; ascis clavatis, breve stipatis, 8-sporis, 75–100 \approx 15–17; sporidiis elongato-cylindricis, subfusoidis, utrinque rotundatis uniseptatis dense et pluriserialiter stipatis, hyalinis, 30–35 \approx 4–4.5, leniter curvis.

Hab. in foliis emortuis *Populi dilatatae* et *P. nigrae* in Germania, Austria et Italia. — Var. *Fuckelii* (*Sph. Populi* Fuck. Symb. myc. App. II, p. 20): ascis deorsum latioribus, 88 \approx 22; sporidiis 28 \approx 6–7; peritheciis hypophyllis. In foliis *Populi nigrae*, Eltville Germaniæ.

55. **Sphærella macularis** (Fr.) Auersw. Myc. Eur. Pyr. p. 9, fig. 28, 1873
Sacc. in Rev. myc. 1881, t. XX, fig. 13, *Sphæria macularis* Fr. S. M. II, 502, *Perisporium maculare* Fr. S. M. III, p. 251. — Peritheciis amphigenis, atris, parenchymati innatis, epidermidem utrinque translucens aut perforantibus, maculas griseas, angulosas, venis limitatas, variæ latitudinis formantibus, globosis, ostiolo minuto simplici perforatis, 60–70 μ . latis; ascis cylindricis, 8-sporis, 34–42 \approx 4–6; sporidiis ovalibus, uni- vel biserialiter, uniseptatis, ad sepimentum non constrictis, hyalinis, 7–9 \approx 2–2.5.

Hab. in pag. plerumque super. foliorum *Populi tremulae* in Suecia, Germania, Gallia, Belgio et Italia.

56. **Sphærella crassa** Auersw. Myc. Eur. 7, fig. 28, Mich. I, 35. — 1874
Peritheciis sparsis majusculis, nigris; ascis ovato-clavatis, p. sporif. 65 \approx 15–16, apophysatis, octosporis; sporidiis 2–3-stichis, oblongis, 18–25 \approx 5–7, constricto-1-septatis, loculo superiore crassiore, minute vage pluriguttulatis, hyalinis.

Hab. in pagina superiore foliorum *Populi tremulae* in Germania (AUERSW.) et *P. albæ*, Conegliano, Italia bor. (SPEGAZZINI).

57. **Sphærella orbicularis** Peck 28 Rep. on the St. mus. New York. 1875
— Peritheciis minutis, innatis, epidermide tandem perforata velatis, maculas distinctas v. confluentes suborbiculares fuscas occupantibus, ascis subcylindricis; sporidiis oblongis uniseptatis, 10–13 μ . longis, chlorinis.

Hab. in pagina superiore foliorum dejectorum *Populi*, Center et North Greenbush Amer. bor. — Maculae illas *Venturia orbiculae* imitantur: perithecia plerumque ad marginem maculae crebriora, quam in centro.

58. **Sphærella major** Auersw. Myc. Eur. Pyr. p. 8, fig. 32. — Pe- 1876
 ritheciis hypophyllis, nigris, epidermidi innatis, sparsis, globosis,
 papilla elongata ornatis, 150 μ . latis; ascis e basi ventricosa atte-
 nuatis, breviter stipitatis 8-sporis, 68-72 \approx 10-12; sporidiis obova-
 to-oblongis, uniseptatis, ad sepimentum constrictis, in ascis basi in-
 flata bi-, in parte superiore attenuata uniserialibus, luteolis, 14
 \approx 5-6.

Hab. in foliis Populi tremulæ in Germania. — An *Ven-
 turia decalvata*?

59. **Sphærella Bhauria** Cooke Some Ind. Fungi in Grev. VI, p. 118. 1877
 — Gregaria, hypophylla; peritheciis minutis, punctiformibus, atro-
 brunneis, obtusis, poro pertusis; ascis cylindræis; sporidiis ovali-
 bus uniseptatis, leniter constrictis, hyalinis, 7 \approx 3, cellulis nucleatis.

Hab. in foliis Symploci spicatæ (vulgo Bhauri), subinde
 paginam superiorem foliorum fere totam occupans, Dinagepore In-
 diæ orientalis.

60. **Sphærella Wisteriæ** Cooke in Grev. VII, p. 53. — Punctiformis, 1878
 sparsa; peritheciis semi-immersis, atris, minimis; ascis clavatis;
 sporidiis ellipticis, uniseptatis, 8 \approx 3.

Hab. in foliis Wisteriæ sinensis, Aiken Carol. Amer. bor.

61. **Sphærella verna** Sacc. et Speg, Mich. I, 379. F. it. t. 384. — Pe- 1879
 ritheciis dense et late gregariis, hypophyllis, punctiformibus, len-
 ticularibus, 100 micr. diam., poro pertusis; ascis crasse cylindra-
 ceis, breve stipitatis, 45-50 \approx 13, 8-sporis; sporidiis oblongo-clavu-
 latis, 22 \approx 5, lenissime constrictis, hyalinis.

Hab. in pagina inferiore, quæ cinerascit, Forsythiæ viri-
 dissimæ, Conegliano, Ital. bor. (SPEGGAZZINI). — Subaffinis *Sphæ-
 rellæ crassæ* Auersw.

62. **Sphærella vagabunda** (Desm.) Fuck. Symb. myc. p. 106 *Sphæria* 1880
 (foliicola) *vagabunda*, Desm. 13 Not. 1846, p. 81. — Maculis am-
 phigenis, minutis, indeterminatis, olivaceis, vel griseo-fuscis; peri-
 theciis minutissimis, innato-prominulis, gregariis, nigris, poro sub-
 tili apertis, nucleo albo faretis; ascis tenerrimis linearibus; spori-
 diis minutissimis, oblongis, hyalinis, 5-6 μ . long., plasmate bipartito.

Hab. in foliis languescentibus Clematidis (et Cratægi
 Oxyacanthæ?) in Gallia et Germania.

63. **Sphærella Pittospori** Cooke Grev. VII. p. 53. — Gregaria; pe- 1881
 ritheciis atris, semi-immersis, in maculas angulatas, veni-limitatas
 congestis; ascis clavato-cylindricis; sporidiis ellipticis, uniseptatis,
 utrinque rotundatis, leniter constrictis, 10 \approx 4.

Hab. in foliis Pittospori, Aiken Carol. Amer. bor.

64. **Sphærella Pseudacaciæ** Auersw. Myc. Eur. Pyr. p. 8, fig. 92. — 1882

Peritheciis nigris, epidermide tectis eamque ostiolo brevissime conico perforantibus, sparsis, vel subgregariis, globosis, 100 μ . latis; ascis e basi ovata apicem versus attenuatis, subsessilibus, 8-sporis, 70-75 \approx 18; sporidiis 2-3-serialibus, obovato-oblongis, utrinque rotundatis, uniseptatis, ad sepimentum constrictis, hyalinis, loculo utroque guttulis 2-3 minutis ornato, 24 \approx 10.

Hab. in foliorum petiolis Robiniæ Pseudacaciæ in Germania.

65. **Sphærella petiolicola** (Desm.) Auersw. Syn. Pyr. eur. p. 8, t. 3, 1883

f. 38. Sacc. Myc. Ven. t. IX, fig. 16-28. *Sphæria petiolicola* Desm. 17. Not. 1849, p. 28. — Peritheciis sparsis vel subgregariis, primitus epidermide tectis, dein eam perforantibus vel sublevantibus, sphæroideis, poro pertusis, atris, latit. circiter 0,1 mill.; ascis subsessilibus, cylindraceo-clavatis, 40 \approx 6, octosporis; sporidiis distichis, subovoideo-elongatis, uniseptatis, ad septum leniter constrictis, hyalinis, 6-8 \approx 1,5-2 (in forma Robiniæ 10 \approx 3).

Hab. in petiolis Fraxini excelsioris et Robiniæ Pseudacaciæ emortuis in Gallia, Germania, Italia et Fennia.

66. **Sphærella Psammisiæ** Cooke Grev. IX. 1881, p. 99. — Epiphyll- 1884

la; maculis orbicularibus hinc inde confluentibus, magnis, pallidis, rubro-cinctis; peritheciis paucis, subprominentibus, atris; ascis clavatis, sessilibus; sporidiis biseriatis, ellipticis, inæqualiter uniseptatis, hyalinis, 15 \approx 5.

Hab. in foliis Psammisiæ pendulifloræ, Caracas Venezuelæ (Doct. ERNST).

67. **Sphærella Œdema** (Fr.) Fuck. Symb. p. 104. Niessl. Beitr. p. 17, 1885

t. III, fig. 14. *Sphæria Œdema* Fr. in Duby Bot. Gall. II, 696. — Peritheciis amphigenis, gregariis, dense confertis seu cæspitosis, sub epidermide nidulantibus, demum erumpentibus, globosis, papillatis, 90-110 μ . diam., atris; ascis fasciculatis, oblongo-clavatis apice rotundatis sessilibus 8-sporis 52-58 \approx 10-11; sporidiis farctis seu subdistichis, fusiformi-oblongis utrinque rotundatis vel parum acutiusculis, rectis curvatisve, uniseptatis, ad sepimentum parum constrictis, dilutissime virescentibus v. fere hyalinis, 20-22 \approx 3-5, paraphysis nullis.

Hab. in foliis languescentibus Ulmi campestris et effusæ pr. Brünn, Austria, Œstrich, Germania, nec non in Vogesis.

68. **Sphærella nitidula** (Lév.) Berk. Fungi Braz. n. 420. *Sphæria* (epi- 1886

phylla) *nitidula* Lév. Ann. Scienc. nat. 3, 1845, p. 54. — Epiphylla, gregaria vel sparsa; peritheciis innatis hemisphæricis lævibus, nigris, nitidis; ostiolis prominulis pertusis; ascis ovoideo-inflatis, octosporis; sporidiis inordinatis, ellipticis, uniseptatis, guttulatis, hyalinis.

Hab. in Brasilia ad folia *Melastomatum* (GUILLEMIN).

69. **Sphærella Myrsines** Kalch. et Cooke Grev. IX, 1880, p. 30. — 1887
Hypophylla, sparsa; peritheciis membranaceis, brunneis, poro pertusis 0,1–0,2 mill. diam., applanatis; ascis anguste clavatis; sporidiis lanceolatis, demum uniseptatis, hyalinis, nec centro constrictis, $14 \approx 3$.

Hab. in foliis putrescentibus *Myrsines africanæ* in Africa australi.

70. **Sphærella Myricariæ** (Fuck.) Sacc. *Sphæria Myricariæ* Fuck. 1888
Symb. Myc. App. II, p. 22. — Peritheciis plerumque in foliorum marcescentium aridorumve pagina inferiori, gregariis, pro ratione majusculis, semiimmersis et basi globosa a foliorum substantia decolorata elevata cinctis, parte libera late conica, aterrima, demum perforatis; ascis tenuiter stipitatis, tunica crassa, oblongis, sæpe curvatis, 8spor. 80 \approx 12; sporidiis distichis, ovato-oblongis, paululum curvatis, utrinque obtusis, uniseptatis, ad septum constrictis, loculis 1–2 guttulis majusculis, hyalinis, 20 \approx 6.

Hab. in foliis adhuc pendulis, siccis *Myricariæ germanicæ* pr. Ragaz Helvetiæ.

71. **Sphærella Molleriana** Thuem. Contr. Myc. Lusit. n. 537. — 1889
Peritheciis amphigenis sed plerumque hypophyllis, dense gregariis, punctiformibus, conico-prominulis, semiimmersis, nitido-atris, minutis in macula irregulari, arescendo sordide fuscidula, zona obscuriore anguste cincta; ascis fasciculatis, late clavatis, utrinque angustatis, hyalinis, 30–40 \approx 12–15, subsessilibus, octosporis; sporidiis fusoides, utrinque acutatis, medio septatis, hyalinis, di-tristichis, 7–9 \approx 2,5.

Hab. ad folia viva *Eucalypti Globuli* prope Coimbra (MOLLER).

72. **Sphærella mediterranea** Sacc. Mich. I, p. 35. — 1890
arescendo candidis brunneo-cinctis; peritheciis sparsis epidermide velatis dein erumpentibus e globoso-lenticularibus, punctiformibus, $\frac{1}{6}$ – $\frac{1}{8}$ mill. diam., basi hyphulis vestitis, vertice obtusis, pertusis, contextu laxo parenchymatico fuligineo; ascis cylindræis apice rotundatis, brevissime stipitatis, 90–100 \approx 12–14, aparaphysatis, octo-

sporidis; sporidiis distichis fuscoideis, rectis curvulisve, 22-25 \approx 7, 1-septatis, non constrictis, sæpius 4-guttulatis, hyalinis.

Hab. in pagina superiore foliorum languescentium *Nerii Oleandri*, Sernide, Mantova, Ital. bor. (A. MAGNAGUTI-RONDININI).

73. **Sphærella Laureolæ** (Desm.) Auersw. Myc. Eur. p. 9, fig. 45. — 1891

Peritheciis amphigenis, nigris, maculæ folii subrotundæ, pellucidæ, luteolæ, limitatæ, 2-10 mill. latæ, numerosissime insidentibus, subglobosis, poro simplici pertusis, 120 μ . latis; ascis elongato-oblongis vel e basi ampliata attenuatis, brevissime stipitatis, 8-sporis, 44 \approx 8; sporidiis biseriatis, obovato-oblongis, utrinque obtusis, uniseptatis, hyalinis, 12-14 \approx 3.

Hab. in foliis adhuc viridibus *Daphnes Laureolæ* in Gallia et Germania. — Sec. Auerswald l. c. huc spectat *Phyllosticta Laureolæ* Desm.

74. **Sphærella grumiformis** Karst. Myc. Fenn. II. p. 173. — Peritheciis 1892

epiphyllis, sparsis, prominulis, difformibus, plerumque rotundatis, rugulosis, subastomis, atris, latit. 200-250 μ .; ascis breviter pedicellatis, elongatis, 55-60 \approx 10-13 octosporis; sporidiis distichis, ovoideo-oblongatis, medio uniseptatis, ad septum haud vel vix constrictis, chlorino-hyalinis, tandem dilutissime fusciscentibus, 15-21 \approx 4,5-6.

Hab. in foliis *Arctostaphyli alpini* emortuis prope Kistofka-guba Lapponiæ rossicæ.

75. **Sphærella Gaultheriæ** C. et P. New Jersey Fungi in Grev. VII, 189

p. 42. — Epiphylla; maculis orbicularibus, albidis, purpureo-cinctis; peritheciis punctiformibus, circinatis; ascis clavatis; sporidiis lanceolatis, biseriatis, uniseptatis, 15-18 \approx 4.

Hab. in foliis *Gaultheriæ*, New Jersey Amer. bor.

76. **Sphærella Dendromeconis** C. et Harkn. Grevill. IX, 1880, p. 9. 1894

— Minima, sparsa, epidermide tecta; peritheciis, membranaceis, brunneis; ascis octosporis; sporidiis biseriatis, ellipticis, hyalinis uniseptatis, cellula inferiore tenuiore.

Hab. in caule *Dendromeconis rigidi* in California, America boreali (HARKNESS).

77. **Sphærella Clymenia** Sacc. M. V. n. 908. Mich. I. p. 35. — Macu- 1895

lis amphigenis subrotundis ochraceis v. subgriseis, fusco-cinctis; peritheciis remote sparsis e globoso lenticularibus, diam. 70-80 μ . punctiformibus, ostiolo impresso pertusis; ascis clavulatis, 40-50 \approx 10, aparaphysatis, octosporis; sporidiis distichis oblongo-clavu-

latis, 14–16 \approx 3 $\frac{1}{2}$ –4, bilocularibus, loculo sup. leniter crassiore, ad septum subconstrictis, 4-guttulatis, hyalinis.

Hab. in foliis *Loniceræ Caprifolii*, socio spermogonio: *Phyllosticta vulgari* f. *Loniceræ* Desm. (sperm. 6–7 \approx 2,5, 2-guttulatis, hyalinis) in sylva Montello Italiæ borealis et in Gallia.

78. **Sphærella collina** Sacc. et Speg. Michel. I, 379, F. it. t. 387. — 1896

Peritheciis in foliis totis dealbatis gregariis amphigenis, sed plerumque epiphyllis, innato-erumpentibus, lentiformibus, 200 μ . diam., pertusis, contextu membranaceo exquisite parenchymatico; ascis cylindræo-clavatis 45–50 \approx 10–11, brevissime noduloso-stipitatis, apapophysatis, octosporis; sporidiis distichis, oblongis, 13 \approx 5, constricto-1-septatis, loculo superiore crassiore, hyalinis.

Hab. in foliis emortuis *Loniceræ Xylostei*, Colfosco, Treviso Italiæ borealis. — A *Sph. Clymenia* Sacc. longe diversa.

79. **Sphærella colorata** Peck. 29 Rep. on the St. Mus. New-York t. 1897

II, fig. 15–17. — Maculis orbicularibus, minutis, sparsis v. rarius confluentibus, rubro-fuscis, late marginatis; peritheciis minutis, nigris, epiphyllis; ascis cylindræis; sporidiis subteretibus, v. fusoides, uniseptatis, hyalinis, 15–18 μ . longis.

Hab. in foliis viventibus *Kalmiæ angustifoliæ*, Center, America boreali. — Maculæ in pag. sup. distinctius marginatæ, quam in inferiori, subinde cinerascens.

80. **Sphærella cinerascens** Fuck. Symb. mycol. p. 103. — Peritheciis 1898

gregariis, numerosissimis, emersis, globosis, atris, *Sph. punctiformis* magnitudine, ostiolis minimis, papillatis; ascis fasciculatis, oblongis, curvatis, 8-sporis, 36 \approx 12; sporidiis ovato-oblongis, uniseptatis, utrinque obtusis, multiguttulatis, hyalinis, 9 \approx 4. Sec. Fuck. l. c. status conidicus est *Cercospora Aricæ* Fuck.

Hab. in pagina inferiore foliorum putrescentium Sorbi *Aricæ*, sæpius maculas latas efficiens, Hallgarten Germaniæ.

81. **Sphærella cerasina** Cooke Grev. VII, p. 53. — Hypophylla; pe- 1899

ritheciis atris, semi-immersis, in maculis suborbicularibus congestis; ascis cylindræis; sporidiis anguste ellipticis, uniseptatis, 10 \approx 2,5.

Hab. in foliis *Pruni Lauro-cerasi* in Carolina Am. bor.

82. **Sphærella Ceratonix** Pass. Funghi Parm. III. p. 28. — Perithe- 1900

ciis hypophyllis, punctiformibus atris; ascis clavatis 8-sporis; sporidiis distichis navicularibus medio septatis et arcte constrictis, loculis binucleolatis, hyalinis.

Hab. in foliis *Ceratonix* Siliquæ, Licata, Sicilæ.

83. **Sphærella Vaccinii** Cooke in Journ. of. Bot. 1866, Aug., p. 249, 1901

t. 50, f. 11 et Brit. Fung. II, p. 917. *Sphaeria maculaformis* Fr. Syst. myc. II, p. 524, pr. p. *Sphaerella Myrtilli* Auersw. Myc. Eur. Pyr. p. 10, t. 4. f. 46. — Peritheciis hypophyllis, innatis, dense gregariis, maculas griseas, angulosas, venulis limitatas formantibus, subsphaeroideis, atris nitidulis, poro simplici pertusis, latit. 80–100 μ . ascis sessilibus, cylindraceo-clavatis vel fusioideo-bacillaribus, 40–50 \approx 7 octosporis; sporidiis distichis, fusioideo-bacillaribus, leviter curvulis vel subrectis, uniseptatis, ad septum neutiquam constrictis, hyalinis, 12–18 \approx 1,5–2.

Hab. in foliis *Vaccinii Myrtilli*, V. arborei, V. corymbosi in Britannia, Suecia, Germania, et Amer. boreali.

84. **Sphaerella myrtillina** Pass. Micr. ital. diagn. n. 3. — Peritheciis, 1902
sparsis vel laxe gregariis minutis pustulaeformibus, epidermide nigricata tectis; ascis cylindrico-fusiformibus rectis, 8-sporis; sporidiis subdistichis fusiformibus rectis vel curvatis saepius integris 2–4-guttatis, interdum (maturis) tenuissime medio septatis, hyalinis, 18–20 \approx 3–3 $\frac{1}{2}$.

Hab. ad ramulos aridos *Vaccinii Myrtilli* in Apennino Parmensi (Lago santo). — An *Laetadia*? A *Sphaerella Vaccinii* Cooke plane diversa.

85. **Sphaerella brachythea** Cooke Grev. VII, p. 88 (nec Grev. IX. p. 8, 1903
Cfr. *Sph. Harknessii*). — Maculis orbicularibus, albidis, nigro-marginatis; peritheciis punctiformibus in maculae centro aggregatis; ascis clavatis v. ovoideis; sporidiis subfusioideis rectis curvulisve, hyalinis, 14–15 \approx 3.

Hab. in pagina superiore foliorum viventium *Vaccinii Vitis idaeae*, Forres Britanniae (Rev. J. KEITH). — Subsimilis *Sphaerellae Gautherieae*, quae sporidiis majoribus pollet.

86. **Sphaerella Bumeliae** Cooke Grev. VII, p. 54. — Epiphylla; peri- 1904
theeciis atris, semi-immersis, in maculis suborbicularibus, nigricatis congestis; ascis clavato-cylindraceis; sporidiis ellipticis, uniseptatis 12 \approx 4.

Hab. in foliis *Bumeliae*, Darien Carolinae Amer. bor.

87. **Sphaerella convexula** (Schw.) Thüm. M. U. n. 1149. *Sphaeria con-* 1905
convexula Schw. Syn. Amer. bor. n. 1788, Grevill. IV. 154. — Totum folium sparse occupans, innata, minuta, rugulosa, tamen nitidula, atra, subastoma, valde convexo-elevata, non collabescens; nucleo ascigero (imperfecto observato).

Hab. in foliis *Caryae tomentosae* Bethlehem et Aiken Amer.

bor. (SCHWEIN et RAVENEL). — N. 1149 M. U. præbet specimina prorsus immatura.

88. **Sphærella Evonymi** (Kunze?) Auersw. Myc. Eur. p. 10, fig. 40. 1906

Sphæria Evonymi Kunze in Fr. S. M. II, p. 439 p. p. — Peritheciis hypophyllis, nigris, epidermidi innatis, dense sparsis vel gregariis, maculas griseas (1–2 μ . mentientes) angulosas, venulis plus minus limitatas formantibus, globosis, poro simplici pertusis, 120 μ . fere latis; ascis clavatis, brevissime stipitatis, 8–sporis, 40 \simeq 6; sporidiis biserialibus, fusiformibus, subfalcatis, utrinque obtusis, 4–nucleolatis aut demum uniseptatis, ad sepimentum non constrictis, hyalinis, 14 \simeq 2.

Hab. in pagina inferiore *Evonymi europæi* in Suecia, Gallia, Belgio et Germania.

89. **Sphærella exutans** Cooke Fungi of Texas 144. — Maculis minu- 1907

tis, atro-brunneis; peritheciis paucis, immersis, demum epidermidem operculatim excutientibus; ascis clavato-cylindræis; sporidiis elongato-ellipticis, inæqualiter uniseptatis, hyalinis, 22 \simeq 4.

Hab. in pag. sup. foliorum *Perseæ*, Houston, Texas, Amer. bor. — Foliorum epidermis supra quodque perithecium operculatim circumscinditur.

90. **Sphærella elatior** Sacc. et Speg. Michel. I, 379, F. ital. t. 386. — 1908

Peritheciis sparsis, hypophyllis, globoso-conoideis, subprominulis, $\frac{1}{5}$ mill. diam.; contextu parenchymatico densiusculo, fuligineo; ascis obclavatis, brevissime stipitatis, 80–90 \simeq 23, apice tunica integra obtusatis, aparaphysatis, octosporis; sporidiis distichis et parte inferiore subtristichis, oblongis subclavulatisque, 25–30 \simeq 8–9, rectis curvulisve, 1-septatis, vix constrictis, 4-guttulatis, dein 2-nucleatis, hyalinis.

Hab. in pagina inferiore foliorum putrescentium *Liriodendri Tulipiferae*, Conegliano, vere 1877. — Ob sporidia et perithecia majuscula ad *Sphærellam Primulae* Rehm Ascom. n. 295 accedit, sed ceterum differt.

91. **Sphærella Duchartrei** (Crié sub Dep.) Sacc., Crié sur les Dep. p. 1909

41, t. VI, fig. 6. — Maculis indeterminatis zona nigra cinctis; peritheciis epiphyllis, nigris; ascis stipitatis elongatis obtusis; sporidiis lanceolatis, acutiusculis, 1-septatis, leniter constrictis, 10–11 \simeq 4, dilute cœrulescentibus.

Hab. in foliis exsiccatis *Vincæ minoris* in Gallia, Sillé-le-Guillaume, Conlie, Meudon, hieme, sociis spermogoniis (*Septoria*: spermatiis 25–40 μ . long.) et pycnidibus (*Phoma* etc.),

92. **Sphærella Coneglanensis** Spig. Michel. I. 455. Fungi ital. t. 626. 1910
 — Peritheciis primo subepidermicis, dein erumpentibus atque sub-superficialibus, 120-150 μ . diam., laxe gregariis; contextu inferne subcarbonaceo, superne parenchymatico-polyedrico, fuliginæo-atro; ascis cylindræis vel cylindræo-clavatis, antice crassiuscule tunicatis, 40-45 \approx 5, octosporis, aparaphysatis; sporidiis didymis, loculo superiore majore, hyalinis, 7-8 \approx 2 $\frac{1}{3}$ -3.
Hab. ad folia emortua dejecta Calycanthi floridi, Conegliano Italiæ borealis.
93. **Sphærella Berberidis** Auersw. Myc. Eur. Pyr. p. 3, fig. 41. — 1911
 Peritheciis hypophyllis, nigris, epidermide innatis, laxe gregariis, gregibus venulis plus minusve limitatis, globosis, 120 μ . diam., poro simplici pertusis; ascis clavatis substipitatis, octosporis, 45-65 \approx 8-9, aparaphysatis; sporidiis 2-3-stichis, fusoideis, obtusiusculis, rectis curvulisve, uniseptatis, 24 \approx 2,5-3, hyalinis.
Hab. in foliis Berberidis vulgaris in Germania, Belgio, Italia et Austria. — Sporidia diu continua manent.
94. **Sphærella Auerswaldii** Fleisch. in litt. Auersw. Syn. Pyr. eur. 1912 p. 11, t. 7, f. 95. — Peritheciis hypophyllis, epidermidi innatis, laxe gregariis, subsphæroideis, ore simplici pertusis, atris, 100-120 μ . latit.; ascis clavatis, brevissime pedicellatis, 48-55 \approx 10 octosporis; sporidiis subquadriseptaliter stipatis, fusoideis, utrinque obtusatis, demum uniseptatis, ad sepimentum neutiquam constrictis, hyalinis, utrinque nucleolis minutis 2-3 ornatis, 27-30 \approx 4.
Hab. in foliis Corni sanguinæ et C. albæ putridis in Germania et Fennia.
95. **Sphærella conglomerata** (Wallr.) Auersw. Myc. Eur. Pyr. p. 5, 1913 fig. 88, *Sphæria conglomerata* Wallr. Fl. Crypt. p. 814, *Stigmatæa maculiformis* Fuck. Symb. p. 95. — Hypophylla, nigra, innata, dense conglomerata et confluens; maculis gregariis minutis; ascis ovato-oblongis, sessilibus, octosporis, 30-40 \approx 12-14; sporidiis obovato-oblongis, uniseptatis, leniter constrictis, hyalinis, 12 \approx 4.
Hab. in foliis emortuis Alni glutinosæ in Germania, Britannia et Belgio. — Formæ in foliis Cytisi Laburni et Cericidis Siliquastri citatæ in Kickx Fl. I, 356, an vere huc spectent, nescio.
96. **Sphærella Alni** (Fuck.) Sacc. Mich. I, 245, *Stigmatæa Alni* Fuck. 1914 Symb. myc. 97, *Perisporium alneum* Fr. S. M. III, 250 p. p.?
 — Maculis foliorum epiphyllis, subcircularibus, dilute fuliginæis;

peritheciis superficialibus, immo facile secedentibus (an ab initio velatis?), globulosis, pertusis, contextu tenui, laxiuscule parenchymatico, fuligineo, basi hyphulis brevibus fuligineis cinctis; ascis subfusoideis v. obclavatis, basi breve attenuatis, 50-60 \approx 12-15, apapophysatis, 8sporis; sporidiis distichis 15-16 \approx 7, obovatis, constricto-1-septatis, loculo superiore crassiore, inferiore acutiore, 4-guttulatis e hyalino dilute luteolis.

Hab. in foliis adhuc vivis Alni glutinosæ in Suecia, Germania et Italia.

97. **Sphærella Alni viridis** De Not. Recl. in Comm. II, pag. 487. — 1915
 Hypophylla, epidermide tecta, minutissima, laxe gregaria; peritheciis e stromate dematiaceo, entophlœodeo, rotundatis, vertice obtusissime conoideis, osculo minuto hiantibus, aterritis, carbonaceis, fragilibus; ascis coacervatis, crasse clavulatis, octosporis; paraphysibus nullis; sporidiis tereti-fusoideis, utroque apice obtusiusculis, curvulis, bilocularibus, hyalinis.

Hab. in foliis dejectis Alni viridis, Val Vogna prope Riva Italiæ borealis (CARESTIA).

98. **Sphærella Araliæ** C. et Harkn. Grevill. IX, 1880, p. 9. — 1916
 Peritheciis gregariis, brunneis, membranaceis, epidermide tectis, in maculas orbiculares congestis; ascis cylindraceutis; sporidiis ellipticis, hyalinis, uniseptatis, 10 \approx 4.

Hab. in caulibus Araliæ californicæ in California Americæ borealis.

99. **Sphærella Acaciæ** C. et Harkn. Grevill. IX, 1880, p. 9. — 1917
 Epiphylla, subgregaria; peritheciis membranaceis, epidermide tectis; ascis clavatis; sporidiis biserialis, hyalinis, sublanceolatis, medio constrictis, uniseptatis, binucleatis, 25 \approx 7.

Hab. in foliis Acaciæ in California Amer. bor. — Sporidia an tandem triseptata fiant dubium videtur.

100. **Sphærella annulata** Cooke Rav. Fung. Amer. in Grev. VI, p. 146. 1918
 Sparsa, immersa; peritheciis depressis, atris, subannulatis; ascis clavatis; sporidiis ellipticis, demum uniseptatis, 8 \approx 3.

Hab. in pag. sup. foliorum emortuorum Magnoliæ, Aiken, Carolina inf. Amer. bor.

101. **Sphærella glauca** Cooke Hedw. 1878, p. 39. — 1919
 Epiphylla; maculis pallidis, suborbicularibus, roseo-cinctis; peritheciis semi-immersis, subglobosis, brunneis; ascis clavatis; sporidiis breviter lanceolatis, uniseptatis, hyalinis, 12-14 \approx 4.

Hab. in foliis Magnoliæ glaucæ, Aiken, in Carolina inferiore Americæ borealis.

102. **Sphærella Cleidii** (B. et Br.) Sacc. *Sphæria* (Foliicolæ) *Cleidionii*, B et Br. Fungi of Ceyl. n. 1119. — Peritheciis gregariis, immersis, minutis, e macula fusca oriundis; ascis clavatis; sporidiis oblongis uniseptatis, 15 μ . longis. 1920

Hab. in foliis Cleidii javanici, in Ceylon. — Epidermidem tenuiter elevat.

103. **Sphærella atra** (Lév.) Sacc. *Sphæria* (conferta) *atra* Lév. ann. Scienc. nat. 3, 1845, p. 50. — Gregaria vel confluens; peritheciis globosis, intus albis, stromate effuso nigro maculæformi inæquabili obtectis, ostioliis obsoletis; nucleo albo ascigero; sporidiis ovato-oblongis, uniseptatis, hyalinis. 1921

Hab. ad folia ejusdam Grevilleæ in Nova Hollandia (Herb. Mus. Par.).

104. **Sphærella Cassinopsidis** Kalch. et Cooke. Grev. IX, 1880, p. 31. 1922
— Epiphylla; maculis pallidis, purpureo-cinctis, orbicularibus; peritheciis atris, centro gregariis, minimis; ascis clavatis, 25 \approx 5; sporidiis linearibus, rectis, hyalinis, 6 μ . long.

Hab. in foliis vivis Cassinopsidis capensis in Africa austr. — Sporidia probab. nondum perfecte matura, hinc septum non conspicuum.

105. **Sphærella coffeicola** Cooke Grevill. IX, 1880, p. 11. — Maculis pallidis, subrotundis, margine brunneo, $\frac{1}{2}$ -1 cent. lat.; peritheciis paucis sparsis, immersis, atro-fuscis, minimis; ascis clavatis; sporidiis fusoides, arcte constrictis, uniseptatis, binucleatis, hyalinis, 2,5 \approx 4,5. 1923

Hab. in foliis Coffeæ arabicæ, Venezuela (ERNST). — Perithecia vix 2-3 in quaque macula.

†† *Clado-carpogonæ.*

106. **Sphærella melanophora** Speg. Nova Add. n. 67 et Mich. II, 247. 1924
— Maculis latiusculis, 1-10 mill. diam., primo subcircularibus, dein confluendo amorphis, indeterminatis, atro-cinereis; peritheciis minutissimis. 60-80 μ . diam., globosis, primo subepidermicis, dein cute lacerata semiexertis, contextu solidiusculo, parenchymatico-membranaceo; ascis clavato-saccatis, brevissime pedicellatis, subincurvis, apice crassiuscule tunicatis, ac rotundato-subtruncatis, octosporis 30-50 \approx 7-9, aparaphysatis?; sporidiis distichis, hyalinis, el-

lipticis, medio constricto-uniseptatis, crassiuscule tunicatis, 4-gutulatis, utrinque acutiuscule rotundatis, $8 \approx 4$.

Hab. in cortice ramulorum juniorum *Quercus pseudorubra* prope Conegliano Italiæ borealis. — An *Didymella*?

107. **Sphærella fumaginea** Catt. Arch. Critt. II, 113, t. VIII, fig. 4-7. 1925

— Peritheciis atris globosis, plus minus dense sparsis, 40-60 μ . latis; ascis clavatis, sessilibus, 8sporibus, 15-20 μ . longis; sporidiis biserialibus, obovato-clavatis, uniseptatis, ad sepimentum constrictis, loculo superiore crassiore, hyalinis, $5-6 \approx 2$.

Hab. in ramis et sarmentis *Vitis viniferæ*, Firenze Italiæ, socio *Cladosporio fasciculato*, quod sec. Cattaneo est status ejusdem conodicus.

108. **Sphærella Cytisi sagittalis** Auersw. Myc. Eur. p. 10, fig. 43. — 1926

Peritheciis amphigenis, nigris, epidermide tectis, sparsis, numerosis, depresso-globulosis, imo lentiformibus, poro simplici pertusis, 280-300 μ . latis; ascis clavato-oblongis, sessilibus, 8-sporibus, 106 \approx 16; sporidiis biserialiter stipatis, oblongo-fusiformibus, utrinque obtusatis, leviter curvatis, 4-nucleolatis, demum uniseptatis, ad sepimentum leviter constrictis, subhyalinis, 25-28 \approx 5-6.

Hab. in ramulis alatis *Cytisi sagittalis* in Styria (NISSL). — Sec. Niessl eadem sit ac *Anthostomella Cytisi* (Fuck.) Sacc. n. 1079, quod ex icone Auersw. l. c. abhorret.

109. **Sphærella inflata** Penz. Fung. agrum n. 26. — Peritheciis ramuliculis, laxiuscule gregariis, epidermide velatis, globoso-depressis, glabris, nigris, 200 μ . latis, ostiolo impresso; ascis crasse obovatis, rotundatis, deorsum brevissime angustatis, 32-36 \approx 14-18, aparaphysatis, octosporibus; sporidiis tristichis, stipatis, oblongo-obovatis, 8-9 \approx 4-4,5, 1-septatis, non constrictis, hyalinis. 1927

Hab. in ramulis vivis *Citri Aurantii* in Horto Agrario, Padova Italiæ borealis (PENZIG).

110. **Sphærella inconspicua** Schröt. Nord. Pilze p. 12. — Peritheciis sphaeroideis, parum prominulis nigro-rufescentibus, 60-90 μ . diam.; ascis cylindraceo-ellipticis, 40-50 \approx 13-16; sporidiis distichis, ovato-clavulatis, 16-19 \approx 5-5,5, medio uniseptatis, loculo sup. crassiore, infero deorsum attenuato, hyalinis. 1928

Hab. in pedunculis fructuum *Andromedæ tetragonæ* in Lapponia Sueciæ (WICHURA).

111. **Sphærella Leguminis Cytisi** (Desm.) Ces. De Not. Schema Sf. p. 237, *Sphæria leguminis Cytisi* Desm. X. Not. p. 24. — Peritheciis minutis, dense sparsis, epidermide tectis, nigro-fuscis, globoso-

depressis, dein planis, intus albidis, ostioliis superficialibus punctiformibus; ascis.....; sporidiis ellipticis, 1-septatis, hyalinis, 12-14 \approx 4.

Hab. in leguminibus *Cytisi Laburni* in Gallia et Belgio. — Sec. Léveillé hæc species *Diplodiam* refert. An?

b) *Herbicolæ.*

† *Follicolæ.*

112. **Sphærella Pulsatillæ** (Lasch) Auersw. Myc. Eur. p. 12, fig. 52. 1930

— Peritheciis amphigenis, nigris, epidermidi innatis, dense sparsis, globulosis, poro simplici pertusis, 80-120 μ . latis; ascis cylindrico-clavatis, breviter stipitatis, 8-sporis, 55-60 \approx 8-10; sporidiis biserialibus, elongato-oblongis, utrinque obtusis, uniseptatis, loculo superiori subcrassiori, hyalinis, 14-15 \approx 3.

Hab. in foliis *Pulsatillæ pratensis* in Moravia (NISSL), Germania (FUCK.), Sibiria (THUEN). — Var. *minor*: ascis cylindraceis 34 \approx 7; sporidiis aequaliter didymis 8-9 \approx 2. In Rhenogovia.

113. **Sphærella Lachesis** Sacc. Fungi Ven. Ser. II. p. 302. — 1931

Maculis nullis, peritheciis hypophyllis hinc inde gregariis, punctiformibus, epidermide subvelatis, globoso-lenticularibus, 100 micr. d., ostiolo impresso pertusis, hyphis tenuibus, brevibus basi cinctis; ascis oblongo-fusoides, 55 \approx 10, 8-sporis; sporidiis distichis oblongo-cylindræis, utrinque rotundatis, 17 \approx 5, 1-septatis, non contractis, 4-guttulatis, hyalinis.

Hab. in foliis exsiccatis *Hellebori viridis*, Sëlva, Conegliano et Vittorio Italiae borealis.

114. **Sphærella Hermione** Sacc. Fungi Ven. Ser. II, 301. — 1932

Peritheciis in maculis candidis, nitidis, atro-marginatis, plerumque epiphyllis paucis, lentiformibus, 80 μ . diam., ostiolo impresso poro pertusis, hyphulis parcissimis basi cinctis; contextu membranaceo, distincte parenchymatico, fuligineo; ascis cylindræo-clavatis, 40 \approx 6, basi vix attenuatis, 8-sporis; sporidiis oblique distichis v. subdistichis, oblongis, didymis, 10-11 \approx 3, loculo inferiore paulo minore, eguttulatis, hyalinis. — Status spermogonicus *Phyllostictam helloborellam* Sacc. sistit.

Hab. in foliis *Hellebori viridis* languentibus, Covolo, Treviso, Italia bor. — Cum *Sphærella Lachesi* Sacc., ne comparanda quidem.

115. **Sphærella Epimedii** Sacc. — 1933

Peritheciis immato-prominulis hinc inde maculiformiter dense gregariis, punctiformibus, poro pertusis,

nigris; ascis teretiuseculis deorsum vix attenuatis, 40 \approx 7-8, fasciculatis, aparaphysatis, octosporis; sporidiis subdistichis inæqualiter didymis, 10-13 \approx 4, loculo superiore crassiore et obtusiore, hyalinis.

Hab. in pag. plerumque superiori foliorum emortuorum Epimedii alpini, Conegliano, Montello Italiæ borealis. — Peritheciis greges maculas angulosas 1-2 mill. diam. sistunt.

116. **Sphærella Adonis** Sacc. Mich. I, 122. — Peritheciis laxe gregariis, punctiformibus, globulosis, papillulatis, 80-100 μ . diam., innato-erumpentibus; contextu distincte parenchymatico, solidiusculo, fuligineo; ascis cylindræco-fusoideis, 80-90 \approx 15, breve crasse stipitatis, aparaphysatis, octosporis, apice, tunica integra, rotundatis; sporidiis distichis elongato-fusoideis, 28-30 \approx 4 $\frac{1}{2}$ -5, rectis curvulisve, utrinque obtuse attenuatis, 1-septatis, non constrictis, hyalinis. 1934

Hab. in pagina inferiore et parcius in superiore foliorum Adonidis vernalis in Marchia Brandenburg (O. REINHARDT in herb. P. MAGNUS). — Affinis, quoad sporidia, *Sphærellæ Populi* Auersw.

117. **Sphærella umbrosa** Sacc. Mich. I, 378, Fungi ital. t. 378. — 1935
Maculis in foliis arecendo candicantibus, vagis; peritheciis paucis epiphyllis, punctiformibus, lenticularibus, 100 micr. d., poro pertusis; contextu laxe parenchymatico, ochraceo; ascis cylindræco-clavatis, 40 \approx 10, breve stipitatis, apice rotundatis, octosporis, aparaphysatis; sporidiis distichis, oblongo-fusoideis, rectis, 14-15 \approx 4, constricto-1-septatis, 2-nucleatis, hyalinis.

Hab. in foliis nondum emortuis Galeopsidis versicoloris prope Treviso Italiæ bor.; sociis spermogoniis *Phyllostictam Galeopsidis* Sacc. (Mich. II, 150) sistentibus.

118. **Sphærella Pedicularis** Karst. Fungi Spetsb. n. 53. — Peritheciis sparsis vel gregariis, primitus epidermidi innatis, dein protuberantibus, sphæroideis, vertice subconoideo-attenuatis, glabris, atris, 150 μ . latit.; ascis subsessilibus, elongatis, 30-35 \approx 7-8, octosporis; sporidiis distichis, fusoideo- vel aciculari-elongatis, rectis vel leviter curvulis, guttulatis vel uniseptatis, hyalinis vel sub-luteolohyalinis, 12-18 \approx 2,5-8; paraphysibus nullis. 1936

Hab. in foliis Pedicularis hirsutæ emortuis ad Green Harbour, Spitzberg.

119. **Sphærella Impatientis** Peck et Clinton, 30 Rep. on the St. Mus. 1937
et in Myc. univ. n. 963. — Hypophylla; peritheciis minutis, nigris, innatis, prominulis aut in maculas irregulares angulatas, subconfluentes venulis limitatas collectis; ascis subcylindræcis, sæpe cur-

vulis et sursum angustatis; sporidiis biseriatis, uniseptatis, oblongis, hyalinis, 10-13 μ . longis, rarius quadrinucleatis, inferiore cellula plerumque angustiore.

Hab. in foliis vivis vel languidis *Impatientis fulvæ*, Buffalo, in montibus Adirondack, Amer. bor. (Peck).

120. **Sphærella carniolica** Niessl Neue Kernp. p. 85. — Epitaxiarius 1938
hypophylla; peritheciis dense disseminatis, minutis, punctiformibus, globosis, papillatis, tandem vertice umbilicatis, atris; ascis fasciculatis 8sporis, obovatis vel oblongis, sessilibus 30-42 \approx 14-18; sporidiis farctis, cuneato-oblongis, rectis, medio septatis vix constrictis, dilute virescentibus, 15-19 \approx 4-5.

Hab. in foliis emortuis *Drabæ ciliatæ* in M. Nanos Carniolicæ. — Affinis *Sphærellæ confini* Karst. — Var. *major* (*Sph. minuta* Auersw.?): peritheciis plerumque sparsis papillatis; sporidiis 16-20 \approx 5-6. In foliis pedunculisque *Drabæ aizoidis* in Tyrolia.

121. **Sphærella brassicicola** (Duby) Ces. et De Not. Schema p. 64, 1939
Sphæria brassicicola Fr. et Duby Bot. Gall. II, p. 712, *Dothidea Brassicæ* Desm., *Sphæria Brassicæ* B. et Br. — Peritheciis dense confertis, greges atros varios efficientibus, globoso-lenticularibus, 80 μ . diam. amphigenis, prominulis, in maculis pallide viridibus centro arescendo fuscescentibus sitis, pertusis, contextu ochraceo-fuligineo; ascis crasse cylindræis, 50 \approx 15, aparaphysatis, octosporis; sporidiis 2-3-stichis, oblongis v. clavulatis, 18 \approx 3 $\frac{1}{2}$, sæpe curvulis, 1-septatis, vix constrictis, hyalinis. — Spermogonium sistit *Asteroma Brassicæ* Chev.

Hab. in foliis *Brassicæ oleracæ*, rarius in siliquis, in Gallia, Germania, Italia et Belgio.

122. **Sphærella sylvatica** Sacc. et Speg. Mich. I, 380, F. ital. t. 382. 1940
— Maculis in foliis nullis obsoletisve; peritheciis dense et late gregariis, plerumque epiphyllis, lenticularibus, punctiformibus, poro pertusis; ascis cylindræis breve stipitatis, 50-55 \approx 10, apice rotundatis, aparaphysatis, 8sporis; sporidiis distichis oblongo-clavulatis, 12-14 \approx 4, rectis, valde constrictis, 1-septatis, loculo superiore, 2-guttulatis, hyalinis.

Hab. in foliis emortuis *Scabiosæ sylvaticæ* in collibus, Conegliano Italiæ borealis.

123. **Sphærella Sarracenicæ** (Schw.) Sacc. *Sphæria Sarracenicæ* Schw. 1941
Syn. Carol. n. 77, Berk. North Am. Fungi. — Effusa, effigurata, tenuissima, cinerea; peritheciis minutissimis, ostioliis subsetaceis(?)

pulverigeris; ascis brevissimis, obovatis; sporidiis oblongis, uniseptatis, 10 μ . longis, hyalinis.

Hab. in foliis siccis *Sarraceniæ* purpureæ et rubræ, Carolina, Amer. bor. — Distinguitur colore cinereo, efficiens maculas varie configuratas unciales et triunciales. Perithecia cum cortice assurgentia, variolosam quasi reddunt superficiem. Ostiola sparsa, adperso pulvere nigerrima.

124. **Sphærella microspila** (B. et Br.) Cooke Handb. p. 919 *Sphæria* 1942
microspila B. et Br. Ann. N. Hist. n. 984, t. 17, fig. 36. — Peritheciis sparsis, globosis, singulis pluribusve macula minuta brunnea innatis, mycelioque tenui cinctis; ascis cylindræis; sporidiis oblongo-ellipsoideis, uniseptatis, hyalinis, 8-11 μ . longis.

Hab. in foliis languidis v. emortuis *Epilobii montani* et *E. Dodonæi* in Britannia, Belgio et Italia. — A *Sphærellæ minori* Karst. tute distinguenda.

125. **Sphærella Epilobii** (Crié sub *Dep.*) Sacc., Crié Sur les Dep. p. 1943
40, tab. VI, fig. 1. — Peritheciis amphigenis, nigris; ascis longe clavatis, apice rotundatis; sporidiis subdistichis oblongo-ellipsoideis, 1-septatis, non constrictis, dilute amethysticis, 16-19 \simeq 4-5.

Hab. in Gallia in foliis *Epilobiorum* prope omnium, aut., sociis spermogoniis (*Septoria*) et pycnidibus (*Phoma*).

126. **Sphærella Vulnerariæ** Fuck. Symb. myc. App. II, p. 21. — Pe- 1944
ritheciis ascigeris in foliorum marcescentium aridorumque pagina superiori ortis, plerumque greges densos, plus minusve laxos, orbiculares oblongosve, nigros formantibus, singulis globosis, obtusis, demum semiliberis, perforatis, nigris; ascis fasciculatis, oblongis, curvatis, substipitatis, 8spor. 48 \simeq 12; sporidiis subdistichis, fusi-formibus, rectis, inæqualiter biloculatis, guttulatis, hyalinis, 16 \simeq 4. — St. conidicus sistit *Cercosporam radiatam*; spermogonicus *Ascochytam Vulnerariæ* Fuck. (teste ipso Fuck).

Hab. in foliis languidis v. siccis *Anthyllidis Vulnerariæ* pr. Neuchâtel Helvetiæ (MORTIER).

127. **Sphærella phaseolicola** (Desm.) Sacc. *Depazea phaseolicola* Rob. 1945
et Desm. XVII. Not. p. 32, n. 47. — Maculis amphigenis, pallide rufescentibus, exaridis, subzonatis; peritheciis minutis numerosis brunneis, innato-prominulis, epidermide tectis; ostiolis nigris punctiformibus; ascis brevibus, crassis, subclavatis, 50 μ . longis; sporidiis oblongis utrinque obtusis, rectis v. curvulis, 15-20 \simeq 5, plasmate bipartito, (spurie?) 1-septatis, hyalinis.

Hab. in foliis languiscentibus Phaseolorum in Gallia. — Maculæ 5–10 mill. diam.

128. **Sphærella Morierei** (Crié sub *Dep.*) Sacc., Crié sur les Dep. p. 1946
39, t. 7, fig. 6. — Maculis indeterminatis, fuscescentibus, zona prominula cinctis; peritheciis nigris, amphigenis; ascis clavatis ad apicem crassiusculis, octosporis; sporidiis ellipsoideis, bilocularibus, guttulis binis oleosis (sub microscopico constantissime dilute roseis), 16–18 \approx 4–5.

Hab. in Gallia, Sillé-le-Guillaume, in foliis Phaseolorum, Pisorum, æstate 1871, socio spermogonio *Septoriam* sistente.

129. **Sphærella nemorosa** Sacc. et Sp. Mich. I, p. 378, F. ital. t. 377. 1947
— Maculis in foliis sordide ochraceis, fusco-cinctis, obtuse angulosis; peritheciis epiphyllis paucis, punctiformibus, lenticularibus, 100 μ . diam., poro 25 μ . diam. pertusis; contextu parenchymatico-dilute fusco-olivaceo; ascis oblongo-clavatis, 40–45 \approx 13–14, subsessilibus, apice truncatis, aparaphysatis, octosporis; sporidiis distichis, biconicis, 14 \approx 5, 1-septatis, non constrictis, 4-guttulatis v. 2-nucleatis, hyalinis.

Hab. in foliis languidis Orobi verni, Conegliano, Ital. bor.

130. **Sphærella nerviseda** Speg. Mich. I, p. 456. — Peritheciis innatis, 1948
spheroidis, ostiolo perforato papillato donatis, 100–120 μ . diam.; contextu minute parenchymatico, atro; ascis clavatis, vel cylindraceo-clavatis, aparaphysatis, 35–45 \approx 7–7 $\frac{1}{2}$, octosporis; sporidiis oblongo-cylindraceis, didymis quandoque curvulis, ad septum vix constrictis, hyalinis, 15–20 \approx 2 $\frac{1}{2}$ –3, distichis vel oblique monostichis.

Hab. in nervis foliorum putrescentium, quæ toruloso-reticulata evadunt, Orobi verni, Conegliano, Ital. bor. — Cum *Sph. nemorosa* Sacc. et Sp. in eadem planta vigente non comparanda.

131. **Sphærella Ariadna** Sacc. Mich. I, p. 34. — Maculis vagis, are- 1949
scendo dealbatis, linea rufa cinctis; peritheciis in macula gregariis innato-erumpentibus, globulosis, 40–50 μ . d., punctiformibus, ostiolo impresso pertuso; ascis obovatis, basi acutatis, apice rotundatis 20–25 \approx 12–14, aparaphysatis, octosporis; sporidiis 2–3-stichis, cylindraceo-fusoideis, 12–14 \approx 3 $\frac{3}{4}$ –4, utrinque obtusiusculis, constricto-1-septatis, minute 4-guttulatis, hyalinis.

Hab. in foliis Coronillæ Emeri languidis, in sylva Montello Italiae borealis. — Cum *Sphærella Emeri* Ces. in Rabh. F. E. n. 1950 nil commune habet; potius *Sphærellæ minori* Karst. cognata. Var. *Tormentille* Sacc. Mich. I, p. 379, F. it. t. 379. — Maculis pallidis, rufo-cinctis. A typo vix differt sporidiis curvulis,

septo minus constrictis. In foliis Tormentillæ erectæ in Italia boreali.

132. **Sphærella geicola** Kalch. et Cooke Grev. IX, 1880, p. 30. — 1950
Hypophylla; maculis suborbicularibus, fuscis, purpureo-cinctis; peritheciis semiimmersis, numerosis, atro-fuscis; ascis clavatis; sporidiis breviter lanceolatis, binucleatis, dein uniseptatis, hyalinis, vix constrictis, 16-17 \approx 3,5.

Hab. in foliis Gei capensis in Africa australi.

133. **Sphærella Fragariæ** (Tul.) Sacc. *Sphæria Fragariæ* Tul. Ann. 1951
Sc. nat. IV, t. V, p. 112, *Stigmatea Fragariæ* Tul. Carp. II, 288 p. p. — Maculis epiphyllis purpurascentibus, dein centro expallentibus; peritheciis circinantibus, minutissimis, globulosis, nigris, innato-erumpentibus; ascis oblongis, sessilibus, octosporis, 40 μ . longis; sporidiis inordinatis, oblongo-ovatis, uniseptatis, leniter constrictis, 15 \approx 3-4, hyalinis. — Spermogonium sistit *Septoriam Fragariæ* Desm. St. conidicus sistit *Graphium* v. *Stysanum* (Cfr. Fuck. Symb. et Tul. l. c.).

Hab. in foliis languidis Fragariæ vescæ et F. virginianæ in Gallia, Germania et Italia. — *Sphæria Fragariæ* Schw. Syn. Am. bor. n. 1769, huc verisimillime spectat; hæc lecta est in foliis Fragariarum in hortis Bethlehem, Americæ borealis. Ibi *Graphium* pro ostiolo clavato-incrassato fibrilloso habetur.

134. **Sphærella Dejanira** Sacc. Fungi Ven. Ser. II, p. 300. — Peri- 1952
theciis epiphyllis in iisdem maculis, paucis, punctiformibus, globoso-lenticularibus, 50 μ . diam., ostiolo impresso, exiguo pertusis; ascis oblongo-ovoideis, 35 \approx 18, sessilibus, 8sporis; sporidiis distichis, ovoideis oblongisve, 14-15 \approx 7, didymis, septo leniter constrictis, 4guttulatis, hyalinis. — St. spermogonicus sistit *Phyllostictam Arunci* Sacc.

Hab. in foliis languentibus Spirææ Arunci, pr. Treviso, Italia boreali, raro.

135. **Sphærella maculans** Sacc. et Roum. Reliq. mycol. Lib. Ser. II. 1953
n. 165, t. XX, fig. 10. — Peritheciis hypophyllis, densissime gregariis, maculasque latas nigricantes efficientibus, subtectis, globoso-lenticularibus, 80-100 μ . diam., poro pertusis; ascis teretibus, breve stipitatis, apice rotundatis, 45-50 \approx 10, aparaphysatis, octosporis; sporidiis distichis, fusoides, constricto-1-septatis, leniter curvis, 18-20 \approx 3-3 $\frac{1}{2}$, hyalinis.

Hab. in pag. inf. foliorum Spirææ Ulmarie, Malmedy in finibus Gallie et Germanie.

136. **Sphærella ootheca** Sacc. Mich. II, p. 160. — Peritheciis epiphyllis, subgregariis, innato-erumpentibus, e globoso depresso-conoidis, atris, membranacco-densiusculis, $\frac{1}{10}$ mill. diam.; ascis crasse obovatis, $40 \approx 28$, apice obtuse rotundatis, basi brevissime stipitato-apiculatis, aparaphysatis, octosporis; sporidiis 2-3-stichis, oblongis, 1-septatis, lenissime constrictis, $15-16 \approx 6-7$, utrinque obtusiusculis, hyalinis.

Hab. in pagina superiore foliorum emortuorum Dryadis octopetalæ in alpinis Vette di Feltre, Belluno, Italiæ borealis (BIZZOZERO).

137. **Sphærella Dryadis** Auersw. Myc. Eur. Pyr. p. 8, fig. 100. — 1955
Peritheciis hypophyllis, nigris, in parenchymate foliis nidulantibus, rostro brevi conico epidermidem perforantibus, sparsis, globulosis, $200-250 \mu$. latis; ascis ample cylindricis brevissime stipitatis, 8-sporis, $50-60 \approx 10$; sporidiis biserialibus, fusiformi-oblongis, utrinque subacutis, uniseptatis, ad sepimentum leviter constrictis, pallidis, 4-6 nucleatis, $18 \approx 4$.

Hab. in pag. inf. foliorum Dryadis octopetalæ in Germania. — A *Didymella Dryadis* Speg. diversa videtur.

138. **Sphærella Biberwierensis** Auersw. Myc. Eur. Pyr. p. 9, fig. 101. 1956
— Peritheciis epiphyllis, nigris, maculis fuliginosis, minutis, ($\frac{1}{5}-1$ mill. latis, angulosis, innatis, gregariis, subglobosis, poro simplici pertusis, 140μ . latis; ascis oblongis, sessilibus, 6-sporis; sporidiis 2-3-serialibus, obovato-oblongis, utrinque rotundatis, uniseptatis, hyalinis, $8 \approx 2\frac{1}{3}$.

Hab. in pag. superiore foliorum Dryadis octopetalæ in Germania.

139. **Sphærella innumerella** Karst. Myc. Fenn. II, 182. — Peritheciis 1957
hypophyllis, gregariis, erumpentibus, sphæroideis, poro pertusis, atris, $75-100 \mu$. latit.; ascis brevissime pedicellatis, cylindraceo-clavatis, interdum infra oblique inflatulis, $42-51 \approx 8-9$; sporidiis subsenis subtristichis, fusoido-bacillaribus, medio uniseptatis, ad septum non constrictis, rectis vel curvulis, hyalinis, $18-21 \approx 3-4$, rarius $17-24 \approx 5$.

Hab. in foliis putridis Comari palustris prope Mustiala Fennicæ (KARST.) et Shrewsbury Britannicæ (PLOWRIGHT). — Cum *Sph. Grossulariæ* permultis rationibus congruit.

140. **Sphærella melanoplaca** (Desm.) Auersw. M. Eur. Pyr. p. 13, 1958
fig. 108, *Sphæria melanoplaca* Desm. XX. Not. 10. — Epiphylla, rarius amphigena; peritheciis minutissimis, numerosis, innato-pro-

minulis, nigris, subnitidis, poro simplici pertusis, in macula magna fuliginea gregariis, 50–80 μ . diam., nucleo albido; ascis brevibus cylindraceutis, 40–42 \approx 8, crassis, absque paraphysibus; sporidiis 3–4–serialibus, lanceolato-fusoideis utrinque obtusis, 1–septatis, hyalinis, 22 \approx 3.

Hab. in Gallia in foliis languescentibus vel exsiccatis Gei urbani, hieme.

141. **Sphærella pseudo-maculiformis** (Desm.) Auersw. Myc. Eur. p. 12, 1959
fig. 51, *Sphæria* (foliicola) *pseudo-maculiformis* Desm. 1846, 13
Not. p. 83. — Epithecium hypophylla, innato-prominula, atra; peritheciis minutissimis, globosis, intus albidis, in maculam conglomeratis; ascis brevibus, subcylindricis, crassis arcuatis vel rectis 25–35 \approx 4–5; sporidiis tereti-oblongis, 8–10 \approx 2, curvulis, 1–septatis, non constrictis, chlorino-hyalinis. — Sec. Fuck. Symb. myc. *Scotocotrichum bulbigerum* Fuck. est status conidiophorus.

Hab. in foliis siccis Poterii Sanguisorbæ in Gallia et in Germania.

142. **Sphærella Jurineæ** Fuck. Symb. myc. p. 99, Auersw. Myc. Eur. 1960
Pyr. p. 13, fig. 106. — Peritheciis sparsis, *Sphærellæ punctiformis* duplo majoribus, conicis, subliberis, astomis, atris, 250–300 μ . diam.; ascis clavato-oblongis, breve stipitatis, 36 \approx 8, 8sporis; sporidiis oblongis, medio parum constrictis, uniseptatis, hyalinis, 10 \approx 4.

Hab. in pag. super. foliorum Jurineæ cyanoides, Budenheim Germaniæ.

143. **Sphærella eriophila** Niessl Neue Kernp. p. 86. — Peritheciis 1961
sparsis, erumpentibus, minutis, subglobosis, ostiolo papillæformi, atris, nitidis, luce diffusa læte castaneis, coriaceis; ascis obovatis vel ovoideo-oblongis, sessilibus, 74–83 \approx 30–45; sporidiis octonis, irregulariter 3stichis seu farctis, ex oblongo cuneatis, inferne perparum attenuatis, rectis, medio septatis et paulo constrictis, dilutissime virescentibus, 20–30 \approx 8–9.

Hab. in foliis ramulisque emortuis Artemisiæ Mutellinæ, A. spicatae, A. glacialis, A. lanatae, A. Baumgartenii in Alpibus Helvetiæ et Germaniæ.

144. **Sphærella confinis** Karst. Fung. in Spetsb. et Beer. Ell. coll. 1962
p. 106 et Myc. Fenn. II, p. 179. — Peritheciis amphigenis, primitus epidermidi innatis, dein protuberantibus, sparsis vel gregariis, sphæroideis, poro pertusis, atris, 100–120 μ . latit.; ascis breviter pedicellatis vel subsessilibus, elongatis vel elongato-clavatis, raro deorsum leviter inflatis, 45–52 \approx 10–13; sporidiis octonis, distichis,

aciulari-elongatis, medio uniseptatis, ad septum haud vel vix constrictis, hyalinis vel chlorino-hyalinis, 14-19 \approx 3-5.

Hab. in foliis Senecionis vulgaris exsiccatis in Fennia, in foliis emortuis Brayæ et Drabarum in Spitzbergia.

145. **Sphærella Pieris** Sacc. Fungi Ven. Ser. II, p. 302. — Peritheciis in iisdem maculis parvis, remotis, lenticularibus, 100-120 μ . diam., ostiolo impresso latiuscule pertuso, contextu laxo parenchymatico, fuligineo; ascis clavatis, subsessilibus, deorsum attenuatis, 50-55 \approx 12-15, 8-sporis; sporidiis distichis, oblongis, curvulis, constricto-didymis, utrinque obtusiuscule attenuatis, 20 \approx 7-8, minute 4-guttulatis, hyalinis. — Status spermogonicus sistit *Phyllostictam Farfaræ* Sacc. 1963

Hab. in pagina superiori foliorum languentium Tussilaginis Farfaræ, Covolo, Treviso Italia bor. raro. — Cum *Sphærella Tussilaginis* Rehm et *Sph. Petasitidis* Rabh. non comparanda.

146. **Sphærella Tussilaginis** Rehm Asc. n. 100, Wint. Diagn. p. 10 (Flora, 1872). — Peritheciis epiphyllis, epidermidi innatis, dense gregariis, globosis, nigris, poro simplici pertusis, 90-120 μ . lat.; ascis oblongo-pyriformibus, sessilibus, 8-sporis, 40-45 \approx 10-12; paraphysibus nullis; sporidiis distichis, clavato-oblongis vel obovatis, hyalinis, uniseptatis, inæqualiter didymis, 12-14 \approx 3. 1964

Hab. in foliis putridis Tussilaginis Farfaræ prope Windsheim Germaniæ.

147. **Sphærella Arnicæ** Speg. Nova Add. n. 66, Mich. II, 247. — Peritheciis dense gregariis, globosis, siccis cupulatis, subepidermicis, atro-carbonaceis, 120-150 μ . diam., maculis primo rotundatis fuscescentibus, dein magnis, amorphis, sæpe totum folium occupantibus e griseo candidis insidentibus; ascis clavatis, basi brevissime pedicellatis, apice acutiuscule rotundatis, octosporis, 25 \approx 6, aparaphysatis?; sporidiis ellipticis, medio uniseptatis, constrictis, hyalinis, triguttulatis. 1965

Hab. in foliis Arnicæ montanæ in pascuis M. Antelao Italiæ borealis. — Specimina haud prorsus matura.

148. **Sphærella Carlinae** Winter in Hedw. 1871, p. 162. — Peritheciis gregariis globosis, minutis, nigro-fuscis, ostiolo minutissimo demum perforato; ascis elongato-oblongis, 8-sporis, 36 \approx 8, aparaphysatis; sporidiis distichis oblongo-lanceolatis, inæqualiter bicocularibus, hyalinis, medio constrictis, 14 \approx 3. 1966

Hab. in Saxonia, Lipsiæ prope Kleinzschocher, in foliis aridis Carlinae vulgaris (Wint.). — *Sphærellæ Jurineæ* Fuck. affinis.

149. **Sphaerella affinis** Wint. in Myc. Univ. n. 59, Rehm Asc. n. 294. 1967
Peritheciis dense gregariis primo epidermide tectis, demum erumpentibus, globosis, fusco-atris, poro simplici pertusis, 90-140 μ . d.; ascis clavato-cylindraceis substipitatis, 8-sporis, 45-52 \approx 10-12; sporidiis subdistichis, lanceolato-cylindraceis rectis v. leviter curvatis, uniseptatis, ad septum non constrictis, hyalinis, 18-22 \approx 3-4.
Hab. in Bavaria, Bayreuth, ad folia arida Carlinæ vulgaris, vere 1874 (THÜEM.).
150. **Sphaerella sarracenica** Sacc. et Roum. Reliq. myc. Libert. Ser. 1968
II, n. 136, t. XX, fig. 12. — Peritheciis amphigenis laxe gregariis globoso-lenticularibus, innato-erumpentibus, $\frac{1}{6}$ mill. diam., pertusis; ascis tereti-clavatis, brevissime stipitatis apice obtusis, 50 \approx 8, aparaphysatis, octosporis; sporidiis distichis oblongo-clavulatis 12-14 \approx 3 $\frac{1}{2}$ -4, bilocularibus, vix constrictis, loculo inferiore minore, hyalinis.
Hab. in foliis emortuis Senecionis sarracenici, Malmedy in finibus Galliae et Germaniae.
151. **Sphaerella Taraxaci** Karst. Fungi Spets. n. 51. — Peritheciis dense 1869
gregariis, amphigenis, protuberantibus, sphaeroideis, dein ore rotundato hiantibus, glabris, nigris, 150-200 μ . lat.; ascis subsessilibus, elongato-clavatis, 45-65 \approx 12-15, octosporis; sporidiis distichis vel subtristichis, fusoideo-elongatis, rectis, uniseptatis, hyalinis, 14-20 \approx 3-4; paraphysibus nullis.
Hab. in foliis Taraxaci phymatocarpi emortuis ad Lomebay et Kingsbay, Spitzberg.
152. **Sphaerella sibirica** Thüm. Beitr. Pilz. Sibir. n. 766. — Peritheciis 1970
hypophyllis, interdum perforantibus, dense gregariis, globulosis, semiimmersis, liberis, nitido-atris; ascis late clavulatis, utrinque subangustatis, hyalinis, membrana tenui, octosporis, subsessilibus; sporidiis longe ellipticis, utrinque acutato-rotundatis, medio septatis sed non constrictis, homogoneis, enucleatis, hyalinis, 20-22 \approx 5-6; paraphysibus non visis.
Hab. ad Dianthi versicoloris folia arida in plantis adhuc virentibus in campis prope Patroschilowo Sibiriae asiaticae.
153. **Sphaerella Smegmatos** Pass. Diagn. fung. nuovi n. 4. — Peritheciis 1971
sparsis, epidermide tectis, punctiformibus, ostiolo acuto, atro, emersis; ascis brevibus amplis, cylindrico-saccatis, vel etiam lageniformibus, 8-sporis, mox evanidis; sporidiis inordinatis, oblongo-spathulatis, uniseptatis, non constrictis, apicibus rotundatis, loculo altero angustiore, hyalinis.

Hab. in foliis putrescentibus Sapotariæ officinalis prope Parma, Ital. bor., socia *Vermiculariæ* specie, quæ forte spermogonium sistit.

154. **Sphærella isariphora** (Desm.) De Not. Schema Sf. p. 63, *Sphæria* 1972
isariphora Desm. 10 Not. 1843, p. 24, *Leptosphæria isariphora*
 Auersw. Myc. Eur. Pyr. fig. 170, *Sphærella Stellaris* Fuck., Sacc.
 Myc. Ven. Spec. p. 94, t. IX, fig. 8-10. — Hypo- rarius epiphylla,
 sparsa subapproximata; peritheciis tectis, minimis, globoso-depres-
 sis, atris, poro apertis, 100-150 μ . diam.; ascis minutis, tereti-cla-
 vatis, 40-50 \approx 5-7; sporidiis hyalinis, ovato-oblongis uniseptatis
 9-10 \approx 4. — St. conidicus sistit *Stysanum pusillum* Fuck. (in St.
 media) et *Stysanum pallescentem* Fuck. (in St. nemorum)
 St. spermogonicus sistit *Septoriam Stellaris* West.

Hab. in foliis siccis Stellaris graminis, St. holostea, St. nemorum, St. mediae in Gallia, Fennia, Germania, Britan-
 nia, Italia, Belgio, rarius tamen ascophora. — Paraphyses nullae ergo
 genuina *Sphærella*. Cl. Fuck., secundum differentias conidiorum,
 distinguit *Sph. isariphoram* a *Sph. Stellaris*, sed ad diem st.
 ascophorus unicus notus est, ergo res ulterius inquirenda.

155. **Sphærella Venziana** Sacc. Fungi Ven. Ser. II, p. 303. — Ma- 1973
 culis nullis; peritheciis amphigenis, sparsis, lenticularibus, atris
 100 μ . diam., ostiolo impresso pertusis, contextu laxo parenchy-
 matico fuligineo; ascis fasciculatis, cylindraneo-clavatis, 45-50 \approx 8,
 8sporibus; sporidiis distichis, oblongis, sursum clavulatis, 1-septatis,
 septo vix vel non constrictis, 12-14 \approx 3-3 $\frac{1}{2}$, minute 4-guttulatis,
 vel 2-nucleatis, hyalinis.

Hab. in foliis et in sepalis aridis Facchinis lanceolatae
 et Cherleris in alpibus del Cadore, Belluno Italiae borealis,
 ubi legit pharm. S. VENZO. — A *Sph. isariphora* ascis crassiori-
 bus, sporidiis angustioribus clavulatis prae ceteris differt.

156. **Sphærella Stellarinearum** (Rabh.) Karst. Fungi Spets. n. 48 (!), 1974
Sphæria Stellarinearum Rabh. Herb. myc. 975 (?). — Peritheciis
 subsparsis, amphigenis, tectis, punctiformibus, poro pertusis; ascis
 sessilibus, ovoideis, 60 \approx 20, octosporibus; sporidiis conglobatis, ovoi-
 deo-oblongatis, rectis vel leviter curvulis, uniseptatis, hyalinis,
 medio non constrictis, 20-24 \approx 6.

Hab. in foliis emortuis Stellaris Edwardsii et St. hu-
 mifusae pr. Spitzberg. — A *Sph. isariphora* (Desm.) ascis spo-
 ridiisque multo majoribus differt.

157. **Sphærella erysiphina** (Berk. et Br.) Cooke Handb. n. 2766, *Sph.* 1975

erysiphina B. et Br. Journ. Hort. Soc. IX, p. 66. — Epiphylla; peritheciis sparsis, minutis, sæpius superficialibus, brunneis; ascis cylindricis; sporidiis monostichis, uniseptatis, hyalinis, 12–13 μ . long.

Hab. in foliis vivis Humuli Lupuli, sæpe in consortio *Sphærothecæ Castagnei*, in Britannia.

158. **Sphærella Eryngii** (Wallr.) Cooke Handb. n. 2761, *Sphæria Eryngii* Fr. in litt. Duby Gall. II, 710. — Peritheciis minutissimis hypophlœodeis, amphigenis, nigris, inæqualibus, dense gregariis spatia internervia oblitterantibus, demum vertice convexo emergentibus, intus albis; ascis crasse cylindræis, flexuosis, octosporis; sporidiis distichis, uniseptatis, ad septum constrictis, utrinque attenuatis, hyalinis, 20 μ . long. — Sec. Fuck. spermog. est *Cambosira reticulata* Fr. f. *Eryngii* (= *Asteroma Eryngii* Auersw. Pyr. Heufl. p. 4).

Hab. in foliis exsiccatis Eryngii campestris et maritimi in Gallia, Germania, Belgio, Italia, Britannia. — Var. *Libanotis* Fuck. — In foliis Libanotis montanæ in Helvetia; sed non plene evoluta.

159. **Sphærella Primulæ** (Auersw.) Wint. Hedw. 1880, p. 166, *Sphærella clandestina* Niessl, Beitr. p. 18, t. IV, fig. 24, *Stigmatea Primulæ* Auersw. et Heufl. in Hedw. 1878, p. 184. — Peritheciis sparsis gregariisve ovoideis v. plus minus conicis, minute papillatis, erumpentibus, atris, basi fibrillosis; ascis brevibus subcylindricis, sessilibus, apice rotundatis, 8spor. 62–100 \approx 12–18; sporidiis biseriatis, oblongis, uniseptatis, nubiosis, 22–28 \approx 4–6.

Hab. in foliis Primulæ minimæ, Gregoriæ, Androsaces in Germania, Austria, Helvetia.

160. **Sphærella Harknessii** Sacc. *Sphærella brachythea* C. et Harkn. 1978 Grevill. IX, 1880, p. 8 (nec Cooke Grevill. VII, p. 88 (1879)). — Peritheciis sparsis tectis, exiguis, 60 μ . diam., membranaceis; ascis ovatis, 20 \approx 16; sporidiis ellipticis, uniseptatis, hyalinis, 8 \approx 4.

Hab. in caule Convolvuli in California (HARKNESS).

161. **Sphærella adusta** Niessl Neue Kernp. p. 86. — Peritheciis minutis dense confertis lateque effusis, ambientis, globosis, papillatis tectis, membranaceis, atris; ascis oblongo-clavatis, subsessilibus, octosporis 30–48 \approx 9, sporidiis farctis cuneato-oblongis seu inferne parum attenuatis, inæquilateralibus, medio septatis, pauloque constrictis, hyalinis, 12–16 \approx 3–5.

Hab. in caulibus, qui cinereo-maculosi fiunt, Convolvuli arvensis prope Brünn Moraviæ.

162. **Sphærella Rumicis** (Desm.) Cooke Handb. n. 2769, *Sphærella Ru-* 1980
micis Desm. Nouv. Not. 1843, p. 44. — Maculis amphigenis, minutis, numerosis, orbiculatis, sparsis, brunneis, viridulo-cinctis; peritheciis epiphyllis, conglomeratis, 100–140 μ . diam.; innato-prominulis, perexiguis, globoso-depressis, collabascendo-concavis, olivaceis, dein subnigris, poro simplici pertusis; ascis amplis, tubulosis, parum curvatis, e duplici membrana compositis, 50 \approx 14; sporidiis pallide olivaceis, ovato-oblongis, obtusis, uniseptatis 12–14 \approx 4. — *Orularia obovata* (Fuck.) Sacc. sistit st. conidicum.

Hab. in foliis languescentibus Rumicis Nemolapathi, R. crispi, R. conglomerati in Gallia, Britannia, Germania, Belgio et Fennia.

163. **Sphærella eucarpa** Karst. Fung. Spetsb. n. 44. — Peritheciis 1981
 sparsis vel gregariis, epiphyllis, epidermidi innatis, sphæroideis, poro vix conspicuo pertusis, nigris, glabris, circiter 150 μ . latit.; ascis subsessilibus, subellipsoideis vel oblongato-clavatis, 120–140 \approx 45–55, octosporis; sporidiis conglobatis, ovoideo-oblongatis, utrinque obtusis, rectis, uniseptatis, medio levissime constrictis, loculo utroque guttula unica ornato, luteolo-hyalinis, 32–40 \approx 13–14; paraphysibus nullis.

Hab. in foliis Polygoni vivipari vetustis ad Adventbay et Crossbay, pr. Spitzberg.

164. **Sphærella Polygonorum** (Crié sub *Dep.*) Sacc., Crié Sur les Dep. 1982
 p. 41, t. 8, fig. 4. — Maculis epiphyllis rotundatis, zona prominula fuscescenti-rubra cinctis; peritheciis epiphyllis, prominulis, nigris; ascis cylindræis, octosporis; sporidiis ellipsoideis, utrinque obtusis, 1-septatis, 17–18 \approx 6, dilute virescentibus.

Hab. in Gallia, in foliis vivis Polygonorum et Rumicum, decedente autumno, sociis spermogoniis (*Septoria*) et pycnidibus (*Diplodia*, *Hendersonia*).

165. **Sphærella Circe** Sacc. Fungi Ven. Ser. II, p. 301. — Maculis 1983
 irregularibus, majusculis, amphigenis, albidis, rufo-cinctis; peritheciis paucis, globoso-lenticularibus, punctiformibus, 80 μ . diam., poro latiustulo pertusis, contextu laxo parenchymatico; ascis fasciculatis, oblongo-clavulatis, 40–50 \approx 11, 8sporibus; sporidiis distichis, ovoideo-oblongis, 12–15 \approx 5–6, didymis, septo constrictis, 4-guttulatis, hyalinis.

Hab. in foliis languidis Phytolacæ decandræ prope Treviso Italiæ borealis.

166. **Sphærella depazeæformis** (Auersw.) Ces. et De Not. Schema 1984

Sfer. ital. p. 238, Auersw. Myc. Eur. Pyr. p. 13, t. 4, fig. 50. — Peritheciis amphigenis, nigris, epidermidi innatis centro maculæ rotundatæ, rufescentis, obscurius, marginatæ, insidentibus, globulosis, poro simplici pertusis, 40–46 μ . fere latis; ascis ex ovata basi attenuatis, brevissime stipitatis, 8-sporis, 34–36 \approx 8; sporidiis 2–3serialiter stipatis, fusiformi-oblongis, utrinque obtusatis, rectis, uniseptatis, ad sepimentum neutiquam constrictis, hyalinis, 8–10 \approx 2–3.

Hab. in foliis Oxalidis Acetosellæ emortuis in Germania.

167. **Sphærella Selene** Sacc. Fungi Ven. Ser. II, p. 301. — Maculis ¹⁹⁸⁵ amphigenis candidis, magnitudine variis, fuligineo-cinctis; peritheciis epidermide tenuissima velatis, punctiformibus, lenticularibus, 66 μ . diam., ostiolo umbilicato latiuscule pertuso; ascis clavato-oblongis, 55 \approx 15, basi breve attenuatis, 8-sporis; sporidiis inordinate distichis, breve fusoides, didymis, loculis inæqualibus, utrinque acutiusculis, 20 \approx 7, 4-guttulatis, hyalinis.

Hab. in foliis languentibus Oxalidis strictæ, Selva, Treviso, Italiæ bor. — *Sphærella depazeæformis* (Auersw.) Ces. et De Not. differt sporidiis et ascis multo minoribus et diverse formatis.

†† *Clado-carpogonæ.*

168. **Sphærella melæna** (Pr.) Auersw. Myc. Eur. Pyr. p. 16, fig. 65. ¹⁹⁸⁶ *Sphæria melæna* Fr. S. M. II. 431, p. p. — Peritheciis nigris, epidermide adnatis, densissime congestis, ac connatis, poro simplici pertusis, 66–80 μ . latis; ascis obovatis, sessilibus, 8-sporis, 27 \approx 14; sporidiis 3–4–serialiter stipatis, obovato-oblongis, utrinque rotundatis, infra medium uniseptatis, ad sepimentum non constrictis, pallide luteolis vel subhyalinis.

Hab. in caulibus siccis Meliloti, Viciæ, Lathyri, Astragali Glycyphylli in Suecia et Germania.

169. **Sphærella Plantaginis** Sollm. Bot. Zeit. XXII, p. 281, t. IX, f. ¹⁹⁸⁷ 27–35. — Peritheciis gregariis, interdum subconfluentibus, minutissimis, glabris, levibus, atronitidis, basi applanatis, hemisphæricis, poro tandem pertusis; ascis brevibus, crassisque, tereti-clavatis, octosporis, aparaphysatis; sporidiis oblongo-ellipticis, utrinque acutiusculis, 1-septatis leniterque constrictis, 10–11 μ . longis.

Hab. in scapis Plantaginis lanceolatæ et mediæ pr. Brünn (Niessl). — In exemplaribus a cl. Niessl missis vidi tantum

spermogonium sistens *Septoriam Plantaginis*; peritheciis subtectis dense gregariis punctiformibus, 90–100 μ . diam., pertusis, spermatis bacillaribus rectiusculis, 18–21 \approx 1, spurie 1–3-septatis hyalinis. — *Sphæria Plantaginis* Ces. Bot. Zeit. 1853. IX, p. 237 forte *Sphærella* speciem sistit sed nucleus ignotus manet.

170. **Sphærella circumvaga** (Desm.) Sacc. Mich. II. p. 56. *Dothidea circumvaga*. Desm. 14, n. 1847, p. 175. — Innata, picea, caules ambiens; peritheciis minutissimis, stipatis, subglobosis, nucleo sicco albo faretis; ascis clavatis, brevibus, apice rotundatis; sporidiis subpyriformibus, seu oblongo-clavulatis, 8–10 \approx 4, apice rotundatis, tenuiter 1-septatis, hyalinis.

Hab. in caulibus Medicaginis falcatæ exsiccatis, in Vogesis Galliæ.

171. **Sphærella pinodes** (B. et Blox.) Niessl in F. Eur. n. 1947. *Sphæria pinodes* B. et Blox. in Ann. N. H. n. 981, t. 17, fig. 34, Cooke Handb. n. 2732. — Sparsa, minutissima, subhemisphærica, depressa, sub-astoma; ascis brevibus, crasse clavatis, aparaphysatis, octosporis; sporidiis 2–3-stichis oblongis, constricto 1-septatis, hyalinis.

Hab. in caulibus Pisi sativi in Britannia et Germania.

172. **Sphærella Trifolii** Karst. Myc. Fenn. II. p. 174. — Peritheciis sparsis vel gregariis sæpe dense congestis, epidermide vulgo colore fusco-nigro tincta adnatis tectis, conoideo-rotundatis, basi applanatis filamentisque repentibus, fuscis obsessis, ostiolo papillato, prominulo, atris, latit. 0.2 mill.; ascis subsessilibus, elongatis vel cylindraceo-clavatis, 60–70 \approx 13–14 octosporis; sporidiis distichis v. tristichis, ovoideo-oblongatis, ad septum constrictis, hyalinis, 18–22 \approx 7–8.

Hab. in caulibus ramulisque emortuis Trifolii pratensis ad Mustiala Fenniæ. — Cum *Didymella Trifolii* (Fuck.) et cum *Gnomonia inæquali* Auersw. similitudinem ostendit maximam, ab illa præprimis sporidiis neutiquam medio constrictis, ab hac sporidiis hyalinis etc. differre videtur.

173. **Sphærella spinarum** Auersw. Myc. Eur. Pyr. p. 9, fig. 107. — Peritheciis atris, nitidulis, epidermidi innatis, sparsis, globulosis, poro simplici pertusis, 100–120 μ . latis; ascis clavatis, sessilibus, 8-sporis. 46 \approx 7; sporidiis biserialibus, oblongo-fusififormibus, utrinque obtusis, uniseptatis, ad septimentum non constrictis, hyalinis, 15 \approx 4.

Hab. in petiolis spinescentibus emortuis Astragali aristati in Germania.

174. **Sphærella Cruciferarum** (Fr.) Sacc. Mich. p. II, 315. *Sph. Crucifera*

ferarum Fr. S. M. II, p. 525. — Sparsa; peritheciis innatis, hemisphæricis, turgidis, lævibus, nigris nitidis, ostiolo simplici pertusis, 70–80 μ . d.; ascis clavatis, breve crasseque stipitatis 40 \approx 12; sporidiis octonis, distichis oblongo-fusoideis, utrinque obtusiusculis, 15 \approx 3 $\frac{1}{2}$, 1-septatis, leniter constrictis, curvulis, 2–4-guttulatis, hyalinis.

Hab. in caulibus, siliquis rarius foliis Erysimi, Lapidii aliisque Cruciferis in Suecia, Britannia, Gallia et Belgio.

175. **Sphærella Compositarum** Auersw. Myc. Eur. Pyr. p. 15, fig. 105. 1993

— Peritheciis nigris, epidermidi innatis, ovatis, acutiusculis, gregariis, 100 μ . latis; ascis ex ovata basi sensim attenuatis, brevissime stipitatis, 8-sporis, 60–70 \approx 20–28; sporidiis 2–4-serialiter stipitatis, oblongis, utrinque rotundatis, uniseptatis, ad sepimentum constrictis, subhyalinis, nubilosis, 24–27 \approx 7.

Hab. in caulibus siccis Cichorii foliisque Carlinæ acaulis in Germania.

176. **Sphærella præcox** Pass. in Erb. critt. ital. n. 987. — Peritheciis 1994

minimis, epidermide innatis, sparsis, atris, cellulis latiusculis subtetragonis contextis; ascis saccato-clavatis, basi breviter incurve stipitatis, 40 \approx 10, octosporis; sporidiis, subdistichis, ovato-oblongis, bi-ocularibus loculo altero latiore, hyalinis, 12 \approx 5.

Hab. in caulibus vivis Lactucæ salignæ, Collecchio pr. Parma in Italia boreali.

177. **Sphærella Dahliæ** C. et Ell. New Jersey Fungi, Grev. VII, p. 42. 1995

— Sparsa; peritheciis membranaceis, brunneis, epidermide tectis, poro pertusis; ascis clavatis; sporidiis biserialiter, ellipticis, uniseptatis, hyalinis, 12 \approx 4.

Hab. in caule Dahliæ, socia *Vermicularia*, New Jersey in America boreali.

178. **Sphærella nebulosa** (Pers.) Sacc. Mich. II. p. 56. *Sphæria ne-* 1996

bulosa Pers. Syn. p. 31, Fr. S. M. II, p. 430, saltem p. p. — Peritheciis minimis, 100–130 μ . diam., gregariis, maculas griseas interruptas inæqualiter lineatas efformantibus ostioliis prominulis; ascis crasse clavatis, 50 \approx 15; sporidiis distichis, 14–16 \approx 5, ovato-fusoideis, utrinque (plerumque) acutiusculis, 1-septatis, vix constrictis, hyalinis.

Hab. in caulibus siccis Solidaginis in Vogesis Galliæ et Helvetiæ (Mougeot!).

179. **Sphærella trichophila** Karst. Myc. Fenn. II, p. 171. — Peri- 1997

theciis, gregariis, primitus epidermide tectis, dein erumpentibus, su-

biculo fusco filamentoso insidentibus, sphæroideis, vertice sæpe conoideis, setisque spiniformibus, erecto-divergentibus, longiuseulis, atris armatis, atris, poro simplici, vix papillari dehiscentibus; ascis sporidiisque *Sphærella Tassiana* (n. 240).

Hab. in caulibus (*Saussurea*?) emortuis ad Olenji Lapponiæ rossicæ. — Si setulæ perithecorum constantes, species inter *Venturias* rectius adnumeranda.

180. **Sphærella Winteriana** Sacc. *Sph. Winteri* J. Kunze F. Sel. ex. 1998
sicc. n. 64 (absque diagnosi), nec Pass. — Peritheciis dense longe lateque gregariis epidermide velatis, globulosis, prominulis, punctiformibus 150 μ . diam., pertusis, contextu parenchymatico fuliginæ; ascis tereti-clavulatis, breve stipitatis, 70-80 \approx 10, octosporis; sporidiis subdistichis fusoides, curvis, 15-18 \approx 4, sub medio constricto-1-septatis, chlorino-hyalinis, 2-4-guttulatis, utrinque subinde minute et obtuse apiculatis.

Hab. in caulibus ramulisque *Melampyri nemorosi* aridis prope Eisleben Germaniæ. — Diagnosim e speciminibus exoletis erui.

181. **Sphærella Vincetoxici** Sacc. — Peritheciis epidermide velatis punctiformibus, semiglobosis, pertusis, dense gregariis maculasque laticas, griseo-fuscas formantibus, subinde mycelio repente subrufescente filiformi connexis; ascis tereti-clavulatis subsessilibus, 40 \approx 8, aparaphysatis, octosporis; sporidiis subdistichis oblongo-clavulatis, 1-septatis, constrictis, 15 \approx 4, 4guttulatis, hyalinis. 1999

Hab. in caulibus emortuis *Cynanchi Vincetoxici*, *Conegliano* Italiæ borealis. — Var. *folliculorum*; ascis 40-50 \approx 7-8; sporidiis 10-12 \approx 3. Cum typo.

182. **Sphærella Gypsophilæ** Fuck. *Symb. mycol.* p. 101. *Thuem. Beitr.* 2000
Pilz. Lib. n. 767. *Sphæria Gypsophilæ* Lasch. in *Kl. Herb. myc.* 1050. — Peritheciis punctiformibus, epidermide velatis, nigris; ascis late ellipsoideis, 72 \approx 42-48, breve stipitatis, hyalinis; sporidiis octonis, longe ellipticis, utrinque acutato-rotundatis, medio septatis, hyalinis, 22 \approx 13.

Hab. in caulibus capsulisque aridis *Gypsophilæ* *Gmelini*, *G. muralis* et *Scleranthi* in Germania et in Sibiria asiatica.

183. **Sphærella Euphorbiæ spinosæ** De Not. *Recl. Pir. in Comm.* II, 2001
487. — Epidermide tecta, sparsa, perexigua, punctiformis, atra; peritheciis subhemisphæricis, coriaceis, osculo vix conspicuo, hiantibus; ascis copiosis, oblongatis, octosporis; paraphysibus nullis; sporidiis oblongatis, bilocularibus, episporio crassiuseculo præditis, nucleis hyalino-luteolis, contiguis, deorsum tenuatis.

Hab. in ramis siccis Euphorbiæ spinosæ, Iglesias in insula Sardinia.

184. **Sphærella Salicorniæ** Auersw. Myc. Eur. Pyr. p. 16, fig. 68. — 2002
Peritheciis nigris, epidermide tectis, dein semiliberis, exacte globosis, poro simplici pertusis, sparsis, 160 μ . latis; ascis obovato-cuneatis, sessilibus, 8-sporis, 25 \approx 10; sporidiis subtriserialiter stipatis, lineari-oblongis, utrinque rotundatis, uniseptatis, ad septimentum non constrictis, brunneolis, 10 \approx 2.

Hab. in caulibus siccis Salicorniæ herbacæe in Germania.

185. **Sphærella peruviana** Speg. Fung. Arg. Pug. IV, n. 146. — Pe- 2003
ritheciis globosis, minutissimis, 70-80 μ . d., subepidermicis, sæpe erumpentibus v. cortice secedente liberis, ostiolo vix prominulo ornatis, atris, membranaceis, contextu parenchymatico, olivaceo-fuligineo; ascis ovatis, v. ovato-saccatis, parvulis, 20-24 \approx 10-12, sursum crassissime tunicatis, deorsum abrupte brevissimeque coarctato-stipitatis, octosporis, aparaphysatis; sporidiis inordinate polystichis, cylindræo-ellipticis, utrinque obtuse rotundatis, medio 1-septatis, non v. leniter constrictis, 8-12 \approx 2,5-3,5, minute 4-guttulatis, hyalinis.

Hab. in caulibus putrescentibus dejectis Salicorniæ peruvianæ ad margines dumetosos laculorum subsalsorum in sylvâ australiore «Tordillo» dicta, in Peru, Amer. austr. — «Forte non satis diversa a *Sph. Salicorniæ*».

186. **Sphærella fuscata** Ell. Bull. Torr. Cl. VIII, 11 Nov. 1881, pag. 200 4
125. — Peritheciis, minutis dense gregariis, maculas elongatas nigricantes efficientibus; ascis obovatis, 38-50 \approx 15-17; sporidiis oblongis, uniseptatis, hinc acutioribus, 17 \approx 6-6,5, hyalinis.

Hab. in caulibus herbarum Pleasant Valley, Utah, Amer. bor. in montibus (HARKNESS). — Maculæ 12-15 mill. longæ, 6-7 latæ; perithecia ovato-conica, rugulosa, subepidermica, denique erumpentia et matrice infuscantia.

187. **Sphærella sagedioides** Wint., Kunze Fungi sel. exsic. cent. IV, 2005
n. 323-324 (absque diagnosi). — Peritheciis gregariis epidermide initio velatis, sphæroideo-depressis, 100-110 μ . diam., membranaceis, ostiolo impresso pertusis; ascis tereti-obclavatis, utrinque obtusiusculis, subinde inæquilateralibus, 10-12 \approx 4, uniseptatis, non constrictis, minute 4-guttulatis, hyalinis.

Hab. in caulibus Dipsaci sylvestris et Dauci Carotæ prope Zürich Helvetiæ, rarius.

188. **Sphærella Umbelliferarum** Auersw. Myc. Eur. Pyr. p. 16, f. 63. 2006
 — Peritheciis nigris, epidermidi innatis, depresso-globosis, sublentiformibus, poro simplici pertusis, dense sparsis, numerosissimis, 80-130 μ . latis; ascis obovatis, sessilibus, 8-sporis, 34 \approx 14; sporidiis 3-4-serialiter stipatis, subcymbiformibus, utrinque obtusatis, rectis v. curvulis, uniseptatis, ad sepimentum non constrictis, hyalinis, 17-20 \approx 4.
Hab. in caulibus siccis Peucedani Oreoselini in Germania.
189. **Sphærella leptasca** Auersw. in Myc. Eur. Pyr. p. 15, fig. 64, 2007
 Mich. I, p. 381. — Peritheciis sparsis, subcutaneis, punctiformibus, globoso-lenticularibus, 80-90 μ . diam., poro pertusis dein erumpentibus; ascis cylindræis, 40-50 \approx 6, breviter stipitatis, apara-physatis, octosporis; sporidiis oblique 1-stichis vel 2-stichis, oblongo-fusoideis, constricto-1-septatis, 11-12 \approx 2 $\frac{1}{2}$ -3, 4-guttulatis, hyalinis. — Spermogonium sistit *Septoriam leptideam* Sacc.
Hab. in caulibus putrescentibus Torilis Anthrisci aliarumque Umbelliferarum in Germania et Italia boreali.
190. **Sphærella sciadophila** Pass. Micr. ital. diagn. n. 4. — Perithe- 2008
 ciis sparsis vel subaggregatis, subglobosis, tectis, tandem denudatis, atra, cellulis minutis subtrapezoideis contextis; ascis oblongis, basi ventricosis vel subclavatis, abrupte brevissime, stipitatis, rectis vel curvulis, 60-75 \approx 15-20; sporidiis octonis subtristichis oblongo-navicularibus, medio septatis non constrictis, apicibus rotundatis, loculo altero paullo angustiore sublongiore, perfecte hyalinis, 15-18 \approx 5,
Hab. in radiis aridis umbellarum Chærophylli temuli L. Parmæ, Ital. bor. — Accedit forma spermatifera, peritheciis similibus: spermatiis subcylindricis hyalinis, 5 \approx 1-1 $\frac{1}{2}$. — A *Sphærella Umbelliferarum* Rabh Myc. Eur. p. 15, t. 5, f. 63, ascorum forma et longitudine præcipue recedit.
191. **Sphærella rubella** Niessl et Schröt. Hedw. 1877, p. 118. — My- 2009
 celio effuso, rubello, corticis lignique parenchyma colore ex rubello atque sanguineo vel fuscescente tingens, maculas extensas plus minus determinatas formans; peritheciis minutis, dense gregariis, subglobosis, tectis, vertice conico, erumpentibus, ostiolo papillæformi, atris, coriaceo-membranaceis; ascis fasciculatis, clavatis 46-60 \approx 10-12; sporidiis farcte distichis, ovato-oblongis vel subclavatis, medio septatis et valde constrictis, hyalinis, 12-16 \approx 4-5.

Hab. in caulibus Angelicæ sylvestris prope Rastatt Germaniæ (SCHRÖTER). — Perithecia fere pleosporoidea.

192. **Sphærella Mougeotiana** Sacc. Michel. II, p. 57, *Sphæropsis Ato-* 2010
mus Lév. (?) Roum. Fungi Gall. n. 388. — Maculis foliorum are-
scendo expallentibus vagis; peritheciis punctiformibus, hypophyllis,
tectis; ascis cylindræis, breve stipitatis, 50–60 \approx 8, apice obtusius-
culis, aparaphysatis (?), octosporis; sporidiis distichis fusoides, utrin-
que obtusiusculis, 14 \approx 3, rectis, 1-septatis (vel ob plasma 4-parti-
tum, simulate 3-septatis) hyalinis.

Hab. in foliis Rubiæ peregrinæ in Vogesis (MOUGEOT).

193. **Sphærella peregrina** Cooke Grev. VII, p. 98. — Sparsa, clado- 2011
phylogena, subinde dense gregaria; peritheciis punctiformibus, pa-
pillatis; ascis crasse clavatis; sporidiis stipatis, breve fusoides, uni-
septatis, hyalinis, 15–18 \approx 4.

Hab. in caulibus foliisque Rubiæ peregrinæ, Symond's
Yat, prope Ross Britannia. — A *Sph. Mougeotiana* Sacc. differre
videtur ascis crasse clavatis, sporidiis majoribus etc. An satis?

194. **Sphærella minor** Karst. Myc. Fenn. II, pag. 171. — Peritheciis 2012
epidermidi innatis, laxè gregariis, fibrillis innatis, serpentibus, sub-
radiantibus, fusciscentibus junctis, maculas cinerascentes forman-
tibus, sphæroideis, poro simplici pertusis, atris, 60–70 μ . lat.; ascis
sessilibus, ovoideo-ellipsoideis vel ovoideo-sphæroideis, 18–25 \approx 12–
14; sporidiis octonis, conglobatis, ovoideo-oblongatis, medio uni-
septatis, ad sepimentum haud vel vix constrictis, chlorino-hyali-
nis, 11–12 \approx 4.

Hab. in caulibus Epilobii angustifolii emortuis prope op-
pidum Kola Lapponiæ rossicæ. — *Sphærellæ Tassianæ* proxima et
affinis, sed omnibus partibus minor. — Var. *Galii* (Michel. I, 381,
Fungi ital. t. 388): ascis obclavato-ovoideis, 20–25 \approx 14, brevissime
crasse stipitatis, apice breve obtuseque attenuatis, 8spor. aparaph-
ysatis, sporidiis tristichis, oblongo-clavulatis, 8–10 \approx 3, 1-septatis,
vix constrictis, hyalinis. — In caule Galii sylvatici in Ital. bor.

195. **Sphærella Hyperici** Auersw. Myc. Eur. p. 14, fig. 60, Karst. M. 2013
Fenn. II, 177. — Peritheciis nigris, epidermidi innatis, globulosis,
poro simplici pertusis, dense sparsis, imo hinc inde connatis, 48–
58 μ . latis; ascis oblongis, breviter stipitatis, 8-sporis, 40–50 \approx 7–
8; sporidiis 2–3-serialiter stipatis, elongato-oblongis, utrinque ro-
tundatis, ad sepimentum non constrictis, hyalinis, 12–14 \approx 3–4.

Hab. in caulibus emortuis Hyperici perforati in Germa-
nia et in Fennia.

196. **Sphærella Gentianæ** Niessl Neue Kernp. p. 128. — Peritheciis 2014
 laxè gregariis, globosis, minutis, tectis, vix papillatis, submembrana-
 ceis; ascis oblongo-clavatis plerumque inferne amplis, stipite bre-
 vi, 8-sporis, 29-32 \approx 8-12; sporidiis stipatis, cuneatis vel clavatis, in-
 ferne attenuatis, rectis vel paulo curvatis, medio septatis, parum
 constrictis, guttulatis, hyalinis 10 \approx 2-3.
Hab. in caulibus siccis *Gentianæ asclepiadææ* prope Gratz
 Austriæ.
197. **Sphærella Galatea** Sacc. Fungi Ven. Ser. II, p. 304. — Peri- 2015
 theciis secus caulem hinc inde gregariis, atris, punctiformibus, 70-
 75 μ . diam., globoso-lenticularibus, epidermide tenuiter tumefacta
 velatis, ostiolo exiguo impresso; ascis cylindræo-clavatis, subses-
 silibus, 35 \approx 6-7, 8-sporis; sporidiis oblique monostichis vel subdi-
 stichis, oblongis, 8-11 \approx 2 $\frac{1}{2}$ -3, loculo infero angustiore, constricto-
 1-septatis, eguttulatis, hyalinis.
Hab. in caulibus aridis *Valerianæ officinalis* in sylva
 Montello, Treviso, Ital. bor., rarius. — *Sph. leptascæ* Auersw. et
Sph. caulicolæ Karst. cognata, sed satis distincta.
198. **Sphærella morphæa** Sacc. Mich. I, 34. — Peritheciis gregariis, 2016
 punctiformibus e globoso lenticularibus, innato-erumpentibus, $\frac{1}{10}$
 mill. diam., ostiolo plano pertuso; peritheci contextu laxè cellu-
 loso fuligineo; ascis clavatis, tortuosis, subsessilibus, 70 \approx 12-13,
 aparaphysatis, octosporis; sporidiis subdistichis ovato-fusoideis, 15-
 20 \approx 6-7 $\frac{1}{2}$, rectis curvulisque, 1-septatis, valde constrictis, 4-gut-
 tulatis, granulosis, hyalinis.
Hab. in stigmatè capsularum *Papaveris somniferi* deje-
 ctarum, Conegliano, Ital. bor. — Cum qua specie comparari pos-
 sit, ignoro. Certe *Sph. arthopyrenides*, in *Papavere* quoque obvia
 longe differt.
199. **Sphærella arthopyrenioideis** Auersw. Myc. Eur. p. 15, fig. 55. 2017
 — Peritheciis nigris, epidermidi innatis, depresso-globosis, poro
 simplici pertusis, dense sparsis, 60-120 μ . latis; ascis obovatis, ses-
 silibus, 8-sporis, 38 \approx 18; sporidiis subtriserialiter stipatis, obovato-
 oblongis, utrinque rotundatis, uniseptatis, ad sepimentum non con-
 strictis, pallidis, nubiosis, 14 \approx 4-5.
Hab. in caulibus siccis *Papaveris Burseri* in Alpibus
 Styriæ.
200. **Sphærella Cannabis** Wint. Hedw. 1872, p. 145. — Peritheciis 2018
 nigris, epidermidi innatis, depresso-globosis, dense gregariis vel
 basi congregatis, poro simplici pertusis, 150-180 μ .; ascis ample

cylindræis, sessilibus, 8-sporis, 50-60 \approx 10; sporidiis subdistichis, fusiformi-oblongis, utrinque attenuatis, fere sub-acutis, inæqualiter bilocularibus, uniseptatis ad septum constrictis, pallide viridulis, 14 \approx 5.

Hab. in caulibus dejectis Cannabis sativæ prope Seis Tyrolia (HAUSMANN).

201. **Sphærella caulicola** Karst. Myc. Fenn. II, p. 169. — Peritheciis 2019
laxe gregariis, subiculo filamentoso fusco insidentibus, per epidermidem erumpentibus, sphæroideis, sæpe vertice umbonatis, poro simplici pertusis, atris, 0,2 mill. lat.; ascis fasciculatis, numerosissimis, cylindræo-clavatis, 54 \approx 8 octosporis; sporidiis distichis, ovoideo-oblongatis, medio uniseptatis, hyalinis, 10-11 \approx 3-3,5.

Hab. in caulibus Galeopsidis versicoloris emortuis in Fennia australi et media. — Quoque ad caules Epilobii angustifolii Umbelliferarumque ad Mare-Glaciæ lecta est hæc species, sporidiis vero minoribus, 8-10 \approx 2-3, prædita. — Facillime dignota species. Maculæ fuscescentes, forma variæ, quibus insident perithecia majuscula, nitidula, sat prominula, in caule hinc inde dispersæ.

202. **Sphærella Micromeriæ** Pass. in Relaz. Botan. Bullettino del Club 2020
Alpino Italiano, vol. VII, n. 21 et Diagn. nuov. funghi n. 7. — Peritheciis subcorticalibus erumpentibus, globoso-conicis, atris, ostiolo punctiformi; ascis brevibus, latiusculis, subclavatis, basi incurvis, subsessilibus, 8sporibus; sporidiis inordinatis, subnavicularibus, septatis, ad septum vix constrictis, loculo altero ampliore, hyalinis; paraphysibus nullis.

Hab. in caulibus siccis Micromeriæ tenuifoliæ, Chieti Italia merid. — Perithecia crassiuscula et prominula ligno insident, non parenchymati corticali; et cortice elapso, in ligno nudato perdurant.

203. **Sphærella polygramma** (Fr.) Niessl Neue Kernp. p. 87, *Sphæria* 1021
polygramma Fr. S. M. II, p. 432 p. p.? — Peritheciis minutis, seriatis, confertis, subconfluentibus, globosis, tectis, obscure papillatis, atro-fuscis, membranaceis; ascis clavatis, subsessilibus, 8sporibus, 30 \approx 7-8; sporidiis fusiformibus vel paulo clavatis, rectis, curvatisve, medio septatis, vix constrictis, hyalinis 8-9 \approx 2 (an maturis?).

Hab. in caulibus, qui fusco-maculosi fiunt, Ballotæ nigræ prope Brünn Moraviæ. — Forte *Phoma polygramma* est ejusdem spermogonium.

II. *In Monocotyledoneis parasiticæ.*

204. **Sphærella Schœnoprasi** Auersw. Myc. Eur. Syn. Pyr. pag. 19, 2022
t. 5, f. 70, *Gnomonia Schœnoprasi* (Rabh.) Ces. et De Not. Schema p. 232, *Vermicularia Schœnoprasi* Rabh. Fungi Eur. II, 346. — Peritheciis ut plurimum epiphyllis, dense gregariis, maculas magnas griseas formantibus, primitus epidermide tectis, dein eam vertice perforantibus, depresso-sphæroideis, in ostiolum breviter conoideum acuminatis, atris, 150–200 μ . lat.; ascis brevissime pedicellatis, ovoideo-oblongatis, 70–82 \approx 18–20, octosporis; sporidiis infra distichis, supra monostichis, ovoideo-oblongatis vel suboblongatis, uniseptatis, ad septum leviter constrictis, subhyalinis, 20–26 \approx 6–8. — Spermogonia (*Vermicularia Schœnoprasi* Rabh. p. p.) peritheciis commixta, gregaria, erumpentia, ovalia vel ellipsoidea vel suborbicularia, obtuse conoidea, astoma, demum basi secedentia, atra, vertice pilis concoloribus, sparsis obsessa, minuta; spermatiiis fusoides-bacillaribus, curvatis, hyalinis, 16–20 \approx 2–3.

Hab. in foliis languidis Allii Porri, A. ochroleuci, A. Schœnoprasi etc. in Germania, Gallia, Italia, Fennia.

205. **Sphærella allicina** (Fr.) Auersw. Myc. Eur. Pyr. 19, fig. 69, 2023
Sphæria allicina Fr. S. M. II, 437. — Peritheciis epidermide griseo-fusca tectis, globosis confertis, subpapillatis nitidis, prominulis; ascis subclavatis, sessilibus, 55–58 \approx 14, octosporis; sporidiis distichis oblongis utrinque rotundatis, subrectis, uniseptatis, non constictis, hyalinis, 16 \approx 4–5.

Hab. in foliis scapisque Alliorum et forte quoque Platantheræ in Suecia, Germania, Belgio, Britannia, Lusitania. — Macula amphigena oritur ex epidermide folii, peritheciis greges tegente, cinerascens. Perithecia genuina, mediæ magnitudinis, nunc confluentia, nunc sparsa, in juniore ætate astoma.

206. **Sphærella Cinxia** Sacc. Fungi Ven. Ser. II, p. 403. — Maculis 2024
nullis; peritheciis amphigenis, sparsis, globoso-lenticularibus, atris, 120 μ . diam., ostiolo impresso tenuiter pertuso; ascis breves crasseque stipitatis cylindraceo-clavatis, tunica crassiuscula, 55 \approx 10–11, 8sporibus; sporidiis inordinate distichis, ovoideis, didymis, loculo altero crassiore, 12 \approx 5 $\frac{1}{2}$ –6, hyalinis, eguttulatis.

Hab. in foliis putrescentibus Lili candidi prope Treviso Italiæ borealis.

207. **Sphærella Matura** Sacc. Fungi Ven. Ser. II, p. 303. — Maculis 2025
nullis; peritheciis amphigenis, sparsis, punctiformibus, 100 μ . diam.,
lenticularibus, ostiolo impresso pertusis, hyphis ramulosis repen-
tibus fuliginosis basi cinctis; ascis minutissimis, 35 \approx 6-7, cylindra-
ceo-clavulatis, curvulis, dense fasciculatis, 8sporis; sporidiis inor-
dinate distichis, oblongo-fusoideis, constricto-didymis, 44 \approx 3-3 $\frac{1}{3}$,
loculo altero angustiore, 4-guttulatis, hyalinis.

Hab. in foliis putrescentibus Lili candidi, Selva, Treviso, Italia bor., socia et forte formam spermogonicam sistens: *Phyllosticta liliicola* Sacc.; peritheciis globulosis, pertusis, punctiformibus spermatia ovoidea, 10 \approx 3, 2guttulata, hyalina fomentibus.

208. **Sphærella brunneola** (Fr.) Cooke Handb. p. 922, Karst. M. Fenn. 2026
II, 180, *Sphæria brunneola* Fr. S. M. II, p. 526, *Ascospora brunneola* Fr. Summa Veg. p. 425. — Peritheciis epiphyllis, gregariis, parenchymati innatis, utrinque prominulis, filamentis in parenchymate repentibus, fuscis maculas oblongatas, brunneas, variæ magnitudinis formantibus, sphæroideis vel siccitate sphæroideo-depressis, poro pertusis, 80-90 μ . diam.; ascis sessilibus, fusoidelongatis, 55 \approx 10, octosporis; sporidiis distichis, ovoideo-elongatis, paullo extra medium uniseptatis, rectis, ad septum vix constrictis, hyalinis, 17-20 \approx 4. — Spermogonia (*Asteroma subradians* Fr.) peritheciis immixta, erumpentia, sphæroidea, dein ore lato aperta, atra, peritheciis multo majora; spermatiis filiformibus, inarticulatis, hyalinis, 75-105 \approx 2.

Hab. in foliis Convallariæ majalis (an et Epipactidis) in Suecia, Britannia, Fennia, Germania, Italia, Gallia, rarius fructificans.

209. **Sphærella Asteroma** (Fr.) Karst. Myc. Fenn. II, 181, *Dothidea* 2027
Asteroma Fr. S. M. II, 560, *Ascospora Asteroma* Fr. Fuck., *Sphærella subradians* Auersw. Myc. Eur. Pyr. p. 19, fig. 77. — Peritheciis epiphyllis, gregariis, parenchymati innatis, utrinque prominentibus, filamentis in folii parenchymate repentibus, fuscis, maculas fuscas vel fuliginoso-nigrescentes, oblongatas, variæ magnitudinis formantibus, sphæroideis, poro simplici pertusis, 60-80 μ . diam.; ascis sessilibus, oblongatis, 32-35 \approx 7-9 octosporis; sporidiis distichis, ovoideo-oblongatis, fere medio uniseptatis, ad septum leviter constrictis, hyalinis, 9-12 \approx 3-4. — Spermogonia? (*Asteroma* [Cambosira] *reticulata* Fr.) epiphylia, prominentia, subsphæroidea, atra, fibrillis liberis, serpentibus juncta, exigua.

Hab. in foliis emortuis caulibusque Convallariæ multiflo-

ræ. Polygonati, verticillatæ et Majanthemi in Succia Germania, Belgio, Gallia, Fennia, Italia, Kamschatka.

210. **Sphærella smilacicola** (Schw.) Cooke in Grev., *Sph.* (Depazea) 2028
smilacicola Schw. Syn. Amer. bor. n. 1825. — Macula sinuosa v. subquadrata impressa, rufo-fusca nigro-marginata; peritheciis punctiformibus, innatis, subconicis, nigris, sparsis, 90 μ . diam. poro pertusis; ascis fasciculatis clavulatis, brevissime stipitatis, 40–50 \approx 10, octosporis; sporidiis oblongo-teretiusculis, utrinque rotundatis, curvulis, 1-septatis, non constrictis, hyalinis, 14–15 \approx 3).

Hab. in foliis *Smilacis rotundifoliæ* etc. Bethlehm et Aiken Amer. bor.

211. **Sphærella Pales** Sacc. Fungi Ven. Ser. II, p. 305. — Peritheciis 2029
 secus caulem laxè sparsis, epidermide velatis, punctiformibus, 100 μ . diam., lenticularibus, atris, ostiolo minuto umbilicato; ascis fasciculatis, oblongo-clavatis, 50 \approx 14, subsessilibus, 8sporis; sporidiis distichis, oblongis, didymis, medio constrictis, 18–20 \approx 7, loculis quandoque inæqualibus, 4guttulatis, hyalinis.

Hab. in caulibus exsiccatis *Heimerocallidis fulvæ*, Selva Treviso, Italia bor.

212. **Sphærella Agapanthi** Kalch. et Cooke Grev. IX, p. 31. — Ma- 2030
 culis magnis, irregularibus, nigrescentibus; peritheciis numerosissimis, membranaceis, applanatis, fuscis; mycelio fusco, radiato, circumdati; ascis obclavatis; sporidiis ellipticis, utrinque rotundatis, uniseptatis, hyalinis 15–18 \approx 3.

Hab. in foliis *Agapanthi* in Africa australi.

213. **Sphærella Iridis** Auersw. Myc. Eur. Pyr. p. 18, fig. 11. — Pe- 2031
 ritheciis amphigenis, nigris, epidermide primo tectis, dein semilibris, sparsis, depresso-globosis, poro simplici minuto pertusis, 120–160 μ . latis; ascis obovato-oblongis, in stipitem brevissimum attenuatis, 8sporis, 50–58 \approx 17; sporidiis subtriseriatis, oblongis, utrinque rotundatis, rectis, uniseptatis, ad sepimentum non constrictis, episporio crasso, 17 \approx 4–5.

Hab. in foliis siccis *Iridis pumilæ* in Germania et *Iridis Pseudacori* in Britannia.

214. **Sphæria Caladii** (Schw.) Sacc. *Depazea Caladii* Schw., B. et 2032
 C. Exot. Fungi Schw. p. 291. — Maculis latis annulari-multicoloribus, centro pallidis; peritheciis congestis; ascis brevibus; sporidiis hyalinis oblongis, medio uniseptatis, lenissime curvulis, 10 μ . longis.

Hab. in foliis *Caladii* cujusdam in Surinam. — Maculæ 10–25 mill. latæ.

215. **Sphærella Maydis** Pass. in Rabh Fungi Eur. n. 1851 et Just 2033
Bot. Jahresb. 1874, p. 319, Sacc. Fungi ital. t. 383. — Peritheciis amphigenis, nigris, epidermidem vix perforantibus, in area translucida folii subgregariis vel sparsis; ascis oblongis subclavatis vel sæpius basi plus minus ventricosis, $35-55 \approx 7\frac{1}{2}-8\frac{1}{2}$; sporidiis subtristichis oblongis, septatis, vix constrictis, $14-16 \approx 3\frac{1}{2}-4$, hyalinis, oculis 1-2 guttulatis.

Hab. in foliis emortuis et putrescentibus Zeæ Maydis in agro Parmensi et Tarvisino Italiae. — A *Sph. Zeæ* Sacc. et *Sph. paulula* Cooke tute distincta.

216. **Sphærella paulula** Cooke. Rav. Fung. Amer. Cent. III. et in Grev. 2034
VI, p. 146. — Sparsa; peritheciis minutis, globosis, semiliberis, 70 μ . diam., ascis clavatis, 20 μ . long.; sporidiis ellipticis, demum uniseptatis 5 μ . longis.

Hab. in vaginis Zeæ Maydis, Gainesville, Florida Americae borealis. — E minimis generis speciebus, subinde a *Cladosporio*, quocum habitat, velata.

217. **Sphærella Zeæ** Sacc. Mich. I, 377, F. it. t. 384. — Maculis in 2035
foliis adhuc vivis irregularibus arescendo candicantibus, ochraceo-marginatis; peritheciis in media macula gregariis numerosis punctiformibus lenticularibus, pertusis, 120-130 μ . diam.; contextu laxè parenchymatico; ascis cylindræo-clavatis, deorsum acutatis, apice obtusiusculis, $80 \approx 14$, octosporis, aparaphysatis; sporidiis distichis, oblongo-fusoideis, constricto-1-septatis, curvulis utrinque obtusiusculis, $20 \approx 7-8$, loculo superiore paulo crassiore, 4- (raro pluri-) guttulatis hyalinis.

Hab. in foliis adhuc vivis Zeæ giganteæ (Caragua) cultæ, Vittorio in Italia boreali. — Ascis sporidiisque fere duplo majoribus a *Sphærella Maydis* Pass. recedit.

218. **Sphærella disseminata** De Not. et Carest. Erb. cr. it. Ser. II, 2036
n. 391 et N. G. B. Ital. 1871, p. 197. — Peritheciis sparsis subsphæroideis, osculo rotundo hiantibus; ascis grandibus crasse clavatis, 8-sporis, paraphysibus nullis; sporidiis ovoideo-oblongis, sæpe curvulis, bilocularibus, hyalinis.

Hab. in Alagna, Valsesia Ital. bor. in foliis graminis cujusdam (CARESTIA). — Affinis *Sphærella Tassianæ* De Not. Socia adest *Septoria*.

219. **Sphærella chlouna** Cooke Grevill. V, p. 121. — Peritheciis gre- 2037
gariis v. sparsis, minutis, epidermidem perforantibus, ostiolo amplo;

ascis clavatis; sporidiis distichis, fusoido-teretiusculis, uniseptatis, 18 \approx 3, hyalinis.

Hab. in Phalaride arundinacea, Shere Britanniae. — A *Sphærella ignobili* Auersw. sporidiorum forma et magnitudine mox distinguenda.

220. **Sphærella Ceres** Sacc. Fungi Ven. Ser. II, p. 302. — Maculis 2038
sinuosis variis expallentibus, zona sanguinea cinctis; peritheciis sparsis, punctiformibus, 80 μ . diam., lenticularibus, ostiolo impresso pertusis; ascis fasciculatis, oblongo-cylindræis, 50 \approx 15, basi breve crasseque stipitatis, 8sporidis; sporidiis oblongo-ovoideis, constricto-1-septatis, loculo altero subcrassiore, rectis curvulisve, 20 \approx 7, 4-guttulatis, hyalinis. — Status pycnidicus *Ascochyta Sorghi* Sacc. sistit.

Hab. in foliis languescentibus Sorghi vulgaris, prope Treviso Italiæ borealis.

221. **Sphærella anarithma** (B. et Br.) Cooke Handb. n. 2771 *Sphæ-* 2039
ria anarithma B. et Br. Ann. N. H. n. 893, t. 11, fig. 37. — Peritheciis sparsis, minutis, globosis, epidermide ostiolo papillulato pertusa velatis; ascis clavatis, octosporis; sporidiis sublanceolatis, 1-septatis, profunde constrictis, hyalinis, 30 μ . longis.

Hab. in foliis exsiccatis Airæ cæspitosæ et Sorghi in Britannia, Italia et Austria.

222. **Sphærella badensis** Niessl Neue Kernp. p. 129. — Amphigena; 2040
peritheciis minutissimis, punctiformibus, dense confertis, subconfluentibus, effusis, globosis, erumpentibus, obscure papillatis, membranaceis, atris; ascis oblongis vel ovoideis, obliquis, sessilibus 44 \approx 14-18; sporidiis faretis, 1-3-stichis, octonis, elongato-oblongis, supra medium septatis, pauloque constrictis, inferne attenuatis, rectis, 4-nucleatis, dilute virescentibus, 16-18 \approx 4-6.

Hab. in foliis demortuis Poæ badensis prope Baden Germaniæ.

223. **Sphærella Agrostidis** (Cast.) Auersw. Myc. Eur. Pyr. pag. 17, 2041
fig. 79, *Sph. Agrostidis* Cast. Cat. Mars. *Sph. Graminis* Mont. p. p. *Phyllachora Agrostidis* Fuck. Symb. myc. p. 217. — Peritheciis epiphyllis, nigris, parenchymati folii innatis, congestis et connatis, acervulos rotundatos oblongosve convexos, impresso-punctulatos, $\frac{1}{4}$ -1 mill. latos formantibus, globulosis, poro simplici pertusis, 100 μ . fere latis; ascis e basi ampliata paululum attenuatis, brevissime stipitatis, 8-sporis, 55-62 \approx 14-15; sporidiis triserialiter stipatis, cuneato-oblongis utrinque rotundatis, rectis, uniseptatis,

ad sepimentum non constrictis, cellula superiore quam inferiore paulo brevior, subhyalinis, $21 \approx 5$.

Hab. in foliis fere emortuis Agrostidis stoloniferæ et caninæ in Gallia et Germania.

224. **Sphærella recutita** (Fr.) Cooke Handb. n. 2772 Fuck. Symb. App. 2042

II, p. 21 (nec Symb. p. 107). *Sph. recutita* Fr. S. M. II, p. 524.

— Aggregata, hyphophylla, innato-prominula, minutissima, poro pertusa, nigra, strias longissimas parallelas densas exhibens; ascis fasciculatis oblongis, sursum acutioribus, subcurvulis, $36 \approx 12$; sporidiis octonis oblongo-fusoideis, rectis, medio constricto-1-septatis (an denique 3-septatis?) $12-14 \approx 4-5$, 4-guttulatis, hyalinis.

Hab. in foliis Dactylidis glomeratæ (et Caricum) in Britannia, Suecia, Germania. — Perithecia ita densa ut maculas griseas imitentur totum fere hypophyllum occupantes. Si denique sporidia 3-septata, an *Leptosphæria*?

225. **Sphærella Malinverniana** Catt. in Arch. Bot. Critt. II, 127, t. XIV, 2043

f. 6. — Peritheciis hypophyllis, atris, epidermide innatis, plus minus dense sparsis, globosis, poro simplici pertusis, $100-150 \mu$. latis; ascis e basi ovata, apicem versus attenuatis, subsessilibus, 8sporis, $60-75 \approx 20-25$; sporidiis 2-3-serialibus obovato-oblongis, utrinque rotundatis, uniseptatis, ad sepimentum constrictis, hyalinis, $20 \approx 10$.

Hab. in foliis languidis Oryzæ sativæ in Italia boreali.

226. **Sphærella Oryzæ** (Catt.) Sacc. *Pleospora Oryzæ* Catt. Micet. 2044

Riso p. 11 et Arch. trienn. I, 181, t. XV-XVI. — Peritheciis hinc inde gregariis, globosis, parenchymate innatis, epidermide tectis, minutis $70-80 \mu$. diam., sepe hyphis mycelicis fuliginis v. subhyalinis repentibus, ramosis septatis interpositis, apice obtusiusculis poro pertusis; ascis elongato-clavatis, octosporis aparaphysatis, $47-50 \approx 8$; sporidiis subdistichis, fusoideis, subhyalinis, $14-15 \approx 4-4,2$, 1-septatis, non constrictis.

Hab. in pedunculis foliisque Oryzæ sativæ, cui affert morbum *carolo bianco e nero* dictum, in Italia boreali.

227. **Sphærella phyllachoroides** Sacc. Fung. Ven. Ser. II, 304. — Ma- 2045

culis nullis; peritheciis amphigenis, atris, foliorum parenchymate immersis, in acervulos elongatos phyllachoriformes, epidermide tumidula nigrificata velatos hinc inde subparallele aggregatis, sphæroideis, ostiolis minutissimis vix prominulis: ascis cylindraceo-clavatis, $50-60 \approx 10-11$, basi brevissime noduloso-stipitatis, pseudo-paraphysibus guttulatis quandoque obvallatis, 8sporis; sporidiis oblique monostichis vel distichis, ovoideo-oblongis, didymis $10-$

12 \approx 4 $\frac{1}{2}$, medio vix constrictis, rectis curvulisve, 2-4-guttulatis, hyalinis.

Hab. in foliis aridis graminum (Agrostidis?) in sylva Montello (Treviso), Italiae borealis. — Affinis videtur *Phyllachoræ helveticae* Fuck. sed multo magis *Sphærellæ lineolatae* (Rob.) De Not. (Sacc. Myc. Ven. p. 95, t. IX, f. 15-17) a qua sporidiis multo brevioribus præ ceteris differt.

228. **Sphærella leptopleura** De Not. Recl. Pyr. Comm. II, p. 488. — 2046

Peritheciis epidermide tectis ad foliorum longitudinem seriatis, discretis, vel per paria subinde arete contiguis, rotundatis, membranaceis tenuibus, ostiolo latiusculo dehiscentibus; ascis confertis, tetrati-clavulatis, octosporis; paraphysibus nullis; sporidiis oblongis rectis, vel curvulis, obscure bilocularibus, vel simplicibus, hyalinis.

Hab. in vaginis Secalis Cerealis, Rovegro, Lago Maggiore Italiae borealis.

229. **Sphærella ignobilis** Auersw. Myc. Eur. Pyr. p. 17. — Perithe- 2047

ciis hypophyllis, nigris, in parenchymate folii nidulantibus, epidermide vix perforantibus, sparsis, globosis, poro simplici perforatis, 100-125 μ . latis; ascis numerosissimis, clavato-cylindricis, subsessilibus, curvulis, 8-sporis, 50 \approx 6-8; sporidiis imbricato-uniserialibus aut biserialibus, pallidis, granuloso-nubiosis, cuneato-oblongis, utrinque rotundatis, uniseptatis, ad sepimentum vix constrictis, 10-12 \approx 4.

Hab. in foliis exsiccatis Glyceriæ spectabilis et Agrostidis in Germania et Italia boreali.

230. **Sphærella graminicola** Fuck. Symb. Myc. p. 101. — Peritheciis 2048

epiphyllis, aggregatis, innato-prominulis, minimis, nigris, foliorum totam superficiem occupantibus, ostiolis papillatis; ascis oblongis, seu ovato-oblongis, 8-sporis; sporidiis oblongis, non clavatis, utrinque obtusis, didymis, hyalinis.

Hab. in foliis exsiccatis Tritici repentis, rarius, prope Æstrich Germaniæ.

231. **Sphærella perexigua** Karst. Fungi Spetsb. n. 54 (nec Lév. quæ 2049

ad *Sph. punctiformem* spectat). — Peritheciis sparsis, innato-prominulis, sphaeroideis vel sphaeroideo-depressis, demum ostiolo exiguo hiantibus, glabris, atris, 50-75 μ . latit.; ascis ovoideo-oblongatis, 30-35 \approx 12, octosporis; sporidiis conglobatis, fusoideo-elongatis, leviter curvulis vel rectis, guttulis 2, rarius 4 præditis vel spurie tenuter uniseptatis, hyalinis 16-20 \approx 2, 5-3, 5; paraphysibus nullis.

Hab. in foliis Junci biglumis siccis ad Adventbay et Nordfjorden, Spitzberg.

232. **Sphærella Najas** Sacc. Fungi Ven. Ser. II, p. 304. — Maculis 2050 nullis; peritheciis sparsis, minutis, punctiformibus, 120 μ . diam., lenticularibus, atris, contextu laxo, fuligineo, ostiolo impresso pertusis; ascis fasciculatis, clavatis, 50 \approx 12–14, 8sporis; sporidiis distichis, oblongis, constricto-didymis, 16 \approx 6, loculo altero crassiore, 4guttulatis, hyalinis.

Hab. in glumis aridis Junci lamprocarpi, Treviso, in Italia boreali.

233. **Sphærella longissima** Fuck. Symb. Myc. p. 107. *Sphærella Bromi* 2051 Auersw. Myc. Eur. Pyr. p. 17, fig. 78. — Peritheciis minutissimis, 60–80 μ . d., dense dispositis et strias longissimas, $\frac{1}{4}$ lineam latas, atras formantibus, dein ore rotundo pertusis; ascis oblongo-clavatis, 34 \approx 7, 8sporis; sporidiis oblongis, medio parum constrictis, didymis, hyalinis, 10 \approx 3.

Hab. in foliis adhuc vivis v. languidis Bromi asperi pr. Æstrich Germaniæ.

234. **Sphærella Luzulæ** Cooke in Grev. VI, p. 31. *Hendersonia Ty-* 2052 *phoidearum* Thüm. F. Austr. n. 785. — Peritheciis velatis, punctiformibus, sparsis; ascis clavato-cylindricis; sporidiis biseriatis cylindræis, 4-nucleatis, dein uniseptatis, hyalinis.

Hab. in foliis Luzulæ albidæ in Austria.

235. **Sphærella Sirpi-lacustris** Auersw. Myc. Eur. Pyr. p. 18, fig. 73. 2053 — Peritheciis carbonaceo-membranæis, subfragilibus, nigris, epidermidi innatis, sparsis, depresso-globosis, poro simplici perforatis, 150–180 μ . latis; ascis clavato-oblongis, in stipitem brevem attenuatis, 8-sporis, 55–58 \approx 14; sporidiis 3-serialiter stipatis, oblongo-fusiformibus, utrinque obtusatis, curvulis, uniseptatis, ad sepimentum non constrictis, subhyalinis, 24–27 \approx 4–5.

Hab. in calamis Sirpi lacustris emortuis in Germania, Britannia et Italia.

236. **Sphærella Thais** Sacc. Fungi Ven. Ser. II, p. 305. — Peritheciis hinc inde secus calamos dense gregariis maculasque nebulosas elongatas efficientibus, globulosis, punctiformibus, 70–80 μ . d., erumpentibus, atris, ostiolo impresso pertusis, hyphis parvis brevissimis basi cinctis; ascis obovatis, apice rotundatis, basi brevissime attenuatis, 35 \approx 16, raro 50 \approx 14, 8sporis; sporidiis inordinate tristichis, oblongis, didymis, septo subconstrictis, loculo intero paulo angustiore, 14–15 \approx 4, minute 4-guttulatis, hyalinis.

Hab. in calamis *Scirpi mucronati* v. *triquetri* putrescentibus ad lacum Benacum (Peschiera), Ital. bor. — A *Sphærella Scirpi lacustris* Auersw. rite distincta.

237. **Sphærella pusilla** Auersw. Myc. Eur. Pyr. p. 17, fig. 115. — 2055

Peritheciis epiphyllis, nigris, epidermide innatis, dense sparsis, globosis, poro simplici pertusis, 50-70 μ . latis; ascis ovato-oblongis, subsessilibus, 8-sporis, 40 \approx 12-14; sporidiis 3-4-serialiter stipatis, oblongo-fusiformibus, apicem versus paululum ampliatis, utrinque obtusatis, subrectis, uniseptatis, ad septimentum constrictis, 4-6-nucleolatis, subhyalinis, 22-24 \approx 3-4.

Hab. in foliis siccis *Caricis tenuis* et *C. acutæ* in Germania et Fennia. — Videretur *Sphærella Tassiana* deminuta.

238. **Sphærella saxatilis** Schröt. Nord. Pilze p. 12. — 2056

Peritheciis subsparsis, sphaeroideis, 65-75 μ . diam., innatis, ostiolo depresso, parum distincto; contextu fuligineo tenui; ascis fasciculatis, parvis, ovoideo-saccatis, infra medium crassioribus, 30-35 \approx 15-17, octosporis; sporidiis conglobatis, fusoides, 17-20 \approx 4-5, medio uniseptatis, non constrictis.

Hab. in foliis vetustis *Caricis saxatilis* in Lapponia Suecica (WICHURA).

239. **Sphærella Wichuriana** Schröt. Nord. Pilze p. 12. — 2057

Peritheciis gregariis, innatis, perexiguis, sphaeroideis, 50-65 μ . diam., glabris, contextu laxe areolato; ostiolo obsoleto; ascis paucis, aparaphysatis, ovoideis 22-26 \approx 14-16, sessilibus, octosporis; sporidiis conglobatis, fusoides, 11-13 \approx 3-3,5, hyalinis, uniseptatis, non constrictis.

Hab. in foliis vetustis *Caricis rupestris* et *C. microglochin* in Lapponia suecica (WICHURA). — Var. *Andromeda polifolia*; peritheciis paulo majoribus 66-80 μ . diam.; ascis 22-26 \approx 11-14; sporidiis, 9-11 \approx 3-4, elliptico-fusoides. Ibidem.

240. **Sphærella Tassiana** De Not. Sfer. ital. p. 87, t. XCVIII. Karst. 2058

Myc. Fenn. II. p. 169. — Peritheciis sparsis vel gregariis, nunc epidermidi, nunc parenchymati innatis, plus minus emergentibus, sphaeroideis, vertice sæpe plus minusve conoideo-attenuatis, osculo minuto hiantibus, atris, 60-150 μ . diam.; ascis sessilibus vel brevissime pedicellatis, oblique ovoideo-oblongatis, inæqualateralibus, 40-80 \approx 18-26 octosporis; sporidiis conglobatis, ovoideo-oblongatis, medio vel paulo extra medium uniseptatis, ad septum vix vel levissime constrictis, hyalinis vel chlorino-hyalinis, 17-26 \approx 5-9.

Hab. in foliis, rarius culmis emortuis *Caricum*, *Eriophori*, *Poæ*, *Glyceriæ*, *Alopecuri*, *Tritici*, *Festucæ*, *Calari*

magrostidis, Junci, Luzulæ, Typhæ, Tofieldiæ in Lapponia, Fennia, Germania, Italia. — In omnibus regionibus hyperboreis vulgatissima, meridionalem versus admodum rarescens. Quoad magnitudinem formamque perithecorum maxime variat; hæc nunc sphæroidea, minutissima, poroque simplici pertusa (qualia in Tritico, Calamagrostide et Typha sunt lecta), nunc majora verticeque conoidea, nunc denique in ostiolum conoideum attenuata (qualia in Tofieldia boreali). Facillime dignoscenda ascis infra inæqualiter saccato-inflatis, sporis 3-4 serialiter stipatis præditis.

241. **Sphærella lineolata** (Desm.) De Not. Schema p. 63 Sacc. Myc. 2059
Ven. p. 95, t. IX, fig. 15-17. *Sphæria lineolata* Rob. et Desm. Nouv. Not. 1843, p. 37. — Amphigena, erumpens; peritheciis minutissimis, 60-80 μ . diam., poro pertusis, nigris, albo farctis, subconnatis, in seriam simplicem dispositis; ascis oblongo-clavatis, sessilibus, 50 \simeq 12; sporidiis oblongis, v. obovatis, 16-18 \simeq 4-5, uniseptatis, leniter constrictis, guttulatis, hyalinis.

Hab. in foliis emortuis Caricum, Phragmitis, Ammophilæ etc. in Italia, Gallia, Britannia, Germania. — *Sphærella lineolata* in Berk. Fungi Arct. Exped. n. 23 quæ sporidiis tandem triseptatis fuscillisque pollet aliena censenda est.

242. **Sphærella Typhæ** (Lasch) Auersw. Myc. Eur. Pyr. p. 18, fig. 110. 2060
Sphæria Typhæ Lasch in Rehb. Herb. myc. I, 660. — Peritheciis amphigenis, nigris, parenchymate folii innatis, congestis et connatis, acervulos lanceolatos, convexos, $\frac{1}{4}$ -1 mill. longos, $\frac{1}{6}$ mill. latos formantibus, globulosis, poro simplici perforatis, 70 μ . latis; ascis elongato-oblongis, brevissime stipitatis, 8-sporis, 50 \simeq 7-8; sporidiis biserialibus, cuneato-oblongis, utrinque rotundatis, rectis, uniseptatis, ad sepimentum non constrictis, fuscidulis, 14 \simeq 5.

Hab. in foliis emortuis Typhæ latifoliæ et T. minimæ in Germania et Italia. — Fuckel Symb. myc. p. 107, describit formam minorem; ascis 36 μ . long.; sporidiis 10 \simeq 4.

III. In Acotyledoneis parasiticæ.

243. **Sphærella Pteridis** (Desm.) De Not. Sfer. ital. p. 87, t. XCIX. 2061
Auersw. Myc. Eur. Pyr. p. 19, fig. 82. *Sphæria Pteridis* Desm. Ann. Sc. nat. 2. XIX, p. 359. *Sphærie aquilina* Strauss, Hedw. I, p. 73-78, t. 11, a-k. (nec Fr.). — Peritheciis epiphyllis, sparsis, ut plurimum intra nervos subseriatis, epidermide demum erosa, vertice subemergentibus, ostiolo minutissimo pertusis, sphæroideis,

atris, latit. 100–120 μ .: ascis cylindraceo-subclavatis, in pedicellum brevem paulisper attenuatis, 50–70 \approx 9–12, octosporis; sporidiis divel tristichis, fusoido-bacillaribus, leniter curvulis vel subrectis, medio uniseptatis, ad sepimentum non constrictis, hyalinis, 24–28 \approx 3–4.

Hab. ad frondes *Pteridis aquilinæ* in Suecia, Germania, Italia, Gallia, Belgio, Fennia.

244. **Sphærella indistincta** Peck. in 28 Rep. on the St. Mus. New York. et in Myc. univ. n. 759. — Peritheciis minutis, innatis, vix prominulis, sparsis vel subgregariis, globosis, nigris; ascis subcylindricis, 35–45 μ . long., sporidiis confertis, elongatis, subcylindraceis, hyalinis, simplicibus vel obscure uniseptatis, sæpe curvulis, 25–28 μ . long. 2062

Hab. in frondibus emortuis *Pteridis aquilinæ*, Albany, Center, Amer. bor. (Peck). — Sporidiis duplo longioribus a *Sphærella aquilina* differt; (sed forte non diversa a *Sph. Pteridis*).

245. **Sphærella aquilina** (Fr.) Auersw. Myc. Eur. Pyr. p. 20, fig. 83. (erronea). *Sphæria aquilina* Fr. S. M. II. 522. *Sphærella Pteridis* Cooke, nec Fr. — Peritheciis epiphyllis, nigris, epidermide tectis, dein subliberis, undique sparsis, globosis, ostiolo simplici pertusis, 60–80 μ . diam.; ascis oblongis, subsessilibus, 8spor. 38 \approx 7; sporidiis 2–3-stichis, incumbenti-stipatis, elongato-oblongis, utrinque subattenuatis, obtusis, uniseptatis, constrictis, 8–9 \approx 2. 2063

Hab. in frondibus siccis *Pteridis aquilinæ*, rarius in Germania, Austria et Britannia.

246. **Sphærella prominula** Speg. Mich. I, p. 456. — Peritheciis globulosis, primo tectis, dein subsuperficialibus, minutis, 100–120 μ . d., laxe gregariis v. sparsis, epiphyllis, atris; ascis cylindraceo-sinuosis crassiuscule tunicatis, mollibus, aparaphysatis, octosporis, 70–75 \approx 8–10; sporidiis valde irregularibus, elliptico-oblongis, subinæquilateralibus, 1-septatis, ad septum valde constrictis, minute 2–4-guttulatis, hyalinis, 15–16 \approx 7–8. 2064

Hab. ad folia emortua *Pteridis aquilinæ*, Conegliano in Italia boreali. — A *Sphærella Pteridis*, *Sph. aquilina*, *Didymella lophospora* etc. satis superque distincta.

247. **Sphærella Filicum** (Desm.) Auersw. Mich. Eur. Pyr. p. 20, t. 6, f. 81. *Sphæria Filicum* Desm. Ann. Sc. nat. 2, XIII, p. 187 (1840). — Peritheciis amphigenis, sparsis, maculæ fuscae insidentibus, innato-prominulis, sphæroideis, poro majusculo hiantibus, atris latit. circiter 0,1 mill.; ascis e basi ampliata apicem versus attenuatis, 2065

brevissime pedicellatis, 32-40 \approx 8-10 octosporis; sporidiis in parte asci superiori monostichis, inferiori distichis, ovoideo-oblongatis medio uniseptatis, ad septum vix constrictis, hyalinis, 10 \approx 3.

Hab. in frondibus *Aspidii spinulosi*, *A. Filicis maris*, *Asplenii Adianti-nigri* in Gallia, Britannia, Germania et Fennia.

248. **Sphærella Tyrolensis** Auersw. Myc. Eur. Pyr. p. 20, t. 6, f. 84. 2066

— Peritheciis epiphyllis, gregariis, parenchymati innatis, vix prominulis, subsphæroidis, ostiolis minutis hiantibus, atris, latit. 120-130 μ .; ascis clavatis, in pedicellum brevem attenuatis, long. 40-60 \approx 13 μ .; sporidiis octonis, di- vel tristichis, uniseptatis, medio non constrictis, chlorino-hyalinis, long. 14-16 \approx 4-5.

Hab. in frondibus *Polypodii vulgaris* languescentis in Germania et Fennia.

Var. *montellica* Sacc. Mich. I. 34. A typo differt sporidiis majoribus constrictisque; ascis clavatis, 50 \approx 14, p. sporif., apice obtusatis, octosporis; sporidiis distichis, fusoidis, 18-20 \approx 7 $\frac{1}{4}$ -8 $\frac{1}{2}$, rectis curvulisve, 1-septatis, leniter constrictis, 2-nucleatis, vel pluriguttulatis, hyalinis.

Hab. in maculis rufescentibus paginæ superioris *Polypodii vulgaris* in sylva Montello Italiæ borealis.

249. **Sphærella Asplenii** Auersw. Myc. Eur. Pyr. p. 20, fig. 80. — 2067

Peritheciis epidermide primo tectis, dein semiliberis, dense sparsis, globosis, ostiolo simplici pertusis, 60-70 μ . diam.; ascis oblongis, subsessilibus, octosporis, 40 \approx 10; sporidiis, 3-4-seriatis, cylindrico-oblongis, utrinque obtusatis, uniseptatis, 14 \approx 2, ad septum vix constrictis, hyalinis.

Hab. in fronde emortua *Asplenii septentrionalis* in Germania et Austria. — Sec. Fuck. sporidia continua 4-guttulata, sed probabiliter immatura observavit.

250. **Sphærella lycopodina** Karst. F. Fenn. exs. 569 (1866), Myc. 2068

Fenn. II. p. 184 *Sphærella Niesslii* Auersw. in Niessl. Beitr. p. 19, t. III, fig. 15 (1872) *Gnomonia Niesslii* Auersw. in Rabh. F. Eur. n. 1154 (1868). — Peritheciis gregatim sparsis innatis, subsphæroideis, ostiolo minuto hiantibus, fusco-atris, latit. 100-130 μ .; ascis cylindræo-clavatis, apicem versus attenuatis, sessilibus, 60-80 \approx 8-12, octosporis; sporidiis distichis, aciculari-elongatis, rectis vel leniter curvulis, basim versus uniseptatis, chlorino-hyalinis, 20-24 \approx 3-5. — Spermogonia gregaria, subinde conglomerato-connata, difformia, ut plurimum suborbicularia, convexa, demum appla-

nata, plicata, nigra, nitentia, minuta; spermatis elongatis vel bacillaribus, rectis, hyalinis, simplicibus, 16-19 \approx 3.

Hab. in foliis languidis v. siccis Lycopodii complanati in Fennia et L. annotini in Styria.

251. **Sphærella Equiseti** Fuck. Symb. Mycol. p. 102, t. IV, fig. 40. 2069

An *Sphæria Equiseti* Desm. Cat. pl. omiss. p. 31. — Peritheciis sparsis, tectis, punctiformibus, globosis, atris, ostioliis minutis, prominulis; ascis fasciculatis, oblongis, sessilibus, 8-sporis; sporidiis distichis, oblongis, parum curvatis, uniseptatis, ad septum constrictis, multiguttulatis, hyalinis, 16 \approx 4.

Hab. in caulibus ramulisque Equiseti palustris et sylvatici in Germania, Gallia, Italia et Sibiria asiatica.

IV. In charta foliisque ignotis parasiticæ.

252. **Sphærella Karsteniana** Speg. Mich. I. 229, F. it. t. 625. — Pe- 2070

ritheciis superficialibus, v. basi tantum immersis, lenticularibus 80-100 μ diam., membranaceis, ostiolo impresso pertusis, fuliginis, circa ostiolum nigricantibus; ascis oblongo-fusoideis, deorsum incrassatis, 70-75 \approx 20, subsessilibus, vertice acutiuscule rotundatis crasseque tunicatis, apophysatis, octosporis; sporidiis di-polystichis, fusoideis, 20-25 \approx 8, constricto-1-septatis, utrinque acutiusculis, 2-4-guttulatis, hyalinis.

Hab. in charta stercorata putrescente, Conegliano, Ital. bor. 2071

253. **Sphærella congregata** (Lév.) Sacc. *Sphæria* (epiphylla) *congregata* Lév. Ann. Sc. nat. 5, 1846, p. 261. — Peritheciis epiphyllis v. amphigenis maculæformi-aggregatis, nigris, punctiformibus, prominentibus, glabris; ostioliis minutissimis; ascis brevibus crasse clavatis, 8-sporis; sporidiis oblongis septatis.

Hab. in Java ad folia..... (Herb. Mus. Par.).

V. Species minus notæ.

254. **Sphærella corylaria** (Wall.) Fuck. Symb. myc. p. 99. *Sphæria* 2072

corylaria. Wallr. Crypt. Germ. p. 770. — Peritheciis solidiusculis, minutis, confertim sparsis, hemisphærico-synphlæodeis, hypophyllis, vertice convexo nitido prominentibus, nucleo albo faretis.

Hab. in foliis languidis Coryli Avellanæ in Germania, Gallia, Italia. — Nucleus albidus, corpusculis subovatis, hyalino-faretis (ascis immaturis?) fœtus. Dubia in hoc genere species. *Sph. sparsa* f. *corylaria* Auersw. M. Eur. Pyr. p. 4, fig. 22 aliena est et potius *Sph. punctiformi* adscribenda.

255. **Sphærella Vitis** Fuck. Symb. myc. p. 104, Thuem. Pilze Weinst. 2073
p. 201. — Peritheciis dense gregariis vel confluentibus, hypophyl-
lis, minutis, atris, vix hemisphæricis, in maculis parvis, gregariis,
atro-nitidulis, nucleo compacto albido, duriusculo; ascis sporidiis-
que — St. conidicus *Septosporium Fuckelii* Thuem. sistens,
sec. Fuck.

Hab. in foliis languidis aridisque *Vitis viniferæ* in Germa-
nia, Austria, Italia. — Sporidia descripta in Thuem. l. c. *Sphæ-
rellæ* vix pertinent.

256. **Sphærella Turba** Fuck. Symb. myc. p. 103. — Peritheciis gre- 2074
gariis, in maculis orbicularibus, griseis, conicis, apiculatis, semi-
immersis, aterrimis; ascis (immaturis) fasciculatis; sporidiis?

Hab. in pag. infer. foliorum dejectorum *Salicis auritæ*,
prope Æstrich, Germania, rarius.

257. **Sphærella insularis** Wallr. (sub *Sphæria*) Fl. crypt. n. 3936. — 2075
Peritheciis microscopicis, globosis gregariis nigris, nucleo cinereo-
albo farctis cum stromate tenui grumuloso fusco synphlæodeo-la-
titantibus, dein vertice convexo tenuiter perforato prominulis in-
sulasque rotundato-angulatas fusco-virentes mentientibus.

Hab. ad folia ulmea et corylea languida in Germania. —
Sec. Auersw. ad *Sph. punctiformem* spectat, sed descriptio Wallr.
non quadrat. *Sph. insularis* Fuck. Symb. myc. ad *Sph. conglo-
meratam* (Wallr.) pertinet.

258. **Sphærella leptidea** (Fr.) Fuck. Symb. mycol. p. 100, *Sphæria* 2076
leptidea Fr. S. M. II, p. 522. — Gregaria, epidermide tegente in-
nata, leviter convexa, collabascendo umbilicato-depressa, lævis,
atra, ostiolo pertuso; ascis ignotis. Spermatia cylindracea
subrecta, hyalina 8 ≈ 2.

Hab. in foliis dejectis *Vaccinii Vitis idææ*, amphigena,
in Suecia et Germania. — In inferiore pagina foliorum conferta
et sæpe confluentis, *Sph. punctiformi* duplo v. triplo major, orbi-
culata, raro irregularis, lævis nitida, intus albida. Ostiolum pun-
ctiforme, distinctum, primo obtutu quasi papillatum.

259. **Sphærella Emeri** Ces. ad int. in Fungi Eur. n. 1950. — Ma- 2077
culis nigris effusis; peritheciis sparsis epidermide tectis, subglobo-
sis, ostiolo nullo; nucleo hyalino ex ascis valde immaturis linea-
ribus curvulis 40 μ . longis, aparaphysatis constante.

Hab. in foliis delapsis *Coronillæ Emeri*, sæpius hypophyl-
la, prope Brescia Italiæ borealis.

260. **Sphærella nyssæcola** Cooke Hedw. 1868, p. 40. — Hypophylla; 2078

peritheciis numerosissimis, semiimmersis, brunneis, punctiformibus; ascis clavatis 20-25 μ . long.; sporidiis minutis (immaturis).

Hab. in foliis Nyssæ multifloræ, Florida, Carolina America boreali.

261. **Sphærella Rottleræ** (B. et Br.) Sacc. *Sph.* (Depazea) *Rottleræ* 2079

B. et Br. Fungi of Ceylon n. 1124. — Epiphylla, e macula umbrina pallida oriunda, orbicularis, nivea, limitata; peritheciis atris.

Hab. in foliis Rottleræ quadricocæ, Peradenya, Ceylon.

262. **Sphærella bonaërensis** Speg. Fungi Arg. Pug. III, n. 53. — 2080

Peritheciis hypophyllis, densissime gregariis in maculis latis cinereo-fuscescentibus, indeterminatis insidentibus, minutis, 90-110 μ . diam., lenticulari-globosis, erumpentibus, atris, ostiolo minuto, impresso pertusis; ascis et sporidiis ob immaturitatem ægre describendis. — St. conidiophorus sistit sec. Speg., *Cercosporam dubiam* Speg. Pug. I, n. 131.

Hab. in foliis dejectis putrescentibus Celtidis Talæ, en Baracas del Sur, Argent. Amer. austr.

263. **Sphærella Arbuti** Fr. sub *Sphæria* S. M. II, p. 523. — Sparsa, 2081

innata, astoma, opaca, atra, primo convexa, dein applanata rugulosa.

Hab. in foliis emortuis Arctostaphyli alpini in Suecia.

An *Discosia*?

264. **Sphærella acerina** Wallr. sub *Sphæria*, Fl. crypt. n. 3718. — 2082

Peritheciis exiguis confertim sparsis synphloeodeis orbiculatis nigris nitidulis, centro tenuiter papillato dein umbilicato-depressis marginemque obtusum prominulum veluti circumducentibus.

Hab. ad folia Aceris Pseudo-platani putrida in Germania, Belgio, Gallia, Italia. — Sec. Auerswald est forma *Sphærelle maculiformis*. Nucleus maturus non observatus.

265. **Sphærella Mori** Fuck. Symb. myc. p. 106. — Spermogonium 2083

Septoriam Mori Lév. sistit. Statum vero ascophorum nullibi observare nec descriptum invenire mihi contigit.

Hab. in foliis Mori albæ in Germania. — Exemplaria lipsiensia, ab Auerswald lecta, sistunt non nisi *Phyllostictam osteosporam* Sacc.

266. **Sphærella? Caprifoliorum** (Desm.) Sacc. Mich. II, 35, *Sphæria Ca-* 2084

prifoliorum Desm. I Not. Crypt. p. 188. — Amphigena, aggregata v. sparsa; peritheciis globosis, astomis, nigris, subnitidis, e macula determinata grisea emergentibus; nucleo ignoto.

Hab. ad folia Loniceræ Caprifolii et Xylostei in Gallia.

267. **Sphærella Atomus** (Desm.) Cooke Grevill. III, p. 169, *Sphæria* 2085

Atomus Desm. nec Fuck. (teste Auersw.) — Epiphylla; maculis rufis minutis sæpius orbicularibus; peritheciis minutissimis, copiosis, brunneis, innatis, prominulis, collabascendo umbilicatis; nucleo fructifero ignoto.

Hab. in foliis emortuis Fagi sylvaticæ in Gallia, Belgio et Britannia.

268. **Sphærella Aucupariæ** Lasch sub *Sphæria*, Plowr. Sphær. Brit. 2086 III, n. 65. — Dense gregaria, hypophylla; peritheciis globulosis, prominulis, nigris, nitidulis, pertusis, intus albo-cellulosis.

Hab. in foliis nondum emortuis Sorbi Aucupariæ in Germania et Britannia. — Mihi videtur status provectus *Septoriæ hyalosporæ* (Ces.), forte denique ascophorus evadens. Conferatur *Sphærella topographica* Sacc. et Speg.

269. **Sphærella? fagicola** (Fr.) Auersw. Myc. Eur. p. 7, fig. 21, *Sphæ-* 2087
ria (Depazea) *fagicola* Fr. S. M. II, 529. — Peritheciis hypophyllis, atris, nitidissimis, epidermidi adnatis, densissime congestis, maculas subrotundas angulosas $\frac{1}{2}$ - $1\frac{1}{2}$ mill. latas formantibus, omnino astomis; ascis ignotis.

Hab. in pag. inf. foliorum Fagi sylvaticæ languidorum in Germania et Suecia.

270. **Sphærella Mercurialis** Lasch. in Kl. Hq. myc. 1251, Fuck. Symb. 2088 myc. p. 103, F. rh. 844.

Hab. in foliis languidis Mercurialis perennis in Germania et Austria. — Ex speciminibus Thuem. Fungi Austr. n. 1259 nullas notas eruere potui.

271. **Sphærella? Armoraciæ** (Fuck.) Oudem. F. Neesl. n. 170, *Ascochyta* 2089
Armoraciæ Fuck. Symb. myc. p. 388. — Peritheciis conicis, atris, sparsis in macula expallescenti; ascis sporidiisque . . . immaturis.

Hab. in foliis nondum emortuis Armoraciæ rusticanae in Germania et Hollandia.

272. **Sphærella ferruginea** Fuck. Symb. myc. App. II, p. 20. — Pe- 2090
ritheciis, gregariis, minutis, erumpentibus, ovato-globosis, atris in foliis nascentibus; ascis fasciculatis, oblongis, curvatis, 8sporis; sporidiis perfecte maturis nondum visis. — Fungus conidiophorus *Cercosporam ferrugineam* Fuck sistit. Fungus stylosporiferus *Phomam* refert. Peritheciis sparsis, subsuperficialibus in cæspitibus fungi conidiophori foliorum marcescentium ortis, perithecio ascophoro triplo majoribus, ovato-globosis, atris vertice pilis paucis concoloribus, perithecii longitudine, in acumen connatis instructis; stylosporibus cylindræis, subrectis, continuis, 6 = 2.

Hab. in foliis *Artemisiæ vulgaris* in Rhénogovia.

273. **Sphærella subalpina** Sacc. Mich. II, p. 247. — Peritheciis in maculis foliorum lutescentibus, dense gregariis, globulosis, pertusis, innato-prominulis, 80-90 μ . diam.; nucleo albo, cellulis (ascis immaturis?) subellipsoideis, 8-9 \approx 6-7, guttulatis foeto.

Hab. in foliis nondum emortuis *Senecionis cordati*. Cadore, Italia bor. (SPEGAZZINI). — Etsi specimina immatura, species distincta videtur.

274. **Sphærella? Aronici** Fuck. Symb. myc. App. III, p. 18. — Sec. Fuck. status conidicus sistit *Fusicladium Aronici* Sacc.; status spermogonicus refert *Phyllostictam Aronici* nuncupandam; status vero ascophorus nondum observatus; ergo species per dubia.

Hab. in foliis nondum emortuis *Aronici scorpioidis* in Helvetia et Italia.

275. **Sphærella Petasitidis** (Rabh.) Fuck. Symb. myc. p. 99, *Sph. Petasitidis* Rabh. — Spermogonium: spermatis cylindræis, subrectis, guttulatis, hyalinis, 10 \approx 2.

Hab. in pag. infer. foliorum *Petasitidis officinalis* in Germania et Belgio. — In exempl. n. 733 Herb. myc. ed. II observantur perithecia epiphylla, hinc inde dense gregaria, globulosa, innato-prominula, nigra; nucleus albo-cellulosus, tandem probabiliter asciger. In Lusatia (KRETSCHMAR).

276. **Sphærella Cerastii** Fuck. Symb. myc. p. 101, *Sphæria Stellarinearum* v. *Cerastii* Rabh. F. eur. 448. — Status conidicus *Isariopsisdem pusillam* Fres. sistit. Status ascophorus hucusque imperfectus est observatus.

Hab. in foliis emortuis *Cerastii trivialis*, *C. arvensis* et *C. alpini* in Germania et Lapponia.

277. **Sphærella perforans** (Desm.) Sacc. *Sphæria perforans* Desm. X, n. 1843, p. 23. — Epiphylla, sparsa; peritheciis immersis, minutis, nigris, ellipsoideis; ostiolis perforantibus, superficialibus, convexis, dein collabascendo subconcavis, poro dilato apertis; sporidiis ellipticis, hyalinis, bilocularibus.

Hab. in foliis siccis *Calamagrostidis arenariæ* in Gallia et Hollandia. — Ascii indescripti, an ergo vera *Sphærella?* Sec. Oud. ann. 1876-77, p. 20, potius *Dilophosporam* sistit, sec. Berk. est *Sphæria subuletorum*. An plures res confusæ?

278. **Sphærella? cinereo-nebulosa** (Desm.) Sacc. *Sphæria? cinereo-nebulosa* Desm. 24, n. 1857, p. 20. — Graminicola, nebulosa, linearis, tecta, suberumpente; peritheciis microscopicis, 50-75 μ . d.,

numerossimis biserialibus confertissimis, subconnatis, globosis, nigris, intus albis, stromatis brunneo subimmersis.

Hab. in foliis exsiccatis Phalaridis arundinaceæ in Gallia. — Nucleus ignotus.

279. **Sphærella Polypodii** (Rabh.) Fuck. Symb. p. 102.

Hab. in frondibus Polypodii vulgaris (nec non, sec. Fuck., 2097 Aspidii Filicis maris, Asplenii Trichomanis, Pteridis aquilinæ) in Germania, Lusitania et Sibiria, — Nec diagnosim nec exemplaria perfecta et genuina invenire contigit. Sec. Auerswald Myc. Eur. Pyr. p. 20, hæc species ad *Leptosphæriam* spectaret. Equidem plures auctores pro hac specie *Sphærellam Tyrolensem* sumunt.

APIOSPORA Sacc. Consp. Gen. Pyr. p. 9. — (Etym. ab *apios*, pyrus, ob formam sporid.). Perithecia tecta, membranacea, globulosa, pseudostromate fusco connexa. Asci octospori paraphysati, v. saltem pseudoparaphysati. Sporidia clavato-subpyriformia, deorsum attenuata et sæpe curvula, prope imam basim tenuiter 1-septata, nubilosa, hyalina. — Species ut plurimum graminicolæ.

1. **Apiospora Montagnei** Sacc. Fungi Ven. Ser. II, p. 306, *Sph. apio-* 2098
spora Dur. et Mont. Fl. Alg., I, p. 492, t. 25, f. 1, Mont. Syll. Crypt. n. 809, *Hypopteris apiospora* (Mont.) Berk. Dec. Fung. n. 485*. — Erumpens, linearis, atra; peritheciis pro ratione amplis globosis uniserialibus albo-farctis, stromate fusco connexis, ostiolis hemisphæricis umbilicatis; ascis clavatis, 70–90 \approx 20; sporidiis biserialibus ovato-oblongis appendiculato-pyriformibus, 25 \approx 10, hyalinis.

Hab. in culmis Arundinis mauritanicæ, circa Perpignan Galliæ et in Algeria, Arundinariæ in Carolina et Alabama Amer. bor., Bambusæ ad Nangki in India orient.

2. **Apiospora Striola** (Pass.) Sacc. Fungi Ven. Ser. II, p. 305, Fungi 2099
ital. t. 180, *Homostegia Striola* Pass. in Nuov. Giorn. Bot. ital. 1871, p. 325. — Peritheciis parallele seriatis, immersis culmique superficiem nonnihil elevantibus erumpentibusque, minutis, 150 μ . diam., globosis, atris, stromate nigricante connexis, ostiolo brevissimo, cylindræo, latiuscule aperto, contextu dense parenchymatico, fuligineo; ascis cylindraceo-clavatis, 70–80 \approx 12, rarius 90 μ . longis, basi attenuatis, subsessilibus, pseudo-paraphysibus crassiusculis guttulatis obvallatis, 8sporibus; sporidiis oblique monostichis v. subdistichis, oblongo-clavatis, deorsum sæpe incurvo-attenuatis, 28–

30 \approx 5 $\frac{1}{2}$ –6 $\frac{1}{2}$, basi ima excentrice spurie 1-septatis, seu inæqualiter 2-nucleatis, hyalinis.

Hab. in culmis Andropogonis, Phragmitis, Bambusæ prope Parma et Treviso Ital. bor. et Lyon Galliæ. — Præcedenti maxime affinis.

3. **Apiospora parallela** (Karst.) Sacc. Fungi Ven. Ser. II, p. 306, *Sphærella parallela* Karst. Myc. Fenn. II, p. 185. — Peritheciis uniserialibus, sphæroideis, stromate tenui, atro tectis, sphæroideis, celluliformibus, tenuissimis, pallidis vel demum subfuscescentibus, in strias parallelas, 1–2 mill. long., lineares, per rimas epidermidis erumpentes, subconfluentibus minutis; ostioliis papillatis, prominulis; ascis sessilibus, fusoideo-bacillaribus, 90 \approx 10–12 octosporis; sporidiis aciculari-elongatis, ut plurimum curvulis, simplicibus vel sæpius basin versus tenuiter uniseptatis, hyalinis, 24–34 \approx 4–5.

Hab. in culmis Calamagrostidis aridis prope Mustiala Fenniæ.

4. **Apiospora? Lloydii** (Crouan.) Sacc., *Sphæria Lloydii* Crouan Finist. pag. 28. — Peritheciis sphæroideis, nigris, 4–5-seriatis, 0,5 mill. diam., ostiolo punctiformi; ascis subclavatis, octosporis; sporidiis distichis oblongis, granulosis, limbatis, hinc loculo obtuso auctis (h. e. prope extremitatem 1-septatis).

Hab. in culmis Phragmitis, Dactylidis, Holci, Finistère Galliæ.

5. **Apiospora inserta** (Berk. et Curt.) Sacc. *Dothidea inserta* B. et C. Fungi exot. Schwein. p. 288, t. XXV, fig. 11. — Lineari-oblonga erumpens, margine nigro, disco albo, ostioliis minutis punctato; ascis brevibus; sporidiis subclavatis basi uniseptatis, hyalinis, 20 μ . longis.

Hab. in culmis putrescentibus Arundinis cujusdam, Surinam. — Series perithecorum 2–3 mill. longæ.

6. **Apiospora Punctum** Sacc. et Speg. Mycoth. Ven. n. 1268, Mich. I, 329, Fungi ital. t. 179. — Peritheciis gregariis, distinctis, foliorum parenchymate immersis, epidermide circum circa brevissime nigrificata velatis, breve obtuse papillulatis; contextu perithecii parenchymatico fuligineo; ascis cylindraceo-clavatis, 80 \approx 18, breve oblique stipitatis, apice rotundatis, lumine apice paulum coarctato, paraphysibus filiformibus guttulatis, obvallatis, octosporis; sporidiis oblique monostichis vel distichis, oblongo-clavatis, deorsum attenuato-curvulis, prope basim (spurie?) 1-septatis, inæqualiter 2-nucleatis, hyalinis.

Hab. in foliis putrescentibus Moliniæ et Dactylidis, Conegliano, Ital. bor., Bambusæ, Lyon Galliæ. — Ab *Ap. Striola* (Pass.) peritheciis subsolitariis, nec stromate lineari-connexis, sporidiis crassioribus etc. differt.

7. **Apiospora comedens** (Schw.) Sacc. *Sphæria comedens* Schw., B. 2104 et C. Exot. Fung. Schw. p. 290, t. XXV, fig. 12. — Hypophylla; peritheciis subcongestis prominulis epidermide tectis, subastomis; ascis brevibus, clavatis, obtusis; sporidiis elongatis subclavatis, denique prope basim (spurie?) 1-septatis, hyalinis.

Hab. in foliis emortuis, Surinam. — Format minutos greges peritheciis prominulis, densis sed non confluentibus.

STIGMATEA Fr. Summ. Veg. Scand. p. 421 p. p. (Etym. a *stigma*, punctum). — Perithecia innato-prominula, glabra, tenuissima, ostiolo minuto, nucleo firmulo albo; contextu perithecii stratis cellulosis sæpius pluribus formato. Ascii oblongati, subsessiles octospori, paraphysati v. pseudoparaphysati. Sporidia ovoideo-ellipsoidea, uniseptata (in sect. *Stigmatula* continua) hyalino-flavescentia. — Fungilli exigui, ut plurimum in foliis vivis vigentes.

I. *Eustigmataea*: sporidiis uniseptatis.

1. **Stigmataea Robertiani** Fr. Summ. Veg. Scand. p. 421, *Dothidea* 2105 *Robertiani* Fr. S. M. II, p. 564, *Cryptosphæria nitida* Grev. Edin. p. 363, *Hormotheca Geranii* Bon. Abhand. p. 149, t. I, f. 22. — Peritheciis subsparis, epiphyllis, innato-prominulis, hemisphæricis vel subsphæroideis, lævibus, nitidis, nigris, nucleo albo, circiter 140 μ . lat. contextu minutissime celluloso; ascis oblique oblongatis, 36-45 \approx 10-12, spurie paraphysatis, octosporis; sporidiis subdistichis, ovoideo-ellipsoideis, inæqualiter uniseptatis, hyalino-flavescentibus, 12-14 \approx 4,5-5, loculo superiore crassiore.

Hab. in foliis adhuc vivis Geranii Robertiani in Suecia, 2106 Britannia, Fennia, Belgio, Gallia, Italia, Austria et Amer. boreali.

2. **Stigmataea Geranii** Fr. S. V. Scand. pag. 421, p. p., Fuck. Symb. myc. p. 95, Oud. Mat. Myc. Neerl. II, p. 65, t. XVI, fig. 8, *Dothidea Geranii* Fr. S. M. II, p. 558, *Perisporium Geranii* Bon. Handb. ? p. p. — Epiphylla; peritheciis gregariis, in macula purpurascenti, ovatis, minutis, atris, glabris; ascis elongatis, 8sporis, 40 \approx 8; sporidiis distichis, subclavatis, didymis, hyalinis, 8 \approx 4.

Hab. in foliis vivis Geranii pusilli, G. dissecti, G.

mollis etc. in Suecia, Belgio, Hollandia, Britannia, Germania. — *Fusidium Geranii* West. sistit, sec. auctores, statum conidicum.

3. **Stigmatea confertissima** Fuck. Symb. myc. p. 95, *Dothidea* (Sphæria) *Geranii* (Kunze) Fr. Syst. myc. II, p. 558, p. p. — *Stigmatea Geranii* Fr. peraffinis, differt tamen peritheciis majoribus in greges majores densius congestis; ascis sporidiisque iisdem. 2107

Hab. in utraque (sæpius inferiore) pagina foliorum vivorum *Geranii sylvatici* in Helvetia et Fennia.

4. **Stigmatea? maculæformis** Fr. S. V. Scand. p. 421, Fuck. Symb. myc. p. 95, *Sphæria maculæformis* Pers. (p. p.). — Hypophylla; peritheciis sphæricis, punctiformibus, minutis, subastomis, intus albis, in greges maculiformes atros inter nervos congestis; ascis oblongis, sessilibus, 8-sporis, 40 \approx 10; sporidiis faretis, oblongo-subclavatis, uniseptatis, hyalinis, 14 \approx 4. 2108

Hab. in foliis *Alni incanæ* exsiccatis in Germania, Belgio et Suecia. — *Stigmatea maculiformis* (Desm.) Niessl in F. E. n. 2652 aliena est. Cfr. *Læstadia epilobiana*.

5. **Stigmatea Ranunculi** Fr. Summ. Veg. Scand. p. 421, *Sphærella* *Ranunculi* Karst. Fungi Spetsb. n. 50, nec *Dothidea Ranunculi* (Wallr.) Fr. Syst. myc. II, p. 562. — Peritheciis epiphyllis, maculæ expallenti insidentibus, confertis, rarius subsparis, innatoprominulis, sphæroideis, vertice interdum conoideo-attenuatis, ore rotundato hiantibus, glabris, nigris 150-200 μ . lat.; ascis e basi ampliata attenuatis, inæquilateralibus, 50-60 \approx 13-16, octosporis; sporidiis conglobatis, aciculari- vel fusoides-elongatis, uniseptatis, plerumque rectis, hyalinis vel luteolo-hyalinis, 23-30 \approx 4-5; paraphysibus nullis. 2109

Hab. in foliis *Ranunculi repentis nivalis* et *R. sulphurei* in Germania, Britannia, Suecia et Lapponia.

6. **Stigmatea Sequojæ** (Cooke) Sacc. *Dothidea Sequojæ* Cooke et Harkn. Grevill. IX, 1881, p. 87. — Follicola sparsa, convexa, atra, nitida, minuta, unicellulata; ascis late clavatis, sessilibus; sporidiis biseriatis, lanceolatis, obtusis, medio constrictis, uniseptatis, binucleatis, hyalinis 23 \approx 7,5. 2110

Hab. in foliis *Sequojæ* v. *Cupressi*, California, Amer. bor. 2111

7. **Stigmatea Andromedæ** Rehm Ascom. n. 542, Diagn. n. 542. — Peritheciis sparsis, globosis, viridifuscis, minutissimis, basi hyphis brevibus, fuscis, repentibus et rectangulariter ramosis cinctis, ceterum glabris, sessilibus; ascis pyriformibus, apice valde incrassatis, 8-sporis, 30 \approx 14; sporidiis distichis, cuneiformibus, bicellulari-

bus, plerumque singulis cellulis magninucleatis, hyalinis, $14 \approx 4$; paraphysibus ramosis, intricatis.

Hab. in pagina inferiori foliorum vivorum *Andromedæ* polifoliæ, Haspelmoor prope Augustam Vindelicorum (BRITZELMAYR).

8. **Stigmatæa jenensis** Kunze F. sel. exs. n. 239 (sine diagnosi). — 2112

Peritheciis amphigenis in maculas nigras minutas, ramulis limitatas, densissime stipatis, perexiguis, globosis, 50–60 μ . diam., vix pertusis, innato-prominulis; ascis dense fasciculatis obclavatis, sessilibus, 25–30 \approx 10–11, octosporis; sporidiis, 2–3-stichis, in asco diu inclusis, oblongis, utrinque obtusiusculis, 1-septatis, vix constrictis, 10 \approx 3–4, bi-quadrinucleatis, hyalinis.

Hab. in foliis putrescentibus *Laserpitii* latifolii pr. Jena Germaniæ. — Æquo fere jure ad *Sphærellas* duci potest.

9. **Stigmatæa sclerotidea** Cooke. North Am. Fungi Grev. V. p. 153. 2113

— *Gregaria*, atra; peritheciis superficialibus, depressis; ascis clavatis mox diffluentibus; sporidiis biseriatis, ellipticis, hyalinis, uniseptatis, 22 \approx 9.

Hab. in foliis *Arundinariæ*, Carolina inf. Amer. bor. — Habitus *Parodiellæ* sed sporidia hyalina descripta.

10. **Stigmatæa seminata** (B. et Rav.) Sacc. *Dothidea seminata* B. et 2114

Rav. — North Amer. Fungi n. 883. — Sparsa, granulata, centro demum punctato pertusa; ascis clavatis; sporidiis biseriatis, cymbæformibus, uniseptatis, 25 μ . long.

Hab. in foliis *Desmodii* in America boreali. — Sporidia angustiora quam in *Parod. perisporioide*, cujus habet faciem.

II. *Stigmatula*: sporidiis continuis.

11. **Stigmatæa Sutherlandiæ** Kalch. et Cooke Grev. IX, 1880, p. 32. 2115

— *Phyllogena*, punetiformis, atra, elevata, convexa, nitida sparsa; ascis clavatis; sporidiis ellipticis, continuis, hyalinis.

Hab. in foliis putrescentibus *Sutherlandiæ* in Africa australi.

12. **Stigmatæa Rhyncosiæ** Kalch. et Cooke Grev. IX, 1880, p. 32. — 2116

Epiphylla, atra, nitida, convexa, gregaria, in maculas orbiculares disposita, numerosa, minutissima; ascis clavatis; sporidiis ellipticis, hyalinis, continuis, binucleatis, 12 \approx 6.

Hab. in foliis viventibus *Rhyncosiæ* in Africa australi. — Habitus fere *Parodiellæ circinatae* (K. et C.) sed perithecia copiosiora et tertia parte minora sporidiaque aliena.

13. **Stigmatea gregaria** Cooke Fungi of Texas 144. — Epiphylla; peritheciis gregariis erumpentibus atris, globosis, subnitidis; ascis cylindraceutis; sporidiis subglobosis, hyalinis, 10–12 \approx 9. 2117
Hab. in Texas, Meskat Bay, in foliis ignotis (RAVENEL).
14. **Stigmatea submaculans** Mont. Syll. Crypt. n. 988 et Cuba, p. 329. 2118
 — Epiphylla; peritheciis innatis ovoideis vix prominulis punctiformibus atris, poro albo pertusis, in maculam folio dilutiorem brunneo-rufam nervis circumscriptam dense aggregatis; ascis clavatis convergentibus sporidia subsena fusiformia foventibus.
Hab. in folio mihi ignoto in insula Cuba lecto (AUBER).

III. *Species dubiæ.*

15. **Stigmatea impressa** Fr. S. M. II, 564, et Elen. II, 126 (sub *Dothidea*). 2119
 — Epiphylla, sparsa, umbilicata, nigra, nitida, collabascendo concava, levis.
Hab. ad folia viva Rubi Chamæmori et Rosarum in Suecia. — A *Spharella punctiformi* certa diversa (Fr. l. c.).
16. **Stigmatea conferta** Fr. Summa Veg. Scand. p. 421, *Sphaeria conferta*, Fr. S. M. II. p. 435. — Innata, hypophylla, difformis, nigra; peritheciis prominulis globosis faretis in centro confluentibus. 2120
Hab. in foliis languescentibus Vaccini uliginosi in Suecia et Britannia. — Macula exarida v. propria nulla. Perithecia prominula, minuta, aggregata, opaca, astoma, albo-fareta, centralia confluent, marginalia sublibera. Habitus *Sph. maculæformis*.
17. **Stigmatea Coriariæ** Mont. Syll. Crypt. n. 987 et Notice etc., in 2121
 Ann., 2, I, p. 346, sub *Dothidea*. — Hypophylla, nigra; peritheciis prominulis nitidis intus albis, solitariis vel sæpius in maculas irregulares congregatis.
Hab. in foliis dejectis Coriariæ myrtifoliæ circa Aginum Galliæ (CHAUBARD).
18. **Stigmatea Lentisci** Mont. Syll. Crypt. n. 989 et Fl. Alg., I, p. 2122
 548. — Hypophylla; peritheciis minutis prominulis astomis atris albo-faretis confertis aut in cæspitulos orbiculares epidermide tectos subconnatis. Nucleus junior.
Hab. in foliis Pistaciæ Lentisci dejectis, Alger (DURIEU).
19. **Stigmatea Polygonorum** Fr. Summa Veg. Scand. p. 421, *Dothidea Polygoni*. 2123
 Fr. S. M. II, 564. — Amphigena, subgregaria, minima, atra, subnitida, collabascens, intus concolor.
Hab. ad folia Polygoni avicularis etc. in Suecia, Britannia, Belgio. — Macule subexpallenti, non exaridæ, insidet, ad fo-

liorum nervos in crustam passim confluentis. Nucleus ignotus. Sec. Kickx Fl. Crypt. Fland. 1, p. 365, ejus spermogonium sistit *Melasmiam Aviculariæ* West.

20. **Stigmatea Ostruthii** (Fr.) Oudem. Ascosp. p. 52 etc. *Sph. Ostruthii* Fr. S. M. II, p. 526 *Ascospora Ostruthii* Fr. S. Veg. Scand. p. 426. — Hypophylla, aggregata, peritheciis globosis minimis astomis atris, e crustula determinata grisea emergentibus. 2124

Hab. ad folia Imperatoriæ Ostruthii (nec non Angelicæ, Heraclei) in Suecia, Britannia, Belgio, Gallia, Germania, Italia. — Maculæ minutæ, angulatæ, 1-2 lin. latæ, passim confluentes, primo intuitu nigricantes, ortæ e peritheciis minimis confertis emergentibus, primo mollibus sclerotioideis. Asci, sec Kickx Fl. I, 357, breves subclavati, sporidia submonosticha (immatura) foventes. An veri asci?

21. **Stigmatea Ægopodii** (Fr.) Oudem. Ascosp. p. 52 etc. *Sph. Ægopodii*, Prs. Syn. 89. Fr. S. M. II, p. 529 *Ascospora Ægopodii* Fr. S. Veg. Sc. p. 425. — Sparsa, peritheciis innatis prominulis astomis nigris, maculæ albæ crustæformi insidentibus; nucleo imperfecto hucusque observato. 2125

Hab. ad folia viva *Ægopodii Podagrariæ* in fere tota Europa. — Macula non exarida, determinata; perithecia hypophylla. A *Phyll. Ægopodii* Fuck seu *Dothidea Podagrariæ* (Roth.) Fr. rite distinguenda?

- DIDYMELLA** Sacc. Mich. I, p. 377. (Ety. a *didymos*, quia sporidia bilocularia). — Perithecia tecta, membranacea, globoso-depressa, breve papillata, sæpius caulogena. Asci 4-8-spori, paraphysati. Sporidia ovoidea v. ellipsoidea v. suboblunga, uniseptata, hyalina. — A *Sphærella* differt paraphysum præsentia, peritheciisque plerumque paulo majoribus; a *Didymosphæria* sporidiis jugiter hyalinis.

A) In Dicotyledoneis.

1. Arboricolæ et fruticicolæ.

1. **Didymella cladophila** (Niessl) Sacc. *Didymosphæria cladophila* Niessl Neue Kernp. p. 199. — Peritheciis laxè gregariis, peridermio pallescentè tectis, media magnitudine, hemisphæricis, tandem vertice depressis, papillatis, atris, coriaceis; ascis clavato-cylindraceis stipite brevi, 8sporis, 83-102 \approx 5-6; sporidiis monostichis 2126

vel hinc inde distichis, lanceolato-ovoideis, plerumque rectis, medio septatis valde constrictisque, hyalinis, 10-13 \approx 4-5; paraphysibus angustis, simplicibus vel laxè ramosis.

Hab. in ramis siccis Genistæ germanicæ pr. Brünn Austriae et Cytisi nigricantis in sylva Montello Italiae bor. — Sporidiorum locus superior inferiore paulo crassior.

2. **Didymella Genistæ** (Fuck.) Rehm Ascom. Ill. n. 97. *Sph. Genistæ* 2127
 Fuck. Symb. myc. p. 114. — Peritheciis sparsis, tectis, globosis, minutis, atris, ostioliis brevibus, perforatis, demum prominulis; ascis clavatis, stipitatis, 8sporis, 150 \approx 12, paraphysibus filiformibus obvallatis, octosporis; sporidiis ovato-clavatis, medio parum constrictis, didymis, hyalinis, 20-22 \approx 6-9.

Hab. in ramis exsiccatis Genistæ germanicæ, raro prope Æstrich Rhénogoviæ et in Austria. — Non confundenda cum *Didymosphæria Genistæ* Fuck, nec cum *Didymella cladophila* (Niessl) quæ ascis cylindricis pollet.

3. **Didymella glomerulata** (Fuck.) Sacc. *Sph. glomerulata* Fuck. Symb. 2128
 myc. p. 113. — Peritheciis seriato-glomeratis, sub epidermide nidulantibus, demum erumpentibus, minutis, globosis, aterrimis, ostiolo brevi, cylindraceo, prominulo; ascis fasciculatis, sessilibus, oblongis, 8sporis, 64 \approx 16; sporidiis ovato-oblongis, inæqualiter didymis, hyalinis, 20 \approx 8; spermatiis cylindraceis rectis.

Hab. sub epidermide sarmentorum Rubi fruticosi, quæ latissime obducit, prope Æstrich Rhénogoviæ.

4. **Didymella Mesnieriana** (Rehm et Thüm.) *Didymosphæria Mesnieriana* 2129
 Rehm et Thüm. Contr. Myc. Lusit. n. 303. — Peritheciis dimidiatis, sparsis, emersis, sessilibus, atris, apice haud papillatis, triangulariter laciniatis, parvulis; ascis longe cylindraceis, subarcuatis, brevistipitatis, utrinque angustatis, apice acutatis, hyalinis, octosporis, 90 \approx 7-8; sporidiis fusiformibus, subcurvatis, biseriatis, didymis, multiguttulatis, medio non constrictis, hyalinis, 18 \approx 5.

Hab. in Rubi fruticosi sarmentis emortuis putridis, Cœmbræ Lusitaniæ (MESNIER).

5. **Didymella applanata** (Niessl) Sacc. *Didymosphæria applanata* 2130
 Niessl Neue Kernp. p. 129. — Peritheciis disseminatis vel sparse gregariis, peridermio immutato vel expallente tectis, minutis, rotundatis, fere clypeiformi-applanatis, vertice umbilicatis, papillatis, fusco-atris, coriaceis; ascis cylindraceis vel cylindraceo-clavatis, stipite brevi obliquo, 60-70 \approx 10-12; sporidiis octonis, distichis raro monostichis, obovato-oblongis, utrinque late rotundatis, medio sep-

tatis constrictisque, loculo superiori paulo inflato, hyalinis, 16 ≈ 5-6; paraphysibus gracilibus ascos superantibus, simplicibus.

Hab. in sarmentis nondum emortuis Rubi idæi, Shrewsbury Britanniae (PLOWRIGHT).

6. **Didymella Sphærellula** (Peck) Sacc. *Sphæria* (obtectæ) *Sphærellula* Peck 30 Rep. on the St. Mus. Mus. New York. — Peritheciis minutis, sparsis, v. seriatis, epidermide denique perforata tectis; ascis crassis, obtusis, sursum sensim attenuatis, basi abrupte contractis; sporidiis stipitatis, fusoideis, uniseptatis, 12-15 μ . longis, hyalinis.

Hab. in ramis emortuis dealbatis Aceris Pensylvanici, in montibus Catskill Americæ borealis. — Asci *Sphærellæ* fere ad instar.

7. **Didymella vexata** Sacc. Mich. II. 58. — *Didymosphæria oblitescens* Fuck. Symb. Mycol. App. I. 301, nec B. et Br. — Peritheciis lenticularibus, subvelatis 250 μ . diam., contextu parenchymatico melleo-fusco, ostiolo vix prominulo pertuso; ascis clavatis, crassis, deorsum attenuatis, 95-110 ≈ 30-36, lumine apice coarctato, paraphysibus guttulatis obvallatis, 8-sporis; sporidiis distichis, obovatis, 25-27 ≈ 14-16, 1-septatis, non constrictis, hyalinis (denique luteolis). — Sec. Fuck. pycnidium sistit *Diplodiam mamillanam* Fr.

Hab. in ramulis corticatis Corni sanguineæ in Germania (FUCKEL) et Gallia (LETENDRE).

8. **Didymella Corni** (Sow.) Sacc. *Sphæria Corni* Sow. Fung. t. 370, fig. 5, *Sph. Corni-Sueciæ* Fr. Exs. n. 409 (teste Cooke Handb. n. 2733). — Peritheciis sparsis, atro-nitidis, depressis in matrice dealbata, ostiolo vix manifesto; ascis oblongis, curvatis, octosporis; sporidiis oblongo-clavatis, 1-septatis, hyalinis (teste Fuck. Symb. p. 114).

Hab. in ramis exsiccatis Corni Sueciæ et C. sanguineæ in Suecia, Britannia et Germania. — *Sph. Corni* sec. West. est phæospora, prob. *Anthostomella*, ergo aliena.

9. **Didymella Barbieri** (West.) Sacc. *Amphisphæria ericeti* Sacc. et Speg. Mich. I, p. 374, F. it. t. 321, *Sphæria Barbieri* West., Lamb. Fl. myc. Belg. II, p. 308. — Peritheciis sparsis v. subgregariis, initio epidermide tumidula velatis, basi ligno inculptis, conoideis, $\frac{1}{3}$ mill. diam., quandoque subcompressis, nigris, nitidissimis, ostiolo obtuse rotundato vix pervio; contextu coriaceo-carbonaceo, denso; ascis cylindræis, 85-100 ≈ 15, apice, lumine angustato, rotun-

dato, breve crassiuscule stipitatis, paraphysibus filiformibus, sæpe ramulosis obvallatis, octosporis; sporidiis oblique monostichis v. distichis. biconicis, medio constrictis, 18-20 \approx 7-8, 2- v. indistincte 4-nucleatis, strato mucoso obductis, hyalinis.

Hab. in ramis emortuis Callunæ vulgaris, Beverloo Belgii, Brionne Galliæ, Conegliano Ital. bor. (SPEGAZZINI). — Var. *minor*; ascis cylindræis, 75 \approx 10-12, paraphysatis; sporidiis oblique 1-stichis, clavulatis, bilocularibus, non constrictis, mucos diu obvolutis, 12-14 \approx 4, cum mucos 15-16 \approx 8, hyalinis. In ramis induratis denique decorticatis Callunæ vulgaris, Brionne Galliæ.

10. **Didymella analepta** (Ach.) Sacc. *Arthopyrenia analepta* (Ach.) 2135
Körb. Parerg. lich. 389, Mass. Lich. ital. n. 185-186, Mich. II. p. 248. — Peritheciis gregariis, cuticulâ nigrificatâ velatis, globoso-depressis. ostiolo dein umbilicato pertusis; ascis fusoides, 65-70 \approx 17-20, pseudoparaphysatis, octosporis; sporidiis oblongo-didymis, 20-25 \approx 8, 1-septatis, leniter constrictis, 4-guttulatis, hyalinis, initio strato mucoso obvolutis.

Hab. in ramulis corticatis Punicæ. Pyri, Cratægi, Cydoniæ, Sorbi, Fagi, in Italia. Germania, Gallia, etc. — Thallus nullus, ergo species potius fungosa quam lichenosa.

11. **Didymella Picconii** (De Not.) Sacc. *Sphaerella Picconii* De Not. 2136
Recl. Pyr. in Comm. II, 487. — Epidermide tecta, minutissima, sparsa, punctiformis, atra; peritheciis rotundatis, lævibus, cellulis, ægre percipiendis contextis, ostiolo exiguo hiantibus; ascis tenuibus, clavulatis, octosporis; paraphysibus filiformibus; sporidiis fusoides, junioribus nucleolis quator fœtis, demum bilocularibus, hyalino-luteolis, loculo superiore ad dissepimentum nonnihil turgescente, fere nodulosis.

Hab. in ramulis siccis Abietis, Albisola marina Italiæ borealis (PICCONE). — An potius *Didymosphæria*?

12. **Didymella Lapponum** (De Not.) Sacc. *Sphaerella Lapponum* De 2137
Not. et Car. Recl. Pir. in Comm. II, p. 486. — Corticola, epidermide tecta, sparsa, punctiformis, atra; peritheciis e lenticulari rotundatis, hemisphærio supero incrassatis, cæterum tenuibus, osculo minuto hiantibus, in sicco collabescentibus; ascis crassiusculis, clavato-teretiusculis, octosporis; paraphysibus coalescentibus; sporidiis oblongis, bilocularibus, hyalino-luteolis, episporio crassiusculo præditis.

Hab. in Salice Lapponum Valdobbia, Ital. bor. (CARESTIA). — An *Didymosphæria*?

13. **Didymella Purpurearum** Auersw. Myc. Eur. t. 12, fig. 168 sub 2138

Laptosphæria. — Peritheciis.....; ascis clavatis, utrinque obtusis, sessilibus, paraphysibus filiformibus obvallatis, octosporis; sporidiis distichis, oblongis, constricto-1-septatis, hyalinis, loculo infero paulo angustiore.

Hab. in foliis Salicis purpureæ in Germania. — An *Sphærella* indiligerenter observata?

14. **Didymella nummularia** (Bagn.) Sacc., *Sphæria nummularia* Bagn. 2139

Mic. Rom. Cent. II, p. 17, t. IV, fig. 3. — Peritheciis exiguis, subepidermicis, erumpentibus, sparsis, fuscis, globoso-depressis, fere nummiformibus, subtus concavniculis; ostiolo amplo impresso; nucleo albido crasso; ascis ovoideo-clavatis, oblongatisque 170 ≈ 28, copiose paraphysatis; sporidiis, oblongis, uniseptatis, vix constrictis, utrinque obtusiusculis, hyalinis, 28 ≈ 9-10.

Hab. in ramulis Staphyleæ pinnatæ in hortis prope Romam Italiæ.

15. **Didymella recedens** (Cooke et Harkn.) Sacc. *Sphæria recedens* 2140

C. et H. Grevillea 1881, p. 130; Niessl in M. Univ. n. 1748, sec. Cooke (nec in diagnosi allata). — Peritheciis gregariis, corticulis, peridermio pustulato tectis, minutis, papillatis; ascis elongatis, 100 μ . longis; sporidiis anguste fusoideis, uniseptatis, hyalinis, 18-20 ≈ 3, loculis facile secedentibus.

Hab. in cortice Eucalypti in Lusitania. — Species Niessleana est *Calosphæria*. Cfr. Syll. nostra n. 408.

16. **Didymella segna** (C. et Ell.) Sacc. *Sphæria* (Obtectæ) *segna* C. 2141

et E. in Grevill. VI, p. 95, t. 100, fig. 33. — Tecta; peritheciis gregariis, corticem elevatum, perforantibus; ascis cylindrico-clavatis; sporidiis biseriatis, anguste ellipticis, uniseptatis constrictis, hyalinis, 15 ≈ 7.

Hab. in ramis Nyssæ, New Jersey, Amer. bor.

17. **Didymella castanella** (C. et Ell.) Sacc. *Sphærella* (Obtectæ) *ca-* 2142

stanella C. et Ell. in Grev. VII, p. 8. — Peritheciis epidermide lacerata tectis, hinc inde gregariis; ascis clavatis; sporidiis biseriatis, 16 ≈ 3, cylindricis, uniseptatis, hyalinis.

Hab. in ramis Castanææ in New Jersey Amer. bor.

18. **Didymella Chionanthi** (B. et Br.) Sacc. *Sphæria* (Obturatoræ) *Chio-* 2143

nanthi B. et Br. Fungi of Ceyl. n. 1114. — Peritheciis minutis epidermide hyalina tectis; sporidiis uniseptatis, 20 ≈ 7,5, spermatis aculearibus, 14-20 μ . long.

Hab. in ramis *Chionanthi zeylanicæ*, Damboul, Ceylon. Greges minutos flavidos format.

19. **Didymella Celtidis** (B. et C.) Sacc. *Sphæria Celtidis* B. et C. 2144
North Amer. Fungi n. 930. — Gregaria, minuta, ostiolo prominulo; ascis brevibus tetrasporis; sporidiis oblongis, uniseptatis.

Hab. in ramis *Celtidis* in Carolina infer. Amer. bor. — Perithecia dense stipata sed distincta, peridermio leniter pustulato tecta.

20. **Didymella cadubrina** Speg. Nova Add. n. 70. Mich. II, p. 248. — 2145
Peritheciis minutis, lenticulari-globosis, subepidermicis, primo tectis, dein semiliberis, atris, ostiolatis, 150-180 μ . diam., contextu membranaceo sub-carbonaceo, olivaceo-atro; ascis cylindræis, breve stipitatis, superne rotundatis, ac crassiuscule tunicatis, 100-110 \approx 6-7 paraphysibus septulatis longioribus obvallatis, octosporis; sporidiis monostichis, ellipticis, medio uniseptato-constrictis, crassiuscule tunicatis non vel 2-guttulatis, hyalinis, 12 \approx 5.

Hab. in ramulis emortuis *Myricariæ germanicæ* in alveo Plavis, Cadore, Ital. bor.

21. **Didymella Cadubriæ** Sacc. *Didymosphæria Cadubriæ* Sacc. Fungi Ven. Ser. II, p. 324, Fungi ital. t. 207. — 2146
Peritheciis gregariis sub epidermide ramulorum nidulantibus, basique ligno infossis, globosis, 180-200 μ . diam., atris, ostiolo minuto papillato, epidermidem vix perforante; ascis clavatis apice rotundatis, basi breve noduloso-stipitatis, 90-100 \approx 12-15, paraphysibus copiosis, filiformibus ramulosis obvallatis, 8-sporis; sporidiis distichis vel oblique monostichis, oblongo-fusoideis, 20-22 \approx 5-6, rectis curvulisve, hyalinis, initio 4-guttatis, tandem constricto-1-septatis, crasse 2-nucleatis.

Hab. in ramulis *Berberidis vulgaris* in Cadore, Belluno Ital. bor. — Etsi sporidia hyalina, tamen matura videntur: hæc cum sporidiis immaturis *Lept. vagabundæ* Sacc. non confundi possunt, nam in hac 4-torulosa sunt.

22. **Didymella diaporthoides** (Speg.) Sacc., *Didymosphæria diaporthoides* Speg. Fungi Arg. Pug. III, n. 58. — 2147
Peritheciis globosis, $\frac{1}{4}$ - $\frac{1}{3}$ mill. d., densiuscule sparsis, subgregariis, cortici immutato immersis, linea stromatica plus minusve visibili late per lignum excurrente ornatis, tenuiter coriaceo-membranaceis, contextu indistincte parenchymatico, olivaceo, ostiolo conico, superficiem attingente v. exertiusculo obtuso, atro-nitente donatis; ascis cylindræo-subclavatis, apice obtuse rotundatis, deorsum breve ac crasse attenuato-pedicellatis, 120-140 \approx 12, octosporis, paraphysibus fili-

formibus, densis obvallatis; sporidiis di-tristichis, cylindraceo-sub-ellipticis, utrinque obtuse rotundatis, medio constricto-uniseptatis, 25-26 \approx 6-7, loculis medio subconstrictis, 2-guttulatis, hyalinis.

Hab. in ramulis dejectis putrescentibus Erythrinæ Cristæ-galli in umbrosis a la Recoleta, prope Buenos Aires Amer. merid.

23. **Didymella hyperborea** (Karst.) Sacc. *Sphæria hyperborea* Karst. 2148

Fungi Spetsb. n. 42. — Peritheciis sparsis, hypophyllis, parenchymati innatis, epidermide nigrefacta, demum fissa tectis, subsphæroideis, basi cupulato-collapsis, ostiolo minutissimo pertusis, atris, madefactis, fuscis, glabris, lævibus, circiter 250 μ . lat.; ascis cylindraceo-clavatis, subsessilibus, obturaculo jodo dilute cœrulescente, 90-100 \approx 11-12, octosporis; sporidiis monostichis, ellipsoideis, uniseptatis, hyalinis, 14-17 \approx 7-8; paraphysibus filiformibus, guttulatis, gracilibus.

Hab. in foliis Andromedæ tetragonæ exsiccatis ad Green Harbour, Spitzberg.

24. **Didymella Oleandri** (Dur. et Mont.) Sacc. *Sph. Oleandri* Dur. et 2149

Mont. Fl. Alg., I, p. 528, Mont. Syll. Crypt. n. 824. — Subtecta; peritheciis immersis, ovoideis, tandem depressis, albo-farctis, poro pertusis, ramum inquinantibus; ascis cylindricis 80 \approx 6; sporidiis octonis, oblongis, medio uniseptatis, 10-12 \approx 5.

Hab. in ramis Nerii Oleandri, Bone Algeriæ (DURIEU).

25. **Didymella sepincolæformis** (De Not.) Sacc. *Sphærella sepincolæ-* 2150

formis De Not. Recl. Piren. in Comm. II, p. 486. — Epidermide tecta, sparsa, punctula atra, halone pallescente redimita præbens; peritheciis e lenticulari-rotundatis, tenuibus, atris, ostiolo vix conspicuo dehiscentibus; ascis clavatis, octosporis; paraphysibus filiformibus, crassiusculis; sporidiis oblongo-pyriformibus, hyalinis, bilocularibus, loculo infero exiguo.

Hab. in ramis Rosæ alpinæ, Valsesia Italiæ borealis (CA-RESTIA).

26. **Didymella Dryadis** Speg. Dec. Mycol. 89, Mich. II, p. 161, nec 2151

Sphæria Dryadis Fuck. quæ *Læstadia rhytismoides*. — Epiphylla; peritheciis majusculis, 140-160 μ . diam., in macula indeterminata, primo fusca, dein arescendo grisea, semiimmersis, globosis, aterrimis, perforatis, demum depressis; ascis fasciculatis, basi ventricosis, breve pedicellatis, 60-65 \approx 12-14, paraphysibus filiformibus obvallatis, octosporis; sporidiis oblongo-ellipsoideis, diu continuis granuloso-farctis, dein medio septatis, parumque constrictis, hyalinis, 15 \approx 5, loculis interdum 1-guttulatis.

Hab. ad folia viva v. arida Dryadis octopetalæ in Monte Borgà, Cimolais, Italiæ borealis.

27. **Didymella strobiligena** (Desm.) Sacc. *Sphæria* (subtecta) *strobi* 2152
ligena Desm. 13 Not. 1846, p. 75. — Erumpens, atra, epidermide, lacerata cincta; peritheciis gregariis, subconfluentibus, minutis, rugulosis, rotundatis, ovatis vel subdifformibus, nucleo albo farctis, rima subdehiscens; ascis clavatis; sporidiis hyalinis, pyriformibus, uniseptatis.

Hab. ad conos dejectos Pini Laricionis in Gallia. — Sec. Crouan Finist. pag. 28: asci 24-spori et tunc an forte novi generis typus?

II. *Herbicolæ.*

28. **Didymella Vincetoxici** (De Not.) Sacc. *Amphisphæria Vincetoxici* 2153
 De Not. Sf. ital. p. 72, t. 76. — Peritheciis sparsis, cortice decedente omnino nudis, superficialibus, cubilibus læviter hærentibus, globoso-depressis, atro-piceis, sub lente rugulosis, vertice ostiolo brevi, cylindræo, osculo lato hiante instructis, cellulis rotundatis fuscis, stratosi ægre conspicuis contextis, in sicco collabescentibus, at simul fragilibus; nucleo pallido; ascis teretibus, copiosis, 8-sporis, 130 \approx 12, junioribus plasmate lutescente farctis; paraphysibus coalescentibus; sporidiis oblongis 2-ocularibus vix medio constrictis, hyalino-perlaceis, 20 \approx 6,5.

Hab. in caulibus exsiccatis Cynanchi Vincetoxici, Colle di Tenda Italiæ borealis.

29. **Didymella effusa** (Niessl) Sacc., *Didymosphæria effusa* Niessl 2154
 Neue Kernp. p. 130. — Peritheciis disseminatis in mycelio nigerimo subcorticali effuso nidulantibus; peridermio griseo tectis, media magnitudine, hemisphæricis vel subglobosis, basi depressis, atris, carbonaceo-coriaceis, duriusculis, numquam collabescentibus, ostiolo brevi, conico; ascis cylindræo-clavatis, stipite brevi, 8-sporis 62-78 \approx 10-12; sporidiis distichis, demum sæpe monostichis, ovoideo-oblongis, plerumque inæquilateralibus, didymis, medio constrictis, hyalinis, 14-20 \approx 6-7; paraphysibus gracilibus exiguis.

Hab. in caulibus emortuis Sambuci Ebuli et Cucurbitæ Peponis in Moravia et Italia boreali.

30. **Didymella nemoralis** Sacc. Mich. p. 376. — Peritheciis in maculis foliorum decoloratis, ochraceo-marginatis, epiphyllis, paucis, globoso-lenticularibus innato-erumpentibus, 90-100 μ . diam. per-tusis; ascis cylindræo-clavatis, apice rotundatis, 50 \approx 8, paraphy-

sibus filiformibus obvallatis, 8sporis; sporidiis distichis, oblongis v. subfusoides, 12-15 \approx 4, constricto-1-septatis, quandoque curvulis, hyalinis.

Hab. in foliis languidis Hyperici Androsæmi, Selva, Ital. bor. — Peraffinis *Didymellæ exiguæ* Niessl, cujus forte varietas.

31. **Didymella exigua** (Niessl) Sacc. *Didymosphæria exigua* Niessl 2156
 Neue Kernp. p. 165. — Peritheciis sparsis, peridermio immutato tectis, hemisphæricis, atris, membranaceo-coriaceis, minutis, ostiolo papillæformi vel subconoideo; ascis clavatis stipite brevi, 8sporis, 60-73 \approx 8-10; sporidiis distichis, fusoides, utrinque obtusiusculis leniter curvatis, cymbiformibus, raro rectis, medio septatis constrictisque, hyalinis, guttulatis, 14-17 \approx 4 $\frac{1}{2}$ -5; paraphysibus, paucis, ascos superantibus, tenellis, fugacibus.

Hab. in caulibus Dipsaci, Verbenæ officinalis, Ste-nactidis annuæ in Germania, Italia et Gallia.

32. **Didymella media** Sacc. Mich. II, p. 57. — A *D. exigua* differt 2157
 ascis majoribus, 80-90 \approx 12-14, æque paraphysatis; sporidiis fusoides, rectis curvulisve, majoribus, 20 \approx 5-6, 1-septatis, non constrictis, 4-guttulatis, hyalinis; peritheciis lenticularibus paulo majoribus; contextu parenchymatico fuligineo.

Hab. in caule Verbenæ officinalis, Rouen Galliæ (LETEN-DRE). — Inter *D. effusam* (Niessl) et *D. exiguam* (Niessl) media.

33. **Didymella planiuscula** (B. et Br.) Sacc. *Sphæria planiuscula* B. 2158
 et Br. in Ann. N. H. n. 891, t. 11, fig. 35, Cooke Handb. n. 2729. — Peritheciis sparsis, planiusculis, ostiolis obscuris, epidermide velatis; ascis clavatis; sporidiis biseriatis, oblongis, uniseptatis, prope septum leniter incrassatis, loculo altero sæpius paulo tur-gidiore, 15 μ . longis.

Hab. in caulibus emortuis herbarum in Britannia.

34. **Didymella hæmatites** (Rob. et Desm.) Sacc., *Sphæria hæmatites* 2159
 Rob. et Desm. Ann. Scienc. nat. 1851, XVI, p. 311. — Peritheciis sparsis, perexiguis, brunneis dein nigricantibus, subglobosis, siccis subcupulatis, matrice cruentata insertis, epidermide velatis, ostiolo poriformi; ascis stipitatis, cylindraceis, 8sporis, 90 \approx 11; sporidiis distichis, oblongo-lanceolatis, utrinque obtusis, subinæquilateralibus, septo intermedio obscuro, hyalinis, 20 \approx 5.

Hab. in sarmentis exsiccatis Clematidis Vitalbæ in Gal-lia, Belgio et Germania. — Sec. cl. Niessl ad *Leptosphæriæ* ge-nus spectaret sed descriptio Desm. et Fuck. non convenit.

35. **Didymella Hellebori** (Chaill. et Fr.) Sacc. *Sph. Hellebori* Chaill. 2160

in Fr. S. M. II. 512, Fuck. Symb. mycol. p. 112, t. VI, fig. 29, Auersw. Myc. Eur. Pyr. fig. 169, *Dothidea Prostii* Desm. Ann. Scienc. nat. 1847, VIII, p. 175. — Immerso-innata, peritheciis tectis subglobosis, atris, demum evacuatis persistentibus; ascis subcylindraceis, stipitatis. 8sporis, $88 \approx 8$; sporidiis submonostichis, oblongo-subclavatis, inaequaliter didymis, medio constrictis, parte inferiori obconica, parte superiori ovata, antice apiculata, hyalinis, $20 \approx 8$.

Hab. in caulibus siccis Hellebori fœtidi prope Geisenheim Germaniæ et Hamerenne Luxemburgiæ nec non in Gallia. — Perithecia minuta, ut puncta minima epidermide cinerascete tecta prominent, opaca, cum matrice concreta; evacuata intus atra.

36. *Didymella eupyrena* Sacc. Michel. II, p. 161. — Peritheciis gregariis, initio epidermide velatis, dein erumpentibus, globoso-depressis, $\frac{1}{3}$ - $\frac{1}{2}$ mill. diam., distincte breve papillatis, atris; contextu parenchymatico solidiusculo, fuligineo; ascis cylindraceo-clavatis breve stipitatis, apice tunica integra rotundatis, 90-100 \approx 15-18, octosporis paraphysibus subcoalescentibus evanidisque; sporidiis distichis obovato-oblongis, 15-19 \approx 7-8, constricto-1-septatis, loculo superiore majore, minute varie guttulatis, hyalinis.

Hab. in caulibus *Urticæ dioicæ* in alpinis Vette di Feltre, Ital. bor. — A *D. effusa* Niessl præcipue peritheciis multo majoribus diversa.

37. *Didymella? hyporrhodia* Sacc. Mich. II, 316. — Peritheciis dense gregariis, globoso-lenticularibus, epidermide velatis, lignique superficiæ cinnabarinæ factæ adnatis, 200 μ . diam., poro pertusis; ascis tereti-clavatis, 60 \approx 10, paraphysatis, sporidiis (immaturis) oblongis, hyalinis.

Hab. in caule Umbelliferarum majorum, Rouen Galliæ (MALBRANCHE). — Etsi immatura, ideoque incerta species, ob matricis characterem insignem notanda visa est.

38. *Didymella operosa* (Desm.) Sacc., *Sphæria* (caulicola) *operosa* 2163 Desm. 16 Not. 1849, p. 354. — Minuta, sparsa; peritheciis tectis, rotundatis, nigris, subnitidis, dein depressis, rugulosis; ostiolo papilliformi erumpente; nucleo albido; ascis subclavatis, 60-64 μ . long.; sporidiis oblongis subfusiformibus, uniseptatis, 14-15 μ . long.

Hab. ad caules siccos *Angelicæ sylvestris* in Gallia.

39. *Didymella Trifolii* (Fuck.) Sacc., *Sph. Trifolii* Fuck. Symb. myc. 2164 p. 112. — Peritheciis sparsis seu seriatim dispositis, *Pleosporæ herbarum* magnitudine, epidermide nigrefacta tectis, globosis, de-

pressisve, atris; ostiolis minimis, globosis, atris prominulis; ascis oblongis, stipitatis, 8sporis, $80 \approx 10$; sporidiis submonostichis, didymis, oblongis, medio constrictis, utrinque attenuatis, obtusiusculis, loculis uniguttulatis, hyalinis, $11 \approx 5$.

Hab. in caulibus siccis, adhuc stantibus Trifolii pratensis prope Æstrich Rhenogoviæ. — Caules omnino obducit atratque.

40. *Didymella onosmodina* (P. et C.) Sacc. *Sphæria* (caulicolæ) *onosmodina* P. et C. 30 Rep. on the St. Mus. New York. — Peritheciis numerosis, minutis, initio epidermide tectis, demum subnudis, depressis, nigris, ostiolo pertuso; ascis cylindræis; sporidiis stipitatis v. biseriatis, oblongo-ellipticis, uniseptatis, hyalinis, $15-17,5 \mu$. longis, loculis plerumque inæqualibus. 2165

Hab. in caule emortuo Onosmodii Caroliniani, Buffalo, Amer. bor. (CLINTON).

41. *Didymella superflua* (Fuck.) Sacc. Mich. II, 316, Auersw. Syn. 2166
Pyr. eur. p. 14, t. 11, fig. 153, Fuck. Symb. myc. p. 102, Sacc. Myc. Ven. Spec. tab. IX, fig. 23-25, *Didymosphæria superflua* (Fuck.) Niessl in Kunze Fungi sel. n. 258. — Peritheciis sparsis, epidermidi innatis, subsphæroideis, ostiolo minuto hiantibus, atris, $150-200 \mu$. lat.; ascis breviter pedicellatis, clavatis, $62-65 \approx 12-13$, octosporis, parce paraphysatis; sporidiis distichis, subovoideo-oblongatis, medio uniseptatis, ad septum levissime constrictis, hyalinis, $14-16 \approx 4-6$, loculo inferiore minore. — Spermogonia *Phomam* referentia, peritheciis ascophoris immixta iisque duplo minora; spermatis cylindræis, curvatis, minutis.

Hab. in caulibus emortuis Urticæ, Lathyri, Solani, Umbelliferarum, Humuli etc. in Germania, Gallia, Britannia et Italia.

42. *Didymella lathyrina* (B. et C.) Sacc. *Sphæria lathyrina* B. et C. 2167
North Amer. Fungi n. 859. — Minutissima; ascis oblongis; sporidiis octonis oblongis uniseptatis, apud septum constrictis, $7-8 \mu$. longis, distichis.

Hab. in caule Lathyri latifolii in Pennsylvania Amer. bor.

43. *Didymella pusilla* (Niessl) Sacc. *Didymosphæria pusilla* Niessl 2168
Hedw. 1881, pag. 55. — Peritheciis sparsis, minutis, subglobosis, atris, glabris, ostiolo papillæformi vel subconico erumpentibus; ascis obovato-oblongis, $56-75 \approx 19-24$, stipite brevi; sporidiis octonis, farcte 2-3stichis, oblongis, rectis utrinque obtusis, subhyalinis, $20-24 \approx 5-7$; paraphysibus paucis.

Hab. in pedunculis florum jam emortuis *Drabæ aizoidis* in passu Albula, Graubinden Helvetiæ (WINTER).

44. *Didymella intercepta* (Kalch. et Cooke) Sacc., *Sphaeria inter-* 2169
cepta K. et C. Grev. 1880, IX, p. 29, t. 137, fig. 30. — Sparsa, cuticula cinerascens tecta; peritheciis subglobosis; ostiolo atro emergente; ascis clavatis; sporidiis biseriatis, ellipticis uniseptatis, profunde constrictis, loculis subglobosis, hyalinis, 22-25 \approx 12.

Hab. in caulibus *Senecionis longifolii* in Africa australi.

45. *Didymella Fuckeliana* (Pass.) Sacc. Mich. J. p. 440, Fungi ital. 2170
tab. 435, *Sphaeria tritorulosa* Plowr. Sph. Brit. cent. II, nec B. et Br. — Peritheciis subcutaneo-erumpentibus, lenticularibus, $\frac{1}{5}$ - $\frac{1}{4}$ mill. d., distincte papillatis, contextu parenchymatico denso; ascis cylindræis, brevis stipitatis, apice, tunica integra, rotundatis, 70-90 \approx 8, parce paraphysatis, octosporis; sporidiis brevis fusoides, 12-14 \approx 4-5, 1-septatis, non constrictis, hyalinis.

Hab. in caulibus emortuis *Epilobii Dodonæi*, Vigheffio prope Parma, Italiæ bor. (PASSERINI), King's Lynn (PLOWRIGHT). — *Sphaeria tosta* B. et Br., sec. descriptionem, huc spectare videtur, sed hujus nominis specimina Cookeana cum *Diaporthe Epilobii* Fuck. congruunt.

46. *Didymella Epilobii* (Fuck.) Sacc. *Sphaeria Epilobii* Fuck. Symb. 2171
mycol, p. 113. — Peritheciis gregariis, primo tectis, demum liberis, *Pleospora herbarum* duplo majoribus, lentiformibus, convexis, demum planis, atris; ostioliis exsertis, cylindræis, obtusis, perforatis, concoloribus, peritheciolorum diametrum dimidium æquantibus; ascis cylindræis, stipitatis, 136 \approx 12, 8-sporis; sporidiis monostichis, ovatis, subobliquis, uniseptatis, medio vix constrictis, multiguttulatis, hyalinis, 18-24 \approx 10.

Hab. in caulibus siccis *Epilobii angustifolii*, rarius prope Cestrich Rhenogoviæ.

47. *Didymella tosta* (B. et Br.) Sacc. *Sphaeria tosta* B. et Br. Ann. N. 2172
II. n. 648, t. 11, f. 34, Cooke Handb. n. 2731, nec F. br. — Peritheciis minutis, globoso-depressis, pallido-fuscis, epidermide circa ostiolum brunnea tectis; ascis linearibus; sporidiis monostichis, brevibus, elliptico-navicularibus vel subclavatis, uniseptatis, non constrictis subhyalinis.

Hab. in caule languido *Epilobii hirsuti* in Britannia — Habitus *Antosthomella Tomici*.

48. *Didymella commanipula* (B. et Br.) Sacc. *Sphaeria commanipula* 2173
B. et Br. in Ann. N. II. n. 645, t. 11, f. 31, Cooke Handb. 2730.

— Peritheciis sparsis, initio tectis, globulosis, dein subdenudatis, collabascentibus, ostiolo exiguo; ascis cylindraceutis; sporidiis biseriatis, brevibus, elliptico-cymbiformibus, uniseptatis, subinde constrictis, nucleatisque.

Hab. in capsulis emortuis Scrophulariæ, Forfarshire Britannia.

49. **Didymella Bryoniæ** (Fuck.) Rehm Ascom. Ill. n. 99, *Sph. Bryoniae* Fuck. Symb. p. 112, *Sphærella Bryoniæ* Auersw. Myc. Eur. Pyr. pag. 15, fig. 56. — Peritheciis sub epidermide nidulantibus, demum subliberis, gregariis, minutissimis, 260–280 μ . diam., globoso-depressis, papillatis, atris; ascis oblongis basi attenuatis, obtusis, 8sporis, 62 \approx 12; sporidiis distichis, oblongo-subclavatis, inæqualiter didymis, loculo superiori majori, antice acutiusculo, inferiori obconico, obtuso, hyalinis, 14–16 \approx 5. 2174

Hab. in sarmentis siccis Bryoniæ dioicæ in Germania, Britannia, Helvetia. — Var. *astragalina* Rehm Ascom. Ill. n. 99: ascis clavatis, paraphysatis, 75 \approx 12; sporidiis inæqualiter didymis, distichis, 12–14 \approx 6. In caulibus Astragali in Germania.

50. **Didymella Cataria** (C. et E.) Sacc. *Sphæria Cataria* C. et Ell. 2175
in Grev. V, p. 95. — Minuta, gregaria, epidermide tecta; ostiolis papillæformibus; ascis clavatis; sporidiis ellipticis, acuminatis, biseriatis, uniseptatis, hyalinis, 20 \approx 8.

Hab. in caulibus Nepetæ cataria, New Jersey Amer. bor. — *Didymellæ incommiscibili* affinis.

51. **Didymella incommiscibilis** (B. et C.) Sacc. *Sphæria incommiscibilis* B. et C, North Amer. Fungi n. 960. — Minuta, epidermide tecta; ostiolis papillæformibus prominulis; ascis linearibus; sporidiis breve fusiformibus, utrinque acuminatis, demum uniseptatis, 20 μ . longis. 2176

Hab. in caulibus pedunculisque plantarum herbacearum in montibus Virginiae Americae borealis.

52. **Didymella cardicola** (Cooke) Sacc. *Sphæria* (caulicolæ) *cardicola* Cooke New Zeal. Fungi in Grev. VIII, pag. 67. — Sparsa, tecta; peritheciis subglobosis, elevatis, atris, demum epidermide perforantibus; ascis subcylindricis; sporidiis ellipticis, uniseptatis, constrictis, 15–18 \approx 7. 2177

Hab. in caulibus Cirsii lanceolati v. affinis, Maungaroa Novæ Zelandiæ.

53. **Didymella? caulicola** Moug. sub *Sphæria*, Roum. F. G. n. 573, 2178
Wallr. Fl. crypt. n. 3716? — Peritheciis gregariis, epidermide ve-

latis, minutis, lenticularibus, vertice convexiusculo, nitido, nigro, prominulis; fructificatione immatura hucusque mihi visa.

Hab. in caulibus *Dipsaci sylvestris* in Alsatia (CASPARY).

54. *Didymella? aggregata* (Lasch.) Sacc. *Sphæria aggregata* Lasch. 2179
in Rabh. Herb. myc. II, 541 et in West. Prodr. Fl. Bot. Fung.
p. 52. — Peritheciis erumpentibus, subrotundis, nigris, nitidis, se-
riatim aggregatis; nucleo albo; ascis subclavatis, octosporis; spo-
ridiis cylindraceis, monoblastis aut uniseptatis.

Hab. in caulibus emortuis *Euphrasiæ Odontitis*, Zuid-
Beveland in Hollandia.

55. *Didymella subexerta* (C. et E.) Sacc. *Sphæria* (caulicolæ) *sub-* 2180
exerta C. et Ell. in Grev. VII, p. 42. — Sparsa, tecta; perithe-
ciis atris; ostioliis elongatis, obtusis, exsertis; ascis subclavatis;
sporidiis anguste ellipticis, biseriatis, uniseptatis, hyalinis, 12–14 \approx 5.

Hab. in caule *Mulgedii*, New Jersey Amer. bor. — Affinis
Didymellæ Cataricæ, sed sporidia tenuiora.

B) In *Monocotyledoneis*.

56. *Didymella proximella* (Karst.) Sacc. *Sphærella proximella* Karst. 2081
Myc. Fenn. II, p. 177, *Sph. hyperopta* Rehm Ascom. n. 348, *Di-*
dymosphæria Kunzei Niessl Hedw. 1866, p. 106. — Peritheciis
amphigenis, sparsis, innatis, sphæroideis, ore subpapillato simplici
pertusis, atris 0,1–0,2 mill. lat.; ascis subsessilibus, oblongato-sub-
clavatis, 70–100 \approx 16–22 octosporis; sporidiis 1–2-stichis, subvoi-
deo-oblongatis, apicibus leviter obtusiuscule attenuatis, medio uni-
septatis, loculo supero plerumque turgidiore, 2–4guttulatis, ad sep-
tum constrictis, hyalinis, 20–24 \approx 8–10.

Hab. in foliis *Caricis acutæ* putrescentibus in Fennia, Ger-
mania, Austria. — See. Rehm. l. c. specimina in Karst. F. fenn.
897 formam microsporam sistunt.

57. *Didymella culmigena* Sacc. Mich. I, 377, *Fungi ital.* t. 369. — 2182
Peritheciis laxè seriatim gregariis, innato-prominulis, globuloso-
lentiformibus, 90–110 μ . diam. poro 20 μ . diam. pertusis, basi sæpe
hyphulis ramosis fuliginèis cinctis; contextu rufo-fuliginèo paren-
chymatico; ascis cylindraceo-clavatis, 55–65 \approx 8–10, breviter stipi-
tatis, apice tunica integra rotundatis, paraphysisibus crassiusculis
(spuriis?) obvallatis, octosporis; sporidiis distichis, fusoides, cur-
vatis, 15–17 \approx 3 $\frac{1}{2}$ –5 $\frac{1}{2}$, utrinque acutiusculis, initio varie guttu-
latis, dein plasmate bipartito spurieque 1-septatis, non constrictis,
hyalinis.

Hab. in culmis vaginisque Sorghi, Selva, nec non Tritico-
rum, Vittorio, Conegliano et Sermide, Mantova, Italia bor. —
Tamquam statum immaturum *Leptosphæricæ culmicolæ* diu habui,
sed iterum iterumque observata, ut distinguendam propono.

58. **Didymella intercellularis** (B. et C.) Sacc. *Sphæria intercellularis* B. et C. North Amer. Fung. n. 966. — Peritheciis 50 μ . d. in cellulis matricis dilatatis, basi radiatis; ascis brevibus, sursum angustioribus basi incrassatis; sporidiis breviter cymbiformibus, uniseptatis, 12–13 μ . long.

Hab. calamis vel in foliis Typhæ, Massachusetts Americæ borealis (RUSSELL).

59. **Didymella juncina** (B. et Rav.) Sacc. *Sphæria juncina* B. et R. North Amer. Fungi n. 927. — Irregularis, ostiolis punctata; sporidiis oblongis, uniseptatis, medio subconstrictis.

Hab. in calamis Junci in Carolina infer. Amer. bor. — Format plagulas minutas discolores ostiolis punctatas.

60. **Didymella subgemina** (B. et C.) Sacc. *Sph.* (caulicolæ) *subgemina* B. et C. Cuban Fungi n. 861. — Gregaria; peritheciis subglobosis subtectis, ostiolo papillæformi subcompresso libero; ascis clavatis; sporidiis uniserialibus lanceolatis curvulis uniseptatis, articulis subbinucleatis, 12–13 μ . longis.

Hab. in culmis graminum in Cuba. — Peritheciis subinde confluent.

61. **Didymella Nebraskæ** (B. et C.) Sacc. *Sphæria Nebraskæ* B. et C. North Amer. Fungi n. 969. — Minuta; subhysteriiformis; ascis oblongis leniter inflatis; sporidiis ellipticis, uniseptatis, distichis, 12–16 μ . long.

Hab. in foliis graminum, Nebraska, Amer. bor.

62. **Didymella phacidiomorpha** (Ces.) Sacc. *Sphæria phacidiomorpha* Ces. Hedw. 1878, p. 45. — Simplex; peritheciis minimis, subcutaneis, sæpe biformibus (ellipticis in pagina superiore foliorum quibus innascitur, orbicularibus in altera pagina), translucetibus, demum epidermide rupta vertice obtuso erumpentibus ostiolo nullo peculiari, poro pertusis; nucleo e sordido albescente; paraphysibus numerosis subtilissimis; ascis plerumque e basi dilatata sacciformi versus apicem attenuatis, rarius subcylindræcis, 30 μ . long., facile diffluentibus; sporidiis 8, distichis vel irregulariter seriatis, 10 μ . long., didymis, segmentis elongatis subovalibus quadantenus irregularibus (linguæformibus, si velis) turbidis, incoloribus.

Hab. in foliis Phormii tenacis in horto botanico Neapoli-

tano Ital. austr. — Adsunt spermogonia: spermatiis cylindraceutis 3 μ . longis.

63. **Didymella refracta** (Cooke) Sacc. *Sphaeria refracta* Cooke in 2188
Grev. V, p. 119, — Peritheciis sparsis, epidermide decolorata tectis, subinde applanatis; ascis cylindraceutis; sporidiis monostichis, obtuse biconicis, uniseptatis, loculo utroque 1-2-guttato, hyalinis. 35 \approx 15.

Hab. in calamis Scirpi, N. Wootton Britannicæ.

64. **Didymella uberina** (Mont.) Sacc. *Sph. uberina* Mont. Syll. Crypt. 2189
n. 857 et Guy., mss., n. 571, t. 6, f. 1. — Erumpens, sparsa, verrucariæformis; peritheciis hemisphærico-depressis, basi applanata epidermide irregulariter rupta cinctis, brunneis opacis ostiolatis, ostiolo nitido; ascis maximis octosporis; sporidiis fusiformibus medio septatis hyalinis.

Hab. in petiolis Palmarum, Cayenna (LEPRIEUR).

65. **Didymella Dioscoreæ** (B. et C.) Sacc. *Sph. Dioscoreæ* B. et C. 2190
North Amer. Fungi n. 948. — Minutissima; ascis brevibus oligosporis; sporidiis oblongis, uniseptatis, 20 \approx 6-6,5.

Hab. in caulibus emortuis Dioscoreæ in Carolina inferiore Americæ borealis.

66. **Didymella eumorpha** (B. et C.) Sacc. *Sphaeria eumorpha* B. et C. 2191
North Amer. Fungi n. 923. — Linearis, epidermide arcte cincta, rima angusta aperta; ascis linearibus; sporidiis oblongis vel subcymbiformibus, uniseptatis, 12-13 μ . longis.

Hab. in culmis Arundinariæ in Carolina infer. Amer. bor.

67. **Didymella combulliens** (B. et C.) Sacc. *Sphaeria combulliens* B. 2192
et C. North Amer. Fungi n. 936. — Peritheciis sparsis, ostiolo minuto excepto, abditis; sporidiis oblongis uniseptatis.

Hab. in culmis Arundinariæ, in America boreali.

C) In Acotyledoneis.

68. **Didymella Hyphenis** (Cooke) Sacc. Mich. II, p. 316, *Sphaeria Hyphenis* 2193
Cooke Handb. n. 2688. — Subparallela seriata; peritheciis minutis, subglobosis, prominulis, demumque epidermidem perforantibus, nigris, ostiulis minutis; ascis obclavatis, 70-80 \approx 25, octosporis; sporidiis subdistichis, oblongo-clavulatis, 20-22 \approx 6, uniseptatis, non v. vix constrictis, hyalinis.

Hab. in stipitibus Pteridis aquilinæ in Britannia (COOKE) et Algeria (TRABUT). — Cl. Cooke descripsit sporidia ellipsoidea, sed quæ vidi sic dici non possunt.

69. *Didymella lophospora* Sacc. et Speg. Mich. I, 376, F. it. t. 367. 2194

— Peritheciis dense gregariis, epiphyllis, cuticula velatis, prominulis, globulosis, vix papillatis, $\frac{1}{8}$ mill. diam., contextu parenchymatico solidiusculo, fuligineo; ascis crasse clavatis, 65–75 \approx 12, p. sporif. 50 \approx 12, deorsum tenuiter stipitatis, paraphysibus filiformibus copiosis obvallatis, octosporis; sporidiis distichis, cylindraceo-fusoideis, 16–17 \approx 5–6, rectis curvulisve, medio distincte constrictis, 1-septatis, utrinque obtusatis atque appendiculâ obtusâ latiusculâ subpenicillatâ auctis, 4-guttulatis, hyalinis.

Hab. in pagina superiore frondis emortuæ *Pteridis aquilinæ* prope Conegliano, Ital. bor. — Var. *Acetosellæ* Ellis et Sacc. in Mich. II, p. 374. Ascis 80–90 \approx 8–10; sporidiis distichis, biconicis, utrinque appendiculatis, constricto-1-septatis, 4-guttulatis, 10–12 \approx 4 (sine append.) hyalinis. In caule *Rumicis* putrescente Newfield New Jersey Americæ borealis.

70. *Didymella pteridicola* (B. et C.) Sacc. *Sphæria pteridicola* B. et C. North Amer. Fungi n. 926. — Linearis, subcuticularis; ascis clavatis; sporidiis oblongis, curvulis, uniseptatis utrinque obtusis, 15 μ . long. 2195

Hab. in stipitibus *Pteridis* in America borealis. — Series parallelas griseolas cuticula velatas format. — *Didymellæ Hypheni* paraffinis nisi eadem.

GNOMONIA Ces et De Not. Schema Sfer. pag. 57 ex parte (Etym. a *gnomone*, ob formam ostioli). — Perithecia tecta v. erumpentia, submembranacea, glabra, sæpius discreta, ostiolo plus minusve elongato, cylindraceo centrali v. laterali. Asci aparaphysati, rarius paraphysati, 4–8-spori, tunica apice sæpe perforata. Sporidia ellipsoidea v. oblonga v. tereti-fusoidea, uniseptata, hyalina. — Fungi minuti, foliicolæ, rarius caulicolæ. A *Gnomoniella* differt sporidiis didymis, sed hujus generis quædam species, ubi prorsus maturæ observatæ sint, forte *Gnomoniæ* veræ manifestabuntur.

I. *Eugnomonia*: sporidiis ovoideis v. oblongis, 1-septatis.

1. *Gnomonia Epilobii* (Fuck.) Auersw. in Mycol. Eur. Pyr. p. 26, t. 2196 10, fig. 14, Sacc. F. it. t. 436, *Sphæria Epilobii* Fuck. Symb. mycol. p. 113. — Peritheciis sparsis v. subseriatis, initio tectis, sphæroideis, grandiusculis, $\frac{1}{3}$ – $\frac{1}{2}$ mill. diam., dein subliberis, umbilicato-collapsis; ostiolo obtuse papillato, perithecium dimidium

subæquante; contextu parenchymatico, firmo; ascis, cylindricis, 115-125 \approx 10-14, lumine apice exquisite bifoveolato, paraphysibus guttulatis spuriis obvallatis, octosporis; sporidiis ex ovato oblongis utrinque obtusiusculis, constricto-1-septatis, 18-22 \approx 10-11, 2-v. sæpius pluriguttulatis, hyalinis.

Hab. in caulibus emortuis *Epilobii angustifolii* in Fennia, Germania et Italia. — An huc *Sphaeria fenestrans* Duby?

2. **Gnomonia fenestrans** (Duby) Sacc. *Sph. fenestrans* Duby, Kieckx 2197
Fl. crypt. Flandr. I. p. 348. — Peritheciis gregariis v. subsparis, nigris, e basi applanata conoideis, denique collabascentibus; ostiolo cylindraceo v. conico, papillato, epidermidem perforante, demumque deciduo; ascis cylindraceo-oblongis, octosporis; sporidiis monostichis subglobosis, medio uniseptatis, 2-guttatis.

Hab. in caulibus emortuis *Epilobii spicati*, Audenarde in Belgio (WESTENDORP) et in Gallia (DUBY).

3. **Gnomonia depressula** Karst. Myc. Fenn. II, p. 121. — Peritheciis 2198
sparsis, sæpe duobus vel pluribus confluentibus, epidermide tectis, sphæroideo-depressis vel basi applanatis, siccis cupulato-collapsis, atris, latit. 0,5 mill.; ostiolis per epidermidem perforatam erumpentibus, cylindraceis vel conoideis, strictis, crassiusculis, nigris, perithecio brevioribus vel longioribus; ascis, sessilibus, fusoido-bacillaribus, 110 \approx 15-16, p. sporif., 95-100 μ . long.; distichis, fusoido-oblongatis, inæquilateralibus vel leviter curvulis, 2-4-guttulatis vel uniseptatis, ad septum leviter constrictis, hyalinis, 24-32 \approx 7-10.

Hab. in ramis aridis *Rubi idæi* prope Abo et Mustiala Fennicæ.

4. **Gnomonia tetraspora** Wint. in Hedw. 1872. XI, p. 148, F. it. t. 2199
376. — Peritheciis semiimmersis e basi globosa leviter conicis, ostiolo breve rostellato, parum emergente instructis, 250 μ . d., contextu tenui-membranaceo olivaceo-fusco, apice densiore; ascis cylindraceis, 45-50 \approx 8-10 breve stipitatis, tetrasporis; sporidis oblongis, submonostichis, constricto-1-septatis, 14-15 \approx 5-6, 4-guttulatis, hyalinis.

Hab. in caule putrescente *Euphorbiæ Cyparissicæ* in Germania, Helvetia, Italia. — Var. *Rubi* Rehm Asc. n. 596; ascis 45-50 \approx 9, paraphysibus longis septatis obvallatis; sporidiis quaternis distichis ellipticis, sæpius curvulis, utrinque acutiusculis apiculique hyalino tenui auctis 15 \approx 3,5. In foliis dejectis *Rubi fruticosi*, Zürich Helvetiæ (WINTER). — «An species distincta?».

5. **Gnomonia Rhododendri** Auersw. Myc. Eur. Pyr. p. 26, fig. 125. 2200
Peritheciis immersis, sparsis, globosis, nigris, rostro cylindrico, perithecio paulo longiore epidermidem immutatam et neutiquam inflatam perforantibus, 200 μ . latis; ascis oblongis in stipitem brevem attenuatis, 8sporis, 50-55 \simeq 12; sporidiis biserialibus, obovato-cuneatis, utrinque rotundatis, ad tertiam longitudinis partem uniseptatis, ad sepimentum non constrictis, hyalinis, 12 \simeq 6.

Hab. ramulis tenellis et dejectis Rhododendri hirsuti in Germania.

6. **Gnomonia inæqualis** Auersw. in Hedw. 1868, p. 185, et in Myc. 2201
Eur. Pyr. p. 27. — Peritheciis minutis, sparsis, globosis, atri, acute papillatis, papillaque epidermidem perforantibus; ascis saccatis, sessilibus, membrana duplici non visibili, 8-sporis; sporidiis elongato-pyriformibus, inæqualiter bilocularibus, biseriatis, nubiosis, cellula sup. ovali, 10 \simeq 6, inferiore obconica 4-5 \simeq 4.

Hab. in Tyrolia merid. prope Seis, in caulibus aridis Lathyri sylvestris, anno 1867 (HAUSMANN).

7. **Gnomonia Myricæ** C. et E. New Jers. Fung. in Grev. VI, p. 17, 2202
t. 95, fig. 24. — Peritheciis sparsis, immersis, collo elongato, rostro; ascis lanceolatis; sporidiis anguste ellipticis, inæqualiter uniseptatis, 10 μ . longis.

Hab. in foliis Myricæ ceriferæ, socia *Septoria* in New Jersey Americæ borealis.

8. **Gnomonia Sesleriæ** Niessl Neue Kernp. p. 85. — Peritheciis minutissimis punctiformibus gregariis, globosis, tectis, ostiolo obscuro; ascis clavatis, inferne in stipitem tenuem attenuatis, 60-66 \simeq 9-10; stipite 12-15 μ .; sporidiis octonis, distichis, ovoideo-oblongis, utrinque obtusiusculis, rectis vel inæquilateralibus, medio septatis numquam constrictis, hyalinis, 10-12 \simeq 4-5. 2203

Hab. in utraque pag. foliorum emortuorum Sesleriæ cæruleæ pr. Brünn et Polau Moraviæ. — Ob ostiolum obsoletum vix *Gnomonia*, cujus tamen habet ascos.

II. *Closterognomis*: sporidiis tereti-fusoideis, 1-septatis.

9. **Gnomonia setacea** (Pers.) Ces. et De Not. Schem. Sfer. Auersw. 2204
Myc. Eur. Pyr. p. 27, fig. 145. Sacc. Myc. Spec. 100, t. X, f. 121. *Sphæria setacea* Pers. Syn. p. 62. — Peritheciis sparsis vel laxe gregariis, hypophyllis, parenchymati innatis, sphaeroideis, atris, rostro elongato, filiformi, apicem versus leviter attenuato, perithecio duplo vel pluries longiori, sæpe flexuoso, concolori, epidermi-

dem perforante, latit. 150-300 μ .; ascis fusoido-elongatis vel fusoido-oblongatis, breviter acuteque pedicellatis, 30-40 \approx 6-9, 4-8-sporis; sporidiis conglobatis, bacillaribus, medio uniseptatis, 4-guttulatis, rectis vel leviter curvulis, hyalinis, 14-15 \approx 1.5-2 utrinque setula brevi auctis. — Sec. Fuck. spermogonium refert *Discosiam clypeatam* De Not.

Hab. in foliis emortuis Quercus, Castaneæ, rarius Aceris Cratægi, Betulæ, Alni, Coryli in tota Europa.

10. **Gnomonia ischnostyla** (Desm.) Fuck. Symb. mycol. *Sphaeria* (fo-²²⁰⁵liicola) *ischnostyla* Desmaz. 17 Not. 1849, p. 31. — Hypophylla, sparsa; peritheciis minutis, tectis, nigris, globosis, dein depressis; ostiolis nigris, elongatis, tenuissimis; ascis minutis apice 2-foveolatis exacte fusiformibus, 50 \approx 7-8; sporidiis fusoido-linearibus; distichis, 15 \approx 1, 4-guttulatis, hyalinis (non omnino muticis visis).

Hab. in foliis siccis Carpini, Aceris Pseudoplatani in Gallia et Germania. — Forte varietas *Gn. setaceæ*.

11. **Gnomonia inclinata** (Desm.) Auersw. Myc. Eur. Pyr. p. 27, fig. ²²⁰⁶143. Sacc. Myc. Ven. t. X, f. 1. *Sphaeria inclinata* Desm. XIX. Not. p. 20. — Peritheciis hypophyllis, parenchymati innatis, sparsis, nigris, oblongis, decumbentibus, ostiolo rostellato inclinato, initio peritheciium æquante, denique duplo fere longiore, filiformi, epidermidem perforantibus, 220-230 μ . diam.; ascis clavato-oblongis, in stipitem brevem attenuatis, 6-sporis, 50 \approx 10; sporidiis 2-3-stichis, cylindræis, rectis, utrinque obtusiusculis sed in setulam longissimam abeuntibus, medio tandem septatis, haud contractis, 4-guttulatis, 17 \approx 3 (absque appendicibus).

Hab. in foliis emortuis Aceris platanoidis, A. campestris, A. Pseudoplatani (rarius et *Æsculi*) in Gallia, Germania et Italia.

12. **Gnomonia setiformis** (Pers.) Sacc. *Sphaeria* (epiphyllæ) *setiformis* Pers. Ann. sc. Nat. V. 1846, p. 262. — Peritheciis amphigenis solitariis v. hinc inde 2-3-capitoso-aggregatis, basi latiuscula folio adnatis, ostiolo setiformi; ascis clavatis, octosporis; sporidiis elongatis, septatis.

Hab. in foliis Codicæi variegati in Java (ZOLLINGER). — *Sphaeriæ Cassiæ* affinis.

13. **Gnomonia Veneta** Speg. Mich. I, p. 457, F. it. t. 631. — Peri-²²⁰⁸theciis globulosis, laxe gregariis, primo parenchymati innatis, tectis, dein emergentibus, siccis cupulato-collapsis, $\frac{2}{10}$ - $\frac{3}{10}$ mill. d. atris, rostro elongato, recto vel curvulo, crassiusculo, peritheciium

æquante vel paululum excedente, concolore instructis; ascis fusoido-clavatis, apice rotundatis, crassiuscule tunicatis, 45-50 \approx 7-8, octosporis, aparaphysatis; sporidiis elongato-fusoidis, quandoque sub-clavulatis, utrinque obtusiusculis, excentrice 1-septatis, h. e. loculo inferiore bis longiore quam superiore, hyalinis, minute pluriguttulatis, utrinque appendicibus rostriformibus, acutiusculis autis, 15 \approx 3 $\frac{1}{2}$ -4.

Hab. ad folia dejecta *Ostryæ carpinifoliæ*, Colfosco in Italia boreali.

14. **Gnomonia amœna** Auersw. Myc. Eur. Pyr. p. 24, fig. 135 (nec 2209
 Fuck. quæ *Gnomoniella*. Cfr. Syll. nostra n. 1568). — Peritheciis immersis, sparsis, depresso-globosis, vel globosis, rostro pyrenio duplo longiore filiformi discum minutum, roseo-album perforantibus, 380 μ . latis, 280 μ . altis; ascis clavato-oblongis, in stipitem brevem attenuatis, 8-sporis, 50-60 \approx 8-10; sporidiis biserialibus, elongato-oblongis, utrinque obtusatis, medio uniseptatis, ad sepimentum leviter constrictis, loculo, utroque nucleolis binis ornato, subhyalinis, 12-15 \approx 3.

Hab. in petiolis foliorum *Coryli* et *Carpini* in Germania. — *Gn. amœna* Fuck. differt sporidiis multo brevioribus et simplicibus.

15. **Gnomonia Ostryæ** De Not. Sfer. it. p. 42, t. 49. Auersw. Myc. 2210
 Eur. Pyr. p. 24, fig. 136. — Peritheciis hypophyllis, epidermidi primo subinnatis, sparsis, depresso-globuosis, siccis cupuliformi-collapsis, membranaceis, atris, rostro tenui, perithecium paululo superante verticali vel excentrico ornatis, 250-300 μ . latis; ascis clavatis, in stipitem brevissimum attenuatis, 8-sporis, 48 \approx 8; sporidiis biserialibus, obovato-fusiformibus, rectis vel curvulis, utrinque rotundatis, ad tertiam sporidiorum partem superiorem uniseptatis, ad sepimentum non constrictis, subyalinis, nucleolis, 3-5 ornatis, 14 \approx 4.

Hab. in pagina inferiore foliorum *Ostryæ carpinifoliæ* in Italia boreali.

16. **Gnomonia Arnstadtensis** Auersw. Myc. Eur. Pyr. p. 22, fig. 119. 2211
 — Peritheciis parenchymati folii immersis, epidermide immutata tectis, sparsis, nigris, depresso-globulosis, latere in rostrum brevissime conicum attenuatis, ostiolo diu, ad sporidiorum maturitatem usque, epidermide tecto, et non nisi sero eam puncti nigri instar lateraliter perforante, 150 μ . latis; ascis clavato-oblongis, in stipitem brevem tenuem attenuatis, 8-sporis, 75-90 \approx 10; sporidiis

biseriatis, elongato-oblongis vel subfusiformibus, utrinque acutiusculis, medio uniseptatis, ad sepimentum vix constrictis, hyalinis, $27 \approx 5$.

Hab. in pagina superiore foliorum emortuorum Carpini Betuli in Germania.

17. **Gnomonia suspecta** (Fuck.) Sacc. *Plagiostoma suspecta* Fuck. 2212
Symb. myc. p. 119, t. VI, fig. 32. *Sphæria suspecta* Auersw.? — Peritheciis majusculis, tectis, planis, atris; ostiolo in perithecii latere nato, brevi, crasso-cylindræo, prominulo; ascis oblongo-cylindræis, 8-sporis, $80 \approx 8$; sporidiis distichis, oblongis, utrinque parum attenuatis, ceterum obtusis, didymis, hyalinis, $18 \approx 4$.

Hab. in pagina inferiore, plerumque secus nervos, foliorum Quercus pr. Æstrich Rhenogoviæ.

18. **Gnomonia lirelliformis** Pass. Micr. ital. diagn. n. 5, in Rev. myc. — 2213
Peritheciis epiphyllis, gregariis, epidermide nigrefacta tectis, ostiolo brevissimo, vix per epidermidem tandem fissam perspicuo; ascis clavatis sessilibus, 8-sporis, $42-50 \approx 8-10$; sporidiis fusiformibus gracilibus nucleatis, hyalinis, $20 \approx 2,5$.

Hab. ad folia viva Quercus Roboris autumnò nondum ascegera et per hyemem in foliis stratis maturans, Collecchio, Parma, Italia bor. — Asci maturi adeo elongantur ut tandem anguste lineares fiant. — «An *Hypospila?*».

19. **Gnomonia erythrostoma** (Pers.) Auersw. in Mycol. Europ. Pyren. 2214
p. 26, fig. 127, Sacc. F. it. t. 375. — Peritheciis innato-erumpentibus, utrinque prominulis, brevi-rostellatis, contextu rufescente, parenchymatico, ostioli prosenchymatico; ascis cylindræis, $100-110 \approx 12-15$, breviter stipitatis, apice lumine bifoveolato, obtusatis, aparaphysatis, octosporis; sporidiis distichis, oblongo-cylindræis, $18 \approx 5-6$, utrinque rotundatis, infra medium spurie 1-septatis, non constrictis, 4-guttulatis, hyalinis, appendiculis mox deciduis curvulis auctis. — Spermogonium *Septoriæ* speciem refert (Cfr. Fuck. Symb. myc. 123 et App.).

Hab. in foliis Pruni Avium et P. Cerasi adhuc pendulis immatura, in putrescentibus maturescens, in Germania, Helvetia, Italia.

20. **Gnomonia Linnææ** Auersw. Myc. Eur. Pyr. pag. 24, fig. 128 et 2215
148 a, *Sphæria setacea* Fr. p. p. — Peritheciis epiphyllis, parenchymati immersis, sparsis, globulosis, atris, rostro elongato, cylindræo, stricto, nitidulo, pyrenio sesqui- vel duplo longiore epidermidem immutatam perforantibus, 300μ . latis; ascis oblongis, bre-

viter et acute stipitatis, 8-sporis, 50-55 \approx 12; sporidiis 3-4-serialiter stipatis, oblongis, utrinque obtusatis, leviter curvulis, medio denique uniseptatis, ad sepimentum non constrictis, subhyalinis, loculo utroque nucleolis binis maximis ornato, 24 \approx 5.

Hab. in foliis siccis Linnææ borealis in Suecia et Germania.

21. **Gnomonia Fleischhakii** Auersw. Myc. Eur. Pyr. p. 26, fig. 134. 2216

— Peritheciis immersis, sparsis aut paucis lineatim congestis, depresso-globosis, nigris, rostro conico rigido erumpente coronatis, subcoriaceo-membranaceis, 300-350 μ . latis; ascis cylindraceutis, breviter stipitatis, 8-sporis, 52 \approx 10; sporidiis biserialibus, oblongo-fusiformibus, utrinque obtusatis, medio uniseptatis, ad sepimentum vix constrictis, subhyalinis, 14 \approx 3.

Hab. in ramis siccis Genistæ tinctoriæ in Germania.

28. **Gnomonia Alni** Plow. Calif. Sphær. in Grev. VII, p. 74, t. 120, 2217

fig. 4. — Peritheciis minutis, cæspituloso-aggregatis, foliorum parenchymati innatis, ostiolo elongato, sursum leniter attenuato; ascis ovato-elongatis, 35-40 \approx 10-15, octosporis; sporidiis 1-septatis, curvulis, 22-25 \approx 3-4, nucleatis, hyalinis.

Hab. in foliis adhuc viventibus Alni in California. — Peritheciolorum basis in aversa foliorum pagina quoque prominula.

29. **Gnomonia alniella** Karst. Myc. Fenn. II. p. 119. — Peritheciis 2218

sparsis, parenchymati innatis, sphæroideis, siccis basi capulæ instar collapsis, atris, rostro stricto, cylindraceuto, apicem versus leviter attenuato, rigido, perithecium fere æquante, concolore, epidermidem immutatam et utrinque inflatam ad folii paginam inferiorem, rarissime superiorem perforantibus, latit. 200-250 mill.; ascis fusoides-elongatis, in pedicellum tenuissimum, brevissimum attenuatis, vulgo curvulis, 30-40 \approx 8-10 octosporis; sporidiis distichis, ovoideo-oblongatis, infra tenuiter uniseptatis, ad septum non constrictis, hyalinis, rectis, 8-10 \approx 2,5-4.

Hab. in foliis Alni putrescentibus circa Mustiala Fennicæ. — Rationibus variis a congeneribus ceteris admodum recedit. Rostrum perithecii 150-180 μ . longum, basi 60-75 μ . crassum.

30. **Gnomonia campylostyla** Auersw. Syn. Pyr. eur. p. 25, t. 9, f. 130, 2219

et t. 11, f. 148 b. — Peritheciis hypophyllis sparsis, parenchymati innatis, depresso-sphæroideis vel oblongatis, rostro laterali, flexuoso, longo vel longissimo, nitido epidermidem perforantibus. latit. 0,3-0,5 mill.; ascis oblongatis, breviter pedicellatis, 40-50 \approx 10-12, octosporis; sporidiis conglobatis, elongatis vel suboblongatis,

4-guttulatis vel medio uniseptatis, ad septum haud vel levissime constrictis, rectis, hyalinis, 15-22 \approx 3-5. — Spermogonia scutiformia, orbicularia, sparsa, interdum confluentia, epiphylla, demum applanata plicataque, atra, nitida, latit. 0.3 mill.: spermatis cylindraceis, rectis, simplicibus, hyalinis, 3-5 \approx 1.

Hab. in foliis *Betulae* albae et *Bet. nanae* siccis in Tyrolia et per totam Fenniam et Lapponiam. — Spermogonia, speciem *Leptothyrii* sistens, vere haud raro obveniunt in foliis *Betulae* nunc in consortio perithecorum, nunc ab iis segregata.

31. **Gnomonia leptostyla** (Fr.) Ces. et De Not. Schema p. 232 Auersw. 2220

Myc. Eur. Pyr. p. 25, fig. 29. *Sph. leptostyla* Fr. S. M. II, p. 517. — Peritheciis conico-prominulis rufescentibus, ostiolo gracili brevi stricto nigro; ascis subclavatis, 45-65 \approx 10-12 aparthysatis, octosporis; sporidiis distichis v. oblique monostichis fusoides, rectis curvulisve, 1-septatis, 18-22 \approx 4, saepius 4-guttulatis, hyalinis. — *Marsonia Juglandis* (Lib.) sistit st. conidicum.

Hab. in foliis putrescentibus *Juglandis* regiae hypophylla, in Belgio, Gallia, Germania, Italia.

32. **Gnomonia errabunda** (R. et D.) Auersw. *M. Eur. Pyr.* p. 25, fig. 2221

120. *Sphæria* (foliicola) *errabunda* Rob. et Desm. 16 Not. 355, 1849. — Amphigena. minutissima, sparsa; peritheciis fusco-nigris. epidermide tectis, $\frac{1}{7}$ mill. diam. humectis globosis, siccis depressis; ostioliis exsertis; ascis clavato-ventricosis, 40-50 \approx 10-12; sporidiis elliptico-oblongis, prope basim 1-septatis, rectis v. inaequalateralibus, 14-16 \approx 3,5, guttulatis, hyalinis.

Hab. in foliis exsiccatis *Fagi*, *Carpini* et *Quercus* in Gallia et Germania.

33. **Gnomonia petiolicola** (Fuck.) Karst. *Myc. Fenn.* II. p. 122, *Pla-* 2222

giostoma petiolicola Fuck. *Symb. myc.* p. 119, *Gnomonia devexa* Auersw. p. p. *Rehm Ascom.* n. 139. — Peritheciis sparsis, interdum nonnullis congestis, epidermide subimmutata tectis eique detractae subtus adherentibus, sphaeroideis, siccis subdepresso-sphaeroideis. basi subinde cupulato-collapsis, rostro brevissimo, conoideo, saepe obliquo, epidermidem breviter perforante instructis, atris, latit. 150-200 μ .; ascis breviter pedicellatis, fusoides-elongatis vel fusoides-bacillaribus, 44-46 \approx 7-9, octosporis; sporidiis distichis, fusoides-elongatis, 1-(-3?)-septatis, guttulatis, rectis vel leviter curvulis, chlorino-hyalinis, 9-12 \approx 2-3.

Hab. ad petiolos putres *Tiliae* parviflorae in Germania occ. et Fennia australi.

34. **Gnomonia Dryadis** Auersw. Myc. Eur. Pyr. pag. 26, fig. 131. — 2223
Peritheciis primo immersis, dein semiimmersis, sparsis vel paucis congestis, imo connatis, rostro nitidulo, perithecium fere æquante, rigido superatis, globosis, 300 μ . latis; ascis clavatis, brevissime stipitatis, 8sporis, 100 \approx 14; sporidiis biserialibus, fusiformi-oblongis, rectis aut subcurvulis, utrinque mucrone minuto ornatis, medio uniseptatis, ad sepimentum leviter constrictis, hyalinis, loculo quoque binucleolatis, 27 \approx 5-6.

Hab. in ramulis emortuis Dryadis octopetalæ in Germania.

35. **Gnomonia Cerastis** (Riess) Auersw. Myc. Eur. Pyr. p. 27, fig. 2224
144. *Sphæria Cerastis* Riess Hedw. I, n. 5, t. III, fig. 2, m-o, *Sphæria petioli* Fuck. Enum. Fung. Nass. pag. 68 (nec *Sphæria ischnostyla* Desm.). — Peritheciis parenchymati immersis, sparsis, globosis, nigris, rostro filiformi perithecium subæquante epidermidem perforantibus, 350 μ . altis; ascis oblongo-clavatis, in stipitem attenuatis, 6sporis 51 \approx 8-10, (parte sporifera 30 μ . longa); sporidiis 3-serialiter stipatis, cylindræco-oblongis, utrinque rotundatis 4-guttulatis, medio uniseptatis, ad sepimentum leviter constrictis subhyalinis, 17 \approx 4.

Hab. in petiolis putrescentibus Aceris Pseudoplatani et A. Negundinis in Germania et Britannia.

36. **Gnomonia Graphis** Fuck. Symb. myc. p. 122, Rehm. Asc. n. 393. 2225
— Peritheciis sparsis, globosis, olivaceis, vertice ostiolo longissimo, tereti, atro terminatis; ascis elliptico-oblongis, tenuissime oblique stipitatis, 40 \approx 6, p. sporif. 28 μ . long., 8sporis; sporidiis distichis cylindræcis, curvatis, 1-(-3?) -septatis, muticis, hyalinis, 16-18 \approx 1-1,5.

Hab. in pag. inferiore foliorum putrescentium Rubi fruticosi in Germania et Britannia.

37. **Gnomonia pleurostyla** Auersw. Myc. Eur. Pyr. p. 28, fig. 146. 2226
— Peritheciis hypophyllis, parenchymati innatis, sparsis, nigris, depresso-globulosis, rostro laterali filiformi epidermidem perforantibus, 200-230 \approx 180; ascis elongato-clavatis, in stipitem breviusculum et acutum attenuatis, 6-sporis, 55-65 \approx 7-8; sporidiis parallele stipatis, filiformi-lanciformibus, vel cultriformibus, subhyalinis, 50-55 \approx 2.

Hab. in foliis siccis Salicis viminalis, in Germania, raro. — Ex icone Auersw. l. c. sporidia videntur fusoidæ breviuscula

basi vero longissime, apice breve setigera. Species rectius prope n. 1591 ponenda.

III. Dubiæ.

38. **Gnomonia acicularis** (Wallr.) Sacc. *Sphæria acicularis* Wallr. 2227
Comp. Fl. crypt. n. 3878. *Sph. subtilis* Mart. Erl. pag. 488 (nec Grev.). *Sph. setacea* β *affinis* Fr. S. M. II, p. 518. — Peritheciis minimis convexis synphlæodeis, collum tenuissimum setaceum illis duplo majus exserentibus.

Hab. ad folia sicca Trifolii repentis rarius in Germania. — *Gnomoniæ setaceæ* paraffinis dicitur.

39. **Gnomonia? curvirostra** (Sow.) Sacc. *Sphæria curvirostra* Sow. 2228
t. 373, f. 5, Fr. S. M. II, p. 517. — Gregaria; peritheciis tectis ovatis nigris, ostiolo erumpente æquali glabro brevioribus.

Hab. ad caules Umbelliferarum in Britannia et Suecia. — Perithecia ovata in ostiolum longius obliquum attenuata. Ostiolo diffracto, facile pro specie diversa sumi potest. An *Diaporthe*?

40. **Gnomonia? Grossulariæ** (Fr.) Sacc. *Sph. Grossulariæ* Fr. S. M. 2229
II, 521, Wallr. Comp. n. 3875. — Sparsa; peritheciis tectis globosis utrinque prominentibus, atris, intus albis, ostiolo minuto nigro.

Hab. in foliis putridis Ribis Grossulariæ in Germania et Suecia. — Perithecia fere *Gn. setaceæ*, demum collabentia, sed ostiolum in pagina inferiore non prominet et gelatinam subcircularis erumpentem semel vidi; intus primo albido-cellulosa, puncto centrali nigro, dein evacuata (Fr. l. c.).

41. **Gnomonia ulmea** (Sacc.) Thüm in Flora 1878, p. 178. — *Sphæ-* 2230
ria ulmea Fr. Syst. mycol. II, p. 436. *Xyloma ulmeum* Schweinz. Syn. fung. Carol. p. 55, n. 288. *Mycoth. univ.* n. 1155. — Tecta; peritheciis subcircinatis, distichis, superne tuberculis corrugatis nitidis prominulis, ostiolis solitariis conicis punctiformibus.

Hab. in foliis emortuis Ulmi americanæ in Carolina austr., bor. et Canadâ. — Sphæriæ species optima et pulcherrima. In pagina superiore folii observantur maculæ indeterminatæ, lacteæ, quibus innata insident tubercula distincta subconcentrica corrugata nitida, quæ, si epidermis tollatur, sunt bases perithecorum evidentissimorum in folii parenchymate fere libere nidulantium, globosorum. Ostiola in pagina inferiori prominent minuta, recta.

EPICYMATIA Fuck. Symb. myc. p. 118. (Etym. *epi*, supra et *cymatium*, apothecium). — Perithecia plerumque lichenicola, hemisphæ-

rica, basi adnata subsuperficialia, coriacea v. subcarbonacea, ostiolo minutissimo pertusa. Asci oblongi octospori typice aparaphysati v. pseudoparaphysati. Sporidia oblonga, 1-(3?-)septata subhyalina. — *Pharcidia* Körb Par. Lichen. p. 469 convenit, sed genus revera fungus potius quam lichen videtur. Plures species forte inter se nimis affines, ideoque conjungendæ. Cum *Sphærella*, *Lizonia* et *Didymella* pluribus notis convenit et nisi potissimum vita lichenicola vix dignoscitur.

1. **Epicymatia vulgaris** Fuck. Symb. myc. p. 118, *Sphæria epicymatia* 2231 Wallr. Crypt. n. 3741, *Sphæria apotheciorum* Mass. Auton. Crost. p. 26, fig. 41, *Pharcidia congesta* Körb. Par. p. 470, Rehm Ascom. n. 33, *Sphæria propinquella* Nyl. Mus. Fenn. p. 112, *Epicymatia commutata* Niessl Not. Pyr. p. 8, t. IV, f. 25. — Peritheciis superficialibus, gregariis, sæpe confertis, minutissimis, globoso-conoideis, atris, coriaceis, ostiolo vix visibili; ascis rosulato-fasciculatis, oblongo-ovatis vel oblongo-lanceolatis, tunica apice incrasata sessilibus, 30-40 \approx 13-14; sporidiis 8 farctis, cylindraceis vel parum cuneatis, utrinque obtuse rotundatis, rectis curvatisve 1-3-septatis non constrictis partim muco obductis subhyalinis, 12-13 \approx 3-4; paraphysibus non visis. — Sec. Fuck. l. c. *Gymnosporium Phyciæ* Kalchbr. sisteret st. conidicum.

Hab. in apotheciis Lecanoræ subfuscæ el Placodii albescentis in Germania, Gallia, Italia, Britannia, Fennia et Belgio. — Apothecia Lecanoræ ob peritheciorum copiam tandem omnino nigrescunt. Si sporidia typice quadrilocularia sint, species ab hoc genere eliminanda erit.

2. **Epicymatia Schæreri** (Mass.) Sacc., *Sphæria Schæreri* Mass. Sulla 2232 Lecid. Hookeri, p. 8, fig. 3, A. B. — Peritheciis globoso-sphæroides, punctiformibus, atris, nitidis, integris; ascis subclavatis, octosporis, paraphysibus laxis evanidis mucilaginosi obvallatis; sporidiis 2-3-stichis elliptico-subincurvis, hyalinis, bilocularibus, 12-13 \approx 2, 5.

Hab. in thallo Lecideæ Hookeri Schær. in Helvetia et Italia.

3. **Epicymatia Mammillula** (Anzi) Sacc., *Leptosphæria Mammillula* 2233 Anzi An. lichen. p. 26. — Peritheciis in cubiculi tuberculis minutissimis mammiformibus sæpe carneo-coloratis inclusis, solo ostiolo purpureo papillatim prominulo; ascis cylindraceo-fusiformibus, substantia subgelatinosa pallida obvallatis, octosporis; sporidiis incumbenti-1-seriatis, navicularibus, 1-septatis, 13-15 \approx 4-7, pellucidis.

Hab. in thalli *Peltigeræ caninæ* pagina superiore in sylvis Bormiensibus, Valfurva Italiæ borealis.

4. **Epicymatia thallina** (Cooke) Sacc. *Sphaerella thallina* Cooke Grev. 2234 VIII, p. 10. — Peritheciis supra thallum sparsis, minutis, semiimmersis, nigro-fuscis, tenuiter papillatis; sporidiis distichis, ellipsoideis, uniseptatis, leniter constrictis, $15 \approx 5$, hyalinis.

Hab. in thallo *Physciæ obscuræ*, Eastbourne Britanniae (C. J. MÜLLER).

5. **Epicymatia araneosa** (Rehm) Sacc., *Sphaerella araneosa* Rehm 2235 Ascom. n. 133 et Diagn. n. 133. — Hyphis fuscis, septatis, c. 8 μ . crassis, aranæe modo thallum et discum apotheciorum nigro-maculantibus: peritheciis sparsis vel gregariis, minimis, oculo nudo vix perspicuis, atris, parenchymatice fusco-contextis, globosis; ascis pyriformibus, sessilibus, apice incrassatis, 36–40 \approx 15, in singulis peritheciis quaternis, vario stadio inæqualiter evolutis aparaphysatis, octosporis, jodo immutatis; sporidiis obtuse ellipsoideis, bicellularibus, utraque cellula nucleo 1 magno vel 2 minoribus prædita, 12–14 \approx 6–7, primitus hyalinis, dein fuscidulis, distichis.

Hab. supra thallum et apothecia *Ochrolechiæ pallescens* var. *upsaliensis* (L.) etc. in alpibus editioribus Tyrolensibus (Dr. ARNOLD). — Cfr. Arnold Fragm. 16, t. II, fig. 22–23.

6. **Epicymatia borealis** Sacc. ex Fr. Hedw. 1881, p. 59 (*Sphaeria* n. 9). 2236 — Peritheciis parvis, ad 0,2 mill. latis, adnatis vel semiimmersis, primo subglobosis, dein varie corrugatis et apice fere descissis, atris, paraphysibus (genuinis?) gracilibus, ramosis anastomosantibus; ascis cylindrico-clavatis; sporidiis 4–6, monostichis, ellipsoideis, medio constrictis, utrinque obtusis, diblastis, 15–17 \approx 7–9.

Hab. in thallo licheneso sterili in Groënlandia.

7. **Epicymatia frigida** Sacc. ex Fr. Hedw. 1881, p. 60 (*Sphaeria* n. 10). 2237 — Peritheciis minutissimis, tantum lente valde augente detegendis, hyphis nigricantibus toruloideis impositis atris; paraphysibus nullis distinctis; ascis ventricosis; sporidiis octonis ovoideis, vel oblongo-ovoideis, utrinque obtusis diblastis, hyalinis, 15–18 \approx 5–7.

Hab. in lichene *Thamnolia vermiculari* in Groënlandia.

8. **Epicymatia thallophila** (Cooke) Sacc., *Sphaeria thallophila* Cooke 2238 Handb. n. 2614. — Peritheciis sparsis vel gregariis, thallo semiimmersis, subglobosis, carbonaceis, ostiolo papillato pertuso; ascis cylindricis; sporidiis monostichis, ellipsoideis, uniseptatis, non constrictis, hyalinis, tandem chlorinis, 10 μ . longis.

Hab. in thallo *Lecanoræ subfuscæ*, Glenshee Britanniae.

(L. LINDSAY). — Sec. Cooke l. c. non improbabile videtur speciem esse xylogenam, superficialem, lichenis thallum superpositum perforantem.

9. **Epicymatia Hageniæ** (Rehm) Sacc. *Pharacidia Hageniæ* Rehm et 2239
Wint. Flora 1872, p. 523, Arnold, Fragm. 16, tab. II, fig. 19. — Peritheciis gregariis vel subconfluentibus, epidermide lichenis innatis, fusco-atris globosis, poro simplici pertusis, 36–100 μ . diam.; ascis obovatis utrinque paululo attenuatis, sessilibus, aparaphysatis octosporis, 30–40 \approx 13–15; sporidiis in parte asci inferiore fere conglobatis, elongato-oblongis, utrinque rotundatis, uniseptatis, ad septum non constrictis, loculo superiore subcrassiore, 12–15 \approx 4–5, bi-quadriguttatis, hyalinis.

Hab. in pag. sup. thalli Hageniæ ciliaris ad Prunum in Franconia Germaniæ.

10. **Epicymatia lichenicola** Mass. sub *Dothidea*, Auton. lichen. crost. 2240
pag. 45, fig. 81. — Peritheciis subrotundis, innatis cum stromate cinereo-nigrescente, rugoso-scabrido concretescentibus; ostiolis minutissimis vix perspicuis; nucleo pallido subgelatinoso; ascis oblongis utrinque attenuatis, 8spor. paraphysibus obsolete obvallatis, sporidiis bilocularibus, diaphanis, subgranulosis, elliptico-oblongis, subincurvis, utrinque obtusis, 18–24 \approx 6–6,5.

Hab. in lamina proligera Pachyosporæ viridescens Mass. (quæ var. *Aspiciliæ calcareæ*) in rupibus trachiticis collium Euganei prope Padova Italiæ borealis.

11. **Epicymatia? Psoromatis** (Mass.) Sacc. *Sphæria Psoromatis* Mass. 2241
in Flora 1856, p. 241, t. III, f. 13. — Peritheciis exiguis, thallo immersis, globulosis; ascis; sporidiis breve fusoideis, vel clavulatis, curvulis, 12–18 \approx 6, uniseptatis, leviter constrictis, subhyalinis, utrinque obtusiusculis.

Hab. ad thallum *Psoromatis* crassi hinc inde in agro Veronensi Italiæ borealis.

12. **Epicymatia Massariæ** Pass. Diagn. fungh. nuov. n. 8 in Nuov. 2242
Giorn. Bot. ital. VII (1875). — Peritheciis in tuberculum subglobosum, *Massariæ* centro insidens, minute ex ostiolis extus papillatum, concretis, parvis, atris, vel etiam circa matricem et in ejus cavitate ampliata, sparsis; ascis oblongo-clavatis, 8spor. sporidiis 1–2-seriatis, elliptico-oblongis, interdum subcurvatis, medio septatis, hyalinis, loculis guttulatis, endoplasmate granuloso.

Hab. in peritheciis *Massariæ Curreyi* ad ramos Tiliæ, Parma Ital. bor. — *Massariæ* perithecia parasito laborantiã ut

plurimum incrassantur, et ostiolo crasso, subgloboso terminata videntur.

13. **Epicymatia verrucariæformis** Fuck. Symb. myc. p. 118. — Peritheciis media magnitudine, sparsis, subsuperficialibus, plano-hemisphæricis, demum umbilicatis, subtilissime papillatis perforatisque, atris, basi stromate spurio, angusto, tenuissimo cinctis; ascis oblongis, 8sporis, $64 \approx 16$; sporidiis subdistichis, oblongis, utrinque obtusis, inæqualiter didymis, loculis biguttulatis, hyalinis, $16 \approx 5$.

Hab. supra epidermidem (thallo lichenoso invasam?) ramulorum Cratægi Oxyacanthæ in Jura Helvetiæ (MORTIER).

LIZONIA Ces. et De Not. Schem. Sfer. p. 41 (Etym. prob. a *Dominico Lisa* botanophilo taurinensi). — Perithecia subaggregata, ovoidea, glabra, ostiolo minutissimo, coriaceo-membranacea, erumpenti-superficialia. Asci clavati. Sporidia disticha, oblonga sæpius inæquilaterialia, uniseptata, e hyalino fuscidula majuscula. Paraphyses nullæ. — Fungilli foliicolæ; a *Sphærella* recedentes ob perithecia subcoriacea congesto-erumpentia et sporidia sæpius majuscula; ab *Epicymatia* quia non lichenicolæ etc.

1. **Lizonia emperigonia** (Auersw.) De Not. Sfer. ital. p. 72, t. LXXVII, 2244
Sphæria emperigonia Auersw. in Rabh. Herb. myc. I, p. 850. — Paritheciis in pagina alarum superiore foliorum periandricorum in series transversas ordinatis, filis a basi prodeuntibus fuliginis in folio repentibus adfixis, ovoideis, tuncque apice obtusiusculis vel sphæroideis tuncque papilla conoidea præditis, osculo nisi minutissimo, atris, opacis, 250-300 μ . diam.; ascis numerosis, rectis, clavatis octosporis $135 \approx 18$; sporidiis distichis, oblongatis, sæpius inæquilateralibus, medio uniseptatis, ad septum leviter vel vix constrictis, loculo altero sæpe paullo majori, flavescensibus vel subfuscescentibus, pellucidis, 30-46 \approx 10-15.

Hab. in foliis periandricis Polytrichi communis emortuis in Germania, Italia, Fennia.

2. **Lizonia distincta** Karst. Myc. Fenn. II, p. 186, *Sphærella distincta* Karst. Fungi Spetsb. p. 107. — Peritheciis sparsis, parenchymati folii innatis, dein utrinque prominulis, sphæroideis, interdum vertice subcupulato-collapsis, astomis, atris, 0,3 mill. latit.; ascis brevissime pedicellatis, oblongatis, 120-180 \approx 32-48, octosporis; sporidiis di- vel tristichis, ovoideo- vel subfusoideo-oblongatis, ut plurimum inæquilateralibus, plus minus extra medium uniseptatis, hyalinis vel subluteolo-hyalinis, 40-50 \approx 13-20.

Hab. in foliis graminum vetustis in Fennia et Spitzbergia.

3. **Lizonia fragilis** (Berk.) Sacc. *Sphæria* (cæspitosæ) *fragilis* Berk. 224

Fl. N. Zel. II, p. 205, t. CVI, fig. 7. — Peritheciis congestis, fragilissimis, nigro-fuscis, obtusis, opacis, minimis; sporidiis hyalinis breviter subfusiformibus, uniseptatis vix constrictis, 16–25 μ . long.

Hab. in pag. inf. foliorum Eurybiæ furfuraceæ in Nova Zelandia (COLENSO).

4. **Lizonia pullulans** (Berk.) Sacc., *Sphæria* (cæspitosæ) *pullulans* 2247

Berk. Fl. N. Zel. II, 205. — Peritheciis aggregatis, subglobosis, astomis, vel ore leviter prominulo opacis; ascis subcylindricis; sporidiis oblongis utrinque subattenuatis, curvulis, uniseptatis, 16–17 μ . long., leniter constrictis.

Hab. in foliis Leucopogonis Fraseri, præcipue in pag. inf., Mission Station, Nova Zelandia (COLENSO).

MELANOPSAMMA Niessl Notiz. über Pyren. pag. 40 (nomen), Sacc.

Mich. I, p. 347. (Etym. *melas*, niger et *psamme*, arena). — Perithecia superficialia v. basi adnata v. semi-immersa, globosa, v. conico-depressa, papillata, carbonacea, glabra v. initio pilis conidiophoris inspersa. Asci paraphysati 4–8-spori. Sporidia ellipsoidea v. subfusioidea, uniseptata, hyalina. — Respondet *Amphisphærie* et pariter variat formis peritheciis globosis stricte superficialibus et peritheciis conoideis basi infossis; quæ formæ in posterum forte generice distinguendæ erunt. *Amphisphærie* species hyalodidymas huc ad interim duxi.

1. **Melanopsamma pomiformis** (Pers.) Sacc. Mich. *Sphæria pomiformis* 2248

Pers. Syn. Fung. p. 65. *Eriosphæria raripila* Sacc. F. V. ser. II, 326. *Melanomma pomiforme* Fuck., Rehm Asc. n. 36. — Peritheciis confertis v. sparsis, superficialibus, pomiformibus, circa ostium papilliforme impressis, lævibus, subtenuibus, rigidulis, atris, initio pilis rariusculis conidiophoris vestitis, latit. circiter 0,4 mill.; ascis fusioideo-clavatis, 65–75 \approx 12–14 octosporis, mucoso-paraphysatis; sporidiis distichis, ellipsoideis, uniseptatis, 2-guttatis, ad septum vix v. parum constrictis, hyalinis, 12–16 \approx 6–7. — Status conidicus sistit *Sporocybem albigedem* B. et Br. (*Fuckelina socia* Sacc. F. Ven. II, p. 326).

Hab. supra ligna truncorum exsiccorum Quercus, Alni, Salicis, Ulmi etc. in Fennia meridionali per annum passim, in Suecia, Britannia, Gallia, Germania, Italia, Austria, Algeria, America boreali. — Perithecia juvenilia globosa, conico-papillata, et

pilis conidiophoris vestita senio glabrescunt et sæpius, collabascendo, umbilicata fiunt, quo statu notam *Sph. pomiformem* sistunt. — Var. *minor*: peritheciis subdistantibus, minoribus, (jugiter?) papillatis; ascis cylindricis $90 \approx 8$; sporidiis $12 \approx 5-6\frac{1}{2}$, 2-guttulatis, hyalinis. In ligno populeo Patavii, Jan. 1877.

2. **Melanopsamma Ruborum** (Lib.) Sacc. Mich. II. p. 58. *Sphæria Ruborum* Lib. Arduen. n. 340. — Peritheciis globoso-papillatis villo fuligineo interseminatis; setis cuspidatis, basi incrassatis, $200 \approx 6$, septatis, fuliginis; ascis cylindræo-fusoideis, breve stipitatis, apice tunica integra obtusis, $80-90 \approx 10$, parce paraphysatis, 8-sporis; sporidiis fusoides, $15 \approx 3\frac{1}{2}-4\frac{1}{2}$, 2-4-guttulatis, hyalinis, denique 1-septatis, dilute fuscellis.

Hab. in sarmentis emortuis Rubi fruticosi, Malmedy in finibus Galliæ et Germaniæ.

3. **Melanopsamma cryptostoma** (Lév.) Sacc. *Sphæria cryptostoma* Lév. Ann. Sc. nat. 1843, XIX, 213-335 (Pl. 7, fig. 35). — Peritheciis gregariis, globosis, papillatis, hirtis, atris e subiculo villosa concolori emergentibus; nucleo albo; ascis clavulatis, paraphysatis, octosporis; sporidiis oblongis utrinque acutis, monostichis, constricto-uniseptatis, hyalinis.

Hab. ad ramos humi prostratos Ericæ cineræ, Bois de Boulogne circa Parisios. — Habitus fere *Rosellinæ Aquilæ*.

4. **Melanopsamma Pustula** (Curr.) Sacc. Mich. I, p. 347. *Sphæria Pustula* Curr. in Linn. Transact. XXII, p. 317, t. 59, f. 31. *Sph. perexigua* Bk., Cooke Handb. p. 863. — Subaggregata, nigra; peritheciis subglobosis; ascis octosporis; sporidiis distichis, subellipticis, $20-25 \mu$. longis, leniter curvulis, e hyalino chlorinis, plasma bipartito, 1-septatis.

Hab. in ligno putri, Bungay Britannicæ. — Habitus *Melanomatis Pulvis-pyræ*.

5. **Melanopsamma coffeicola** (B. et C.) Sacc. *Sph. (pertusæ) coffeicola* B. et C. Cuban Fungi n. 851. — Nuda; peritheciis late conicis glabris; ascis clavatis; sporidiis hyalinis biarticulatis, articulo superiore conico parvo, inferiore subelliptico, 25μ . long.

Hab. in ramis emortuis Coffeæ in Cuba. — Sporidia fere illa *Apiosporæ* imitantur.

6. **Melanopsamma confertissima** (Plowr.) Sacc. *Sph. confertissima* Plowr. Calif. Sphær. in Grev. VII, p. 73. — Peritheciis minutis, in greges dense stipatis, ambitu laxioribus, subsphæricis compres-

sisque; ascis cylindraceis, 80–100 \approx 10–15; sporidiis biseriatis, uniseptatis, subæqualibus, 15–20 \approx 5, hyalinis.

Hab. in squamis strobilorum Sequojæ sempervirentis in California Americæ borealis.

7. **Melanopsamma lanuginosa** (B. et C.) Sacc. *Sph. lanuginosa* B. et C. North Amer. Fungi n. 898. — Peritheciis globosis, sursum leviter applanatis; basi lanuginosis; sporidiis uniseriatis, oblongis, uniseptatis, subbiconicis, inæquilateralibus. 2254

Hab. in ramis Robiniæ in Carolina inf. Amer. bor.

8. **Melanopsamma congesta** Speg. Fungi Arg. Pug. IV, n. 148. — Peritheciis globosis, atris, carbonaceis, minutis, 120–150 μ . diam. densissime gregariis, subconfluentibus, latissime matricem tegentibus, ostiolo papillato majusculo ornatis, glaberrimis; ascis cylindraceis, sursum truncato-rotundatis, deorsum attenuato-stipitatis, 42–50 \approx 4–5, octosporis, paraphysibus filiformibus longioribus, obvallatis; sporidiis oblique monostichis, ellipticis, utrinque plus minusve rotundatis, 6–7 \approx 3–3,5, primo continuis, dein spurie 1-septatis. 2255

Hab. in trunco carioso decorticato Celtidis Talæ in sylvis australioribus «Montes largos» dictis, Argent. Amer bor.

9. **Melanopsamma Bolleana** (Pass. et Thuem.) Sacc. *Melanomma Bolleanum* Pass. et Thüm. Contr. fung. Litor. n. 113, t. I, fig. 16. — Peritheciis subsuperficialibus; ascis oblongo-clavatis, membrana tenuissima, ægre perspicua, sex-octosporis; sporidiis ellipticis, plus minus longis, medio septatis, rectis vel curvulis, hyalinis (an semper?); paraphysibus brevibus articulatis. 2256

Hab. ad ramulos emortuos Rosmarini officinalis, Gorizia, Austr. merid. — Specimina incompleta. Adsunt perithecia minima stylosporea, sporis oblongis triseptatis, fuscis. An hæc *Hendersonia*?

10. **Melanopsamma mendax** Sacc. et Roum. Reliq. myc. Lib. Ser. II, n. 139, tab. XIX, fig. 6. — Peritheciis in subiculo late effuso velutino fuligineo denso gregariis, superficialibus, globoso-papillatis, $\frac{1}{5}$ mill. diam., nitidulis, levibus; ascis tereti-clavatis 130 \approx 12–15, paraphysatis, breve stipitatis, apice rotundatis, octosporis; sporidiis subdistichis oblongo-didymis constrictis, 20–22 \approx 8, utrinque obtusiusculis, hyalinis, denique pallide fuligineis. 2257

Hab. in sarmentis Rubi Idæi, Malmedy, Gallia et Germania. — A *Melanopsamma Ruborum*, quam habitu æmulatur, differt ascis et sporidiis multo majoribus.

11. **Melanopsamma Rhodomphalos** (Berk.) Sacc. *Sphæria rhodomphalos* Berk. Lond. Journ. 1845, p. 313. Curr. Linn. Transact. XXII, t. 57, f. 28. *Sph. rhodopis* Fr. Summa 389 (nomen). — Peritheciis globosis, denudatis, zona rosea circa ostiolum ornatis; ostiolo leniter depresso; ascis tereti-clavatis, breve stipitatis octosporis; sporidiis biseriatis, hyalinis v. chlorinis, subfusoides, curvulis uniseptatis, binucleatis, 17-20 μ . long., medio subinde constrictis. 2258
- Hab.* in ligno putrescente, Cincinnati, Ohio, Amer. bor.
12. **Melanopsamma latericollis** (Fr.) Sacc. Mich. I. p. 347. *Trematosphæria latericollis* Fuck. Symb. mycol. App. II, p. 31. *Sphæria latericollis* Fr. Syst. m. II, p. 464, non DC.! — Peritheciis sparsis subgregariisve, raro 2-3-confluentibus, media magnitudine, primo immersis demum subliberis, oblique ovatis seu irregularibus, aterrimis, ostiolo plerumque laterali, recto seu curvato, cylindraceo, perithecium subæquante, perforato; ascis oblongis, stipitatis, 8-sporis, 80 \approx 14; sporidiis distichis, oblongo-fusiformibus, utrinque obtusiusculis, rectis seu curvatis, didymis, ad septum arcte constrictis, loculis 1-2-guttulatis, dilutissime fuscis, 24 \approx 7-8. 2259
- Hab.* in ligno putri decorticato Populi nigrae et Quercus in Germania et Suecia.
13. **Melanopsamma borealis** (Karst.) Sacc. Mich. I, p. 347. *Sphæria borealis* Karst. Myc. Fenn. II, p. 94. *Urularia borealis* Karst. Enum. Fung. Lapp. p. 209. — Peritheciis sparsis erumpentibus, tandem basi tantum innatis, orbicularibus, applanatis demum vertice rimoso-dehiscentibus, glabris, atris, latit. 0,3-0,4 mill.; ascis fixis cylindraceo-subclavatis vel subcylindricis 50 \approx 6 octosporis; sporidiis oblique monostichis, ellipsoideis, 2-guttulatis vel spurie tenuiter uniseptatis, hyalinis, 4-6 \approx 2,5-4; paraphysibus parvis, filiformibus. 2260
- Hab.* ad lignum juniperinum vetustum in Lapponia rossica, Kitofka. — Species ulterius inquirenda; dignitas ejus generica facile est concedenda.
14. **Melanopsamma tenerrima** Speg. Fungi Arg. Pug. IV, n. 151. — Peritheciis erumpenti-superficialibus, conico-hemisphæricis, 200-250 μ . diam., glaberrimis, atris, teneris, tenui-membranaceis, contextu parenchymatico-anguloso, majusculo, distinctissimo, fumoso-olivascente, ostiolo papillato, subcarbonaceo, latiusculo, 20 μ . diam. perforato; ascis..... cito diffluentibus; sporidiis elliptico-cylindraceis, utrinque acutiuscule rotundatis, 32-37 \approx 10-12, medio 1-septato-constrictis, loculis pergrosse 1-guttulatis, granulosis, hyalinis. 2261

Hab. in culmo putrescente *Bambusaceæ* speciei ejusdam ad ripas del Rio de la Plata prope Palermo, Amer. merid.

15. **Melanopsamma improvisa** (Karst.) Sacc. *Sph. improvisa* Karst. 2262

Mycol. Fenn. II, 93. *Melanomma improvisum* Karst. Symb. Myc. Fenn. *Zignoella improvisa* Sacc. Mich. II, 346. — Peritheciis gregariis vel sparsis, adnato-superficialibus, sphæroideis, vertice conoideo-attenuatis, papillatis, lævissimis, nitidulis, glabris, nigris, latit. 0,2-0,3 mill.; ascis cylindræis, 80-90 \approx 7 octosporis; sporidiis monostichis, oblongatis vel subellipsoideis, utrinque attenuatis, rectis vel inæquilateralibus 1-3-guttulatis vel spurie tenuiter uniseptatis, chlorino-hyalinis, 12-18 \approx 5-7, paraphysibus filiformibus, coalescentibus.

Hab. ad lignum mucidum Alni prope Wasa Fennicæ. — Fructificatione *Melanopsammæ pomiformi* maxime affinis, habitu vero diversissima.

16. **Melanopsamma hydrotheca** Speg. Fung. Arg. Pug. III, n. 57. — 2263

Peritheciis primo sublenticularibus, tectis, dein erumpenti-superficialibus, globoso-hemisphæricis, densiuscule sparsis v. 3-5-aggregatis, atro-olivaceis, initio adpresse laxèque tomentosopruniculosis, serius glabris, basi tantum hyphis vestitis, $\frac{1}{3}$ - $\frac{1}{4}$ mill. diam., ostiolo impresso pertusis; ascis late clavatis, sursum rotundatis, deorsum longiuscule attenuato-pedicellatis 100-110 \approx 20-25, cito diffluentibus ac ægre visibilibus, aparaphysatis? sporidiis di-tristichis, ellipticis, utrinque obtusiuscule rotundatis, medio constricto-septatis 18-22 \approx 10-12, granuloso-farctis, hyalinis.

Hab. ad ramulos emortuos dejectos *Erythrinæ Cristæ-galli* in nemorosis humidis prope la Recoleta, Argent. Amer. merid.

17. **Melanopsamma anaxæa** (Speg.) Sacc. *Amphisphæria anaxæa* 2264

Speg. Nov. Add. n. 71. Mich. II, p. 249. — Peritheciis tenui-membranaceo-carbonaceis, lenticularibus, ostiolo pertuso, latiusculo donatis 200-250 μ . diam., in ligno decorticato, sæpe dealbato insidentibus; ascis cylindræis, antice rotundatis postice breviter ac nodulose pedicellatis, paraphysibus longioribus obvallatis, 80-90 \approx 8-9, octosporis rarius tetrasporis; sporidiis ellipticis, medio uniseptatis non vel vix constrictis, utrinque rotundatis, non vel 1-2-guttulatis, crasse tunicatis, hyalinis, 12-15 \approx 6-7.

Hab. in radicibus *Dryadis octopetalæ* in alveo Plavis, Belluno, in Italia boreali.

18. **Melanopsamma recessa** (C. et P.) Sacc. *Sphæria* (denudata) *re-* 2265
cessa C. et Peck. 29 Rep. on the St. Mus. New York. — Peri-

theeciis gregariis, initio semi-immersis, glabris, depressis, nigro-fuscis v. nigris, 300 μ . diam., ascis subclavatis; sporidiis mono-disticis, ellipticis, uniseptatis, ad septum profunde constrictis, 13-20 \approx 7-10, hyalinis.

Hab. in lignis emortuis, Tyre Amer. bor. — Perithecia subinde discoidea videntur.

19. **Melanopsamma texensis** (Cooke) Sacc., *Sphaeria texensis* Cooke 2266
Fungi of Texas 143. — Sparsa, grisea; peritheciis subglobosis ligno atrato subimmersis, vix prominulis; ascis cylindraceutis; sporidiis lanceolatis, uniseptatis, hyalinis, 15 \approx 6.

Hab. in ligno quercino, Texas Amer. bor. (RAVENEL). — An *Diaporthe*?

20. **Melanopsamma Petrucciana** (Cald. et De Not.) Sacc., *Sphaeria* 2267
Petrucciana Cald. Erb. cr. ital. n. 242, Comm. Critt. I, pag. 40, tab. II, fig. VI, *Amphisphaeria Petrucciana* Cald. et De Not. Comm. Critt. I, pag. 223, Michel. II, 316. — Peritheciis innato-erumpentibus, tandem emersis, atris, sphaericis, subinde sphaeroideo-conicis denique poro pertusis, sparsis, gregariisque, stromate subcinereo maculiformi thalliformi (proprio?) cinctis; ascis cylindricis breve stipitatis, apice rotundatis, paraphysibus filiformibus obval-latis, 150-160 \approx 16-18, octosporis jodo non cœrulescentibus; sporidiis monostichis, ellipsoideis, utrinque obtuse rotundatis, 18-24 \approx 11-13, 1-septatis, non constrictis, hyalinis.

Hab. in cortice Cupressi prope Firenze Italiae mediae et in Gallia australi.

21. **Melanopsamma glandis** (Duby) Sacc. *Sphaeria glandis* Duby Bot. 2268
Gall. 700, Mont. Fl. Alg. p. 504. — Sparsa aut hinc inde aggregata, aterrima, nitida; peritheciis orbiculatis, applanato-convexis, basi interdum subdilatis ostiolo minimo vix prominulo, demum pertuso; ascis ventricosis utroque fine obtusis, 8sporibus; sporidiis oblongis, uniseptatis, biseriatis.

Hab. ad glandes humi delapsas *Quercus cocciferæ* in Algeria et Gallia.

22. **Melanopsamma Papilla** (Schw.) Sacc., *Amphisphaeria Papilla* 2269
(Schw.) Mich. II, p. 138, *Sph. Papilla* Schw. Carol. n. 159. — Sparsa, atra, opaca, peritheciis tornatis, hemisphaerico-conicis innatis, ostiolo papillæformi; ascis cylindraceutis crassis, paraphysatis, octosporibus; sporidiis oblique monostichis, ovoideo-biconicis, 40 \approx 15-20, leniter constrictis, 2-nucleatis, hyalinis, jodii ope (æque ac ascibus) flavescens.

Hab. ad ligna et cortices *Aceris* etc. in Amer. bor. (SCHWEIN., FARLOW). — Solitaria, major, late conica, superficiali-innata, glaberrima, vix nisi sub lente perspicue rugulosa. Ostiolum distincte pertusum.

23. **Melanopsamma? europæa** Speg. Fungi Arg. Pug. IV, n. 150. — 2270

Peritheciis innato-superficialibus, basi matrici parce infossis, globoso-depressis, 250-350 μ . diam., ostiolo minuto, papillato-truncato donatis, sparsis vel gregariis, atris, subnitentibus, carbonaceis; ascis fusoido-clavatis, sursum subtruncato-rotundatis deorsum in pedicellum parvulum attenuatis, 80-84 \simeq 12-14, octosporis, paraphysibus filiformibus, densiusculis obvallatis; sporidiis distichis, fusoido-ellipticis, utrinque obtusiusculis, 27-28 \simeq 6-7, primo medio tantum 1-septato-constrictis, 4-6-guttulatis (dein triseptatis hyalinis, strato mucoso tenui ad apicem incrassato obvolutis).

Hab. in sarmentis putrescentibus Rubi discoloris in dumetis prope S. José de Flores, Argent. Amer. merid. — Species notis plurimis fructificationis *Lophiostomatibus* affinis videtur, sed adhuc ostiolum umboniforme poro rotundo pertusum visum est. « An *Massariella?* ».

24. **Melanopsamma? Diana** Speg. Fungi Arg. Pug. IV, n. 149. — 2271

Peritheciis laxè gregariis, lenticulari-hæmisphæricis, 250-300 μ . diam., atris, glaberrimis, subcarbonaceis, epidermide velatis, prominulis, ostiolo vix papillulato erumpente, non exerto ornatis; ascis cylindræo-clavatis, sursum obtuse rotundatis ac crasse tunicatis, deorsum breviter attenuato-pedicellatis, 95-110 \simeq 16-18, octosporis paraphysibus filiformibus obvallatis; sporidiis recte vel oblique distichis, ellipticis vel elliptico-elongatis, rectis vel inæquilateralibus, utrinque attenuato-rotundatis, 30-35 \simeq 9-10, primo medio 1-septato-constrictis, loculis grosse 2-guttulatis, stratoque crassiusculo, 2-3 μ . crass., obvolutis (dein muco destitutis, 3-septato-constrictis, hyalinis; an postremo fuligineis?).

Hab. in ramis dejectis putrescentibus *Cephalanthi Sarandi* in dumetis uliginosis à las Conchas, Argent. Amer. merid. — Species a genere *Melanopsamma* longe abhorrens et facile ad novum genus trahenda; characteres perithecorum *Didymosphæriæ*, fructificationis fere *Massariæ*, ab utroque tamen valde diversa. « Probabiliter *Massariella* ».

BERTIA De Not. in Giorn. bot. ital. I, p. 335 (Etym. a Doct. *Josepho Berti*, botanophilo ex Porto Maurizio Ital. bor.). — Perithecia su-

perificialia vel basi insculpta, coriaceo-carbonacea, corrugata vel tuberculata, atra, ostiolo impresso minuto. Asci 4-Spori, paraphysati vel non. Sporidia majuscula typice uniseptata, teretiuscula (rarius 3-5-septata), hyalina. — Fungi lignicolæ, rarius lichenicolæ.

1. *Eubertia*: sporidiis uniseptatis.

1. **Bertia moriformis** (Tode) De Not. in Giorn. Bot. ital. I, pag. 335. 2272

Sacc. Fungi ital. tab. 440, *Sphæria moriformis* Tode Meckl. II, pag. 22, fig. 90, *Sph. claviformis* Sow., *Sph. rubiformis* Sow., *Sph. rugosa* Grev. — Peritheciis confertis, superficialibus, forma varia, cylindræis, sphæroideis, corrugato-tuberculatis, atris, glabris, rigidis, majusculis, circiter 0,6 mill. lat.; ascis pedicellatis, fusoideo-clavatis, 135-170 \approx 15-18, paraphysibus septulatis obval-latis; sporidiis octonis, conglobatis, elongatis, ut plurimum curvulis, guttulis 2 foetis vel spurie uniseptatis, hyalinis, 30-38 \approx 5-7.

Hab. in lignis corticibusque arborum variarum, e. g. Populi, Sorbi, Salicis, Fagi, Quercus in Suecia, Belgio, Britannia, Gallia, Italia, Fennia, America bor., Java et Kamtschatka.

2. **Bertia submoriformis** (Plowr.) Sacc., *Sphæria submoriformis* 2273

Plowr. Grev. V, p. 74. — Peritheciis irregularibus, rugosis, erumpentibus, magnitudine satis variis; ascis octosporis; sporidiis distichis teretiusculis, curvulis, 20-23 \approx 3, uniseptatis, hyalinis.

Hab. in corticibus putrescentibus, S. Francisco Americæ bor. (HARKNESS).

3. **Bertia italica** Sacc. et Speg. Mich. I, p. 404, Fungi ital. t. 336. 2274

— Peritheciis gregariis, superficialibus et facile secedentibus, globulosis, majusculis, $\frac{1}{2}$ mill. diam., vertice obtusis, undique et perspicue rugoso-tuberculatis, nigris, subopacis, nucleo nigro; contextu coriaceo-molliusculo, distincte laxo parenchymatico fuligineo; ascis elongato-clavatis, 145 \approx 28, apice obtusiusculis, breve crasseque stipitatis octosporis, paraphysibus nullis visis; sporidiis distichis, 32-35 \approx 12-14, oblongis vel subfusoideis, medio sæpe constrictis, 1-septatisque, utrinque obtusiusculis, 2-guttatis vel granulosis, hyalinis.

Hab. in cortice Juniperi communis. Conegliano, Ital. bor. (SPEGAZZINI). — A *Bertia moriformi* De Not., *B. querceti* Rehm et *B. lichenicola* De Not. ascis sporidiisque multo crassioribus præsertim distinguenda; a *B. macrospora* Sacc. defectu paraphysum sporidiisque brevioribus.

4. **Bertia australis** Speg. Fungi Arg. Pug. IV, n. 157. — Peritheciis 2275

dense gregariis, globosis, 300-350 μ . diam., in sicco depressis, rugulosis, ostiolo latiuscule umbilicato perforatis, atris, glaberrimis; ascis cylindræis antice obtusiuscule rotundatis deorsum breve ac crasse attenuato-stipitatis, p. sporif. 110-120 \approx 12, ped. 12-15 \approx 7-8, octosporis, aparaphysatis; sporidiis oblique monostichis vel rarius subdistichis, elliptico-elongatis, utrinque obtusiuscule rotundatis, 25 \approx 8-8,5, medio 1-septato-constrictis, localis primo grosse 2-guttulatis, dein medio spurie 1-septatis, hyalinis.

Hab. in truncis vetustis nec non ramis dejectis Celtidis Talaë et Sambuci australis in sylvis australioribus «Montes Largos» dictis, Argent. Amer. merid. — Cum *Sphæria* (Bertia) *moriformi* Tode f. *minore* Mont. in Gay. Fl. Chil. vol. VIII, p. 475 probabiliter identica.

5. **Bertia lichenicola** De Not. in Rabh. Fungi eur. ed. II, 950 (1864), 2276
Sacc. Fungi ital. t. 439, *Rhagadostoma corrugatum* Körb. Par. p. 473 (1865). — Peritheciis confertis, emersis vel semiemersis, sphæroideis, corrugatis, glabris atris, circiter 0,3 mill. lat.; ascis pedicellatis, clavatis, 98-115 \approx 14-18, tetrasporis; sporidiis distichis elongatis, plerumque curvulis, 1-septatis, hyalinis, 30-50 \approx 7-9.

Hab. in thallo Solorinæ crocæ in Lapponia, Britannia, Germania et Italia. — Sec. Karst. sporidia rarius 3-septata fiunt. Sec. Rehm habetur forma ascis bisporis.

6. **Bertia Vitis** Schulz. in Verhandl. zool.-bot. Gesell. Wien XX, p. 2277
644, Thuem Pilze Weinst. p. 113. — Peritheciis rotundatis, superficialibus, gregariis, sæpe connatis, ostiolo detruso demum aperto, nigris, carbonaceis; ascis clavatis vertice acutatis, octosporis; sporidiis cylindræis, curvulis, uniseptatis, dilutissime flavidis, 9 μ . long.; paraphysibus sursum coalescentibus, simplicibus.

Hab. ad sarmenta arida Vitis viniferæ in Slavonia.

7. **Bertia querceti** Rehm Ascom. 43, Wint. Diagn. p. 5. — Peritheciis 2278
gregariis vel subconfluentibus, villo tenuissimo, arachnoideo, repente, fuligineo insidentibus et ab eo vestitis, globosis, papillatis, rugosis, demum collapsis, subglabris, nitidis, atris, 0,6-0,7 mill. latis, ascis longissimis, elongato-cylindræis, angustis, stipitatis, 8-sporis, 130-180 \approx 10-12; paraphysibus filiformibus, simplicibus, obscure septatis, ascos æquantibus vel plerumque eis longioribus; sporidiis subdistichis vel inordinatis, fusiformibus, rectis vel rarius parum curvatis, hyalinis, spurie uniseptatis, supra septum paullulo incrassatis, 36-42 \approx 5, 2guttatis granulosisque.

Hab. in ramis quercinis in Franconia. — Cl. Rehm in Asc.

Diagn. p. 15 hanc speciem ad *Enchnosphaeriam pinaterum* Fuek. ducit, sed diagnosis Fuekellii longe differt præcipue ob sporidia 2-septata.

II. *Bertiella*: sporidiis tandem 3-5-septatis.

8. **Bertia macrospora** Sacc. Mich. I, p. 452, Fungi ital. t. 136. — 2279

Peritheciis dense gregariis confluentibusque, superficialibus subrotundis, repandisque ubique obtuse verruculosis, atris opacis, circiter $\frac{3}{4}$ -1 mill. diam., ostiolo brevi papillato, quandoque vix distincto, contextu pachydermatico, carbonaceo, atro; ascis cylindraceo-clavatis, apice rotundatis, deorsum crassiuscule attenuato-stipitatis, 100-130 \approx 15, stipite ima basi noduloso appendiculatoque, paraphysibus filiformibus brevibus parvis obvallatis, 8-sporis; sporidiis oblique monostichis vel distichis, elongato-fusoideis, 40-45 \approx 10-12, plerumque curvulis, utrinque obtuse attenuatis, constricto-1-septatis, crasse 4-guttatis, tandem tenuiter, 3-septatis, hyalinis.

Hab. in ligno decorticato putri fagineo in sylva Cansiglio Treviso. Ital. bor. — Affinis *Bertiæ querceti* Rehm: differt vero sporidiis plus quam duplo crassioribus, peritheciis magis rugosis, subopacis, etc.

9. **Bertia parasitica** H. Fab. Sphær. Vaucl. pag. 95, t. 3, fig. 33. — 2280

Peritheciis superficialibus, carbonaceis, duris, nunc solitariis, nunc confluentibus, hemisphæricis, atris Fragorum instar papillatis, vertice poro pertusis, 0,5-0,6 mill. diam.; ascis clavatis, stipitatis, 8-sporis, 60-70 \approx 10; sporidiis faretis, oblongis, utrinque obtusis, hyalinis, 3-5 septatis, nonnumquam loculo subintermedio septo longitudinali diviso, 15-20 \approx 4-5.

Hab. in crusta Eutypæ latæ, Vaucuse Galliæ, rarissime.

LENTOMITA Niessl Not. Pyr. p. 44 (Etym. mihi ignota). — Perithecia immersa, demum erumpentia vel libera, sub-coriacea vel submembranacea, in rostrum plus minus distinctum sæpe abbreviatum attenuata. Asci tenues, membrana interna apice incrassata, octospori. Sporidia didyma, hyalina. Paraphyses distinctæ. — *Rhynchostomatis* analogum genus, sed sporidiis hyalinis.

1. **Lentomita brevicollis** Niessl Notiz. Pyr. p. 45. — 2281

Peritheciis gregariis e ligno dealbato erumpentibus dein liberis, nudis, glabris, atris, minutis, 130-150 μ . diam., conoideis, basi applanata, versus apicem in ostiolum breve conicum attenuatis, substantia coriaceo-membranacea, basi plerumque collapsis; ascis e clavato subcylin-

draceis in stipitem brevem attenuatis, mox evanescentibus, membrana interna apice parum incrassata, 70-75 \approx 10-13, 8sporis; sporidiis initio distichis mox monostichis, ellipticis vel oblongis, obtusis, didymis, biguttatis, medio vix vel haud constrictis, hyalinis, 9-13 \approx 6-8; paraphysibus distinctis ascos paulo superantibus ramulosis, guttulatis.

Hab. in ligno emortuo Tiliæ, prope Czeitsch Moraviæ.

2. **Lentomita cæspitosa** Niessl Notiz. Pyr. p. 46. — Peritheciis dense gregariis vel cæspitosis, liberis, hemisphærico-conoideis, ostiolo conico sæpe abbreviato, glabris, tenuibus, fragilibus, majusculis, 300-350 μ . diam., atris; ascis valde elongatis, tubulosis, in stipitem attenuatis, 150-180 \approx 14-15, membrana interna apice incrassata; sporidiis oblique monostichis oblongo-ovatis, rectis, medio septatis valdeque constrictis, parte superiori paulo inflata late rotundata, inferiori attenuata, 17-19 \approx 8, hyalinis; paraphysibus multis, tenuibus, parum superantibus, apice ramulosis.

Hab. in ramis decorticatis Cratægi Oxyacanthæ prope Gratz Styriæ.

3. **Lentomita crassicollis** (De Not.) Sacc., *Sphæria crassicollis* De Not. Micr. ital. Dec. VII, p. 107, t. II. — Peritheciis gregariis ligno superficie nigrificato semi- vel penitus immersis, vix 1 mill. diam., nigris, tenuibus, ostiolo erumpente perithecio sublongiore recto vel curvo, cylindræo, annulatim sulcato et asperulo; ascis cylindræis, brevissime stipitatis, paraphysatis, octosporis, 125-130 \approx 13-15; sporidiis oblique monostichis, constricto-didymis, utrinque rotundatis, hyalinis, 17 \approx 7-7,5.

Hab. ad frustula lignea in M. Cenisio (Italia).

4. **Lentomita Schulzeri** (Schulz.) Sacc., *Ceratostoma Schulzeri* Pirotta Funghi Vitign. p. 38, *Ceratostoma Vitis* Schulz. — Crustas compactas, lignicolas formans; peritheciis dense gregariis, globosis, atris, longe rostratis, tuberculatis, deformatis, solitariis vel gregariis; ascis clavato-fusoideis, sex- raro octosporis, tenuissimis, cito evanidis; sporidiis oblongo-ovatis, medio constrictis, uniseptatis, bi- vel quadrinucleatis, dilute flavidis, 16-17 \approx 4; paraphysibus simplicibus, filiformibus, nucleatis.

Hab. ad sarmenta arida Vitis viniferæ in Slavonia. — An *Diaporthe?* non tamen *D. viticola*.

5. **Lentomita ligneola** (B. et Br.) Sacc., *Sphæria ligneola* B. et Br. in Ann. N. H. n. 883, t. 11, fig. 29. — Peritheciis globosis, subpallidis, levibus, subimmersis; rostro elongato, obtuso; ascis ;

sporidiis ellipticis, subinaequalibus, 7.5–10 μ . long., 2-nucleatis tandem uniseptatis, hyalinis.

Hab. in ligno quercino emortuo, Somerset Britannia. — Habitus fere *Ceratostomellæ cirrhosæ* sed levis, glaucescens, sporidiisque denique bilocularibus.

6. **Lentomita stylophora** (B et Br.) Sacc., *Sphæria stylophora* B. 2286 et Br. Ann. N. H. n. 976, t. 17, fig. 29, Cooke Handb. n. 2630. — Peritheciis initio tectis, denique liberis, in greges subcirculares dispositis, ovoideis, sursum attenuatis; ostiolis perithecio longioribus; ascis late clavatis; sporidiis fusoideis, uniseptatis, hyalinis, distichis, utrinque appendiculatis.

Hab. in ramis Aceris platanoidis, Mossburnford Britannia. — An *Diaporthe*?

7. **Lentomita Auerswaldii** (Fleisch.) Sacc., *Gnomonia Auerswaldii* 2287 Fleisch. in Auersw. Myc. Eur. Pyr. p. 26, fig. 132. — Peritheciis rostellatis; ascis teretibus, breve crassiuscule stipitatis, apice rotundatis, paraphysatis, octosporis, 90 \approx 8–10; sporidiis monostichis, oblongo-ellipsoideis, utrinque rotundatis, constricto-1-septatis, 16–17 \approx 7–8, hyalinis.

Hab. in ramis Genistæ tinctoriæ in Germania.

VENTURIA De Not. et Ces. Schema Sf. in Comm. critt. p. I, p. 225 prope minore parte (nec De Not. in Att. VI, Riun. Sc. p. 484), Fr., Cooke, Karst., Sacc. etc. (Etym. a mycologo ill. *Ant. Venturi*). — Perithecia subsuperficialia setulosa, ostiolata, membranacea vel carbonaceo-membranacea. Asci octospori, sessiles vel brevissime pedicellati, aparaphysati. Sporidia oblonga vel ovoideo-ellipsoidea, uniseptata, hyalina vel luteola. — Fungilli minutissimi, plerumque foliicolæ. — Genus *Venturia*, quale primitus condidit cl. De Notaris (in Atti VI, Riun. Sc. p. 484), sistit *Pleosporæ* species setosas, quarum sporidia opaca, male observata, prout didyma aestimavit cl. Auctor. Serius (in Schema Sfer.) cl. De Not. et Ces. ad hoc genus retulerunt nonnullas specis, a primis vere recedentes, quæ vero sensum præstiterunt genuinæ *Venturiæ*, qualis hodie universim usurpatur.

A) In Dicotyledoneis lignosis.

1. **Venturia chlorospora** (Ces.) Karst. Myc. Fenn. II, 189, Sacc. Fungi ital. t. 349, *Sphæria chlorospora* Ces. Erb. critt. ital. n. 296, *Sphærella chlorospora* (Ces.) De Not. Sfer. ital. p. 86, t. XCVII, 2288

(forma decalvata), *Sphærella canescens* Karst. l. c. — Peritheciis globulosis, 50 μ . diam., laxe cellulosis, pilis rigidulis aterrimis basi incrassatis, 40–50 \simeq 4, undique, præcipue vertice, vestitis; ascis cylindraceo-clavatis, 50–60 \simeq 12–14, paraphysibus nullis visis, octo-sporis; sporidiis subdistichis, oblongo-ovatis, 14–16 \simeq 6–6,5, bilocularibus, vix constrictis, amœne luteolis.

Hab. in foliis putrescentibus *Quercus*, *Salicum*, *Pyri*, *Pruni*, *Sorbi*, *Cratægi* etc. in Italia, Germania, Gallia, Fennia. — Var. *Salicis vitellinæ*: ascis cylindraceo-obclavatis, subsessilibus, 44–50 \simeq 14–15; sporidiis didymis 15–16 \simeq 6, chlorinis. — Var. *Pruni Cerasi*: ascis angustioribus et longioribus 75 \simeq 12, sporidiis 12–14 \simeq 6. — Var. *Sorbi aucupariæ*: ascis 50 \simeq 13; sporidiis 12–15 \simeq 5½–8. — Var. *Pyri*: peritheciis parcius setulosis et sporidiis obscurioribus; ascis 65–70 \simeq 10–12; sporidiis 14 \simeq 5½–6, atro-olivaceis; peritheciis setulis 20–30 \simeq 4, basi incrassatis. — Var. *microspora*: Sacc. Fungi ital. t. 310: ascis 50 \simeq 8; sporidiis 8–10 \simeq 4. In foliis quercinis in Ital. bor.

2. *Venturia ditricha* (Fr.) Karst. Myc. Fenn. II, 188, *Venturia maculans* Peck 30 Rep. on the St. Mus., *Sphæria ditricha* Fr. Syst. myc. II, p. 515, *Vermicularia ditricha* Fr. Summ. Veg. Scand. p. 420. — Peritheciis ut plurimum hypophyllis, subgregariis, maculæ griseæ, inderminatæ, confluenti insidentibus, subsphæroideis, atris, ostiolo papillato, setis subsenis, continuis, 40–90 \simeq 6, spiniformibus, erecto-divergentibus, concoleribus obsitis, minimis; ascis brevissime pedicellatis vel sessilibus, elongatis, 36–45 \simeq 10–12, octo-sporis, tenuiter paraphysatis; sporidiis distichis, ovoideo-oblongatis, uniseptatis, chlorino-hyalinis, 12–16 \simeq 5–6, loculo inferiore sæpius tenuiore. — Sec. Fuck. spermogonium sistit *Asteroma Betulæ* Desm.

Hab. in foliis *Betulæ albæ*, *B. verrucosæ*, *B. populifoliæ* in Fennia, Lapponia, Suecia, Germania, Britannia, Gallia, Italia, Amer. boreali. — *Venturia maculans* Peck sistit formam solito paulo majorem.

3. *Venturia inæqualis* (Cooke) Wint., *Sphærella inæqualis* Cooke Handb. 2758. — Hypophylla; peritheciis sparsis, innatis, globosis, nigris, setulis 3–4 epidermidem perforantibus coronatis; ascis ventricosis, deorsum attenuatis, sessilibus 60 \simeq 12; sporidiis biseriatis vel stipatis, uniseptatis, dilute flavidis, 12–13 \simeq 6, loculo superiore subgloboso, infero duplo longiore; paraphysibus ramulosis.

Hab. in foliis emortuis *Pyri Ariæ*, *P. communis* et *P.*

Mali nec non Cratægi, Salicis, Fraxini etc. in Britannia, Germania et Helvetia.

4. **Venturia Kunzei** Sacc. Fungi Ven. Ser. V, p. 174, *Chætomium* 2291
circinans Wallr. Comp. n. 1809, *Stigmatea Chætomium* (Kunze)
 Fr. Summa Veg. Scand. p. 422, *Dothidea Chætomium* Kunze in
 Fr. S. M. II, p. 563 (nec *Venturia Chætomium* (Corda) De Not.).
 — Peritheciis epiphyllis, gregariis, globulosis, subsuperficialibus,
 nigris, setulis acicularibus, 50–60 \approx 4, fuliginosis vestitis; ascis cla-
 vulatis, 45 \approx 10–12, aparaphysatis, 8-sporis; sporidiis distichis, ob-
 longo-clavulatis, 8–10 \approx 4–5, tenuiter 1-septatis, vix constrictis, di-
 lutissime chlorinis.

Hab. in pag. sup. foliorum nondum emortuorum Rubi cæsii
 in Britannia, Suecia, Germania, Belgio, Gallia et Italia.

5. **Venturia Clintonii** Peck 28 Rep. on the St. Mus. New York t. II, 2292
 fig. 22–25. — Maculis indeterminatis, subcircularibus; peritheciis
 hypophyllis, subliberis, globosis, nigris, setulis paucis, nigris, rectis
 vestitis; ascis linearibus; sporidiis uniseriatis, uniseptatis, obovatis,
 luteolis, vel subolivaceis, 10 μ . long., septo plerumque sporidii basi
 propiore.

Hab. in foliis dejectis Corni circinatae, Buffalo, Amer.
 bor. (CLINTON). — Præcipue sporidiis monostichis subcoloratis mox
 distinguenda species.

7. **Venturia ilicifolia** Cooke Handb. n. 2782. — Sparsa, epiphylla, ra- 2293
 rius et amphigena; peritheciis minutis, subsuperficialibus, globu-
 losis, 90–100 μ . diam., poro pertusis, setulis, 50–60 \approx 5, fuliginosis,
 rigidulis vestitis; ascis subfusoideis, minutis, 25–30 \approx 4–5; sporidiis
 distichis, elliptico-oblongis, uniseptatis, vix constrictis, 6–8 \approx 1,5–2,
 hyalinis.

Hab. ad folia putrescentia Ilicis Aquifolii et I. balea-
 ricæ (et Salicis caprææ?) in Britannia, Germania, Gallia et
 Italia boreali.

7. **Venturia nobilis** Sacc. Fungi Ven. Ser. IV, pag. 174, Fungi ital. 2294
 t. 352. — Peritheciis phyllogenis, erumpenti-superficialibus, glo-
 bosio-lenticularibus, atris, setulis remotiusculis, 50 \approx 1½, rigidulis
 acutis, basi incrassatis, conspersis; ostiolo minuto, impresso; pe-
 rithecii contextu atro, obsolete areolato; ascis cylindraceo-subclav-
 vatis, 35–40 \approx 4–5, fasciculatis, aparaphysatis, 8-sporis; sporidiis di-
 stichis v. oblique monostichis oblongo-fusoideis, 10 \approx 3, rectis, cur-
 vulisve, denique 1-septatis, hyalinis.

Hab. in foliis emortuis *Lauri nobilis*, Selva, Treviso, Ital. bor. rarius.

8. **Venturia Loniceræ** (Fuck.) Sacc., *Sphæria Loniceræ* Fuck. Symb. myc. p. 111. — Peritheciis plerumque hypophyllis, sparsis, *Venturiæ ditrichæ* magnitudine, vertice parce longeque setulosis, atris, erumpentibus; ascis oblongis, 8sporis; sporidiis subdistichis, oblongo-ovatis, didymis, pallide flavis, $10 \approx 4$. — *Asteroma Loniceræ* Desm. sec. Fuck. sistit spermogonium.

Hab. in pagina plerumque inferiore foliorum *Loniceræ Xylostei* prope *Æstrich* Rhenogoviæ et in Jura Helvetiæ.

9. **Venturia vermiculariæformis** (Fuck.) Sacc., *Sphæria vermiculariæformis* Fuck. Symb. myc. pag. 110. — Peritheciis in maculis gregariis, dein superficialibus, punctiformibus, globosis, vertice parum setulosis, atris; ascis sessilibus, cylindræis, 8spori, $58 \approx 8$; sporidiis oblique monostichis, ovatis, didymis, flavis, $8 \approx 4$. — Status conidiophorus sistit *Stysanum sphæriæformem* Fuck. (an et Auersw?).

Hab. in foliis exsiccatis *Evonymi europæi*, rarius et *Loniceræ Xylostei* prope *Æstrich* Germaniæ.

10. **Venturia Orbicula** (Schwein). C. et Peck 25 Rep. p. 105, *Sphæria Orbicula* Schw. Syn. Amer. bor. n. 1789. — Peritheciis minutis globosis, superficialibus, hinc inde in greges orbiculares nigricantibus congestis, setulis nigris, persistentibus hispidulis; ascis brevibus subclavatis; sporidiis sparsis, uniseptatis, loculis sæpius inæqualibus, $10 \approx 2,6$, dilute coloratis.

Hab. in pag. infer. foliorum *Quercus montanæ*, *Q. tinctoriæ*, *Q. albæ* in Amer. bor., Bethlehem, Sandlake, Albany, Guilderland. — Cl. Peck *Sph. Orbiculam* Schw. ad suam speciem non citat, sed non diversæ videntur. — Sec. Schw. l. c. greges perithecorum margine quasi linea nigra limitati sunt, 6-7 mill. lat.

11. **Venturia Grossulariæ** (Auersw. et Fleisch.) Sacc. *Stigmatea Grossulariæ* Auersw. et Fleisch. in Hedw. 1869, p. 89. — Peritheciis membranaceis atris, ovatis, in superiore parte pilis rigidis ornatis; ascis clavatis, sessilibus, 8-sporis, membrana duplici non visibili; sporidiis subbiseriælis, ovatis, inæqualiter diblastis (more *Stigmateæ Potentillæ* Fr.) fuscidulis, $10 \approx 4$ (cellula majore 6, minore 4 μ . longis).

Hab. in foliis *Ribis Grossulariæ* in Germania.

12. **Venturia Dickiei** (B. et Br.) Ces. et De Not. Schem. Sfer. p. 51, *Sphæria Dickiei* B. et Br. Ann. N. H. n. 617, t. X, fig. 8, La-

siobotrys Linnææ Dickie, Berk. Out. pag. 404. — Peritheciis in soros orbiculares, 1-1,5 μ . lat. coacervatis, epiphyllis, erumpentibus. dein liberis, superficialibus, subiculo filamentoso, fusco insidentibus, subsphæroideis, ostiolo papilliformi, atris, vertice setis spiniformibus, concoloribus, 40-80 μ . longis armatis; ascis sessilibus, elongatis, obtusis, 35-40 \approx 8-10 octosporis; sporidiis distichis, oblongatis, 4-guttulatis, tandem sæpe uniseptatis, chlorino-hyalinis (demum obscurioribus), rectis, 10-14 \approx 3-4.

Hab. in foliis languidis Linnææ borealis in Fennia, Britannia et America boreali.

13. **Venturia pulchella** C. et Peck. 25 Rep. p. 106. — Peritheciis 2300 minutis in areolas irregulares v. angulares congregatis, nigris, setulis nitidulis concoloribus obsitis; ascis cylindræis v. clavatis 60 \approx 7; sporidiis monostichis, uniseptatis, dilute flavidis, 7-9 \approx 3 long., loculis sæpius inæqualibus; paraphysibus (genuinis?) subdichotomis.

Hab. in Amer. bor. Center, in pag. inf. foliorum *Cassandrea calyculatæ*. — Folia mycete invasa mox decidunt.

14. **Venturia Myrtilli** Cooke in Journ. Bot. 1866, p. 245, t. L, f. 4. 2301
Sphæria Vaccinii Fuck. Symb. myc. p. 106, (1869). — Peritheciis amphigenis sparsis vel gregariis, superficialibus, subsphæroideis, atris, setis spiniformibus, longis, concoloribus armatis, minimis; ascis e basi ampliata angustatis, 50 \approx 12-14, octosporis; sporidiis distichis vel in asci parte inferiori conglobatis, ovoideo-oblongatis, uniseptatis, medio non constrictis, rectis, chlorino-hyalinis, 12-14 \approx 4-5.

Hab. in foliis semiputridis *Vaccinii Myrtilli*, *V. uliginosi* (et *Cassiopejæ*) in Germania, Britannia, Fennia, Amer. bor. et regione Arctica. — Setæ simplices, inarticulatæ, basi curvatæ, longit. 100-120 μ . A *Venturia cincinata* Fr. Summ. Veg. Scand. p. 405 nondum descripta forte non diversa, teste Karst.

15. **Venturia compacta** Peck, 25 Rep. p. 106, — Peritheciis 2302 minutis, in areolas circulares dense congregatis, nigris, setulis brevibus copiosis concoloribus obsitis; ascis cylindricis; sporidiis monostichis aut sparsis, uniseptatis, subolivaceis 12-15 μ . long., loculis sæpius inæqualibus.

Hab. in America boreali, Sandlake, in pagina inferiore foliorum *Vaccinii macrocarpi*.

16. **Venturia atramentaria** Cooke Grev. I, p. 175. — Hypophylla, 2303 gregaria, in maculis decoloratis maculiformiter-aggregata; peritheciis subglobosis, setulis densis, brevibus, patentibus, nigris, ve-

stitis; ascis cylindræis; sporidiis uniseriatis, ellipsoideis (maturitate probabiliter 1-septatis).

Hab. in foliis *Vaccinii uliginosi* Lochnagar Britannia (B. WHITE). — A *V. Myrtilli* peritheciis majoribus, aggregatis, setulis crebrioribus distinguenda.

17. **Venturia Barbula** (B. et Br.) Cooke Handb. n. 2784. Rehm. Asc. 2304 n. 293, *Sphæria Barbula* B. et Br. Ann. N. H. n. 870, t. 10, fig. 20. — Peritheciis cæspitulosis, globulosis collabascensibus, setulis acutis, brevibus, fuliginosis densiuscule vestitis; ascis cylindræis, 60 ≈ 6, octosporis, parce paraphysatis; sporidiis oblongis, obtusis, rarius ovoideis 1-septatis, 8-10 ≈ 4,5, monostichis, hyalinis, strato exiguo mucoso, sæpius obvolutis.

Hab. in corticè Pinorum in Britannia et Germania.

18. **Venturia pusilla** Speg. et Roum. Reliq. Lib. in Rev. myc. II, 23. 2305 (*Sphæria conoplea a acicola* Lib. in Herb.) *Vent. conoplea* Cooke in Grev. VIII, p. 87. — Peritheciis gregariis minutissimis 130 μ . diam., superficialibus, tenui-membranaceis, cupulato-collapsis, pilis rigidulis atris, 20-40 ≈ 5; sporidiis cylindræo-ellipticis, medio uni-septatis, hyalinis, loculo superiore parum crassiore, 6-7 ≈ 2.

Hab. in acubus putrescentibus Pini sylvestris, prope Malmedy in finibus Gallia et Germaniæ.

19. **Venturia Chætomium** (Corda) Ces. et De Not. Schema pag. 225. 2306 *Sphæria Chætomium* Corda Ic. fung. t. 2, p. 29, fig. 152, Desm. 19 Not. p. 12 (nec *Dothidea Chætomium* Kunze), *Niesslia Chætomium* (Corda) Auersw. Myc. Eur. Pyr. p. 30, fig. 152, *Chæt. pusillum* Fr. S. M. III, 255. — Amphigena, superficialis, gregaria, aterrima; peritheciis minutis, $\frac{1}{8}$ - $\frac{1}{10}$ mill. diam., globosis, proo apertis, siccitate pezizoideo-collabentibus, superne glabris, nitidis, inferne setis nigris, 30-40 μ . long., subopacis, brevibus, rigidis, acutis, continuis, strigosis; nucleo albido; ascis fusiformibus, 35 μ . long.; sporidiis hyalinis, minutis, cylindricis, obtusiusculis, rectis vel subcurvulis, absque ordine dispositis, 3-5-guttulatis, 15 ≈ 3, 1-septatis, non constrictis.

Hab. in foliis dejectis Pinorum in Suecia, Germania et Gallia. — Sec. Auersw. l. c. genus *Niesslia* a *Venturia* distinguetur tunica ascorum apice perforata.

20. **Venturia Spegazziniana** Cooke in Mich. I. 440, F. it. t. 423. — 2307 Peritheciis laxè gregariis, superficialibus, globulosis, senio umbilicato-collapsis, $\frac{1}{10}$ - $\frac{1}{8}$ mill. diam., ostiolo impresso pertusis, undi-setulis divergentibus, acutis, basi incrassatis, 40 ≈ 3 $\frac{1}{2}$ -4, 1-cellula-

ribus, atris vestitis; contextu perithecii minute celluloso fuligineo; ascis cylindraceo-clavatis breve stipitatis, apice rotundatis, 35-40 $5\frac{1}{2}$ -6, aparaphysatis, octosporis; sporidiis distichis v. oblique monostichis, cylindraceo-fusoideis, 10-11 \approx 3, constricto-1-septatis, hyalinis.

Hab. in sarmentis corticatis emortuis *Vitis viniferae*, Co-negliano Ital. bor. et in foliis dejectis *Eryngii agavifolii* in paludosis à la Boca del Riachuelo, Argent. Amer. bor. — Adest subiculum pulverulento-pruinoseum albido-roseum, inter perithecia inspersum.

B) In Dicotyledoneis herbaceis.

21. **Venturia Petasitidis** (Fuck.) Sacc. *Sphaeria Petasitidis* Fuck. 2308

Symb. myc. p. 96. — Peritheciis superficialibus, gregariis, magnitudine eorum *Vent. Kunzei*, vertice parce setulosis, ovatis, aterrimis, in maculis purpureis; ascis ventricosos-elongatis, 8sporibus, 48 \approx 10; sporidiis ovato-clavatis, medio parum constrictis, didymis, dilute flavescentibus, 10 \approx 5.

Hab. in pagina superiore foliorum *Petasitidis vulgaris*, Winkler Wald Germaniæ.

22. **Venturia Johnstonii** (B. et Br.) Sacc. Mich. II, p. 55, *Dothidea* 2309

Johnstonii B. et Br. Cooke Handb. p. 806. — Peritheciis epiphyllis in acervulos maculiformes hinc inde dense aggregatis, globosonicis circa verticem setulis cuspidatis, 26-40 \approx 5, atris vestitis; ascis cylindraceis, brevissime stipitatis, 50-60 \approx 15, apice tunica integra obtusiusculis, aparaphysatis, 8sporibus; sporidiis distichis clavato-oblongis, 15-16 \approx $5\frac{1}{2}$ -6, 1-septatis, lenissime constrictis, 4-guttulatis, chlorino-hyalinis.

Hab. in foliis nondum emortuis *Epilobii montani* in Britannia, Gallia et Amer. bor.

23. **Venturia glomerata** Cooke Grev. III. p. 69. Mich. I, p. 507. — 2310

Peritheciis in maculis decoloratis hypophyllis, cespitulosis minutis formantibus, globoso-conicis 50 μ . diam., nigris, erumpentibus, membranaceis, setulis rigidis acutis coronatis; ascis cylindraceo-clavulatis 30 \approx 7, octosporibus; sporidiis oblongo-clavulatis 7 \approx 3, infra medium 1-septatis, chlorinis.

Hab. in foliis *Geranii dissecti* nondum prorsus emortuis in Britannia et in Gallia. — Habitus fere *Stigmateæ Geranii*.

24. **Venturia circinans** (Fr.) Sacc. Mich. I, p. 499. F. it. t. 639. *Pe-* 2311

risporium circinans Fr. S. M. III, p. 252. *Stigmatea circinans*

Fr. Summa V. S. p. 421. — Peritheciis hinc inde (matrice subimmutata) maculiformiter aggregatis, vix circinantibus setulis cuspidatis, basi incrassatis, $30 \approx 7-8$ (in basi) circa ostiolum conspersis; ascis cylindræis, $40-50 \approx 9-11$, aparaphysatis, subsessilibus, 8-sporis; sporidiis didymis, $9-10 \approx 6$, loculo infero multo minore, subhyalinis.

Hab. in pag. sup. foliorum languidorum Geranii rotundifolii et mollis in Gallia, Germania et Italia boreali.

25. **Venturia Cephalariæ** Kalch. et Cooke Grev. IX, 1880, p. 31, tab. 2312
137, f. 36. — Phyllogena, maculis fuscis, orbicularibus; peritheciis globosis, emergentibus, pilis rigidis, erectis, brevibus, fuscis, ornatis; ascis aliis cylindræis, aliis clavatis; sporidiis uniseriatis, vel biseriatis, ellipticis, irregulariter uniseptatis, pallidis $20-23 \approx 9-10$; cellula superiore magna, cellula inferiore minuta, apiculiformi.

Hab. in foliis Cephalariæ attenuatæ in Africa australi.

26. **Venturia bonariensis** Speg. Fungi Arg. Pug. IV, n. 147. — Peritheciis superficialibus epiphyllis, in maculis expallentibus, suborbicularibus, indeterminatis, majusculis laxissime gregariis, globosis, $80-100 \mu$ diam., atris, astomis?, membranaceo-coriaceis, contextu subindistincte parenchymatico, atro, setulis rectis, fuligineo-atris, apice pallidioribus, basi non v. vix incrassatulis, $1-3$ -septulatis, $50-100 \approx 3-5$ laxè vestitis; ascis ellipticis v. obovatis sursum subtruncato-rotundatis, deorsum abrupte ac brevissime stipitato-attenuatis $30-35 \approx 10-12$, octosporis aparaphysatis; sporidiis distichis, ellipticis, medio 1 -septato-constrictis, $11-12 \approx 3,5-4$, loculis parum inæqualibus, supero majore, obtusiusculo, infero minore et acutiussculo, 4 -guttulatis, hyalinis.

Hab. ad folia radicalia viva Erigerontis bonariensis, Bañado San José de Flores, Argent. Amer. merid.

27. **Venturia Alchemillæ** (Grev.) B. et Br. Grev. IV, p. 68, Sacc. F. 2314
it. t. 422. *Stigmatæa Alchemillæ* Fr. S. v. Sc. p. 423. *Asteroma Alchemillæ* Grev. Fl. Edin. p. 369. *Chaetomium Alchemillæ* Wallr. Comp. n. 1810 *b* (Addit.), *Dothidea ceramioides* Duby Bot. gall. II, 715. *Dothidea Alchemillæ* Fr. Elen. II. 152. — Epiphylla, nigra, maculæ pallidæ insidens; peritheciis prominulis globoso-conicis seriatis in fibrillas a centro radiatim excurrentibus, subconnatis, v. subsparis, subsuperficialibus, setulis acutis exiguis, $20 \approx 2$, parce vestitis; ascis clavulatis, $35-40 \approx 8$, octosporis; sporidiis di-

stichis, oblongis, 1-septatis, leniter constrictis, minute 4-guttulatis, 8-10 \approx 3,5-4,5, hyalinis.

Hab. in foliis subviviis *Alchemillæ vulgaris* in Scotia, Germania, Gallia, Italia, Fennia, Belgio.

28. **Venturia Niesslii** Sacc. *Venturia alpina* Niessl in Hedw. 1881, p. 55 (nec Sacc. 1875). — Peritheciis sparsis liberis globosis submembranaceis atris, setis divergentibus atris instructis, ostiolo punctiformi; ascis oblongis vel obovato-oblongis, stipite brevi 68-80 \approx 12-15; sporidiis farcte distichis, ovato-oblongis, seu superne late rotundatis, inferne parum attenuatis, rectis, inæqualiter bicellularibus, parte inferiori valde minori 20-22 \approx 6-8, dilutissime virescentibus; paraphysibus brevibus coalitis.

Hab. in capsulis emortuis exsiccatisque *Primulæ integrifoliæ*, in passu *Albulæ*, Graubünden Helvetiæ.

29. **Venturia Potentillæ** (Fr.) Cooke Grev. VI, p. 76, t. 97, fig. 16. 2316
Sacc. F. it. it. 348. *Dothidea Potentillæ* Fr. S. M. II, pag. 563. *Stigmatea Potentillæ*, Fr. Summ. Veget., p. 422. Desmaz. 24 Not. 1857, p. 17. — Epi- rarius hypophylla; peritheciis minutissimis, innato-prominulis, globosis, nigris, nitidis, hirtis, nervisequis, seriatis, albofarctis, poro apertis; ascis clavatis, subsessilibus 8spor. 50 \approx 10; sporidiis, oblongis subpyriformibus, uniseptatis, 12 \approx 4, dilute flavidis. — Sec. Fuck. *Marsonia Potentillæ* sistit statum conidicum.

Hab. ad folia viva *Potentillæ anserinæ*, *P. bifurcæ*, *P. reptantis* etc. in Germania, Gallia, Belgio, Britannia, Italia, Sibiria asiatica.

30. **Venturia subtilis** (Fuck.) Sacc. *Stigmatea subtilis* Fuck. Symb. 2317
myc. p. 96. — Peritheciis in greges orbiculares usque ad lineam latos, dispositis, aterrimis, setulosis, globoso-conicis, minutissimis; ascis oblongis, octosporis, 42 \approx 12; sporidiis ovato-oblongis, inæqualiter didymis, flavescentibus, 14 \approx 6.

Hab. in pag. sup. foliorum *Potentillæ cinereæ*, quibus maculas cinereas adfert, pr. Budenheim Germaniæ.

C) In *Monocotyledoneis* et *Acotyledoneis*.

31. **Venturia graminicola** Wint. Hedw. 1880, p. 165. — Peritheciis 2318
sparsis, erumpentibus, e basi globosa brevissime conicis, apice setis rigidis, longis, fusco-atris obsitis, membranaceis 120-130 \approx 100; ascis e basi ovata oblongatis, sessilibus, 8spor. 50-70 \approx 15-17; sporidiis bacillaribus, basin versus uniseptatis et parum attenuatis,

ad septum constrictis, pallide fusco-viridulis, 19-23 \approx 5-6; paraphysibus filiformibus, pro maxima parte diffluentibus.

Hab. ad folia arida Avenæ Scheuchzeri prope Hospitium Albulæ in Helvetia.

32. **Venturia exosporioides** (Desm.) Sacc. in Rel. myc. Lib. II. n. 188. 2319

Sphæria exosporioides Desm. Nouv. Not. 1843, p. 39. — Hyporarius epiphylla; peritheciis minutissimis, superficialibus, sparsis vel gregariis; humectis subglobosis, siccis pezizoideo-collapsis, atris; setulis concoloribus continuis basi incrassatis, 90-100 \approx 5, rigido-divergentibus obsitis; ostioliis papillatis exilissimis; ascis subfusiformibus; sporidiis fusioideo-oblongis, rectis vel subcurvatis, 1-septatis, non constrictis, 10-11 \approx 2-2,3, hyalinis.

Hab. in foliis exsiccatis Cariciis pendulæ etc. in Gallia et Germania. — *V. Chaetomium* Corda, quacum Cooke jungit *Sphæriam exosporioidem* Desm., est species acicola diversa, quæ sub nomine *Niessliæ Chaetomii* describitur in Rabh. et Gonn. Myc. Eur. p. 30, t. XI, fig. 152 (*Acanthostigma*). (Cfr. Syll. nostra n. 2306). Diversa quoque videtur *Trichosphæria exosporioides* Fuck. (Cfr. Syll. nostra n. 1748).

33. **Venturia Eres** (B. et Br.) Ces. et De Not. Schema p. 51. *Sphæria* 2320

Eres B. et Br. Ann. N. H. n. 621, t. IX, fig. 4. — Peritheciis sparsis, superficialibus, globosis, setulis longis rigidis radiantibus articulatis rufescentibus vestitis; ascis brevibus, clavatis; sporidiis biseriatis, oblongo-ellipticis, latitudine quadruplo longioribus, uniseptatis, hyalinis.

Hab. in foliis emortuis Caricum in Britannia.

34. **Venturia bryophila** (Fuck.) Sacc. Mich. II, p. 315. *Stigmatea* (Co- 2321

leroa) *bryophila* Fuck. Symb. myc. App. II, p. 19 (nec *Sph. bryophila* Desm.). — Peritheciis globulosis, superficialibus, 120-130 μ . diam., contextu parenchymatico, fusco, setulis filiformibus, basi leniter incrassatis 20-30 \approx 2, fuliginis laxè vestitis; ostiolo inconspicuo; ascis clavatis, apice tunica integra rotundatis, brevissime stipitatis, 50-55 \approx 15, octosporis, aparaphysatis; sporidiis distichis vel subtristichis ellipsoideo-oblongis, 15 \approx 6 $\frac{1}{2}$ -7 $\frac{1}{2}$, 2-guttatis, denique 1-septatis, non constrictis hyalinis. — Sec. Fuck. l. c. in peritheciis juvenilibus adsunt spermatia cylindracea, recta, 6-8 \approx 2, hyalina.

Hab. in foliis emortuis Jungermannia, Polytrichorum, Diphyscii in Germania et Gallia. — Exemplaria ascigera a Fuck.

descripta videntur non prorsus matura. *Sphæria bryophila* Desm. est mihi *Nectria*.

D) *Venturiola*: sporidiis continuis (an tandem 1-septatis?) *).

35. *Venturia integra* Cooke Handb. n. 2783. — Peritheciis sparsis, superficialibus, minutis, obscure fuscis, setis flexuosis, longis vestitis; ascis anguste clavatis; sporidiis biserialis, ellipticis, continuis, intus granulosis, subhyalinis, 9–10 μ . longis. 2322

Hab. in foliis *Coryli Avellanæ*, Shere Britanniae (CAPRON).

36. *Venturia trichella* Quel. Champ. Jura 518, t. IV, fig. 28 (sub *La-siella*). — Peritheciis sphaericis, astomis, microscopicis, fulvis dein nigris, setulis brevibus, rigidis divergentibus hispidulis; ascis lanceolatis, stipitatis; sporidiis lanceolatis, 8 μ . long., triguttulatis, hyalinis. 2323

Hab. in pag. infer. foliorum *Ilicis Aquifolii* in Vogesis et Jura Galliae.

37. *Venturia Kalmiæ* Peck, 28 Rep. on the St. Mus. New York, t. 2, f. 69. — Peritheciis minutis prominulis, centro maculae brunnae aggregatis v. secus nervos subserialis, nigris, setulis rigidis, rectis divergentibus hispidulis; ascis subcylindricis, 35 μ . long.; sporidiis oblongis v. subfusoidis, minute nucleatis, 8.5–9 μ . longis. 2324

Hab. in pag. sup. foliorum viventium *Kalmiæ glaucae*, Kasoag. Amer. bor. — Folia fungillo affecta ad plantae partem inferiorem spectant et hinc vetustiora.

38. *Venturia montellica* Sacc. Fungi Ven. Ser. IV, p. 3 et F. it. t. 353. — Peritheciis sparsis, praecipue juxta foliorum nervos, e globo-so-depressis, 130–160 μ . diam., erumpenti-superficialibus, atris, setulis 1-cellularibus, basi incrassatis, rigidulis, subopacis, praecipue circa ostiolum papillatum obsitis; peritheci contextu e cellulis minutis subvermicularibus conflato, atro-fuligineo; ascis cylindraceis, fasciculatis, subsessilibus, 3.5–4.5. aparaphysatis. 8sporis; sporidiis distichis v. oblique monostichis, oblongo-fusoidis, utrinque obtusiusculis. 7–8 \approx 3, (immaturis?) hyalinis, 4-guttulatis. 2325

Hab. in foliis *Carlinae vulgaris* putrescentibus in sylvâ Montello Italiae borealis.

E) *Species incertae*.

39. *Venturia riparia* Sacc. Mich. I. p. 382. — Peritheciis superficia- 2326

*) An *Trichosphaeria tarda* Fuck. hue ducenda?

libus, globosis, aterrimis $\frac{1}{10}$ - $\frac{1}{8}$ mill. diam., subastomis, setulis 40-60 \approx 3-4, fuligineis laxè vestitis; contextu subcarbonaceo, atro; ascis.....

Hab. in caulibus emortuis Equiseti hyemalis, Conegliano Italiæ borealis (SPEGAZZINI).

40. **Venturia alpina** Sacc. Fungi Ven. Ser. IV, p. 3, F. it. t. 353. — 2327

Peritheciis subhemisphæricis, tenuissimis, 50 μ . diam., erumpenti-superficialibus, atris, setis robustis divergentibus, 1-cellularibus, 50-60 \approx 2 $\frac{1}{2}$, sursum attenuatis, opace fuligineis, crebrius circa ostiolum minutissime papillatum vestitis; contexto perithecii minute sed distincte parenchymatico dilute fuligineo, monostromatico; hyphis parvis simplicibus basi fultis; ascis fasciculatis, clavulatis, 30 \approx 6, deorsum attenuatis, aparaphysatis; sporidiis guttulatis, hyalinis.... prorsus immaturis visis.

Hab. in foliis Arctostaphyli alpinae in albis Cadore, Belluno Ital. bor. socio *Asteromate alpino* Sacc., et *Phacidii* specie imperfecta, (S. VENZO).

ERIOSPHÆRIA Sacc. Consp. Gen. Pyrenom. ital. n. 52, pag. 10. —

(Ety. ab *erion*, lana, ob perithecia vestita). — Perithecia superficialia v. subsuperficialia, carbonacea, hispida v. setulosa. Asci 4-8-spori, paraphysati v. pseudoparaphysati, cylindricei. Sporidia ellipsoidea v. subfusioidea, 1-septata, hyalina v. subhyalina. — Fungilli lignicolæ, rarius corticicolæ, *Trichosphæriæ* analogi. Forte *Lasioosphæria canescens* (Pers.) huc quoque referri posset.

1. **Eriosphæria Vermicularia** (Nees) Sacc. Consp. gen. Pyr. pag. 10, 2328

Trichosphæria Vermicularia (Nees) Fuck. Symb. myc. p. 145. *Sphæria Vermicularia* Nees Syst. p. 311, fig. 347, Fr. S. M. II, p. 451. — Atra, minima; peritheciis confertis, ovatis subdepressis, astomis, undique setis erectis nigris tectis; ascis oblongis, stipitatis, 8-sporis, 56 \approx 7; sporidiis distichis, ovato-oblongis, didymis, hyalinis, 8 \approx 3.

Hab. ad lignum putre Pini in Germania et Carolina infer. Americæ borealis.

2. **Eriosphæria exigua** Sacc. Fungi Ven. S. II, 325, F. it. t. 138. — 2329

Peritheciis superficialibus, globoso-depressis, punctiformibus, 65-75 μ . diam., atris, setulis divergentibus, rigidulis, simplicibus, continuis, obscure fuligineis, 40-70 \approx 3, undique vestitis, ostiolo impresso minuto; ascis clavato-oblongis, subsessilibus, 40-50 \approx 8-9, paraphysibus nullis, 8-sporis; sporidiis distichis, raro oblique mono-

stichis, fusoides, 10-13 \approx 3-4, rectis curvulisve, medio leniter constrictis, 4-guttulatis, v. plasmate bipartito et tenuiter 1-septatis, hyalinis.

Hab. supra epidermidem ramulorum putrescentium Salicis babylonicæ, Selva, Treviso, Italia boreali.

3. **Eriosphæria Andromedæ** (Rehm.) Sacc. *Trichosphæria Andromedæ* Rhem, Ascom. n. 491 et Diagn. n. 491. — Peritheciis minimis, epiphyllis, in superficie folii longe lateque infusata, in rima nervi solitariis vel gregariis, pilosis, nigrofuscis, parenchymatico-contextis, globosis, pilis sparsis, acutis, brevibus, rigidis, lævibus, simplicibus, fuscis, c. 3-4 μ . crassis, longitudine vix diametrum perithecii superantibus obsessis; ascis sessilibus, pyriformibus, superiore parte incrassatis, 4-8-sporis, 50 \approx 10; sporidiis elongato-ovatis, bicellularibus, cellulis anisomeris, binucleatis, hyalinis vel subfuscidulis, 2-stichis, 18 \approx 6; paraphysisibus articulatis filiformibus.

Hab. in pagina superiore foliorum languidorum *Andromedæ* polifoliæ, Haspelmoor prope Augsburg sive Augustam Vindelicorum (BRITZELMAYR).

4. **Eriosphæria œnotria** Sacc. et Sp. Mich. I, pag. 348, F. it. t. 305. 2331
Speg. Ampelomyc. ital. n. 36. — Peritheciis sparsis, globulosis, superficialibus, $\frac{1}{4}$ - $\frac{1}{5}$ mill. diam., obtusiuscule papillatis, pilis rigidulis, septulatis, fuligineis, undique sed laxe vestitis; ascis cylindraceis, apice rotundatis, deorsum crassiuscule breveque stipitatis, paraphysisibus filiformibus obvallatis, octosporis 110-125 \approx 12-15; sporidiis monostichis, v. subdistichis, oblongo-ellipsoideis, 1-septatis, leniter constrictis, e hyalino roseo-fuscidulis, 20-25 \approx 8-9.

Hab. in cortice emortuo *Vitis* viniferæ, Conegliano, Ital. bor. ut videtur, rarius. — Nonnullis notis cum gen. *Gibbera* convenit, sed multo propius cum gen. *Eriosphæria*.

5. **Eriosphæria membranacea** (B. et Br.) Sacc. *Sphæria membranacea* B. et Br. in Ann. N. H. n. 1493, t. II, fig. 9. — Semiimmersa; peritheciis amplis membranaceis depresso conicis, pilis brevibus, flexibilibus tectis; ascis cylindricis longe stipitatis, octosporis; sporidiis oblique monostichis breve fusoides, constricto-1-septatis, 37 \approx 17-18, hyalinis (?) 2-guttatis.

Hab. in lignis putridis Langridge Britannicæ, socio *Sphæronemate* ampulliformi, spermata minuta globosa ferente.

6. **Eriosphæria investans** (Cooke) Sacc. *Sphæria investans* Cooke 2333
Handb. n. 2556. — Gregaria v. sparsa, globosa, papillata, fuligineo-nigra, erumpens, peridermiumque excutiens, ab initio subicu-

lo villosa brunneo obducta, denique vertice denudata; sporidiis crasse lanceolatis, uniseptatis, biconico-constrictis, uniseptatis, strato mucoso obductis, 4-guttatis, hyalinis, 20-23 μ . longis.

Hab. in ramis emortuis, Shere Britanniae (CAPRON).

7. **Eriosphæria imitatrix** (B. et Br.) Sacc. *Sphæria* (Byssisedæ) *imitatrix* B. et Br. Fungi of Ceylon. n. 1086. — Late effusa, e strato nigro oriunda; peritheciis minutis collapsis, asperulis; sporidiis uniseptatis oblongo-cymbiformibus, 15 μ . longis.

Hab. in Central province pr. Ceylon in truncis.

8. **Eriosphæria alligata** (Fr.) Sacc. *Sphæria alligata* Fr. S. M. II, p. 445, Curr. Simpl. Sphær. n. 225, fig. 10. — Peritheciis sparsis depressis, lævibus, nigris, collapsis umbilicatis, villo laxo pallide fusco cinctis; ascis cylindricis, breve stipitatis, octosporis; sporidiis monostichis, oblongis, utrinque obtusiusculis, constricto-1-septatis, 17-18 \approx 6, binucleatis, luteolis.

Hab. in corticibus ramorum dejectis in Suecia. — Omnino superficialis, villo tenui laxo contexto subeffuso, passim in subiculum tomentosum confluyente, adhærens. Perithecia e villo emergunt v. juniora ab eodem obvolvuntur; dein parte superiore saltim denudata, glabra, lævia, collabascendo umbilicato-concava; evacuata intus alba. Ostiolum minimum, papillatum, papilla mox decidua.

9. **Eriosphæria horridula** (Wall.) Sacc. *Sphæria horridula* Wallr. Comp. p. 796, Mont. Pl. Cell. Cent. VIII. p. 59. — Peritheciis minutis, confertis, nigris, tenuissime rugulosis, superficialibus, subglobosis, vertice convexo sphærico-papillatis, extus pilis sparsis brevibus pellucidis, parce vestitis, dein collabascens, depresso-umbilicatis; ascis clavatis, curvulis, octosporis, 60 \approx 10; sporidiis uniseriatis imbricatis, diblastis, hyalinis, 12-13 μ . longis.

Hab. ad truncos decorticatos Pyri in Germania, rarius.

10. **Eriosphæria nigrita** (B. et Br.) Sacc. *Sphæria* (byssisedæ) *nigrita* B. et Br. Fungi of Ceyl. n. 1091. — Mycelio acanthimorpho; peritheciis minute hispidulis; ascis linearibus; sporidiis ellipticis, submetulæformibus, uniseptatis, utrinque hyalinis 12-13 μ . longis.

Hab. in ligno putri, Habgalla, Ceyllon. — Mycelium fere *Trichosphæriæ acanthostromæ*. Si sporidia medio fuscidula, tunc species a genere removenda.

GIBBERA Fr. Summ. Veg. Scand. p. 402 ex p. (Etym. a *gibbere*, ob perithecia superficie sæpe inæqualia). — Perithecia cæspitosa, stro-

mâte superficiali-innato, crasso, dematiaceo, conidiophoro instrata, setis obsessa, carbonacea, fragilia, obsolete papillata. Asci cylindracei, octospori. Sporidia monosticha, oblongato-ellipsoidea, uniseptata, dilutissime flava. Paraphyses coalescentes.

1. **Gibbera Vaccinii** (Sow.) Fr. Summ. Veg. Scand. p. 412, De Not. 2338
Sf. ital. t. 93, *Sphaeria Vaccinii* Sow. Engl. F. t. 273, fig. 1. — Peritheciis stromate atro coacervatim instratis, sphæroideis, deorsum leviter attenuatis, setis rigidis, acutatis, simplicibus, inarticulatis, brevibus, 60-70 \approx 6-7, aterrimis tota superficie obsessis, obsolete papillatis, atris 0,3 mill. lat.; ascis cylindræis, breve pedicellatis, octosporis, 90 \approx 8-9; sporidiis oblique monostichis, oblongo-ellipsoideis, uniseptatis, ad septum non vel leviter constrictis, hyalinis vel dilutissime olivaceis, 15-18 \approx 7-8. — Status conidicus sistit *Helminthosporium Vaccinii* Fr.

Hab. in ramulis subvivis Vaccinii Vitis-idææ in Britannia, Suecia, Fennia, Germania, Gallia, Italia et Belgio. — In ramulis jam emortuis tantum fructificat. Perithecia in cæspites minores, subrotundos, sæpe irregulariter confluentes coacervata, subinde annuli lati ad instar ramos ambientia.

2. **Gibbera borneensis** Ces. Myc. Born. p. 21, tab. IV. — Peritheciis 2339
aggregatis, ovatis, vertice obtuso, ostiolo nullo (hinc ab *Amphisphaeria* recedens), atris, rudibus, tuberculatis, pilosis, demum calvescentibus, carbonaceis; ascis numerosissimis, capillaceo-paraphysatis, 100 μ . long., subclavatis, in pedicellum æquilongum, capillarem, strictum sed flexilem, excurrentibus; sporidiis linearibus, utrinque acutis, uniseptatis, ad septum obiter constrictis, fuscellis.

Hab. ad lignum vetustate consumptum, Sarawak, Borneo (BECCARI).

MYRMÆCIUM Nits. et Fuck. reform., Sacc. Mich. II, p. 138, Fungi Car. fig. II. (Etym. a *myrmæcia*, verrucæ, calli, ob stromatis formam). — Perithecia botryose aggregata, erumpenti-superficialia, glabra, intus alba, stromate depresso-pulvinato, intus albido, molliusculo inserta. Asci cylindracei, paraphysati, octospori. Sporidia ovoideo-oblonga, 1-septata, hyalina. — *Myrmæcii* species primitivas ad *Valsariam* reduxi.

1. **Myrmæcium endoleucum** Sacc. II. cc. — Acervulis gregariis pulvinatis, subsuperficialibus, depresso-pulvinatis, $\frac{1}{4}$ - $\frac{1}{3}$ mill. diam., extus nigerrimis, nucleis vero stromateque albis, peritheciis in stromate leviter infossis, globulosis, obtusis, tuberculoso-prominulis, 2340

contextu parenchymatico fuligineo; ascis cylindricis, brevissime stipitatis, apice rotundatis, $90 \approx 5-6$, paraphysibus grumoso-deliquescentibus cinctis, octosporis; sporidiis monostichis, ovoideo-oblongis, $10-13 \approx 5-6$, (spurie?) 1-septatis, 2-nucleatis, haud constrictis, hyalinis.

Hab. in ramis corticatis, Texas, Corpus Christi (RAVENEL). — Habitus fere *Botryosphæriæ*, sed characteres potius *Valsariæ*, a qua præcipue sporidiis hyalinis differt.

2. **Myrmæcium? insidens** (Schw.) Sacc. *Sphæria insidens* Schw. 2341
 Carol. n. 222 Fr. S. M. II, p. 422. *Melogramma insidens* (Schw.) Berk. N. Am. Fungi p. 169. — Effusa, stromate subrotundo innato fusco-nigro, peritheciis emergentibus, confertis, ovatis, flexuosis, subpapillatis; sporidiis monostichis v. distichis, oblongis, uni-septatis, $7-8 \mu$. long.

Hab. in lignis et corticibus in Carolina Amer. bor. — Stroma innatum, ex habitu superficiale, sed revera matrici basi immersum et subcircumscriptum, difforme, opacum, ex parte sterile. Perithecia plus minus emersa, difformia, farcta, ad dimidiam magnitudinem seminis Papaveris accedentia.

ENDOTHIA Fr. Summa Veg. Scand. p. 385 (Etym. ab *endothen* intrinsecus, ob perithecia immersa). — Stroma innato-erumpens, verruciforme, amœne crocatum, subcoriaceum. Perithecia immersa, nigricantia, submonosticha, longicollia. Asci fusoides, aparaphysati, octospori. Sporidia breve fusiformia, hyalina, (spurie?) 1-septata. Spermogonia nota. — Fungillus colore stromatis fere *Tuberculariæ* mox dignoscendus.

1. **Endothia gyrosa** (Schw.) Fuck. Symb. myc. n. 226, Sacc. Myc. 2342
 Ven. Spec. p. 146, t. XIV, f. 63-65, *Sphæria gyrosa* Schw. Syn. Car. n. 25, Fr. S. M. II, 419, *Endothia radicalis* Fr. Summa Veg. Scand. p. 385, De Not. Sfer. ital. p. 8, f. III. — Subrotunda, confluens, aurantio-miniata, stromate lutescente, peritheciis atris, globosis pulverulentis, demum prominulis; ascis subclavatis, basi substipitato-attenuatis, $35-40 \approx 7-8$, 8-sporis, aparaphysatis; sporidiis recte distichis, breve fusoides, hyalinis, 1-septatis, non constrictis, $7-9 \approx 3$, raro oblique monostichis. — Perithecia spermogonica in superficie stromatis, subrotunda, sinuosa, medio umbilicata, coccinea; spermatiis minutissimis, oblongis, $3 \approx 1$, hyalinis, paraphysibus (?) filiformibus obvallatis.

Hab. in corticibus et ad ligna Quercus, Carpini, Æscu-

li. Ulmi, Coryli, Castaneæ, Alni, Fagi, Juglandis in Gallia, Germania, Italia, Britannia, Amer. bor., Ceylon et Nova Zelandia. — Stroma lutescens, subpulveraceum, cortici interiori immersum, determinatum, sed non circumscriptum; peridermium erumpit; tubercula inæqualia hemisphærica, raro lineam excedentia, ostioliis numerosis, conico-elongatis fragilibus spinulosa. Perithecia minuta, atra, globosa, immersa; etiam per ostiolum spinulosum ductulo nigro continuata. Sporidia non vere sed spurie 1-sepata visa, ob plasma bipartitum. — Var. *rostellata*: ostioliis cylindraceis, elongatis, tortuosis, amene crocatis summoque vertice nigris. In Quercu Italiæ borealis.

MELANCONIS Tul. Sel. Fung. Carp. II, p. 115 pr. p. (Etym. *melas*, niger et *conis*, pulvis, ob conidiorum naturam). — Stromata conoideo-depressa, excepto disco, peridermio tecta. Perithecia corticis parenchymati vulgo immutato immersa, circinantia, ostioliis in discum plus minus exsertis. Asci cylindræci vel elongato-clavati, paraphysati, typice octospori. Sporidia monosticha vel disticha, ellipsoidea vel oblongata, uniseptata, hyalina, majuscula, interdum appendiculata. — Stromata conidifera conoidea, tecta, *Melanconia* referentia. Conidia subconglutinata, continua, ellipsoidea, olivaceo-fusca, stipitata. — Species phæodidymas ad *Melanconiellam*, species phragmosporas ad *Pseudovalsam* duxi.

I. *Eumelanconis*: sporidiis muticis.

1. **Melanconis stilbostoma** (Fr.) Tul. Sel. Fung. Carp. II, pag. 119, 2343 t. 14, f. 1-12, *Sphæria stilbostoma* Fr. S. M. II, pag. 403 p. p. *Valsa stilbostoma* Fr. Summa Veg. Scand. p. 412. — Stromatibus e basi orbiculari late conoideo-truncatis, depressis, plus minus protuberantibus, pustulatis, salvo disco, peridermio adhærente, integro tectis; peritheciis in singulo stromate 3-12, corticis parenchymate haud mutato insculptis, circinantibus, subsphæroideis, in collum ascendens tenuissimum attenuatis; ostioliis incrassatis, sphæroideis vel demum elongatis, lævibus, nitidis in disco peridermium nonnihil superante cinereo-albido, 0,7 mill. lato sparsim erumpentibus eundemque tandem oblitterantibus; ascis oblongo-subcylindræcis, 90-100 \approx 12-14; sporidiis octonis, rarius senis, subdistichis, ellipsoideis vel suboblongatis, uniseptatis, medio constrictis, hyalinis, 18-25 \approx 8-11. — St. conidicus sistit *Melanconium bicolor* Nees. St. sperm. (?) sistit *Libertellam betulina* Desm.

Hab. in ramis emortuis *Betulæ albæ*, *B. populifoliæ* in Germania, Suecia, Fennia, Belgio, Britannia, Italia, Amer. bor.

2. **Melanconis modonia** Tul. Carp. II, p. 141, *Valsa biconica* Comp. 2344
Sph. f. 142, Curr., teste Cooke. — Peritheciis globosis vel depressis, paucis circinantibus, peridermio pustulato nidulantibus; ostioliis erumpentibus, breviusculis; ascis paraphysatis, apice crasse tunicatis, octosporis, 130–160 \approx 12–18; sporidiis distichis, ellipticis, utrinque obtusis, medio 1-septato-constrictis, crassiuscule tunicatis, primo granuloso-farctis, dein 1–2-guttulatis, hyalinis vel hyalino-chlorinis, 24–30 \approx 10. — Status conidicus (*Steganosporium Castaneæ* Lib.) et spormogonicus adsunt. Cfr. Fuck. Symb. myc. p. 190.

Hab. in ramis corticatis emortuis *Castaneæ vescæ* in Gallia, Germania, Britannia et Italia.

3. **Melanconis Carthusiana** Tul. Carp. II, p. 129. — Peritheciis nigris, copiosis, in interiore stromatis conidici stipate nidulantibus, globulosis; collis discretis cylindricis, apice non incrassato poro hiantibus, epidermidem perforantibus parumque excedentibus; ascis cylindraceutis, octosporis, 120 \approx 10–13; sporidiis monostichis, ovato-lanceolatis, uniseptatis, ad septum constrictis, 20–25 \approx 10, hyalinis. — St. conidicus sistit *Melanconium juglandinum* Kunze. 2345

Hab. in ramis corticatis *Juglandis regię* in Gallia, Germania et Italia. — Stroma intus flavicans.

4. **Melanconis fennica** Karst. Myc. Fenn. II, p. 75. — Stromate valseo, sphæroideo-applanato, cortici immerso, ligno sæpe basi innato vel adnato, corticis vel ligni substantia immutata vel flavo-colorata formato, peridermio tecto, 1 mill. latit. vel paullo ultra; peritheciis in singulo stromate 1–12, sphæroideis mutuaque pressione subinde angulatis, subcircinantibus, majusculis, atris, 0,3 mill. lat., collis brevissimis, convergentibus; ostioliis nunc abbreviatis, exiguis, nunc plus minus elongatis, in discum minutum, 0,5 mill. lat., atrum, per peridermium perforatum erumpentem, deinde oblitteratum, nunc, omnino nunc basi tantum connatis; ascis cylindraceutis, 145–165 \approx 20 p. sp., octosporis; sporidiis monostichis, ellipsoideis, apice rotundatis, uniseptatis, medio constrictis, massa grumosa repletis, dein loculo utroque uniguttulato, hyalinis, 22–35 \approx 13–17; paraphysibus filiformibus, guttulatis. 2346

Hab. in ramis emortuis *Sorbi fennicæ*, *Mustiala Fennicæ*.

5. **Melanconis? asteropycnis** (Crouan) Sacc., *Cucurbitaria asteropycnidia* Crouan Finist. p. 31. — Peritheciis nigris, convexis, peridermio tectis, 3–4-aggregatis, dein erumpentibus; ascis clavatis, 2347

crassis, octosporis; sporidiis oblongis, uniseptatis, 4-guttulatis; paraphysibus filiformibus. — Sec. Crouan l. c. st. pyenicus sistit *Asterosporium Hoffmanni* Kunze.

Hab. in ramulis emortuis Fagi, Finistère Galliæ.

6. **Melanconis dolosa** (Fr.) Sacc., *Sphæria dolosa* Fr. S. M. II, p. 405, *Valsaria dolosa* (Fr.) De Not. Sfer. ital. 57, t. 54, A. B. (var. *Massaræ*). — Peritheciis aggregatis vel subcircinantibus depresso-globosis, tectis, disco mere corticali suberumpente; collis convergentibus; ostiolis exsertis, convexis, stipatis, oblitterato; ascis elongatis, octosporis, aparaphysatis; sporidiis oblongis utrinque obtusis, uniseptatis, lenissime tandem constrictis, hyalinis, 25 \approx 8.

Hab. in ramis siccis Salicis et Alni in Germania et Italia. — Sec. De Not. adest socium *Melanconium* conidiis ovoideis, 10 μ . long. binucleatis, fuliginosis. — Pustulæ irregulares, epidermide rimose vel stellatim fissa parum prominent, sed discus intra rimas fere occultatus, ubique tectus ostiolis convexis lævibus nitidis pusillis. Verticaliter vero dissectus discus facile patet. Perithecia irregulariter circinantia, immersa, depresso-globosa, collis brevibus angustatis convergentibus. A *Mel. Alni* potissimum sporidiis muticis differre videtur. — Var. *Massaræ* De Not. Sfer. ital. p. 57, fig. 54 B. A typo differt peritheciis copiosioribus, collis longioribus. In ramis crassioribus Alni in Ital. bor.

II. *Melanconidium*: sporidiis appendiculatis.

7. **Melanconis Alni** Tul. in Ann. Sc. nat. Ser. 4, t. 5 (1865), p. 109, 2349 Sacc. Fungi ital. del. t. 452, Oodem Mat. Néerl. II, 29, tab. IV, fig. 4. — Stromate valseo, disco excepto, peridermio tecto, substantia corticis fere immutata formato, parte centrali interna suberea, albida vel flavida in discum concolorem erumpentem, plus minus protuberantem protracta; peritheciis in singulo stromate 1-9, cortici immutato immersis, circinantibus, sphæroideis, atris; ostiolis in discum exsertis, conoideis, acutis vel obtusiusculis, rigidis, nigris; ascis vix pedicellatis, elongato-clavatis, 75-90 \approx 12-18, octosporis, paraphysatis; sporidiis distichis, oblongis vel ovoideo-oblongis, rectis vel curvulis, uniseptatis, ad septum levissime constrictis, chlorino-hyalinis, 18-24 \approx 5-7, utroque apice setula seu appendicula exili, 3-6 \approx 4-5, hyalina, tandem decidua ornatis. — Status conidicus sistit *Melanconium sphæroideum* Link.

Hab. in ramis corticatis Alni glutinosæ in Britannia, Germania, Italia, Fennia, Hollandia.

8. **Melanconis thelebola** (Fr.) Sacc. Reliq. myc. Lib. II, n. 138, *Dia-* 2350
porthe thelebola (Fr.) Sacc. Myc. Ven. n. 224, *Sphæria thelebola*
 Fr. S. M. II, p. 408, *Aglaospora thelebola* Tul. Carp. II, 166. —
 Circinata, pustulata; peritheciis globosis decumbentibus, ostiolis
 exsertis subglobosis confertis lævibus, primo papillatis; ascis ob-
 longo-fusoideis 110–120 \approx 20, octosporis; sporidiis distichis cylin-
 draceis curvis, 1-septatis, vix constrictis, 45–50 \approx 8, subhyalinis,
 initio utrinque setigeris. — Status conidicus, sistit *Stilbosporam*
thelebolam Sacc. Status spermogonicus, teste Tul., sistit *Cytispo-*
ræ formam.

Hab. in cortice Alni glutinosæ etc. in Italia bor., Helve-
 tia, Gallia, Germania, Britannia et America boreali. — Perithecia
 subsena, conferta, valde decumbentia, collis convergentibus subjun-
 ctis. Ostiola valde prominentia, incrassata, perithecia minuta re-
 ferentia, inæqualia, primo papillata, dein umbilicata nitida, rigida,
 unde rami, quibus innascitur, ad tactum asperi.

9. **Melanconis occulta** (Fuck.) Sacc. *Calospora occulta* Fuck. Symb. 2351
 myc. p. 190, t. IV, fig. 25. — Peritheciis subcorticalibus, 4–10 in
 greges orbiculares oblongosve dispositis, oblique stipatis, antice sub-
 connatis, e maximis, ovatis, in collum breve attenuatis, nigris;
 ostiolis lato-connicis, majusculis, aterrimis, demum per epidermi-
 dem longitudinaliter fissam prominulis, nucleo albo; ascis oblongo-
 ovatis, in stipitem brevem, crassum attenuatis, 8spor. 144 \approx 68;
 sporidiis conglomeratis, oblongis, quandoque curvatis, uniseptatis,
 ad septum constrictis, loculis 1–2guttulatis etiam multigranulosis,
 hyalinis vel dilutissime flavescentibus, utrinque appendiculis latis,
 sporidium dimidium æquantibus, subtilissimis, vix conspicuis (sed
 extantibus!) primo sporidio ipso adpressis, demum patentibus; spo-
 ridiis sine appendiculis, 44–58 \approx 14–16. — Status spermogonicus
Cytisporam sistit, teste Fuck. l. c.

Hab. in ramis emortuis Populi tremulæ prope Cëstrich
 Rhenogoviæ, raro.

HERCOSPORA Tul. Carp. II, p. 154, nec Fries. (Etym. ab *hercos*,
 septum, ob sporidia 1-septata). — Perithecia stromate corticali co-
 nico-truncato immersa, discumque erumpentem crassum penetran-
 tia. Asci paraphysati octospori. Sporidia bilocularia, hyalina. —
 Status pycnidicus *Rabenhorstiam* sistit; st. conidicus *Evospo-*
rium; st. spermogonicus fere cytisporoideus.

1. **Hercospora Tilix** (Fr.) Tul. Sel. Fung. Carp. II, p. 154, t. XVIII 2352

et XIX, fig. 1-14, *Sphæria Tiliæ* Pers. Syn. p. 84, *Sph. ampullacea* Pers. p. 41, Quel. Champ. Jura p. 500, *Valsaria Tiliæ* De Not. Sfer. ital. p. 58, t. 55, *Valsa tilaginea* Curr. Phil. Trans. 1857. p. 546. — Peritheciis cortice profundo immersis in acervulos subconicos congregatis, subcircinantibus, majusculis subampulliformibus, ostiolis convergentibus, obtusis, disco stromatico crasso virescente subcirculari coronatis; ascis longe cylindræis, obtusissimis, deorsum breviter attenuatis octosporis; sporidiis monostichis, ellipsoideis, rectis, muticis, utrinque obtusis, medio uniseptatis et nonnihil angustatis, 16-22 \approx 10. Pycnidium (*Rabenhorstia Tiliæ* Fr.); stylosporæ hyalinæ ellipsoideæ, utrinque obtusissimæ, rectæ, leves, simplices, hyalinæ, 11-13 \approx 6; spermogonia rarissima, discreta, pycnidiiis subconformia sed longe minora: spermatia exiliter linearia, recta, et brevissima. — Status conidicus sistere dicitur *Exosporium Tiliæ* Link.

Hab. in ramis corticatis Tiliæ in Suecia, Belgio, Britannia, Gallia, Italia, Germania, Fennia.

DIAPORTHE Nits. Pyr. Germ. p. 240 (Etym. a *diaportheo*, evertō, quia matricem vastat). — Stromata corticola sub valsea discreta (*Chorostate*) vel effusa, indeterminata e cortice parum mutato formata, sed solite linea atra circumscripto (*Tetrastaga*) vel pariter effusa sed e ligno superficie denique denigrato, intusque sæpius linea nigra circumscripto formata (*Euporthe*). Perithecia membranacea vel subcoriacea, intus sæpe cinerascens, in ostiolum sæpissime filiforme rarius breve producta. Asci typice aparaphysati, fusoides, octospori. Sporidia fusoides vel subellipsoidea, 1-septata ¹⁾, plerumque medio constricta et 4-guttata, hyalina, mutica v. appendiculata — Status spermogonicus sistit *Phomæ* species: peritheciis sæpius subirregularibus intusque griseis, spermatiiis 2-guttatis, basidiis filiformibus plerumque tandem aduncis suffultis ²⁾.

1) Auctores plures e. g. Nitschke, Fuckel etc. *Diaporthis* sporidiis septa typice terna tribuunt, quod mihi revera rarissime contingere videtur. In plerisque speciebus profecto sporidia præter septum medium normale monstrant in quoque loculo septum alterum, quod vero spurium habendum est, nam nulla plerumque adsit constrictio in mediis loculis; fictio hæc e divisione plasmatis oritur, fitque magis manifesta si sporidia vel Hydrate Kalico vel Ammoniacō indeque Chloro-joduro Zynchi tractentur.

2) *Diaporthes* generis species jam numerosissimæ et in diem novis inventis continuo crescentes epierisi nova et comparata maxime egent, qua

1. *Chorostate* (*Chorostate* et *Sclerostroma* Nits.); peritheciis in acervulos valseos vel subvalseos aggregatis. (Ety. a *choros*, chorus, ob dispositionem perithecorum). — Aptius forte ut genus proprium sumendum.

A) *Euchorostate*: sporidiis muticis.

1. **D. *Chorostate conjuncta*** (Nees) Fuck. Symb. myc. p. 206, *Sphæ-* 2353
ria conjuncta Nees Syst. p. 305, fig. 337. — Circinata; peritheciis globosis confertis; collibus brevibus; ostioliis in discum tuberculosum nitidum junctis, cylindraceis elongatis apice incrassato-capitatis; ascis fusoides, sessilibus, 70-75 \approx 9, 8sporis; sporidiis fusoides, 18-20 \approx 4, hyalinis, tandem constricto-1-septatis, 4-guttulatis vel granulosis.

Hab. in ramis emortuis Coryli Avellanæ in Suecia, Germania, Belgio et Italia. — Pulchra. Perithecia 3-9 in circulos subregulares stipata, leviter decumbentia, juniora materia crustacea albida fugaci evidentius obducta, quam plurimæ aliæ. Discus erumpens, orbicularis, punctiformis, omnino homogœneus h. e. ex solis ostioliis conjunctis formatus.

2. **D. *Chorostate Kunzeana*** Sacc. F. Ven. Ser. V, p. 181, *D. Carpini* 2354
Sacc. M. V. n. 665, Myc. Spec. p. 137, t. XIII, f. 44-46, nec auct. — Peritheciis stromate valseo corticali exceptis, hinc inde monostiche aggregatis, sub epidermide sæpius nigrificata tumidulaque nidulantibus, compressis, olivaceis, ostioliis in centrum subhorizontaliter convergentibus ibique disculum atrum minutum nonnihil elevatum, epidermideque cinctum efformantibus, apice rotundatis; ascis fusoides, 70-80 \approx 10, sessilibus, aparaphysatis, 8sporis; sporidiis distichis, biconico-fusoides, utrinque obtuse sed conspicue attenuatis, 16-19 \approx 3 $\frac{1}{2}$ -4, rectis curvulisve, medio leniter constrictis, 1-septatis, 4-guttulatis, hyalinis. — Spermogoniis subcuticularibus, conoideo-depressis, medio pertusis, e fusione cellularum quasi 1-locularibus, pulpa lutescenti fœtis, spermata oblongo-fusoidea, recta curvulave, 10-11 \approx 3, 4-guttulata (tandem 1-septata?), sterigmatibus brevissimis fasciculatis fulta fœventibus.

Hab. in ramulis Carpini Betuli, Selva, Treviso, Ital. bor. — A *Diap. Carpini* genuina, differt pustulis ostioliisque multo mi-

peracta, earum numerus facile contrahi poterit. Interea formas distinguendas esse quam confundendas tutius existimavi, ex eo potissimum quod pro certo compertum jam sit species generis plures et prædistinctas, etsi affines, in ipsissima matrice (e. g. Carpino, Quercu etc. etc.) cohabitare!

noribus, praecipue vero sporidiis majoribus biconicis neque subcylindraceis.

3. **D. Chorostate bitorulosa** (Berk. et Br.) Sacc., *Valsa bitorulosa* 2355

B. et Br. Ann. N. H. n. 861. t. 10, f. 15, *Cryptospora bitorulosa* (B. et Br.) Niessl Hedw. 1877, p. 119. — Peritheciis brunneis, subpulverulentis; collis decumbentibus, rectis; ostioliis confluentibus ascis clavatis, breve stipitatis, octosporis; sporidiis biconicis, constricto-1-septatis, 4-guttulatis, hyalinis, 17-20 μ . long.

Hab. in ramis corticatis Carpini Betuli in Britannia. — Perithecia in quoque stromate circ. 8; sporidiorum articuli denique ad medium constricti.

4. **D. Chorostate decipiens** Sacc. Fungi Ven. Ser. IV, p. 6. — *Acer-* 2356

culis gregariis discoideis, sub epidermide plerumque pustulatim elevata nidulantibus, zona v. macula circulari corticali nigra interdum limitatis, ex peritheciis 5-15 circinantibus efformatis; peritheciis e globoso depressis, $1\frac{1}{2}$ mill. diam., vivis atrovirentibus, in colla longiuscule subhorizontaliter flexa centroque convergentia attenuatis, ostioliis supra discum subrotundum initio pallide luteolum furfurellum parum exertis, obtuse rotundatis, denique perforatis, atro-nitidulis; ascis oblongo-fusoideis, 90-100 \approx 14, deorsum attenuatis, sessilibus, aparaphysatis, lumine in apice 2-foveolato, 8sporibus; sporidiis oblique monostichis, vel distichis, oblongo-fusoideis, dein constricto-didymis, 24-26 \approx 5-6 $\frac{1}{2}$, initio pluriguttulatis, denique 4-6-guttatis, postremo 2-magninucleatis, hyalinis, utrinque primitus obtuse apiculatis, saepe curvulis, sporidiorum loculis tandem nonnumquam secedentibus.

Hab. in ramis corticatis Carpini Betuli in Italia boreali, Gallia et Germania. — Ab affini *D. sulfurea* Fuck. differt in primis stromate vix v. non lutescente, sporidiis angustioribus et longioribus. Cl. Rehm ducit dubitanter hanc speciem ad *D. carpini-colam* Fuck., cl. Niessl ad *D. bitorulosam* (B. et Br.). Res ulterius inquirenda.

5. **D. Chorostate Carpini** (Pers.) Fuck. Symb. myc. p. 205 (nec Sacc. 2357

Specim.). *Valsa Carpini* (Pers.) Fr. Summa Veg. Scand. p. 411, *Sphaeria Carpini* Pers. Syn. p. 39. — Innata, stromate corticali pallido; peritheciis circinantibus, numerosis, stipitatis, linea tenui arete circumscriptis; ostioliis epidermide stellatim fissa erumpentibus inter se liberis, confertis primo subpapillatis, demum umbilicatis; (locis vero udis substrellatis); ascis oblongis, sessilibus, 8sporibus, 42-66 \approx 7-8; sporidiis subdistichis, oblongo-cylindraceis

utrinque obtusiusculis uniseptatis, 4guttulatis, hyalinis, 13-18 \approx 3-4; spermongoniis demum erumpentibus, 1-2 mill. lat., poro centrali plerumque irregulariter fisso apertis, intus cellulis globosis, dense stipatis formatis; spermatiis lanceolato-fusiformibus, biguttulatis (uniseptatis?), hyalinis, 12 \approx 3-4.

Hab. in ramis siccis Carpini Betuli in Suecia, Germania, Gallia, Belgio et Italia.

6. **D. Chorostate mucosa** Wint. herb. (sine diagnosi). — Peritheciis corticulis, peridermio tectis, hinc inde inordinate valsoideo-aggregatis laxiusculis, decumbentibus, globoso-depressis, $\frac{1}{2}$ mill. latit., ostiolis in disculum minutum vix erumpentem atrum convergentibus, obtusiusculis; ascis subfusoideis 87-100 \approx 10, octosporis; sporidiis, utrinque obtusiusculis, medio septatis, lenissime constrictis, strato mucoso hyalino crassiusculo obductis, hyalinis, 17-19 \approx 5-6. 2358

Hab. in ramis corticatis Carpini Betuli, Eisleben Germaniæ (J. KUNZE).

7. **D. Chorostate longirostris** (Tul.) Sacc. *Cryptospora Hystrix* Fuck. 2359
Symb. myc. p. 194 (nec Fr.), *Valsa longirostris* Tul. S. F. C. II, p. 200. — Stromatibus subgregariis, depresso-conicis, innato-erumpentibus, e fulvo subcastaneis, ostiolis rostellatis pluribus, 1 mill. long., liberis, subflexuosis; ascis elongato-clavatis, substipitatis, 8-sporis, 48 \approx 8; sporidiis farctis, lineari-oblongis, subcurvatis, uniseptatis, 4guttulatis, hyalinis, 18-25, 3-3,5, muticis. — Status conidiophorus; pustulis siccis, unicellularibus, sub corticis epidermide nidulantibus, demum erumpentibus, extus intusque sordide albis; conidiis (leucoconidiis Nke., stylosporibus Tul.) ut ascosporibus, sed perparum angustioribus et plerumque guttulis deficientibus.

Hab. in ramis crassioribus corticatis Aceris Pseudoplatani in Gallia et Germania.

8. **D. Chorostate Mamiania** Sacc., *Mamiania Hystrix* De Not. Sfer. 2360
ital. p. 43, t. 50 (nec *Sph. Hystrix* Fr.). — Stromatibus e basi applanata, cortice insidente, subhemisphærico-pulvinatis, epidermide varie perfossa, verrucæformi-emergentibus, crustaceo-corticatis, atris, intus medulla albicante farctis; peritheciis contiguis, perpendicularibus, depresso-orbicularibus, vel conoideo-hemisphæricis, fusciscentibus, basi in siccis collabascentibus, longe rostratis; rostris perithecorum stromatis cortice perfosso, seorsum spiniformi-emergentibus, atris rectis, varie curvatis non raro divergentibus, apice perviis; nucleo pallescente; ascis clavatis, 8-sporis; sporidiis oblon-

go-teretibus. lenissime curvulis, utrinque obtusis, hyalinis, guttulis 4 fetis, verosimiliter senio 2-(4?)-locularibus, 20 μ . longis.

Hab. in ramis emortuis Alni, Moncenisio, Italia bor. (LISA).

9. **D. Chorostate Niessli** Sacc. Mich. I, p. 391 nec Kunzei, quæ *Cry-²³⁶¹*
ptospora. — Acervulis gregariis cortice nidulantibus, intus et
extus nigris disco subcirculari, ostiolis numerosis parum emergen-
tibus punctulato, epidermide rupta arcte cincto; peritheciis minu-
tis $\frac{1}{3}$ mill. diam., monostichis, globulosis, nigris intus et extus col-
lis cylindræis convergentibus, zona, stromatica nigra per corti-
cem et lignum excurrente, acervulos varie circumscribente; ascis
fusoideis, subsessilibus 70-75 \approx 8-10, lumine apice bifoveolato, octo-
sporis, aparaphysatis; sporidiis distichis v. oblique monostichis, fu-
soideis, rectis curvulisve, 15 \approx 3-4, utrinque acutiusculis, 4-gutta-
tis, simulateque 1-(v. raro 3)-septatis, non v. lenissime medio
constrictis.

Hab. in cortice ramorum majorum Aceris Pseudoplatani,
Feletto Ital. bor. (SPEGAZZINI), in Styria (G. v. NIESSL), Malmedy
in finibus Galliæ et Germaniæ (LIBERT.). — A *Diaporthe Hystrice*
(Tode?) Sacc. sporidiis muticis, a *D. longirostri* (Tul.) et *D. Mamia-*
nia Sacc. sporidiis brevioribus et crassioribus, ostiolisque curtis et
sporidiis utrinque attenuatis nec rotundatis præ ceteris diversa.

10. **D. Chorostate pustulata** (Desm.) Sacc. *Sphaeria* (incusa) *pustula-²³⁶²*
ta, Desm. 13 Not. 70, 1846 (non Hoffm, nec Moug, nec Sow.) *A-*
glaspora pustulata Tul. Carp. II, p. 163. — Erumpens, pustula-
ta, sparsa, stromate corticali pallido, linea circumscripto; disco
nigro subconvexo; peritheciis 4-12 in centro confertis; ostiolis pro-
minulis crassiusculis umbilicatis; nucleo albido dein subnigro; ascis
oblongo-cylindræis, obtusis, octosporis; sporidiis fusiformibus, 4-
guttulatis, hyalinis, muticis 16-19 \approx 3-4. — Teste Tul. adsunt pyc-
nides et spermogonia.

Hab. in ramis exsiccatis Aceris Pseudoplatani in Gallia,
Germania et Belgio.

11. **D. Chorostate Aceris** Fuck. Symb. myc. 204. *Valsa Aceris* (Fuck.) ²³⁶³
Cooke in Grevill. — Acervulis erumpentibus, sparsis minutis, ostio-
lis parum emergentibus; ascis oblongis, 60 \approx 8, sporidia 8, disti-
cha, oblonga, parum curvata, utrinque obtusa, uniseptata, hyalina,
14 \approx 4 includentibus.

Hab. in ramis Aceris campestris etc. in Germania, Bri-
tannia et Amer. bor.

12. **D. Chorostate albo-cincta** (Cooke et Peck) Sacc. *Valsa albo-cin-²³⁶⁴*

cta C. et P. in Vals. Un. St. p. 120 (nec in Rep. on the St. Mus. New York). — Peritheciis in acervulos valseos aggregatis, peridermioque secesso linea alba circumscriptis, perque lignum zona stromatica nigra limitatis; ascis cylindræis; sporidiis monostichis, ellipticis, uniseptatis leniterque constrictis 18 \approx 6.

Hab. in ramis *Aceris* spicati, New York Amer. bor.

13. **D. Chorostate acerina** (Peck.) Sacc. *Valsa acerina* Peck, 28 Rep. 2365 on the St. Mus. New York. — Pustulis minutis erumpentibus; peritheciis ligno immersis, crusta stromatica nigricante tectis lineaque nigra cinctis; stiolis prominulis, conico-cylindræis; sporidiis oblongis v. subellipsoideis, subacutis, 12,5 μ . long. plasmate 2-4-partito.

Hab. in ramis *Aceris* spicati, Indian Lake, Amer. bor. — «An eadem ac *D. Aceris* Fuck? ».

14. **D. Chorostate subaquila** (B. et C.) Sacc. *Melogramma subaquilum* B. et C. North Amer. Fungi n. 862. — Peritheciis paucis longitudinaliter erumpentibus; ascis clavatis; sporidiis hyalinis constricto-uniseptatis angustis, subinde biconicis, 20-22 μ . long.

Hab. in ramis *Aceris* striati, Massachusetts Amer. bor. — An e sect. *Tetrastagæ*?

15. **D. Chorostate sphenamnina** (B. et C.) Sacc. *Diatrype sphenamnina* B. et C. Noth Amer. Fungi n. 855. — Pustulis longitudinaliter erumpentibus; ostiolis brevibus cylindricis; ascis clavatis; sporidiis uniseriatis, oblongis, angustis, hyalinis.

Hab. in ramis corticatis *Aceris* rubri, Pennsylvania Americæ borealis (MICHENER).

16. **D. Chorostate myinda** (C. et E.) Sacc. *Valsa myinda* C. et E. 2368 Grev. VI, p. 93. — Tecta, demum epidermide fissa erumpens; peritheciis paucis, atris, convergentibus; ascis clavatis; sporidiis lanceolatis, quadrinucleatis, dein uniseptatis, hyalinis, 15 \approx 4.

Hab. in cortice *Aceris*, New Jersey Amer. bor.

17. **D. Chorostate Oudemansii** Sacc. *Cryptospora* et *Valsa Æsculi* 2369 Oud. Mat. Myc. Neerl. II, p. 61, t. V, fig. 5. — Habitus *Cryptosporellæ Æsculi* Fuck. (Cfr. Syll. nostra n. 1808); ascis crasse oblongo-fusoideis, breve stipitatis, 40 \approx 8; sporidiis octonis distichis cylindræis, curvatis utrinque obtusiusculis, 2-4-guttatis, dein 1-septatis non constrictis, 13 \approx 3-4, hyalinis.

Hab. in ramis *Æsculi* Hippocastani prope Amsterdam Hollandiæ. — *Cr. Æsculi* conspicue differt ascis sporidiisque plus quam duplo majoribus, sporidiis continuis etc.

18. **D. Chorostate oncostoma** (Dub.) Fuck. Symb. myc. p. 205. Sacc. 2370
Myc. Ven. p. 136, tab. XIII, f. 36-39. *Sphaeria oncostoma* Duby
in Kl. Herb. myc. II, n. 253. *Valsa oncostoma* Duby in Cooke
Handb. n. 2499. — Stromatibus globoso-conicis, innato-erumpen-
tibus, linea atra circumscriptis; peritheciis circinato-monostichis,
globulosis; ostioliis elongatis, curvulis, subconvergentibus; ascis ob-
longo-cylindraceutis, sessilibus, 65 = 9, 8sporis; sporidiis distichis,
oblongo-fusoideis, 1-guttulatis, hyalinis, tandem constricto-1-sep-
tatis, 18 = 4½-5. Spermogonia *Phomam* referentia: spermatiis fu-
soideis utrinque acutissimis, continuis, 2-guttulatis, hyalinis, 10 = 2.
Hab. in ramis emortuis Robiniæ Pseudacaciæ in Gallia,
Italia, Germania, Austria, Britannia. — Perithecia et ostiola satis
varia; prima nucleo flavido fereata; in Robiniæ varietatis iner-
mis ramis durioribus paulo majora vidi quam quæ in ramulis ju-
nioribus; ostiola sæpe elongata, gracilia, apice incurva, rarius bre-
viora, crassiora; stromata intus flavida.
19. **D. Chorostate personata** (C. et E.) Sacc. *Valsa personata* C. et 2371
E. Grev. VII, pag. 9. — Pustulis variis, tectis; peritheciis ligno
immersis, nigro-cinctis; ascis clavatis; sporidiis lanceolatis, uni-
septatis, quadrinucleatis 25-28 = 6.
Hab. in ramis Robiniæ Pseudacaciæ in New Jersey Amer.
bor. — «Forte eadem ac *D. oncostoma* (Duby)».
20. **D. Chorostate enteroleuca** (Fr.? Curr.) Sacc. *Valsa enteroleuca* 2372
(Fr.) Curr. Linn. Trans. XXII, t. 47, f. 113. Cooke Handb. n. 2501.
Sph. enteroleuca Fr. S. M. II, p. 381, p. p. — Orbicularis, con-
vexa, libera; stromate albo linea nigra circumscripto; peritheciis
minutis; ostioliis stipatis, discretis, globulosis rostellatis, subrugo-
sis; ascis tereti-clavatis breve stipitatis octosporis; sporidiis disti-
chis, fusoideis, curvulis constricto-1-septatis, 4-nucleatis, 15-17 μ .
longis.
Hab. in ramis exsiccatis in Britannia, Suecia, Gallia; in ramis
Robiniæ in Carolina Amer. bor. — Forma Robiniæ verisimil-
lime a *D. oncostoma* non differt.
21. **D. Chorostate transversalis** Karst. Myc. Fenn. II, pag. 110. — 2373
Stromatibus vaseis, discretis, raro confluentibus, e basi orbicula-
ri, truncato-conoideis, cortice immutato formatis; peritheciis in sin-
gulo stromate 5-10, parenchymati insculptis, circumstantibus, sub-
ovoideis; ostioliis in disco lanciformi, atro, 1-1.5 mill. lato, peri-
dermium arete adherens, vulgo pustulato-elevatum perforante, pro-
minulis, sphaeroideis, conoideis vel ovoideis, raro elongatis, flexuo-

sis, teretibus, longis, circiter 1 mill.; ascis fusoido-elongatis, sessilibus, 45 \approx 6, octosporis; sporidiis distichis, fusoido-elongatis, vulgo leviter curvulis, 4-guttulatis vel spurie tenuiter 1-(3?)-septatis, chlorino-hyalinis, 12-14 \approx 2-3.

Hab. in ramis emortuis *Betulæ albæ* prope oppid. Abo Fennia.

22. **D. Chorostate platasca** (Peck) Sacc. *Diatrype platasca* Peck 2374
27 Rep. pag. 109. — Stromate suborbiculari, minuto, erumpente, nigro; ostiolis elongatis, tenuibus, sæpe leniter curvis cylindricis; ascis oblongis v. fusoidis, valde crassis; sporidiis stipatis, hyalinis, oblongis, uniseptatis, quadrinucleatis, 12-15 μ . long.

Hab. in Amer. bor. Adirondack, in ramis emortuis *Betulæ*.

23. **D. Chorostate aristata** (Fr.) Karst. Myc. Fenn. II, p. 112. *Sphæ-* 2375
ria aristata Fr. S. M. II, p. 363. *Diatrype aristata* Fr. Summa V. S. p. 385. — Stromate diatrypeo, immerso, per peridermium laciniatum fissum transversim erumpente, plerumque oblongato convexo vel plano, disco sæpe tuberculoso, atro, opaco, intus albo, demum albido-fuscescente, crassiusculo, latit. circiter 5 mill.; peritheciis in singulo stromate plerumque 12, demersis, mono- vel distichis, subsphæroideis, majusculis; ostiolis exsertis, rostellatis, distantibus, divergentibus, teretibus, æqualibus, lævibus, longis, facile diffractis, atris; ascis sessilibus, fusoido-elongatis, 48-60 \approx 11-12, octosporis; sporidiis distichis, fusoido-elongatis, ut plurimum curvulis, 2-4-guttulatis vel uniseptatis, chlorino-hyalinis, 12-18 \approx 3-4.

Hab. in ramis exsiccatis *Betulæ nanæ* in Norvegia, Lapponia et Fennia.

24. **D. Chorostate Strumella** (Fr.) Fuck. Symb. myc. p. 205. *Sphæ-* 2376
ria Strumella Fr. S. M. I', p. 365. *Diatrype Strumella* Fr. Summa Veg. Sc. p. 385. *Sph. olivacea* Ehrenb. Sylvæ p. 16. *Sph. tentaculata* Batsch Cont. I, fig. 183 (?). — Stromate orbiculari, depresso, cortice immutato formato, peridermio tecto; peritheciis in singulo stromate numerosis (circiter 12), in stromate in orbem dispositis, basi sæpe ligno adnatis, sphæroideis, parvulis; ostiolis in disco, per peridermium transversim erumpente, planiusculo, lanciformi vel suborbiculari vel lineari, atro exsertis, distantibus vel confertis, cylindræis, plerumque abbreviatis, sed interdum longiusculis, rostellatis, subtortis; ascis sessilibus, fusoido-elongatis, 40-52 \approx 7-9, octosporis; sporidiis distichis, fusoido-elongatis, plerumque curvulis 4-guttulatis 1-(3?)-septatis medio haud constrictis; chlorino-hyalinis, 12-18 \approx 3-4.

Hab. in ramulis exsiccatis *Ribis nigri*, *Rib. Grossulariæ*, *Rib. rubri* et *Rib. alpini* in Britannia, Suecia, Fennia. Belgio, Italia, Germania, Gallia, Amer. bor. — Sec. Rehm, Asc. n. 429 adsunt paraphyses articulatae.

25. **D. Chorostate strumellæformis** (De Not.) Sacc. *Sphæria strumellæformis* De Not. Micr. ital. Dec. VIII, 119, fig. IV. — *2377*
 Acervulis corticulis erumpentibus, subvalseis, 1 mill. diam., stromate extus nigrescente intus pallescente exceptis, peritheciis globosonicis, nigris, tenuibus, circinantibus, in ostiola cylindracea, exserta, obtusa desinentibus; ascis fusoideo-clavulatis aparaphysatis, 40-50 \approx 7; sporidiis octonis cylindraceo-fusoideis utrinque obtusiusculis, 4-guttatis, dein tenuiter (spuriæ?) 3-septatis, hyalinis, 15 \approx 4-5.

Hab. in ramis dejectis corticatis prope Taurinum (Italia).

26. **D. Chorostate sociata** (C. et E.) Sacc. *Valsa sociata* C. et E. *2378*
 Grev. IV, p. 11. — Minuta tecta; peritheciis subglobosis, cortice immersis, paucis 3-5, atro-cinctis; ascis clavatis; sporidiis ellipticis, uniseptatis, hyalinis, 12 \approx 4.

Hab. in ramis corticatis Benzoin, New Jersey Amer. bor. — Supra acervulos plerosque emergunt fasciculi *Helminthosporii* cujusdam, conidiis clavatis multiseptatis præditi.

27. **D. Chorostate varians** (Curr.) Sacc. *Diatrype varians* Curr. Linn. *2379*
 Trans. XXII, p. 270, t. 46, fig. 77. Cooke Handb. n. 2439. — Peritheciis subglobosis; ostiolis conicis, subinde apice umbilicatis, peridermium seriatim parallele perforantibus; ascis tereti-fusoideis, breve stipitatis, crassiusculis, octosporis; sporidiis distichis, oblongo-navicularibus, utrinque obtusis, constricto-1-septatis, hyalinis, 15 μ . longis.

Hab. in ramis corticatis emortuis, Eltham Britanniae. — Peridermium quo innascitur, vix mutatum. Species quoad subgenus dubia; an potius e sect. *Tetrastagæ*?

28. **D. Chorostate Helicis** Niessl Not. Pyr. pag. 50 *D. Nitschkei* J. *2380*
 Kunze F. Sc. exs. n. 124. — Stromate diatrypeo, basi effusa ligno immerso, in ejusque superficie crustoso, expanso, medio elevato, pulvinato, apice cortici interiori adnato, fere tecto vix erumpente, minuto, sordide atro, intus albido; peritheciis paucis 2-4 in singulo stromate, globosis, majusculis, 0,5 mill. lat.; ostiolo brevi, fragile coriaceo-subcarbonaceis, luce refracta sordide violaceis; ascis lanceolatis stipite brevi, 45-55 \approx 7-9; sporidiis farcte distichis, fusoideo-oblongis, rectis, inaequalateralibus vel parum curvatis, obtu-

siusculis, medio constrictis 1-(3?)-septatis, 4-guttulatis, hyalinis, 10-12 \approx 3-4.

Hab. in ramis corticatis *Hederæ Helicis* prope Eisleben Germaniæ (J. KUNZE).

29. **D. Chorostate albovelata** (B. et C.) Sacc. *Valsa albovelata* B. et C. N. Amer. Fungi n. 875. Cooke *Valsei* Un. St. 119. — Pustulis cortice tectis; disco albo, ostiolis nigris cylindricis punctato; ascis clavatis; sporidiis anguste fusiformibus, quadrinucleatis, 20 \approx 4.

Hab. in ramis *Rhois copallinæ* in Carolina inf. Amer. bor., socia *Helminthosporii* specie conidiis breve fusoideis 3-septatis.

30. **D. Chorostate stilbostoma** (Cooke) Sacc. *Valsa stilbostoma* Cooke Handb. n. 2498, nec Fr. *Valsa Rhois* Cooke Exs. n. 245 (nec, ut videtur, *Diap. Rhois* Nits.). — Peritheciis circinantibus, disco albedo subpruinoso coronatis; ostiolis prominulis, subsparsis, emergentibus, denique discum oblitterantibus; ascis subfusoideis, octosporis; sporidiis distichis, hyalinis elliptico-acuminatis, constricto-1-septatis, plasmate bipartito, 17-18 μ . longis.

Hab. in ramis emortuis *Rhois* in Britannia et Amer. bor.

31. **D. Chorostate Woolworthii** (Peck) Sacc. *Valsa Woolworthii* Peck 28 Rep. on the St. Mus. New York. — Pustulis minutis erumpentibus; peritheciis 2-6 aggregatis, cortice interiore nidulantibus; ostiolis stipatis, prominulis, peridermium longit. fissum vix superantibus; ascis octosporis; sporidiis stipatis v. biseriatis, oblongis v. subfusoideis, uniseptatis, quadrinucleatis, subhyalinis, 10 μ . longis.

Hab. in ramis *Quercus* v. *Caryæ*, Greenbush Amer. bor. — Pustulæ copiosæ, sæpius longitudinaliter seriatae.

32. **D. Chorostate dryophila** (Niessl) Sacc. *Cryptospora dryophila* Niessl in Rabh. F. Eur. n. 1941. — Stromate valseo conoideo e corticis parenchymate haud mutato formato, limitato, superne atrato; peritheciis aggregatis ovoideis vel mutua pressione angulatis ostiolis exsertis superne tumidis; apice conoideis; ascis clavatis, sessilibus, membrana interna apice incrassata perforataque, 70-80 \approx 10; sporidiis distichis fusoideo-oblongis, parum curvatis, medio septatis constrictisque, guttulis binis globosis majusculis, hyalinis, 16-19 \approx 5; conidiis lanceolato-fusiformibus, rectis vel curvatis, continuis, hyalinis, 16-20 \approx 3.

Hab. in ramis dejectis *Quercus* pr. Voitsberg Styriæ (G. v. NISSL). — *Diaporthi leiphæmæ* peraffinis, a qua differt sporidiorum et conidiorum forma et magnitudine.

33. **D. Chorostate leiphæma** (Fr.) Sacc. Myc. Ven. Spec. p. 135, t. 2385

XIII, fig. 26-28. *Sphæria leiphæma* Fr. S. M. II, p. 399. — Pustulata, stromate corticali globoso-conico discoque erumpente pallido; peritheciis globosis, aggregatis, tenuibus; ostioliis subexertis ovatis (in locis suffocatis rostellatis); ascis fusoides, subsessilibus, 70-80 \approx 9, 8sporis; sporidiis distichis, ovato-lanceolatis, 18 \approx 5, 1-septatis ad septum tandem nonnihil constrictis, hyalinis, 2-pluriguttulatis. — St. conid. notus (An *Fusicoccum quercinum* Sacc.?). Cfr. Fuck. Symb. sub *Cryptospora leiphæma*.

Hab. in ramis *Quercus pedunculatæ*, sessilifloræ et pubescentis in Suecia, Britannia, Germania, Italia, Gallia, Belgio et America boreali.

34. **D. Chorostate quercina** Fuck. Symb. myc. p. 204. *D. Carpini* 2386 var. *quercina* Rehm Asc. n. 149. — Stromatibus conico-depressis, corticulis, erumpentibus, linea atra circumscriptis; peritheciis globulosis; ostioliis in discum conjunctis rotundatis, nigris; ascis oblongis, sessilibus, 8sporis, 50-60 \approx 6-7; sporidiis distichis, oblongo-lanceolatis, 4guttulatis, 16 \approx 3, muticis, hyalinis.

Hab. in ramis siccis *Quercus* in Germania et Gallia.

35. **D. Chorostate dichænoïdes** (B. et C.) Sacc. *Melogramma dichænoïdes* 2387 B. et C. North Am. Fungi n. 861. — Acervulis erumpentibus, suborbicularibus, v. transverse oblongis; ostioliis conicis rugosis exasperatis; ascis clavatis; sporidiis oblongis subinde deorsum acutioribus, obtusis, hyalinis, uniseptatis, 25 μ . longis, monostichis v. distichis.

Hab. in ramis *Quercus*, Alabama in Amer. bor.

36. **D. Chorostate Robergeana** (Desm.) Niessl in Rabh. F. Eur. n. 2388 2222. *Sphæria Robergeana* Desm. Not. 19, 1851, p. 11. — Corticola, immersa, minuta; peritheciis 6-15 epidermide adnata tectis confertis irregulariter circinantibus, nigris, collabescendo concavis, primum globosis albido-farctis; ostioliis convergentibus cylindricis, erumpentibus prominulis; ascis subfusiformibus, 75 μ . long.; sporidiis octonis biserialibus, 15 \approx 5, subellipsoideis, uniseptatis, 2-guttulatisve, chlorino-hyalinis.

Hab. in Gallia et Austria in ramis siccis *Staphyleæ pinnatæ*; sociis (teste Niessl) spermogoniis.

37. **D. Chorostate oclaria** (C. et E.) Sacc. *Valsa oclaria* C. et E. 2389 Grev. VI. p. 11, t. 95, f. 3. — Pustulis epidermide tectis, ad basin ligno adnatis; peritheciis in stromate pallido congestis, nigro-cinctis; ostioliis atris, cylindricis, erumpentibus; ascis clavatis; spo-

ridiis fusiformibus, 4-nucleatis demum leniter 1-(3?)-septatis, hyalinis, 25 \approx 4.

Hab. in ramis Ilicis glabræ (?), New Jersey Amer. bor.

38. **D. Chorostate pulchra** (Curr.) Sacc. *Valsa pulchra* Curr. Linn. 2390
Trans. XXII, n. 152, t. 48, fig. 143, Cooke Handb. n. 2492. Peritheciis stromate valseo aggregatis; ascis tereti-fusoideis brevissime stipitatis, octosporis 200 \approx 20-22; sporidiis subdistichis breve fusoides, constricto-1-septatis, granulosi, chlorino-hyalini, 30 \approx 11.

Hab. (matrix et locus non indicata) sed verisim. in Britannia. — An *Melanconis*?

39. **D. Chorostate paulula** (C. et E.) Sacc. *Valsa* (Diaporthe) *paulula* 2391
C. et E. in Grev. VII, p. 9. — Pustulis minimis, epidermide tectis; peritheciis subglobosis, ostioliis brevibus erumpentibus; ascis clavatis; sporidiis anguste fusiformibus, quadrinucleatis, 16-18 μ . long.

Hab. in ramis Nyssæ, New Jersey Amer. bor.

40. **D. Chorostate patria** Speg. Nov. Add. n. 74 et Mich. II, p. 250. 2392
— Acervulis sparsis, valsiformibus, e 7-8 peritheciis circinantibus efformatis, ligno late nigrificato subimmersis, cortice tectis, ostioliis tantum cortice tumefacto erumpentibus, atque superficiem attingentibus; ascis cylindræo-fusoideis, superne subtruncatis, octosporis, aparaphysatis 50-60 \approx 8-10; sporidiis distichis subcylindræis, medio constricto-1-septatis, hyalinis, loculis biguttulatis 12-15 \approx 4.

Hab. in ramulis dejectis Sorbi aucupariæ in montanis di Ampezzo Ital. bor.

41. **D. Chorostate nucleata** (Curr.) Sacc. *Diatrype nucleata* Curr. 2393
Linn. Trans. XXII, p. 270, n. 72. t. 46, f. 76. Cooke Handb. n. 2425. — Peritheciis ovoideis v. globosis, ostioliis breviusculis instructis, in acervulos elongatos irregulares aggregatis, linea nigra circumscriptis; ascis tereti-fusoideis, brevissime stipitatis, octosporis; sporidiis distichis anguste fusoides, medio constrictis, 4-nucleatis, utrinque acutiusculis, 17-20 μ . long., hyalinis.

Hab. in ramis Ulicis, Weybridge Britannia.

42. **D. Chorostate interrupta** (Mont.) Sacc. *Diatrype interrupta* M. 2394
et Fries. in Notice etc., in Ann., 2, I, pag. 295, t. 11, f. 1, sub *Sphæria* Mont. Syll. Crypt. n. 753. — Longitrorsum et interrupte erumpens, lineari-lanceolata, nigra; peritheciis ovoideo-sphæricis, intus nigris, stromati ceraceo albo irregulariter immersis, ostioliis vix exsertis rugulosis; ascis subclavatis; sporidiis elliptico-oblongis, guttulatis, hyalinis.

Hab. in trunco et ramis *Cytisi scoparii* Lyon Gallie (MONTAGNE). — An, monente Nitschke, eadem ac *D. Sarothamni*?

43. **D. Chorostate impulsæ** (C. et P.) Sacc. *Valsa impulsæ* C. et Peck 2395
in 27 Rep. on the St. Mus. New York, pag. 109. — Erumpens; stromate suberoso e cortice formato; peritheciis 8-12, aggregatis, globosis, nigris; ostioliis elongatis, levibus, nigris; ascis cylindraceis, sporidiis fusoidis uniseptatis, hyalinis, $20 \approx 7,5$, quadrinucleatis.

Hab. in Amer. bor. Adirondack, in ramis emortuis *Fraxini*. 2396

44. **D. Chorostate furfuracea** (Fr.) Sacc. *Sphæria furfuracea* Fr. S. M. II, p. 109, *Valsa furfuracea* (Fr.) Cooke Handb. n. 2493 et Vals. U. S. p. 121. — Irregulariter circinans; peritheciis globosis pulvere furfuraceo immixtis, ostioliis brevissimis junctis obsolete prominulis; ascis cylindraceis; sporidiis monostichis, anguste ellipticis, uniseptatis, hyalinis, $25-30 \approx 11$ (teste Cooke).

Hab. in ramis *Tiliæ*, *Populi* etc. in Suecia, Gallia, Amer. bor. — Stroma nunc lutescente- nunc olivaceo-pulverulentum. Discus minutus planus vix emergens. Perithecia in quoque stromate circ. duodecim. («An *Hercospora*?»).

45. **D. Chorostate fibrosa** (Pers.) Fuck. Symb. myc. p. 204. Sacc. 2397
Myc. Ven. p. 106, t. XIII, fig. 33-35. *Sphæria fibrosa* Pers. Syn. p. 40. *Sph. extensa* Fr. p. p. — Stromatibus innatis conico-depressis, circumscriptis, fibrosis; peritheciis immersis globosis nigris, collis longiusculis in ostiola conferta subrotunda levia erumpentia desinentibus; ascis cylindricis basi abrupte breviterque attenuatis, $100 \approx 10$, 8spor. sporidiis oblique monostichis, interdum sporidio uno alterove transverse posito (ibique ascus protuberans), ellipsoideis, utrinque rotundatis, constricto-1-septatis, loculis 1-magnitudinatis, $12-14 \approx 8$. — Status spermogonicus: conceptaculis paulo minoribus, pluricellularibus, cellulis pulpa luteo-fusca fætis; spermatis, ellipsoideis, basi acuminatis, continuis, hyalinis, nucleolatis, $11 \approx 5$.

Hab. in truncis ramisque exsiccatis *Rhamni cathartici* in Suecia, Britannia, Germania, Belgio, Gallia, Italia.

46. **D. Chorostate extensa** (Fr.? Curr.) Sacc. *Valsa extensa* (Fr.?) 2398
Curr. Linn. Trans. XXII, n. 119, t. 47, fig. 116. — Convexa, crusta effusa ambiente connexa, stromate fibroso; peritheciis ovoideis; ostioliis stipatis, oblongis; ascis tereti-clavatis, octosporis; sporidiis oblique monostichis, ellipsoideis, obtusis constricto-1-septatis, binucleatis, hyalinis, $15-16 \mu$. long.

Hab. in ramis corticatis Rhamni cathartici in Britannia et Suecia. — Verisimillime nil nisi forma *D. fibrosa*.

47. **D. Chorostate faginea** (Curr.) Sacc. *Valsa faginea* Curr. Linn. 2399
Trans. XXII, p. 281, t. 48, f. 168. — Peritheciis conicis in acervulos valseos collectis; ostioliis peridermium perforantibus, emergentibus, denique decedentibus; ascis octosporis; sporidiis distichis elliptico-fusoideis, constricto-1-septatis, inæquilateralibus, 12-13 μ . long., 4-guttulatis, hyalinis.

Hab. in ramis Fagi, Eltham Britannia.

48. **D. Chorostate euryala** (Mont.) Sacc. *Valsa euryala* Mont. Syll. 2400
Crypt. n. 768 et Cent. V, n. 92, in Ann., dec. 1845, p. 362. — Urceolata, immersa; stromate corticali; peritheciis aggregatis circinantibus numerosis convergenti-erectis, ostioliis annularibus in discum planum amplum atrum conjunctis; ascis minutis, 40 \approx 3-4; sporidiis uniseptatis minutissimis, 5 μ . long.

Hab. in cortice Abietis, Bagnères-de-Bigorre, loco Sapinière d'Oubat dicto Gallia (CH. DES MOULINS). — An sporidia revera tam minuta?

49. **D. Chorostate detrusa** (Fr) Fuck. Symb. myc. p. 205. *Sphæria* 2401
detrusa Fr. S. M. II, p. 382. — Conica, stromate læte luteo, ligno immerso, superne conceptaculo cincto, ostioliis conjunctis umbilicatis; ascis oblongis, sessilibus, 8spor. 58 \approx 9; sporidiis subdistichis, ovato-oblongis, uniseptatis, hyalinis, 13 \approx 5. — Stat. spermogonicus. Pustulis multicellularibus, depressis, demum epidermidem lacerantibus; spermatis (sterigmatibus) angustissime filiformibus, vermicularibus.

Hab. ad ramos siccos Berberidis vulgaris in Suecia, Britannia, Gallia, Germania, Italia et Belgio. — Inferne absque conceptaculo, a cortice tegente discreta, quare illo deciduo nuda persistit. Perithecia stipata, ovata, ligno ad dimidium immersa, stromate luteo tecta, ex quo facillime dignoscitur.

50. **D. Chorostate decorticans** (Lib.) Sacc. et Roum. Reliq. mycol. 2402
Lib. II, n. 88. — *Sphæria decorticans* Lib. Herb. n. 682, nec Alior. — Acervulis valseis minutis, corticulis, ligno denigrato appositis; peritheciis globulosis; ostioliis brevibus disculum atrum erumpentem vix attingentibus; ascis fusoideis 90-95 \approx 15-18, sessilibus, lumine apice bifoveolato, octosporis; sporidiis distichis anguste fusoideis, utrinque obtusiusculis, 18-20 \approx 4, rectiusculis, 1-septatis, constrictis 4 guttulatis, hyalinis; spermogoniis *Phomam*

padinam referentibus, sublectis globoso-lenticularibus sparsis; spermatis fusoideis 9-11 \approx 3, hyalinis.

Hab. in ramis corticatis Pruni Padi Malmedy in finibus Galliae et Germaniae.

51. **D. Chorostate difficilior** Kunze F. Sel. exs. n. 352 (absque diagnosi). — Peritheciis hinc inde in acervulos subvalseos minutos aggregatis corticolis globulosis, ostioliis subconvergentibus in disculum minutum atrum erumpentibus, vix emergentibus; ascis fusoideo-clavatis, breve stipitatis, 90-110 \approx 10-14, octosporis, paraphysibus (spuriis?) filiformibus; sporidiis distichis fusoideis rectis v. inaequalateralibus, 20-22 \approx 5-6, plasmate bipartito 1-septatis, vix constrictis, hyalinis.

Hab. in ramulis Pruni spinosae emortuis pr. Zürich Helvetiae (WINTER). — An satis diversa a praecedente?

52. **D. Chorostate tuberculosa** (Ellis) Sacc., *Valsa tuberculosa* Ellis 2404 Torr. Bot. Cl. 1881, p. 89. — Peritheciis 8-10 subcircinantibus, stromate corticali colore parum mutato sed compactiori immersis lineaeque nigra lignum quoque penetrante circumscriptis; ostioliis breve cylindracois crassis, obtusis, irregulariter deliscentibus; ascis crasse lanceolatis, sessilibus, 75 \approx 15; sporidiis biseriatis, oblongo-ellipticis, uniseptatis, leniterque constrictis, hyalinis, 12-13 \approx 7-8, binucleatis, loculis subinde denique secedentibus.

Hab. in cortice trunci Amelanchieris canadensis in America boreali. — Cortice denique dejecto, acervuli ligno libere adherent.

53. **D. Chorostate Cratægi** (Curr.) Fuck. Symb. myc. p. 204, *Valsa Cratægi* Curr. Linn. Trans. XXII, p. 278, t. 48, f. 1450. — Acervulis subvalseis satis compactis, ostioliis parum emergentibus, obtusiusculis; ascis fusoides 90-100 \approx 9-12, aparaphysatis, lumine apice 2-foveolato, octosporis; sporidiis distichis, cylindracois, utrinque obtusiusculis, 17-18 \approx 5-6, 1-septatis, leniter constrictis, 4-guttulatis, hyalinis.

Hab. in ramis corticatis emortuis Cratægi Oxyacanthae in Germania, Britannia, Italia, Gallia et Amer. bor.

54. **D. Chorostate crassiuscula** Sacc. et Bizz. Mich. II, p. 378. — 2406 Acervulis hinc inde sparsis, corticolis, linea stromatica nigra usque ad lignum decurrente cinctis, peritheciis aggregatis, globulosis, nigricantibus, $\frac{1}{2}$ mill. diam., ostioliis subconvergentibus, erumpentibus, apice leniter incrassatis obtusisque: ascis fusoideo-clavatis, 80-84 \approx 13-15, aparaphysatis, octosporis; sporidiis distichis crasse fu-

soideis, 18-20 \approx 6-7 $\frac{1}{2}$, utrinque obtusiusculis, rectis, 1-septatis leniterque constrictis, 4-guttatis, hyalinis.

Hab. in ramis emortuis Mahoniæ Aquifolii in Horto Patavino. — Affinis *D. detrusæ* a qua stromate cinereo nec flavo, ascis sporidiisque multo crassioribus statim dignoscitur.

55. **D. Chorostate fulvo-pruinata** (Berk.) Sacc., *Sphæria fulvo-pruinata* Berk. Decad. n. 98. — Pustulata, subangulata basi effusa; peritheciis globoso-oblongis collo elongato; stromate discoque ostioli punctato fulvis; ascis linearibus; sporidiis ellipticis uniseptatis, binucleatis. 2407

Hab. in ramis putrescentibus Platani occidentalis, Ohio Amer. bor. (F. G. LEA). — Pustulæ 2 mill. crassæ.

56. **D. Chorostate Ailanthi** Sacc. Myc. Ven. Spec. pag. 137, t. XIII, fig. 40-43. — Stromate valseo; acervulis sparsis, parvis e 5-6 peritheciis constantibus, stromate lignescente nigro-limitato insidentibus, immersisque, et epidermide primo tectis, dein cinctis; peritheciis subrotundis, $\frac{1}{3}$ mill. diam., nucleo flavido fœtis, ostioli elongatis, cylindricis, conniventibus, in discum parvum nigrum convexo-tuberculosum desinentibus, rarius nonnihil exertis; ascis cylindraceo-fusoideis, 50 \approx 7, 8sporis; sporidiis oblongo-fusoideis, hyalinis, 4-guttulatis, tandem 1-septatis ad septum leviter constrictis, 12-15 \approx 4. — Status spermogonicus: acervulis conoideis, atris subemergentibus; sterigmatibus filiformi-arcuatis, 25 \approx $\frac{1}{4}$, spermata ovato-fusoidea, hyalina, 2-guttulata, 7 \approx 2 $\frac{1}{2}$, ferentibus. 2408

Hab. in ramis junioribus exsiccatis Ailanthi glandulosæ, Selva agri Tarvisini, Italia bor. — Affinis *D. oncostomæ* a qua statim distinguitur ascis, sporidiis, spermatis multo minoribus, ostioliisque plerumque non exertis.

57. **D. Chorostate apocrypta** (C. et E.) Sacc., *Valsa apocrypta* C. et E. Grev. VII, p. 14. — Tecta, lineata; peritheciis immersis, inconspicuis; ascis clavatis; sporidiis biseriatis, elongato-ellipticis, uniseptatis, vix constrictis, hyalinis, 25-28 \approx 8-9. 2409

Hab. in ramis Caryæ albæ, New Jersey Amer. bor. — Nisi dissecta ægre conspicienda.

58. **D. Chorostate lixivia** (Fr.) Sacc., *Valsa lixivia* Quel. Jur. p. 502, *Sphæria lixivia* Fr. S. M. II, p. 385 (?). — Stromatibus minutis, flavicantibus; peritheciis exiguis, globulosis, nigris, laxis, ostioli fasciculatis granulosis, dein relaxatis; sporidiis lanceolatis, constricto-1-septatis, 4-guttulatis, 12 μ . long. 2410

Hab. in ramis corticatis Juglandis regiæ in Vogesis et Jura Galliæ.

59. **D. Chorostate bicincta** (C. et P.) Sacc., *Valsa bicincta* C. et Peck 29 Rep. on the St. Mus. New York. — Erumpens; stromate albo-farinoso; peritheciis 6-10, subglobosis, circinantibus, nigris; ostiolis elongatis convergentibus; disco albido linea nigra, denique obsoleta, circumscripto; ascis cylindræis; sporidiis biseriatis, fusoides, 4-nucleatis, 10-13 μ . long., 1-(3?)-septatis. 2411

Hab. in ramis Juglandis cineræ, Greenbush Amer. bor.

60. **D. Chorostate corymbosa** (C. et E.) Sacc., *Valsa corymbosa* C. et E. Grev. VIII, pag. 15. — Peritheciis atris, globosis, ligno immersis, 6-10, nigro-cinctis; ostiolis erumpentibus; ascis cylindræis; sporidiis uniseriatis, ellipticis, uniseptatis, leniter constrictis, nucleatis, granulatis, hyalinis, 18-20 \approx 8-9. 2412

Hab. in ramis Vaccinii corymbosi, New Jersey Americæ borealis.

61. **D. Chorostate salicella** (Fr.) Sacc. Myc. Ven. Spec. p. 135, t. XIII, fig. 22-25, *Sphæria salicella* Fr. S. M. II, 377, *Sph. salicina* Curr. Linn. Trans. XXII, t. 48, f. 149, *Cryptospora salicella* (Fr.) Fuck. Symb. myc. p. 193. — Peritheciis hinc inde subaggregatis v. gregariis, peridermio tectis eique soluto adhærentibus, sphæroideis, sicis cupulato-collapsis, glabris, nigris, 0,4 mill. lat., ostiolis per peridermium erumpentibus, cylindræis v. conoideis; ascis elongato-clavatis, apice, leviter attenuatis, 65-72 \approx 15-16 octosporis; sporidiis distichis, oblongatis, rectis vel leviter curvulis, utrinque obtusis, uniseptatis, massa grumosa repletis, chlorino-hyalinis, ad septum vix vel levissime constrictis, 18-20 \approx 6-7. — Sec. Fuck. l. c. st. conidicus sistit *Discellam carbonaceam* (Fr.) B. et Br. 2413

Hab. in ramulis corticatis Salicis albæ, vitellinæ, triandræ, capræ in Suecia, Britannia, Belgio, Germania, Gallia, Austria, Italia, Amer. bor. — Ostiola perithecii cylindræa, raro satis elongantur et ex epidermide emergunt. Sporidia (in exemplaribus gallicis) quandoque ad septum lenissime annulato-tumidula vidi, quo caractere cum *Sphæria sphingiophora* Oud. Mat. Myc. Néer. I, p. 54, pl. VII, fig. II, (in Corno) congruere videntur, sed fungillus meus a *D. salicella* typica non satis differt, ut separari mereatur.

62. **D. Chorostate sphingiophora** (Oud.) Sacc., *Sphæria sphingiophora* Oud. Mat. Mycol. Néerl. II, 64, t. VII, fig. 11. — Peritheciis sparsis, infra epidermidem nidulantibus, demum erumpentibus, collo bre-

vissimo, poro rotundo perforato præditis; ascis oblongis, 8sporis 60 \approx 12; sporidiis oblique distichis, 17 \approx 5, oblongis, utrinque obtusis, rectis vel parum curvatis, septo tamquam annulo prominente bilocularibus, hyalinis.

Hab. in ramis Corni albæ, prope Naaldwyk Hollandiæ. —

D. salicellæ certe affinis.

63. **D. Chorostate coramblicola** (B. et Br.) Sacc., *Diatrype coramblicola* B, et Br. Ann. N. H. n. 1725. — Pustulis elongatis, bullatis; ostiolis prominulis, rugosis; sporidiis fusoides, 4-nucleatis, 8–9 μ . longis.

Hab. in caulibus Brassicæ, Forres Britanniciæ. — An e sect. *Euporthe*?

B) *Chorostella*: sporidiis appendiculatis.

64. **D. Chorostate Hystrix** (Tode) Sacc. Fungi Ven. Ser. IV, pag. 6, 2416
Diatrype Hystrix Fr. Roum. Fungi Gall. n. 76, *Sphæria Mougottii* Pers. sec. Fr. Elench., *Sphæria Hystrix* Tode Meckl. II, 53, fig. 127. — Peritheciis numerosis in acervulos valseos aggregatis, stromatique luteolo corticali laxè infossis, globulosis, $\frac{1}{4}$ mill. d., atris, extus lutescenti-pruinosis; ostiolis perithecio duplo longioribus, cylindraceo-filiformibus arcuatim divergentibus; ascis copiosis, fusoides, initio stipitatis, dein stipite evanescente subsessilibus, p. sporif. 45 \approx 10, aparaphysatis, 8sporis; spordiis inordinate oblique monostichis, v. distichis, v. subtristichis, cylindraceo-fusoides, 10 \approx 3, plerumque curvulis, 1-septatis, ad septum leniter constrictis, utrinque breve acuteque appendiculatis, 4-guttulatis, hyalinis.

Hab. in ramis Aceris Pseudoplatani in montibus Bellunensibus Ital. bor. nec non in Vogesis. — A *D. Mamiana*, *D. longirostri* et *D. Niessleana*, etsi affinis, satis recedit.

65. **D. Chorostate Hystriçula** Sacc. et Speg. Mich. I, p. 392, *Sphæria* 2417
Lebiseyi (Desm.?) Roum. Fungi Gall. n. 482. — Stromate nullo manifesto; peritheciis hinc inde in acervulos minutos aggregatis v. subsparis, cortice nidulantibus, globulosis, $\frac{1}{2}$ mill. diam. nigris, peridermio secedenti adhærentibus et basi dein cupulato-collapsis, ostiolis peridermium fasciculatim perforantibus, capillaceis, $\frac{1}{2}$ mill. long.; contextu perithecii distincto parenchymatico rufo-fuligineo; ascis fusoides, utrinque acutis, 40–45 \approx 6–7, lumine bifoveolato, aparaphysatis, octosporis; sporidiis oblique monostichis v. distichis

fusoideis rectiusculis, 1-septatis, 4-(v. pluri-) guttulatis, 12-14 \approx 21 $\frac{1}{2}$, hyalinis, initio utrinque appendiculatis, dein muticis.

Hab. in cortice *Aceris campestris* ramorum, Conegliano Ital. bor. (SPEGAZZINI), in Germania (THUEN) et in Vogesis (MOUGEOT). — Species prædistinguenda, nonnullis notis *Gnomoniis* affinis. Ad sectionem *Tetrastagon* ob perithecia sæpe sparsa pari fere jure duci posset. Linea stromatica semper deest ut in *Diap. rostellata* (Fr.) Nits.

66. **D. Chorostate castanea** (Tul.) Sacc. Mich. I, 507, *Valsa castanea* 2418
Tul. Carp. II, p. 202, t. XXIII, fig. 1-12, *D. Castaneæ* Sacc. Myc. Ven. Spec. p. 136, t. XIII, fig. 29-32. — Stromate valseo, rufescente epidermide rupta cincto et partim tecto; peritheciis in quoque acervulo 6-8, ovoideis v. angulosis, leniter conniventibus, atris stromate lignescente corticali exceptis, diam. ca $\frac{1}{3}$ mill.; ostioliis brevibus in discum desinentibus; ascis cylindræo-clavatis breviter crasseque stipitatis, 40-55 \approx 8-9, 8sporis; sporidiis recte distichis, raro oblique monostichis, cylindræo-fusoideis, curvulis, 14-18 \approx 3-35, utrinque appendicula setiformi, incurva, hyalina, 3-4 μ . longa, labili auctis, faretis, hyalinis initio 4-guttulatis, dein medio constrictio-1-septatis, loculo altero paulo crassiore. — Status spermogonicus; acervulis quam ascophoris minoribus, sed forma similibus, cellulis pulpa nigricante foetis; spermatiis breve fusoideis, 6-7 \approx 1 $\frac{1}{2}$ -2, simplicibus, hyalinis.

Hab. in ramulis *Castaneæ vescæ* in Gallie variis locis et in agro Tarvisino et Patavino, Ital. bor.

67. **D. Chorostate leiphæmoides** (Fuck.) Sacc., *Cryptospora leiphæmoi-* 2419
des Fuck. Symb. myc. App. II, p. 34. — Peritheciis sub stromate ferrugineo tuberculiformi, erumpente 1 lin. lat. nidulantibus, 1-4, majusculis, globosis, nigris, nucleo sordido, ostioliis demum in disco ferrugineo exsertis, sed brevibus, conicis, atris; ascis clavatis, in stipitem attenuatis, 8sporis, 48 \approx 10; sporidiis distichis, fusiformibus, antice parum crassioribus, curvatis, utrinque acute appendiculatis, uniseptatis, 16-18 \approx 3-4, hyalinis. — Fungus leucoconidiphorus erumpens, tuberculiformis, magnus, 1-1 $\frac{1}{2}$ lin. lat., $\frac{1}{2}$ lin. crass., extus lævis, fusco-ferrugineus, intus siccus, niveus; leucoconidiis oblongo-ovatis, hyalinis, rectis, biguttulatis, 6-10 \approx 3-4.

Hab. in ramis exsiccatis corticatis *Castaneæ vescæ*, Vollrads Germaniæ. — Verisimillime non diversa a præcedente.

68. **D. Chorostate pyrrocystis** (B. et Br.) Fuck. Symb. myc. p. 204, 2420
Dialrype pyrrocystis B. et Br. Ann. N. H. n. 841, t. 9, f. 10.

— Irregularis, disco plano vel concavo, ostioliis nigris punctato; stromate pallido; peritheciis brunneis, ascis fusoido-clavatis, octosporis; sporidiis biseriatis, oblongo-ellipticis, utrinque obtusiusculis, 25 μ . long., 2-guttatis, hyalinis (teste Fuck. utrinque acute appendiculatis).

Hab. in ramis corticatis Coryli Avellanæ in Britannia et Germania. — Icon B. et Br. præbet paraphyses (genuinas?).

69. **D. Chorostate sulphurea** Fuck. Symb. myc. p. 205, *Melanconis?* 2421
umbonata Sacc. Myc. Ven. Spec. p. 126, t. XII, fig. 39-41 (nec Auct.). — Peritheciis 8-19 circinatis, in stromate spurio, amœne sulfureo nidulantibus, globosis, in collum attenuatis, ostioliis in disco sulfureo, plano prominulis, globosis, perforatis, atris; ascis clavato-oblongis, stipitatis, 80-94 \approx 14-16, 8sporis; sporidiis distichis, ovato-oblongis, didymis, utrinque apiculatis, sæpe curvatis, hyalinis, 24 \approx 8. — Spermogoniis sub corticis epidermide nidulantibus, latissime conicis, orbicularibus, 2-2 $\frac{1}{2}$ mill. latis, gelatina grisea, homogœna repletis, disco centrali, erumpente, orbiculari, applanato seu valde convexo, pulverulento, amœne flavo, demum perforato et massa gelatinosa, diaphana, fusca, expulsa; spermatibus late fusiformibus, quandoque inæquilateralibus, continuis, 1-2guttulatis, 12-16 \approx 5-6, hyalinis.

Hab. in ramis corticatis Coryli Avellanæ in Germania, Helvetia, Gallia et Italia.

70. **D. Chorostate affinis** Sacc. Mich. I. p. 28. — Peritheciis corticis, in acervulos sparsos valseos monostiche aggregatis, epidermide elevata medioque fissa cinctis, globosis, nigris intus nitidis, stromate furfuraceo lutescente junctis; contextu peritheciæ distincte cellulari fuligineo; ostioliis cylindræis, vertice conoideis, peridermium parum excedentibus; ascis fusoidis, 110-120 \approx 20, apice subtruncatis lumineque coarctato v. obsolete bifoveolato, aparaphysatis, octosporis; sporidiis distichis oblongis, 25-30 \approx 10-12, rectis curvulisve, constricto-1-septatis, 2-guttulatis, granulosis, hyalinis, initio appendiculâ cylindræâ hyalina utrinque auctis. 2422

Hab. in ramulis Coryli Avellanæ, Conegliano, Ital. bor. et Saintes Galliæ. — A *D. sulphurea* Fuck. præcipue differt sporidiis utrinque rotundatis, crassioribus, stromate obscuriore, an satis?

71. **D. Chorostate decedens** (Fr.) Fuck. Symb. myc. App. I, p. 318. 2423
Sphæria decedens Fr. S. M. II, p. 481. — Gregaria, peritheciis globosis immersis nigris, collo recto, ostioliis epidermide vix lacera-
 rata erumpentibus distantibus; ascis subfusoidis, 70-80 \approx 9, octo-

sporis, lumine apice bifoveolato; sporidiis lanceolato-oblongis medio septatis, 4guttulatis, hyalinis, utrinque acute appendiculatis, $12 \approx 4$.

Hab. in ramis corticatis emortuis Coryli Avellanæ in Suecia, Britannia, Gallia et Germania. — Perithecia nunc solitaria, nunc conferta, in cortice interiore immersa, nuda, in collum breve attenuata, nulla linea nigra circumscripta. Discus nullus adest distinctus, sed ostiola pertusa disposita fere ut in *D. Tessera*.

72. **D. Chorostate Tessera** (Fr.) Fuck. Symb. myc. App. I. p. 318. 2424

Sphaeria Tessera Fr. S. M. II, p. 405. — Peritheciis irregulariter circinantibus, disco erumpente plano mere corticali tectis, ostioliis sparsis prominulis; ascis oblongo-fusoideis, $60-70 \approx 10-12$, lumine apice bifoveolato, 8sporis; sporidiis oblongo-fusoideis, constricto-4-septatis, $15-20 \approx 6-7$, utrinque minute appendiculatis, 4-guttulatis, hyalinis.

Hab. in ramis corticatis Coryli Avellanæ in Suecia, Germania, Gallia, Italia, Belgio. — Immersa. Perithecia subdena, aggregata, globosa, exserendo ostiola globosa, sublævia, ad dimidium prominula corticem internam elevant, qui erumpens format discum planum irregulari-subrotundum, 1-2 lin. latum, colore et substantia omnino corticis interioris.

73. **D. Chorostate syngenesia** (Fr.) Fuck. Symb. myc. p. 204. *Sphæ-* 2425

ria syngenesia Fr. Syst. Myc. II, p. 382, p. p. *Sph. Frangulæ* Pers. in Cooke Handb. n. 2448. *Valsa syngenesia* Fr. Summa Veg. Sc. p. 411. — Stromate e basi plerumque orbiculari conoideo, apicem versus coarctato, ligno adnato, concentrice striatulo, atro, intus fusco, latit. circiter 2 mill.; peritheciis in singulo stromate 5-9, monostichis, sphaeroideis, atris, ostioliis exsertis, in corpus s. discum corrugatum connatis instructis; ascis sessilibus, cylindraco-clavatis, $54-58 \approx 7-9$, octosporis; sporidiis distichis, fusoideo-elongatis, utrinque appendiculo brevi, setiformi ornatis, vulgo rectis, chlorino-hyalinis, 4-guttulatis, $12-16 \approx 3-4$.

Hab. in ramis exsiccatis Rhamni Frangulæ in Britannia, Suecia, Germania, Belgio, Gallia, Helvetia, Italia, Fennia, Lapponia. — Sæpius in ramis decorticatis libera occurrit. Stromata apice ostioliis deciduis albido-umbilicata.

74. **D. Chorostate Taleola** (Fr.) Sacc. F. Ven. Ser. IV, p. 12. *Melan-* 2426

conis Taleola Speg. Add. Myc. Ven. n. 77. *Aglaospora Taleola* Tul. Carp. II. p. 168. *Valsa Taleola* Fr. S. M. II, 391. *Sphaeria Taleola* Fr. S. M. II, 301. *Valsa Taleola* Fr. Sum. V. S. p. 411.

— Laxe circumscripta, stromate corticali, peritheciis in centro confertis, disco albo, ostioli punctiformi-immersis lævibus; ascis cylindræis, oblique breviter stipitatis, 8sporibus, $152 \approx 14$; sporidiis oblique monostichis, oblongo-ovatis, utrinque subobtusis, distincte uniseptatis, medio constrictis, loculis uni-biguttulatis, utrinque unimedio 3-appendiculatis, appendiculis filiformibus, sporidium subæquantibus, hyalinis, $18-24 \approx 7-9$. — Status spermog. et conid. *Libertellæ* et *Myxosporii* species sistunt. Cfr. Tul. et Fuck.

Hab. in ramis corticatis *Quercus* dejectis in Suecia, Gallia, Germania, Britannia, Belgio, Italia. — Pustulæ subrotundæ v. ellipticæ, cortici interiori innatæ, depressæ, superne epidermide tectæ, qua sublata patet stroma corticale in superficie pallide testaceum (ab epidermide coloratum). Perithecia numerosa, exigua. Ostiola in disco sparsa, pauca, prominula, *V. niveæ* admodum similia.

75. **D. Chorostate oxyspora** (Peck) Sacc. *Valsa oxyspora* Peck 28 2427
Rep. in the St. Mus. New York t. II, f. 26-29. — Pustulis sparsis, subconicis, erumpentibus, extus nigricantibus, epidermide substellatim fissa cinctis; peritheciis ligno dealbato lineaque nigra circumscripto infossis; ostioli paucis brevibus; ascis octosporibus; sporidiis stipatis v. distichis, oblongo-ellipticis medio leniter constrictis, 1-septatisque, 4-nucleatis, 15μ . long., appendicula setacea utrinque auctis.

Hab. in ramis quercinis, Sandlake Amer. bor.

76. **D. Chorostate nidulans** Niessl Notiz. Pyr. p. 49. — Stromate e 2428
corticis parenchymate immutato formato, haud elevato, e peridermio fisso erumpente; peritheciis 4-9 sine ordine monostiche stipatis, vel subcircinantibus, in corticis parte interiori nidulantibus, subglobosis, compressis, ostioli convergentibus dense stipatis vel concrenentibus mox elongatis mox abbreviatis cylindræis angustis; ascis lanceolatis subsessilibus, $24-30 \approx 6$; sporidiis 8, distichis cuneato-fusoideis seu inferne attenuatis, plerumque curvatis utrinque obtusis, mucronatis, non constrictis, 4 guttulis, minutis, hyalinis $8-10 \approx 2\frac{1}{2}$.

Hab. in sarmentis siccis Rubi Idæi et R. fruticosi pr. Graz Styriæ. — Var. *exigua* Niessl l. c.; minor, ostioli non exsertis; sporidiis 6-7 ≈ 2 . In sarmentis Rubi cæsii, Voitsberg.

77. **D. Chorostate obscura** (Peck) Sacc. *Valsa obscura* Peck 28 Rep. 2429
on the St. Mus. New York. — Pustulis minutis, ligno immersis, erumpentibus; ostioli 3-8, leniter prominulis; ascis subcylindricis; sporidiis stipatis v. biseriatis, obscure subexcentrice 1-septatis (con-

tinuisve?), oblongis, una extremitate acutioribus, utrinque setulâ auctis, hyalinis, 7-8 μ . longis.

Hab. in sarmentis Rubi strigosi, Albany Amer. bor. — Setulæ sporidiorum facile prætereundæ. Epidermis supra acervulos solite stellatim fissa.

78. **D. Chorostate Saccardiana** J. Kunze F. sel. exs. n. 123 [1876] (absque diagnosi). — Peritheciis in acervulos valseos intus zona nigra circumscriptos subcircinantibus globulosis, atris, $\frac{1}{3}$ mill. diam., collis convergentibus ostiolis obtusiusculis discrete subcirculari-erumpentibus; ascis fusoidis, subsessilibus, aparaphysatis, octosporis, 90-100 \approx 9-10; sporidiis distichis fusoidis constricto-1-septatis, 15-4,5-5, utrinque mucronulo dein decedente ornatis, 4-guttatis, hyalinis.

Hab. in ramis Ulmi campestris emortuis, Eisleben Germaniæ. — Habitus exterior fere *D. Tesseræ*.

79. **D. Chorostate perijuncta** Niessl Hedw. 1878, p. 44 (sub nomine *con-* 2431
juncta jam usurpato) Hedw. 1876 p. 153. — Stromate discreto subvalseo, sed e corticis parenchymate pallescente, strato angusto cincto, formato, semiimmerso, subpustulato; peritheciis, 5-12 in singulo stromate, aggregatis, innatis, subglobosis vel mutua pressione angularibus. majusculis, 300-500 μ . d., collis brevibus (perithecii diam. paulo longioribus) ostiolis minutis vix superantibus, nunc disciformi-erumpentibus, nunc solitariis; ascis lanceolato-clavatis, subsessilibus, 64-80 \approx 8-9; sporidiis 8, distichis clavato-fusoidis, rectis v. sæpe inaequilateralibus, medio vix constrictis, 1-(3?)-septatis, hyalinis, utrinque obtusiusculis, mucronatis, 13-15 \approx 4.

Hab. in ramis Ulmi campestris, Stralsund in Germania (RABENHORST). — An eadem ac præcedens?

80. **D. Chorostate Tessella** (Pers.) Rehm Ascom. n. 176. *Cryptospora Tessella* (Pers.) Karst. Myc. Fenn. II, p. 79. *Sphæria Tessella* Pers. Syn. p. 48. *Valsa Tessella* (Pers.) Fr. Summa V. S. p. 411. — Stromate cortici omnino innato basique ligno adnato, valseo, strato extimo atro, lineam subflexuosam nigram, peridermium subpenetramentem efficiente undique cincto, parte centrali superiori erumpente atrofusca excepta, substantia corticis immutata formato; peritheciis in singulo stromate 4-6, plerumque 5, inordinate circinantibus, sphæroideis, collabentibus, stromate corticali immer-sis basique ligno subinnatis; ostiolis solitariis, per peridermium erumpentibus, superficialibus, circinatis vel in quincuncem sparsis, junioribus convexis, nitidis, deinde umbilicatis; ascis subsessilibus,

elongatis, utrinque attenuatis 135-140 \approx 21-26, p. sporif., 125 μ . long., octosporis; sporidiis tristichis vel subdistichis, fusoido-elongatis, utrinque subtiliter breviterque appendiculatis, curvatis, uniseptatis (rarissime 3-septatis?) ad septum medium vix vel levissime constrictis, hyalino-chlorinis 40-60 \approx 7-9, paraphysibus gutturalis (genuinis?).

Hab. in ramis corticatis Salicis in Suecia, Fennia, Germania et Belgio.

81. **D. Chorostate glyptica** (B. et Curr.) Sacc. *Valsa glyptica* B. et Curr. North Am. Fungi n. 866. Cooke Valsei U. S. pag. 120. — 2433
Epidermide tecta, nigro-cincta, ostiolis vix perforantibus; sporidiis fusiformibus subinde sigmoideis, uniseptatis, 45-55 μ . long.

Hab. in ramis Salicum, Carolina infer. Amer. bor. — Perafinis nisi eadem ac *D. Tessella*.

82. **D. Chorostate mucronata** (Peck) Sacc. *Valsa mucronata* Peck, 2434
28 Rep. on the St. Mus. New York t. II, f. 10-13. — Peritheciis 4-8 aggregatis, majusculis, cortice interiore nidulantibus, linea nigra circumscriptis; ostiolis discrete erumpentibus, nec discum formantibus, prominulis, nigris; ascis, clavato-lanceolatis, crassis, octosporis; sporidiis stipatis, majusculis, cylindraceutis, curvulis, uniseptatis, non constrictis, hyalinis, 40-50 μ . long., solite utrinque breve mucronatis.

Hab. in ramis emortuis Salicum, Sandlake Amer. bor. — *D. Tessellæ* affinis nisi eadem.

83. **D. Chorostate galericulata** (Tul.) Sacc. *Valsa galericulata* Tul. 2435
Carp. II, pag. 203. — Stomatibus corticis, disco obtuso, albedo erumpente, ostiolis 8-10 rotundis nigris punctulato; ascis ovato-oblongis octosporis; sporidiis distichis lanceolatis, curvulis, 1-septatis, utrinque breve aristatis, hyalinis, 19-23 \approx 6,5. — Spermogonia (*Fusicoccum*): spermatiis fusoidis 6-10 \approx 3,5-4.

Hab. in ramis corticatis Fagi sylvaticæ prope Versailles Galliæ.

C) *Dubie v. non rite cognitæ.*

84. **D. Chorostate chrysoides** (Tul.) Sacc. *Valsa chrysoides* Tul. Carp. 2436
III, pag. 107. — Peritheciis hinc inde valsoideo-confertis, in stromate conidiophoro, subcutaneis, lageniformibus, carnosulis, carneauratis (extus?), ostiolis concoloribus vix erumpentibus; ascis linearibus 100-130 \approx 7, subsessilibus octosporis non v. spurie para-

physatis; sporidiis monostichis, breviter ovatis, utrinque obtusis, medio constricto-1-septatis $10 \approx 6,5$ hyalinis. Conidia v. spermatia intra stroma generata ovato-oblonga 3-4 μ . longa, basidiis 30 μ . longis suffulta.

Hab. in ramis emortuis Cytisi Laburni prope Versailles Galliae. — Ob colorem et mollitiem perithecorum dubia.

85. **D. Chorostate convexa** (Pr.) Sacc., *Sphæria* (obtectæ) *convexa* 2437
Pr. Fungi Hoyersw. n. 300. — Gregaria, epidermide tecta; peritheciis globoso-depressis, convexis, atris, intus albis; collo prominulo crasso; ascis clavatis, octosporis; sporidiis subfusiformibus, diblastis, albis; parphysis nullis. (Perithecia ad basin sæpe concava).

Hab. ad ramulos Salicis, Hoyerswerda Germaniæ. — « An diversa a *D. salicella*? »

86. **D. Chorostate castriformis** (Pr.) Sacc., *Sphæria* (versatiles) *castriformis* 2438
Pr. Fungi Hoyersw. n. 290. — Seriatim erumpens; stromate conico-obtuso, basi latissimo, crustaceo-dilatato, simplex vel confluentis; subiculo latissime effuso, atro, intus cinereo-fusco; disco depresso et margine acuto cincto; peritheciis subglobosis, subaggregatis; ostioli distantibus, exsertis, spinulosis, scabris; ascis clavatis; sporidiis octonis fusiformibus, 2-(3?)-locularibus albis.

Hab. in ramis exsiccatis frondosis, Hoyerswerda Germaniæ.

87. **D. Chorostate? phomaspora** (C. et E.) Sacc., *Valsa* *phomaspora* 2439
C. et E. New Jersey Fungi Grev. VI, p. 10, t. 95, f. 12. — Pustulis ellipsoideis, erumpentibus; peritheciis atris globosis, in collo attenuatis, tectis; ostioli convergentibus, cylindræis, atris, vix conspicuis; ascis clavatis; sporidiis anguste ellipticis, rectis, phomatoideis, primum binucleatis, hyalinis, 10-12 μ . long.

Hab. in ramis Myricæ, New Jersey Amer. bor.

88. **D. Chorostate innata** (B. et C.) Sacc., *Valsa* *innata* B. et C. 2440
North Amer. Fungi n. 874. — Pustulis subcorticalibus planis; peritheciis circa discum elevatum circinantibus; ostioli disco elevato brevi abditis; ascis filiformibus; sporidiis oblongis, utrinque acutiusculis, 7-8 μ . long.

Hab. in ramis corticatis Castaneæ vesceæ in montibus New York Amer. bor.

89. **D. Chorostate? tortuosa** (Fr.) Sacc., *Sphæria* *tortuosa* Fr. S. M. 2441
II, p. 395, *Sph. Hystrix* var. B. Nees Syst. fig. 329, B. — Pustulata, peritheciis globosis aggregatis, ostioli fasciculatis subcylindricis inæqualibus obtusis subdivergentibus.

Hab. ad cortices ramorum in Suecia et Germania. — Perithecia globosa, glabra, lævia, conferta, in orbem cortici interiori immersum disposita, pustula corticali prominula tecta. Ostiola intra pustulam convergunt, fasciculatim erumpunt, breviter, subdivergunt, læviuscula, elongata, deflexa, subnodosa, habitu *Calosphæricæ Principis*.

90. **D. Chorostate? ciliata** (Pers.) Sacc., *Sph. ciliata* Pers. Syn. p. 35, 2442
Nees Syst. f. 329, Fr. S. M. II, p. 394. — Pustulata, peritheciis ovatis convergentibus, ostiolis subsetaceis acutis divaricatis subflaccidis.

Hab. ad cortices Ulmi et Alni in Suecia et Germania. — Perithecia subdena, erecto-convergentia, in ostiolum attenuata, circumstantia in cortice interiori nidulantur, pustula subrotunda minori corticali prominente tecta. Ostiola tenuissima, ciliæformia, longitudine varia (circiter 1-2 lin.), lævia, dein e gelatina profuente subnodosa.

- II. *Euporthe* Nits.: peritheciis gregariis ligno superficie tandem denigrato intusque nigro-circumscripto immersis.

A) *In Dicotyledoneis arboreis.*

91. **D. Euporthe Eres** Nits. Pyr. Germ. p. 245. — Stromate latissime effuso ramosque ambiente, cum cortice coalito ejusque superficiem tandem nigrificante, in lignum subpositum alte penetrante, limitibus nigris semper circumscripto; peritheciis minutissimis, globosis, ligni strato extimo infossis, in collum pertenuæ, corticem perforans abrupte attenuatis; ostiolis plus minus elongatis, tenuissime cylindricis vel rarius nodosis, plerumque secundis vel varie flexuosis, condense grege erumpentibus ac rami superficiem setosam reddentibus; ascis cylindrico-clavatis, octosporis, sessilibus, 50-56 \approx 9; sporidiis subdistichis, fusiformibus, obtusis, rectis vel inæquilateralibus, bicellularibus, quadriguttatis, parum constrictis subhyalinis, 13-14 \approx 4. — Spermogonia phomatoidea: spermatiis ellipsoideis 6-7 \approx 3, biguttatis; basidiis? (stylosporibus Nits.) curvatis 33 \approx 1.

Hab. in ramis emortuis Ulmi campestris in Germania, Italia et Gallia. — Adest mihi forma corticola ostiolis brevioribus, an e sect. *Tetrastagæ* species nova?

92. **D. Euporthe Malbranchei** Sacc. Mich. I, p. 509. — Stromate late effuso corticem internam lignique superficiem infuscante lineaque nigra intra lignum limitato; peritheciis sparsis v. hinc inde gre-

gariis ligno immersis v. semiimmersis, globosis, majusculis, $\frac{3}{4}$ mill. diam., ostioliis breve cylindraceis v. conoideis; ascis cylindraceo-fusoideis, subsessilibus, 60-70 \approx 10, apice, lumine 2-foveolato, obtusatis, aparaphysatis, octosporis; sporidiis distichis, oblongo-2-conicis, utrinque primo minute apiculatis, dein muticis, medio constrictis, 12-15 \approx 4 $\frac{1}{2}$ -5, 4-guttatis, hyalinis.

Hab. in ramis decorticatis v. libro vestitis Ulmi campestris in Gallia. — A *Diap. Ere* Nits. et *D. Saccardiana* Kunze, Ulmum pariter habitantibus, diversa.

93. **D. Euporthe sordida** Nits. Pyr. Germ, p. 252. — Stromate, ef- 2445
fuso, peridermio haud decolorato, tecto v. sæpius, peridermio de-
jecto, corticis nudatam superficiem colore ex sordide fuscescente
tandem nigricante tingente maculasque formante ambitu vario, ir-
regulari, opacas, sordidas, intusque lineis tenuissimis atris undique
limitato; peritheciis exiguis, ligni strato extimo omnino immersis,
globosis v. sæpius depressis, ordine maxime vario dispositis, mox
remotissimis, mox contra dense gregariis, in collum brevissimum
abrupte attenuatis; ostioliis minutis, sed pro ratione crassis parum
elongatis, conicis v. cylindricis, immo ventricosos-nodosis, apice ro-
tundatis, rectis vel curvatis, solitarie vel gregatim erumpentibus;
ascis clavatis vel oblongis, sessilibus, octosporis, 55-60 \approx 8-10; spo-
ridiis distichis vel submonostichis, fusiformibus vel oblongis, utrin-
que obtusis, immo rotundatis, pallide lutescentibus, bicellularibus,
bi- vel quadriguttatis, sæpe medio constrictis, 13-14 \approx 3-4. — Sper-
mogonia phomatoidea: spermatiis 8-10 \approx 2-2,5 biguttatis, basidiis
hamatis 27 \approx 1.

Hab. in ramis corticatis decorticatisque Carpini Betuli, prope Münster et Cappenberg Germaniæ et Treviso Italiæ bor.

94. **D. Euporthe Aucubæ** Sacc. Fungi Ven. Ser. V, p. 201 et Mich. I, 2446
p. 390, *Sphæria insularis* Berk. in Curr. Comp. Sphær. n. 212,
fig. 210, verisimiliter, sed non Nits. — Stromate ramulos, cortice
relaxato, hinc inde ambiente, lineaque nigra in ligni superficie et
profunditate excurrente limitato, peritheciis globulosis, gregariis,
 $\frac{1}{3}$ mill. diam., ligno infossis, ostioloque vix emergente; ascis fu-
soideis, 45-48 \approx 7-8, aparaphysatis, octosporis; sporidiis distichis,
oblongo-fusoideis, 14-16 \approx 3-3 $\frac{1}{2}$, constricto-1-septatis, 4-guttula-
tis, hyalinis. — St. spermog. *Phoman Aucubæ* Sacc. sistit.

Hab. in ramis emortuis Aucubæ japonicæ, Susegana, Ital. bor., Rouen Galliæ, Forden Britannicæ.

95. **D. Euporthe abdita** Sacc. et Spég. Mich. I, p. 391. — Stromate 2447

ramos corticatos late ambiente et superficiem parum infuscante, linea nigra tortuosa per lignum immutatum excurrente limitato; peritheciis ligno immersis, globulosis, majusculis, $\frac{1}{2}$ mill. diam., ostiolis peridermium perforantibus et vix superantibus, obtusis; ascis clavato-cylindræis, 70-80 \approx 10, apice rotundatis, breve crassequae stipitatis, aparaphysatis, octosporis; sporidiis distichis oblongo-didymis, 15 \approx 5, utrinque obtusiusculis, 4-guttulatis, hyalinis.

Hab. in ramis emortuis *Meliæ Azedarach*, Susegana, Ital. bor. et in Argentina Amer. austr.

96. **D. Euporthe orientalis** Sacc. et Speg. Mich. I, p. 391. — Stromate 2448
 ramate ramos corticatos decorticatosque late ambiente, eosque varie infuscante, linea nigra per lignum varie excurrente limitato; peritheciis gregariis, ligno immersis, $\frac{1}{4}$ mill. diam., globulosis, ostiolo apice rotundato, vix emergente; ascis fusoides, apice obtusioribus, 45-50 \approx 7, aparaphysatis, octosporis; sporidiis distichis v. oblique monostichis, fusoides, 15-17 \approx 2 $\frac{1}{2}$ -3, medio constrictis, 1-septatis, 4-guttulatis, septulis spuriiis 2 accedentibus, hyalinis.

Hab. in ramis emortuis *Mori albæ*, Susegana, Ital. bor. et propè la Recoleta Argent. Amer. austr. (SPEGAZZINI, utrinque!). — Forma americana præbet ascos 55-65 \approx 8-10, sporidia 12-15 \approx 4-5.

97. **D. Euporthe sociabilis** Nits. Pyr. Germ. p. 263. — Stromate ple- 2449
 rumque latissime effuso ramosque longe ambiente, cortici lignoque omnino immerso, strato tenui, atro undique circumscripto, peridermio arcte adhærente, tandem obscurato tecto; peritheciis minutis, ordine subæquali, hinc inde in series longitudinaliter directas, parallelas, distributis, denseque sociatis, v. rarius 2-4 stipitatis, e globoso mox depressis, sectione verticali ovalibus ligni strato supremo totis immersis, membrana pertenui, molli, fusca structis, in collum brevissimum abrupte attenuatis; ostiolis crassis, cylindricis, apice rotundatis, poroque solito ampliore tandem apertis, peridermium perforatum parum tantum superantibus; ascis anguste clavatis v. subcylindricis, octosporis, sessilibus, 66-80 \approx 8-10; sporidiis distichis, rarius oblique monostichis, fusiformibus, utrinque obtusis v. acutiusculis, bicellularibus, guttulis mox 4 tantum, mox pluribus gravidis, medio sæpe parum constrictis, immo anisomeris, rectis v. inæquilateralis, subhyalinis, 17-21 \approx 5.

Hab. in ramis emortuis *Mori rubræ*, Cappenberg Germaniæ.

98. **D. Euporthe spiculosa** (Alb. et Schw.) Nits. Pyr. Germ. p. 256, 2450
Sphæria spiculosa Alb. et Schw. Nisk. p. 16, *Valsa circumscripta*

pta (Fr.) Mont. Syll. Crypt. n. 764, *Valsa tortuosa* Fuck. Nass. p. 55. — Stromate diatrypeo, mox late effuso ramosque ambiente, mox contra brevior, maculæformi, immo valseo, cortice arcte adhaerente v. sæpius relaxato tecto, rarius nudato lignique superficiem colore sordide nigricante tingente, intusque undique nigrolimitato: peritheciis exiguis, subglobosis, ligni strato extimo omnino infossis v. sæpius semiimmersis tantum. parte superiore plus minus extante, ordine vario distributis, mox laxè sparsis, mox dense ac monostiche, immo subcircinatim stipatis, tunc stroma exacte valseum referentibus; ostioliis plus minus elongatis, cylindricis sed basin versus sensim incrassatis, sub cortice soluto sæpe longissimis ac tenuissimis, decumbentibus, flexuosis, hinc inde nodulosis, adhærentem contra corticem plerumque conjunctim perforantibus, brevioribus, rectiusculis; ascis subcylindricis v. anguste clavatis, octosporis, sessilibus, 45–60 \approx 7–9; sporidiis distichis v. rarius oblique monostichis, anguste fusiformibus, bicellularibus, quadriguttatis, vix unquam constrictis, plerumque rectis, 12–15 \approx 3. — Spermogonia phomatoidea: spermatis ovato-oblongis, 8 \approx 3–4, biguttatis.

Hab. in ramis emortuis Sambuci racemosæ et nigræ in Germania, Gallia, Britannia, Italia, Suecia, Belgio et Amer. bor.

99. **D. Euporthe tropicalis** Speg. Fungi Argent. I, p. 182. — Stromate ramos late ambiente per lignum leniter infuscatum vel immutatum, sinuose excurrente, nigro-limitato; peritheciis in cortice vel ligno nidulantibus, confertissime gregariis, globosis $\frac{1}{4}$ – $\frac{1}{3}$ mill. diam.; ostioliis brevibus, cylindræis, superficiem epidermidis subimmutatæ attingentibus, non exertis; ascis fusoideo-clavatis, 45 \approx 8–10, octosporis, aparaphysatis; sporidiis distichis, oblongis, medio 1-septatis, constrictis, utrinque obtusiuscule rotundatis, 12–14 \approx 4–5, quadriguttulatis, hyalinis.

Hab. in ramulis emortuis dejectis Bauhinia grandifloræ a la Recoleta, Argent. Amer. merid.

100. **D. Euporthe tumulata** C. et E. G. 34. — Sparsa; peritheciis distinctis, ligno sub-immersis, brunneis; ostiolo peridermium perforante elongato; ascis clavatis; sporidiis lanceolatis, quadrinucleatis demum uniseptatis, hyalinis, 12 \approx 5.

Hab. in ramis Coryli americanæ, New Jersey Amer. bor. — Linea nigra stromatica per lignum excurrit et perithecorum greges circumscrit.

101. **D. Euporthe valida** Nits. Pyr. Germ. p. 262. — Stromate mox late effuso, plagas magnitudine et forma maxime varias, hinc inde

ambientes occupante mox brevissimo, immo peritheciis ostiolis arctissime stipatis valseum æmulante, ligno corticique immerso, strato extimo tenuissimo, nigricante circumscripto, peridermio adhærente, haud decolorato, tecto; peritheciis grandiusculis, globosis v. multa pressione compressis, rarius laxe ac sine ordine distributis, sæpissime vero 4-20, immo pluribus densissime stipatis, monostichis, v. fere distichis, collis haud raro convergentibus, ligno omnino solitoque altius infossis, in collum abrupte attenuatis; ostiolis plus minus elongatis, validis, aliis abbreviatis cylindricis, apice rotundatis, aliis longioribus et apicem versus attenuatis, tunc varie flexuosis v. curvatis, nodulosis v. deformibus, raro solitarie, multo sæpius 4-20 v. pluribus conjunctim erumpentibus; ascis oblongis v. clavatis, octosporis, 50-56 \approx 10; sporidiis subdistichis, fusiformibus, utrinque obtusiusculis, bicellularibus, guttulis mox 2-4, mox contra pluribus fœtis, medio tandem constrictis, lutescentibus, 14-16 \approx 5.

Hab. in ramis crassioribus emortuis *Myricæ ceriferæ* in Horto botanico Münster Germaniæ.

102. **D. Euporthe viticola** Nits. Pyr. Germ. p. 264. — Stromate bre- 2454
vi, plagas minutas in rami longitudinem extensas, ovales, ellipticas v. irregulares, hinc inde confluentes occupante, intus nigrolimitato, v. ligni superficiem maculis, atris, opacis aspergente, corticis libro fibroso primum omnino tecto deinde sæpe nudato; peritheciis exiguis, depresso subglobosis, stromati alte immersis, plerumque in series longitudinaliter directas, breves, plerumque simplices ordinatis, mox dense stipatis mox distantibus, in collum longiusculum subito attenuatis; ostiolis basin versus sensim incrassatis, conicis v. plus minus elongatis, tenuissime cylindricis, nodulosis, rectis v. varie flexuosis, per libri rimis angustis ordine lineari erumpentibus; ascis anguste clavatis, octosporis, 60 \approx 7-8; sporidiis distichis subfusiformibus vel sæpius clavæformibus, bicellularibus, haud constrictis, sæpissime parum curvatis, hyalinis, 10-12 \approx 3.

Hab. in sarmentis *Vitis viniferæ* prope Münster Germaniæ et prope Treviso Italiæ borealis.

103. **D. Euporthe Badhami** (Curr.) Sacc., *Diatrype Badhami* Curr. 2455
Linn. Trans. XXII, t. 46, f. 80, Cooke Handb. n. 2446. — Peritheciis subsolitariis v. aggregatis, penitus ligno immersis, peridermio intus denigrato; ostiolis perforatibus, rugulosis; ascis teretifusoideis breve stipitatis, octosporis; sporidiis distichis, fusoideis utrinque acutis appendiculaque setacea auctis, 4-nucleatis, hyalinis, 12,7-15 μ . longis (sine setulis).

Hab. in ramis *Prini glabri*, New Jersey Amer. bor. (ELLIS) et in ramis in Britannia (CURREY). — Habitus *D. inæqualis*.

104. **D. Euporthe subpyramidata** (B. et C.) Sacc., *Eutypa subpyramidata* B. et C. North Amer. Fungi n. 858. — Effusa; peritheciis nigerrimis subpyramidatis exasperantibus; ascis lanceolatis, deorsum acutioribus; sporidiis biconicis; loculis elongatis. 2456

Hab. in *Quercu* in Carolina sup. Amer. bur. — An e sect. *Tetrastagæ*?

105. **D. Euporthe spinosula** Karst. Myc. Fenn. II, p. 111. — Stromate ligno leviter immerso vel fere superficiali, plus minus effuso, forma et magnitudine vario, atro, plerumque 2-3 cent. long., 1.5-2 cent. lat.; peritheciis strato ligni extimo fusco insidentibus, densissime stipatis, plus minus protuberantibus, subsphæroideis, vel pressione mutua angulatis, mediocribus, ostiolis parum elongatis, crassiusculis sursum obconice dilatatis, rugosis, immo quadrisulcatis, interdum cylindræcis et sublevibus; sporidiis oblongatis, obtusis, 4-guttulatis, chlorino-hyalinis, 14-22 \approx 5-6. 2457

Hab. in ligno *Quercus* denudato vetusto in insula Runsala Fennicæ. — Habitu *Eutypam spinosam* (Pers.) nonnihil æmulatur. Asci et paraphyses in speciminibus exoletis non adsunt. An affinis *D. subpyramidata*.

106. **D. Euporthe Quilmensis** Speg. Fungi Arg. Pug. IV, n. 156. — Stromate late per ramulos corticatos excurrente, lignum immutatum v. vix cinerascens relinquit, linea stromatica, sæpe ægre visibili, circumscripto; peritheciis inordinate sparsis, globulosis, 250-300 μ . diam., ligno totaliter immersis, ostiolo parvulo corticem perforante ac non v. vix prominulo, atro, levi, carbonaceo donatis; ascis fusoides, 50-60 \approx 10-13, octosporis, aparaphysatis; sporidiis distichis, ellipticis, utrinque obtuse rotundatis, 15-16 \approx 5-6, medio 1-septato-constrictis, loculis grosse 2-guttulatis, hyalinis. 2458

Hab. in ramis dejectis putrescentibus *Lucumæ neriifoliæ* in nemorosis uliginosis prope Quilmes, Argent. Amer. bor.

107. **D. Euporthe pulla** Nits. Pyr. Germ. p. 246, Sacc. Myc. Spec. p. 140, t. XIII, fig. 72-64, *Sph. spiculosa* var. Fr. El. Fung. II, 75. — Stromate plus minus late effuso; Hederæque sarmenta, cortice dejecto, mox longe lateque superficie nigrificante mox maculis tantum. forma et magnitudine maxime variis, tandem aterrimis marmorante intusque limitibus nigris undique circumscripto; peritheciis perexiguis, globosis v. depressis, in ligni strato, extimo 2459

nigrefacto proximo immersis, laxe ac plerumque subæqualiter sparsis, in collum tenue breveque subito attenuatis; ostioliis elongatis, breviusculis, cylindricis v. nodulosis, basim versus sæpissime sensim incrassatis, ideo subconicis, plerumque rectis ac matricis superficiem asperam reddentibus; ascis anguste clavatis v. oblongis, octosporis, 36-40 \approx 5-6; sporidiis distichis v. rarius oblique monostichis, angustissime fusiformibus v. subcylindricis, haud constrictis, rectis, bicellularibus, quadriguttatis, hyalinis, 9-12 \approx 2-3. — Status spermogonicus sistit *Phomam pullam* Sacc. (*Ph. Hederæ* Fuck. ? nec Desm.).

Hab. in truncis et sarmentis tandem decorticatis *Hederæ Helicis* in Gallia, Germania, Italia et Britannia.

108. **D. Euporthe fallaciosa** Nits. Pyr. Germ. p. 254. — Stromate, 2460 peritheciis hinc inde dense stipatis, valseum simulante, ramos juveniores ambiente, crassiores maculis aspergente, ambitu irregulari, vario, corticis superficiem, peridermio facile solubili tectam v. tandem nudatam nigrificante, cortice vero jam pridem secesso, lignum ipsum colore ex fusco sordide nigricante tingente parte, immersa nigrolimitato; peritheciis majusculis, basi applanatis, convexis v. depresso conicis, ligni superficiem impositis, cortice solum tectis vel ligni strato extimo, tenuissimo, pustulato-elevato, hinc inde spurio velatis, ordine subæquali v. sæpius gregatim sparsis, in collum brevissimum, tenuissimum abrupte attenuatis; ostioliis plerumque valde elongatis ac tenuissime cylindricis, nodulosis, varie flexuosis, sæpissime per peridermii rimas communes conjunctim erumpentibus; ascis oblongis v. subcylindricis, octosporis, 50-56 \approx 8-10; sporidiis distichis, fusiformibus, acutiusculis, plerumque rectis, bicellularibus, quadriguttatis, hyalinis, haud constrictis sed sæpius parum anisomeris, 12-14 \approx 4.

Hab. in ramis *Aceris Pseudoplatani* et *A. campestris*, Cappenberg, Æstrich, Eisleben Germaniæ. — Ostioliis longis, flexuosis etc. a *D. protracta* distinguenda.

109. **D. Euporthe protracta** Nits. Pyr. Germ. pag. 255. Sacc. Myc. 2461 Ven. Spec. p. 141, t. XIII, fig. 65-67. — Stromate plerumque latissime effuso, corticis superficiem ex fusco nigrificante peridermio arctissime adhærente tecto, v. multo rarius, peridermii particulis hinc inde excussis, ex parte tandem nudato; stratoque extimo, nigricante circumscripto; peritheciis magnitudine varia, globosis v. sæpius depressis, sectione verticali ovalibus, ligni strato extimo omnino immersis in series longitudinaliter directas, plus minus elon-

gatas, fere parallelas, rectiusculas v. varie flexuosas densius ordinatis, in collum brevissimum subito attenuatis; ostioliis nunc peridermium perforatum v. rimose fissum vix superantibus nunc parum elongatis, conicis, crassiusculis, solitariis v. 3-8 ordine linearum dense stipatis ac conjunctim erumpentibus; ascis anguste oblongis v. subclavatis, octosporis, 52-60 \approx 8-9; sporidiis distichis, raro monostichis, anguste oblongis v. subcylindricis, utrinque obtusis, bi-cellularibus, quadriguttatis, tandem parum constrictis v. torulosis, hyalinis, 10-15 \approx 3-4.

Hab. in ramis emortuis *Aceris campestris* in Germania, Britannia, Italia boreali.

110. **D. Euporthe petiolorum** Sacc. et Sp. Mich. 1, p. 388. — Stromate petiolis plagulas oblongas nigras hinc inde efficiente, lineaque nigra intus limitato; peritheciis ligno infossis, gregariis, globulosis, $\frac{1}{3}$ mill. diam., ostiolo cylindræo perforante et parum exerto; ascis fusoidis, 50-55 \approx 6-7, apophysatis, octosporis; sporidiis distichis, oblongis, 12-14 \approx 3-3 $\frac{1}{2}$, constricto-1-septatis, 2-4-guttulatis, hyalinis. 2462

Hab. in petiolis languidis *Catalpæ syringifoliæ*, Conegliano, Ital. bor.

111. **D. Euporthe nigricolor** Nits. Pyr. germ. p. 260 Sacc. Myc. Ven. Spec. p. 141, t. XIII, fig. 68-71. — Stromate plus minus late effuso, ramulos ambiente v. sæpius maculis brevioribus, irregularibus varie confluentibus marmorante, primo peridermio relaxato, ostioliis perforato tecto, deinde in plerisque nudato, superficieque atrato intus vero strato tenuissimo, atro circumscripto; peritheciis exiguis, e globoso mox depressis, sectione verticali ovalibus, ligno supremo omnino immersis nec protuberantibus laxè sparsis, in collum abrupte attenuatis; ostioliis e basi sensim conico-incrassatis tenuissime cylindricis, plus minus sed plerumque parum tantum elongatis; ascis anguste clavatis, oblongis v. subcylindricis, octosporis, 53-56 \approx 7-9; sporidiis subdistichis, rarius oblique monostichis, fusiformibus, bicellularibus, bi-quadriguttatis, medio constrictis, utrinque acutiusculis, subhyalinis, 16 \approx 5. Spermogonia nota. 2463

Hab. in ramis emortuis *Rhamni Frangulæ* in Germania et Italia boreali.

112. **D. Euporthe meridionalis** Sacc. Mich. I, p. 387. — Stromate ramos corticatos varie ambiente, lineaque tortuosa nigra per lignum excurrente limitato; peritheciis globulosis, ligno infossis, $\frac{3}{4}$ mill. diam., ostiolo peridermium perforante vix emergente; ascis fusoi-

deis, 55 \approx 10, aparaphysatis, octosporis; sporidiis distichis oblongo-fusoides, medio leniter constrictis, 15 \approx 4 $\frac{1}{2}$ -5, 1-septatis, 4-guttulatis, hyalinis.

Hab. in ramis Paliuri aculeati, Montebelluna, Ital. bor.

113. **D. Euporthe geographica** Fuck. Symb. myc. App. II, p. 38. — 2465

Stromatibus illis *Diaporthe controversæ* similibus, maculas irregulariter elongatas, limitatas, atro-fuscas formantibus, in ligno linea nigra circumscriptis; peritheciis spermatiferis in stromatis superiori parte natis, immersis, minutis, globosis; spermatiiis ovato-oblongis, biguttulatis, continuis, 10 \approx 3; peritheciis ascigeris in stromate sordido profunde immersis, globosis, nigris, collo vix prominulo, cylindraceo; ascis lanceolatis, 8spor. 64 \approx 8-9; sporidiis subdistichis, fusiformibus, 4guttulatis, uniseptatis, hyalinis, 10-12 \approx 4-6.

Hab. in ramis siccis adhuc stantibus Syringæ vulgaris, pr. Biebrich Germaniæ.

114. **D. Euporthe medusæa** Nits. Pyr. germ. p. 251. — Stromate effuso v. subvalseo plagas mox late effusas ramosque ambientes mox breviores irregulares, varie confluentes formante, cortice haud decolorato, facile solubili tecto, ligni superficiem nigrificante v. crustam aterrimam, verruculosam, interruptam sistente, intus nigrolimitato; peritheciis subglobosis v. depressis, immo a latere compressis, ligno plus minus profunde immersis, mox dense stipatis mox sine ordine sparsis v. solitariis majusculis, collo brevi, tenui instructis; ostiolis tenuissime cylindricis v. nodulosis, maxime elongatis, flexuosis, in ligni superficie prostratis, tamquam repentibus cortice omnino tectis v. eum apicibus solum perforantibus, stromatibus subvalseis, sæpe radiatim expansis; ascis subcylindricis anguste clavatis v. oblongis, octosporis, 46-52 \approx 7, sporidiis subdistichis, fusiformibus, acutiusculis v. obtusis, haud constrictis, rectis vel inæquilateralibus, pallide fuscescentibus, 2-(4?)-cellularibus, 10-13 \approx 3.

Hab. in ramis emortuis Cytisi Laburni, Cappenberg Germaniæ.

115. **D. Euporthe fasciculata** Nits. Pyr. Germ. p. 247. Sacc. Myc. 2467

Ven. Spec. p. 140, t. XIII, f. 62-64. *Sphæria spiculosa* Auctorum p. p. — Stromate in ramis corticatis, plagas mox maxime extensas, ambientes mox contra, et quidem sæpius, maculas irregulares breves, immo brevissimas, solitarias v. confluentes formante, ligni superficiem nigrificante, parte immersa nigrolimitato; peritheciis ligno plus minus alte immersis, plerumque gregatim densius nidu-

lantibus, majusculis, globosis, rarius depressis v. mutua pressione angulatis, in collum tenue abrupte attenuatis; ostioliis elongatis, cylindricis, rarius basin versus incrassatis v. nodosis, sæpissime flexuosis, plerumque fasciculatim erumpentibus; ascis cylindrico-clavatis v. anguste oblongis, 53-66 \approx 8-9; sporidiis distichis, fusiformibus obtusiusculis, constrictis, plerumque rectis, bicellularibus quadriguttatis, hyalinis v. pallide coloratis, 12-14 \approx 3-4. — Spermogonia phomatoidea; spermatiis 8-10 \approx 2 $\frac{1}{2}$ -3, biguttatis, hyalinis basidiis 20 \approx 1 denique curvatis fullis.

Hab. in ramis dejectis Robiniæ Pseudacaciæ in Gallia, Germania, Italia, Amer. merid.

116. **D. Euporthe forabilis** Nits. Pyr. Germ. p. 259. Sacc. Myc. Ven. 2468
Spec. p. 141. — Stromate, effuso, plerumque maculas breviores immo brevissimas, irregulares sistente, mox cum cortice peridermioque artissime adhærente coalito, tecto, mox, cortice dejecto, in ligno nudato libero, ejusque superficiem denigrante v. corticem residuum in crustam aterrimam mutante, intusque nigrolimitato; peritheciis grandiusculis, plerumque totis ligno infossis, rarius parte superiore in corticem projectis, immo ligno basi tantum adnatis, globosis v. depressis, ordine vario sed plerumque laxè sparsis; ostioliis crassis subcylindricis, corticem, ubi adest, parum tantum aut omnino non superantibus, cortice dejecto elongatis, rectis v. ascendentibus; ascis subcylindricis v. anguste clavatis, octosporis, 52-70 \approx 7-10; sporidiis distichis, anguste fusiformibus v. subcylindricis bicellularibus, quadriguttatis, medio tandem constrictis, pallide lutescentibus, 14-20 \approx 3-4.

Hab. in ramis emortuis Salicis capræ et babilonicae et Populi pyramidalis in Germania et Italia.

117. **D. Euporthe Floresiana** Speg. F. Argent. Pug. II, n. 71. — Stro- 2469
mate ramulos corticatos late ambiente per lignum immutatum tortuose excurrente, nigro-limitato; peritheciis globosis, atris totaliter immersis vel subimmersis et parum corticem tumefacentibus, discretis, rarius subaggregatis, $\frac{1}{4}$ mill. diam., ostiolo papillato minutissimo, atro, epidermidem vix perforante ornatis; ascis oblongo-fusoideis apice rotundatis crasseque tunicatis, luce refracta bifoveolatis, 50-55 \approx 7-8; sporidiis distichis cylindrico-fusoideis, 13-15 \approx 3-3 $\frac{1}{2}$, utrinque obtuse acuminatis, medio constricto-1-septatis, 4-guttulatis, hyalinis.

Hab. in Argentina, S. José de Flores, in ramulis dejectis Metrosideri in hortis.

118. **D. Euporthe extorris** Sacc. Mich. I, p. 30. — Peritheciis cortice immutato tectis, ligno omnino v. ad medium immersis, globosis, nigris, linea stromatica nulla manifesta limitatis; ostiolo cylindraceo-conoideo, peridermium vix superante; ascis subclavatis, 80 ≈ 12, subsessilibus, apice subtruncatis lumineque bifoveolato, aparaphysatis, octosporis; sporidiis distichis vel oblique monostichis, oblongo-fusoideis, 16–18 ≈ 7–8, rectis, curvulisve, utrinque obtusiusculis, medio constricto–1–septatis, 4–guttulatis, hyalinis.

Hab. in ramis corticatis *Chimonanthi fragrantis* Padova, Ital. bor. — Ad *Tetrastagam nutat.*

119. **D. Euporthe culta** Sacc. et Sp. Mich. I, p. 389. — Stromate ramos primo corticatos late ambiente, dein cortice secesso, ligni superficiem infuscante v. nigrificante; peritheciis ligno, lineola nigra obsoleta circumscripto, infossis, globulosis, $\frac{1}{3}$ mill. diam., ostiolis cylindræis peridermium primo perforantibus, parumque excedentibus; ascis cylindræo-fusoideis, obtusiusculis, 40–50 ≈ 5, aparaphysatis, octosporis; sporidiis distichis oblongis, constricto–1–septatis, utrinque acutiusculis, 4–guttulatis, hyalinis.

Hab. in sarmentis emortuis *Jasmini officinalis* in hortis, Selva, Ital. bor.

120. **D. Euporthe cryptica** Nits. Pyr. Germ. p. 265 Sacc. Myc. Spec. p. 141, t. XIII, fig. 72–75. — Stromate, plerumque breviter effuso, rarius ambiente, cortice rimoso, arido, tecto sæpeque omnino velato, ligno supposito superficie maculis e fusco nigricantibus, ambitu et magnitudine maxime variis, irregularibus maculato intusque strato marginali, atro undique limitato; peritheciis globosis, raro mutua pressione angulatis, majusculis, sine ordine sparsis, hinc inde 2–3 dense stipatis, parte inferiore tantum ligno plus minus alte immersis, superiore vero v. ostiolo tantum corticis tunicam inferiorem perforantibus; ostiolis crassis, nodosis v. ventricosis, plus minus elongatis ac sæpissime curvatis v. decumbentibus; ascis clavatis, octosporis, 54 ≈ 7–8; sporidiis distichis, fusiformibus v. subcylindricis, utrinque obtusis, medio tandem constrictis, rectis v. parum curvatis, bicellularibus, quadriguttatis, pallidis, 12–15 ≈ 3–4.5. — Spermogonia phomatoidea; spermatii 7–8 ≈ 2; basidiis (stylosporibus Nits.) filiformi–curvatis 33 ≈ 1.

Hab. in sarmentis emortuis *Loniceræ Periclymeni*, *L. Caprifolii*, *L. Xylostei* in Germania, Gallia, Italia et New Jersey Americæ borealis.

121. **D. Euporthe crassicollis** Nits. Pyr. Germ. p. 258. — Stroma-

te plus minus late effuso sed plerumque brevior, maculæformi, v. peritheciis hinc inde congestis ostiolisque fasciculatim erumpentibus, valseum simulantibus; peridermio adhærente tecto, parte immersa nigrolimitato, in superficie obscurato, fuscescente; peritheciis magnitudine media, globosis, mutua pressione hinc inde angulatis v. rarius depressis, ligni strato supremo plerumque totis immersis raro plus minus protuberantibus, gregatim sparsis v. 2-4, immo pluribus dense ac submonostiche stipatis; ostiolis elongatis, crassis, cylindricis sed in plerisque nodosis v. basim versus bulboso-incrassatis, immo deformibus, rectiusculis, curvatis v. prostratis; ascis clavatis v. oblongis, octosporis, membrana apicem versus incrassata structis, $40 \approx 8$; sporidiis distichis, anguste fusiformibus, bicellularibus, quadriguttatis, haud constrictis, hyalinis, $12-14 \approx 3$.

Hab. in ramis Corni sanguineæ in Germania et Italia.

122. **D. Euporthe rhynchophora** H. Fab. Sphér. Vaubl. p. 76, t. I, 2474 fig. 3-4. — Peritheciis in ligno nigrificato nidulantibus et series longitudinales efformantibus, globosis, atris, $\frac{1}{4}$ mill. circiter latis; ostiolo elongato, curvato, atro, nitido, lævi, vel noduloso squamoso, apice marginato papillatoque, 1 mill. circ. longo; ascis lanceolatis, sessilibus, 8-sporis, $45-50 \approx 8$; sporidiis distichis, oblongo-lanceolatis, hyalinis, 4-guttatis, $16 \approx 4$.

Hab. ad ramos exsiccatos Coronillæ minimæ, cum Cucurbitariâ elongatâ, Vacluse Galliæ.

123. **D. Euporthe Coronillæ** (Desm.) Sacc. F. Ven. Ser. IV, pag. 13 2475 (spermog.) et Ser. V, p. 181 (ascoph.) *Sphaeria* (Phoma) *Coronilla* Desm. Ann. Sc. nat. 1840, XIII, p. 188 sistit statum spermogonicum. — Stromate linea nigra per lignum profunde excurrente limitato; peritheciis sparsis, ligno semiimmersis, globoso-lenticularibus, $\frac{1}{2}$ mill. diam., atris, ostiolo peridermium immutatum vix superante, cylindræo-conoideo, ascis fusoideis, $70 \approx 10$, aparaphysatis, 8-sporis, sporidiis distichis v. oblique monostichis, oblongis, $14 \approx 5-6$, constricto-1-septatis, 4-guttatis, hyalinis.

Hab. in ramis Coronillæ Emeri putrescentibus, Selva Treviso, Ital. bor. (Sacc.) et Vacluse Galliæ (FABRE).

124. **D. Euporthe Castrensis** Sacc. et Sp. Mich. I, p. 388. — Stro- 2476-
mate ramulos decorticatos longe lateque ambiente et superficie atroinquinante; peritheciis globosis, $\frac{1}{2}$ mill. diam., ligno infossis, gregariis, ostiolis nunc punctiformibus nunc breve exertis; ascis fusoideis $60-70 \approx 10$, aparaphysatis, octosporis; sporidiis distichis, fu-

soideis, 1-septatis, lenissime constrictis, 15-17 \approx 3 $\frac{1}{2}$ -4 $\frac{1}{2}$, 4-guttulatis, hyalinis.

Hab. in ramulis Capparidis rupestris ad castrum S. Salvatore, Susegana, Ital. bor. — *Diaporthe pullæ* Nits. affinis.

125. **D. Euporthe brachyceras** Sacc. F. Ven. Ser. IV, p. 11. — Stro- 2477
mate ramulos hinc inde ambiente, latiusculo v. maculiformi, zona nigra per lignum subimmutatum tortuose excurrente limitato; peritheciis discretis v. sæpius in soros subvalseos aggregatis, ligno fere omnino immersis, sphæroideis v. e mutua pressione angulosis, $\frac{3}{4}$ - $\frac{1}{2}$ mill. diam., atris, ostiolis cylindræis perithecio longioribus peridermium immutatum hinc inde fasciculatim perforantibus exertisque; ascis fusoides 45 \approx 8, 8sporis; sporidiis distichis, fusoides, 14-15 \approx 3-4, constricto-1-septatis utrinque plerumque brevissime apiculatis, 4-guttulatis, hyalinis.

Hab. in ramis Ligustri vulgaris in sylva Montello Treviso, Ital. bor. — *D. spiculosa* affinis sed satis distincta.

126. **D. Euporthe biglobosa** (C. et E.) Sacc. *Sphæria* (obtectæ) *bi-* 2478
globosa C. et E. Grevill. VII, p. 9. — Epidermide nigrificata tecta; peritheciis depressis; ascis cylindræis; sporidiis uniseriatis, ellipticis, uniseptatis, profunde constrictis, hyalinis, 14 \approx 7, cellulis globosis.

Hab. in ramis Lauri Sassafras, New Jersey Am. bor.

127. **D. Euporthe australis** Sacc. et Speg. Mich. I, p. 29. — Peri- 2479
theeciis sparsis ligno subimmutato immersis v. saltem basi infossis, et tunc cortice parum mutato partim exceptis, linea nigra sinuosa per lignum excurrente limitatis, globosis; ostiolo cylindræo vix peridermium superante; ascis fusoides, 50-60 \approx 7-10, aparaphysatis, octosporis; sporidiis distichis v. oblique monostichis breviter fusoides, 14-16 \approx 3 $\frac{1}{2}$ -5, medio constrictis, 1-(3?)-septatis, septis extimis tenuioribus spuriisque, 4-guttulatis, hyalinis.

Hab. in ramis putrescentibus Celtidis australis, Conegliano, Italiae borealis. — Ad sectionem *Tetragagæ* quoque vergit.

128. **D. Euporthe americana** Speg. Mich. I, p. 457. — Stromate hinc 2480
inde ramos ambiente, per lignum immutatum excurrente, nigro-limitato; peritheciis 3-7 in eadem macula stromatica laxe-gregarie insidentibus, ligno infossis, $\frac{1}{6}$ - $\frac{1}{8}$ mill. diam., atris, ostiolo plus vel minus longo recto vel curvulo, cylindræo, corticem perforante ornatis; contextu tenuissime membranaceo-parenchymatico, fuligineo; ascis oblongo-fusoides, aparaphysatis, 55-60 \approx 7-8, granuloso-oleoso-farctis; sporidiis..... immaturis visis.

Hab. in ramulis emortuis *Magnoliæ grandifloræ*, Susegana, Ital. bor.

129. **D. Euporthe parabolica** Fuck. Symb. Myc. p. 211. — Stromate ²⁴⁸¹ subcorticali, late effuso, ramulos totos occupante; peritheciis in ligno nidulantibus, plerumque sparsis, majusculis, globosis, collo exserto, plerumque parabolico, atro; ascis oblongis, 8spor. 44 \approx 8; sporidiis distichis, lanceolato-oblongis, medio constrictis, 1-(3?)-septatis, 2-4guttulatis, hyalinis, 9 \approx 5.

Hab. in ramulis siccis corticatis *Pruni spinosæ*, quos omnino investit, in Jura Helvetiæ (MORTIER). — Ostiolo longo, sæpius parabolico mox dignoscitur.

130. **D. Euporthe Fuckelii** Kunze F. sel. exs. n. 139 (absque diagnosi). Rehm. Ascom. n. 374. — Stromate late effuso peridermium denique denigrante, lineaque nigra per lignum excurrente limitato; peritheciis gregariis ligno immersis, globulosis; ostiolis teretiusculis, peridermium perforantibus, breveque spinuloso-emergentibus, obtusiusculis; ascis fusoides-oblongis, subsessilibus, 45 \approx 9, subinde coalescentibus, octosporis; sporidiis breve fusoides utrinque obtusiusculis, 11-13 \approx 3,5-4,5, rectis, uniseptatis non v. vix constrictis, 2-4-nucleatis, hyalinis, subinde mucoso-obvolutis.

Hab. in ramis emortuis *Spirææ ulmifoliæ*, Eisleben Germaniæ.

131. **D. Euporthe Sorbariæ** Nits. Pyr. Germ. pag. 261. — Stromate ²⁴⁸³ plus minus late effuso, peritheciis 3-8 sæpissime dense ac monostiche stipatis ostiolisque erumpentibus approximatis, immo fasciculatis, valseum fere æmulante, strato extimo obscuriore, nigricante limitato ac peridermio haud dissolubili, plerumque obscurato tecto; peritheciis minutis, globosis, depressis v. mutua pressione angulatis, ligno plerumque totis immersis; ostiolis mox abbreviatis, peridermium perforatum parum tantum superantibus, crassiusculis, cylindricis, apice rotundatis, mox vero e basi sensim conico incrassata elongatis, tenuibus, flexuosis, nodulosis, ascis anguste clavatis v. cylindricis, octosporis, 50-56 \approx 6 $\frac{1}{2}$ -7; sporidiis distichis, anguste fusiformibus, bicellularibus, bi-quadriguttatis, haud constrictis, pallide lutescentibus, 14-17 \approx 3-4. — Spermogonia photatoidea: spermatiis fusoides 7-9 \approx 2,5, biguttatis; basidiis 17-20 μ . longis.

Hab. in trunculis emortuis *Spirææ* (*Sorbariæ*) *sorbifoliæ* pr. Münster Germaniæ.

132. **D. Euporthe simulans** Sacc. Fungi Ven. Ser. IV. p. 11. — Stro- ²⁴⁸⁴

mate ramulos arcte corticatos late ambiente per lignum immutatum tortuose excurrente et nigro-limitato; peritheciis gregariis remotiusculis vel hinc inde 2-5 in soros subvaseos coadunatis, ligno omnino immersis, e globoso depressis, $\frac{3}{4}$ mill. diam., tenuimembranaceis, atris; ostiolis cylindraceo-conoideis, epidermidem immutatam perforantibus et apicibus exertis, acutiusculis exasperantibus; ascis fusoideis, copiosis, $60 \approx 8$, 8sporis; sporidiis distichis, obtuse fusoideis, $14-15 \approx 4-4\frac{1}{2}$ utrinque subtruncatis, 4-guttulatis tandem tenuiter 1-septatis, hyalinis.

Hab. in ramis maioribus Rosæ caninæ et R. centifoliæ in Italia boreali et Argentina Amer. austr.

133. **D. Euporthe japonica** Sacc. Fungi Ven. Ser. IV, p. 11. — Peritheciis $\frac{1}{2}$ mill. diam., ascis $45-50 \approx 7-9$; sporidiis distichis v. oblique monostichis, $14-15 \approx 4$; cætera *D. simulantis*, cujus forte varietas habenda. — Status spermogonicus: spermogoniis sub epidermide nidulantibus, minutis, nigris, oblongo-lenticularibus quandoque zona nigra plagulas limitante circumdatis; spermatis ovoides, $6 \approx 3$, hyalinis, 2-guttulatis, sterigmatibus filiformibus $20 \approx 1$, dein uncinatis suffultis. 2485

Hab. in ramis Kerriæ japonicæ prope Treviso Ital. bor.

134. **D. Euporthe semiimmersa** Nits. Pyr. Germ. p. 253. — Stromate mox latissime effuso, ambiente, mox brevi, maculas sistente forma et magnitudine varias, remotas v. confluentes, peridermio ostiolis numerosis, vix exstantibus pertuso, ceterum immutato, primo arcte adhærente tecto, deinde maxima ex parte nudato, cum corticis parenchymate coalito ac in superficie nigrefacto, intus strato atro, tenui circumscripto; peritheciis minutis, globosis v. depressis, sæpissime a latere compressis v. e basi applanata subconicis v. hemisphæricis ligni strato extimo omnino v. multo sæpius parte inferiore tantum infossis immo ligni superficiem basi adnatis, ordine inæquali ac plerumque laxè sparsis, in collum pertenuè et brevissimum abrupte attenuatis; ostiolis exiguis, brevissimis, subconicis, corticis (v. peridermii) superficiem exasperantibus; ascis oblongis v. clavatis, octosporis, plerumque $56-60 \approx 9-13$; sporidiis distichis, fusiformibus, obtusis, rectis, bicellularibus, constrictis v. torulosis, subhyalinis, $14-16 \approx 3\frac{1}{2}-5$. 2486

Hab. in trunculo Cratægi Oxyacanthæ pr. Cappenberg Germaniæ et pr. Treviso Ital. bor. — Affinis *D. sordida*.

135. **D. Euporthe Coëmansii** Nits. Pyr. Germ. p. 257, *Ceratostoma rostratum* Rabh. Fungi Eur. n. 256, nec Tode. — Stromate effuso, 2487

in ramulis junioribus ambiente, in crassioribus vero sæpe brevior, maculæformi, primo peridermio ostiolis perforato, ceterum haud decolorato tecto, deinde, ubi nudato, matricis superficiem atro-infusante stratoque nigricante circumscripto; peritheciis perexiguis, subglobosis, mutua pressione angulatis v. sæpius depressis, rarius ligni strato supremo totis immersis v. basi plus minus applanata adnatis, sæpius vero parte inferiore ligno plus minus alte infossis, superiore cortice persistente velatis, dispersis, sæpissime vero 2-4 magis approximatis; ostiolis elongatis exacte cylindricis v. apice parum attenuatis v. nodulosis, pro ratione crassiusculis, rectis v. flexuosis, subinde fasciculatim erumpentibus; ascis anguste clavatis v. subcylindricis, octosporis, $36 \approx 7$; sporidiis distichis, fusiformibus v. subcylindricis bi-cellularibus, rectis v. parum curvatis, hyalinis, haud constrictis, $8-10 \approx 2-2\frac{1}{2}$.

Hab. in sarmentis siccis Rubi fruticosi prope Gand Belgii (COEMANS) et prope Münster Germaniæ (NITSCHKE).

136. **D. Euporthe ceuthosporioides** (Berk.) Sacc., *Sphæria ceuthosporioides* Berk. Engl. Fl. V, p. 258, Cooke Handb. n. 2691. — Stromate phyllogeno maculiformi suborbiculari, rufescente, linea nigra circumscripto; peritheciis tectis, 6-10 subsparsis, utrinque prominulis; ostiolis minutis perforantibus; ascis oblongis; sporidiis oblongis 1-(?)—septatis. 2488

Hab. in foliis Pruni Laurocerasi prope Edinburgh Britannæ. — Maculæ stromaticæ 3-5 mill. latæ.

137. **D. Euporthe samaricola** Ph. et Plowr. Grev. III, p. 126, t. 42, f. 6. 2489 — Peritheciis minutis, immersis, stromate maculiformi, nigro, versiformi circumscriptis, ostiolis minutis prominulis; ascis fusoides $75 \approx 10$; sporidiis distichis, subinde acuminatis, quadrinucleatis, $17-18 \approx 5$, hyalinis.

Hab. in samaris dejectis Fraxini, Terrington Britannæ.

138. **D. Euporthe griseo-tingens** (B. et C.) Sacc., *Sphæria griseo-tingens* B. et C. North Amer. Fungi n. 941. — Minuta sublinearis prominula, ostiolis punctulata; ascis clavatis; sporidiis fusiformibus inæquilateralibus, hyalinis, 20μ . long. 2490

Hab. in ramis Juniperi virginianæ, Pennsylvania Americæ borealis.

139. **D. Euporthe pinophylla** Plow. et Phil. Grev. IV, p. 124, t. 62, fig. VII. 2491 — Peritheciis sparsis, subinde 2-3 aggregatis, sub crustula stromatica, effusa, nigra infossis; ostiolis elongatis, apice abrupte

truncatis; ascis fusoides 25 μ . long.; sporidiis biserialis, lanceolatis, acutis, hyalinis, 4-guttatis, uniseptatis, 17-18 \approx 5.

Hab. in acubus dejectis Pini sylvestris, Belmont Hereford Britannicæ. — Asci ex icone 45-55 μ . longi.

140. **D. Euporthe conorum** (Desm.) Niessl in Hedw., 1876, pag. 2. 2492

Sphæria (subtecta) *conorum* Desm. 13 Not. 1846, p. 76. — Peritheciis subgregariis, immersis, linea circumscriptis et macula atra subnitida tectis, dein suberumpentibus epidermide cinctis; nucleo griseo; ascis subelavatis 50 μ . long.; sporidiis minutissimis, ovato-oblongis, biserialibus, 2-4-guttatis, hyalinis, 8 μ . longis.

Hab. in squamis conorum Pini sylvestris in Gallia, Germania et Belgio. — *Diaporthe occulta* Fuck. ostiolis rostellatis differt.

141. **D. Euporthe occulta** (Fuck.) Nits. Pyr. Germ. p. 266, *Valsa* 2493

occulta Fuck. Fungi rhen. n. 622, *Sph. conorum* West. nec Desm. (teste Niessl), *Sph. strobilicola* Lib. ined. — Stromate effuso, conorum squamis putrescentibus immerso easque in superficie colore ex fusco nigricante tingente, intus vero a squamæ substantia specie haud mutata formato sed strato atro limitato; peritheciis minutis, globosis sparsis, substrato omnino immersis et, ubi protuberantibus, tamen ab ejus strato supremo, tenui obductis; ostiolis per poros v. rimulas erumpentibus, plerumque maxime elongatis, tenuissime cylindricis, apicem versus parum attenuatis, curvatis, inflexis; ascis clavatis, octosporis, 44-48 \approx 6-7; sporidiis distichis v. rarius oblique monostichis, fusiformibus, rectis v. parum curvatis, bicellularibus, quadriguttatis, haud constrictis, hyalinis, 12-16 \approx 3. — Spermogonia phomatoidea; spermatii oblongo-ovatis, 2-guttatis, 7 \approx 3, hyalinis.

Hab. in squamis conorum et putridorum Abietis excelsæ, Cupressi sempervirentis in Germania, Gallia, Britannia, Italia et Belgio.

B) In Dicotyledoneis herbaceis.

142. **D. Euporthe Berkeleyi** (Desm.) Nits. Pyr. Germ. p. 273, *Sphæ-* 2494

ria Angelicæ Berk. ? in Cooke Handb. n. 2649, *Sphæria Berkeleyi* Desm. Ann. Scienc. nat. 1837, VIII, p. 358, *Sphæria Angelicæ* Fuck. Symb. p. 113. — Stromate effuso, in substrati superficie maculas, mox breves, irregulares, hinc inde confluentes, mox multo latiores, caulesque longe ambientes, ex fusco v. cinereo nigricantes efficiente, parte immersa in ligno medullaque ipsa, specie omnino

non mutata formato; peritheciis perexiguis, globosis vel a latere parum compressis, ordine subæquali in series longitudinaliter directas dispositis, omnino immersis, membrana tenui, nigricante structis, in collum brevissimum constrictis; ostiolis minutissimis punctiformibus, parum prominulis, hemisphæricis v. subconicis; ascis anguste oblongis v. subcylindricis, octosporis, 46-60 \approx 5-7; sporidiis subdistichis, fusiformibus, utrinque obtusiusculis, rectis, hyalinis, bicellularibus, bi-quadriguttatis, 10-13 \approx 3-4.

Hab. in caule emortuo Angelicæ sylvestris, Torilis, Cerefolii, Heraclei, Ferulaginis in Britannia, Belgio, Italia, Fennia. — Cl. Cooke negat in litt. identitatem plantæ Berkeleyi cum specie Nitschkei, et forte non immerito.

143. **D. Euporthe fœniculacea** Niessl in Thuem. Contr. Mycol. Lusit. 2495 n. 285. — Stromate effuso, caulis superficiem ambiente et colore sordide fusco vel nigricante tingente; peritheciis disseminatis, laxe seriatis, depresso-globosis, minutis, ostiolo brevi crassoque, conico, obtuso, prominulo; ascis lanceolato-clavatis, sessilibus, octosporis, 38-42 \approx 8; sporidiis distichis, oblongo-fusiformibus, rectis vel parum inæquilateralibus, utrinque obtusiusculis, medio septatis et bi-quadriguttulatis, hyalinis, 9-11 \approx 2,5-3.

Hab. ad caules aridos Fœniculi officinalis, Coimbra Lusitaniæ (P. G. MESNIER). — *Diaporthe nigrella* Niessl proxima sed diversa: rostris retusis, brevioribus et crassioribus, sporidiis multo minoribus. Etiam a *Diaporthe Berkeleyi* et *Diaporthe inquilina* optime distinguenda. Quoad *Sph. fœniculaceam* Mont. cfr. Syll. nostra n. 1711.

144. **D. Euporthe picea** (Pers.) Sacc., *Sphæria picea* Pers. sec. Mont. 2496 in Fl. Alg. p. 484. — Maculæformis, effusa, sæpe confluens, epidermide adnata, tecta; peritheciis sparsis, subglobosis, subprominulis, mollibus, matrici semiimmersis, stromate piceo tectis, intus albidofarctis, astomis, tandem evacuatis pertusis, vel ostiolo brevi interdum longiusculo instructis; ascis clavatis; sporidiis octonis oblongis subbiseriatis, 1-(3?)-septatis. — Maculas sistis valde inæquales 1-2 centimetra et ultra longas.

Hab. ad caules siccos Magydarios tomentosæ, Ferulæ, Fœniculi et Acanthi mollis in Algeria. — «*Sphæria picea* Pers. Icon. et descr. t. X, fig. 7-8 (in *Atropa Belladonna*) potius *D. Chailletii* spectat».

145. **D. Euporthe nigrella** (Auersw.) Niessl Beitr. p. 51, Michel. II. 2497 p. 317, *Læptosphæria nigrella* Auersw. Myc. Eur. Pyr. tab. 12,

fig. 163, nec *Sphæria nigrella* Fries. — Caulicola; stromate late effuso, tenuissimo, ambiente, peridermium sordide purpureo-atrum vel violaceo-fuscum tingente, peritheciis gregariis, sæpe seriatim dispositis, immersis, minutis, 300 μ . diam., globosis coriaceo-submembranaceis, fusco-atris, ostiolo elongato cylindræo, sæpe curvato, protuberante, 700 μ . longo; ascis oblongis, late rotundatis, subsessilibus, membrana interna apice incrassata, 8sporis, 32-46 \approx 6, sporidiis distichis rarius oblique monostichis, ample seu oblongo-fusiformibus utrinque acutiusculis sæpe inæquilateralibus, hyalinis, 9-11 \approx 3-4, sæpissime 3-guttatis.

Hab. in caulibus exsiccatis *Eryngii campestris* in Styria et Gallia. — *Sph. nigrella* Fr. verisimiliter est *Leptosphæria*, etsi maculâ quasi *Diaporthes* prædita sit.

146. **D. Euporthe tetraspora** Sacc. Mich. II, p. 250. — Peritheciis 2498 gregariis caule superficie tandem infuscato immersis, globulosis, $\frac{1}{3}$ - $\frac{1}{2}$ mill. diam., nigris ostiolis spinuliformibus, emergentibus, peritheciæ diametrum subæquantibus; ascis tereti-clavulatis, 50-55 \approx 7 $\frac{1}{2}$ -8 $\frac{1}{2}$, apice rotundatis, 2-foveolatis, aparaphysatis, tetrasporis; sporidiis oblique monostichis ovato-oblongis, 14-16 \approx 5-5 $\frac{1}{2}$, subinæquilateralibus, 3-guttulatis, continuis, hyalinis.

Hab. in caule emortuo *Eryngii amethystini*, in collibus prope Vittorio, Ital. bor. — A *Diap. nigrella* (Auersw.) differt sporidiis quaternis, ascis sporidiisque paulo amplioribus. Paraphyses veræ nullæ.

147. **D. Euporthe denigrata** Wint. in Kunze Fungi Sel. exs. n. 354 2499 et 355 (sine diagnosi). — Stromate plagas atras, sinuosas in caulibus superficie hinc inde formante; peritheciis gregariis majusculis globosis, ligno immersis; ostiolis perforantibus et punctiformi-prominulis; linea nigra stromatica interiore vix ulla; ascis clavato-fusoideis 46-50 \approx 5-7, octosporis; sporidiis distichis ovato-fusoideis, 8-10 \approx 3,6-4, uniseptatis, non v. vix constrictis, rectiusculis, hyalinis.

Hab. in caulibus aridis *Angelicæ* et *Dauci* prope Zürich Helvetiæ.

148. **D. Euporthe Faberi** Kunze Fungi Sel. exs. n. 266 (sine diagnosi). 2500 — Stromate caules late ambiente, superficieque nigrificante; peritheciis laxiuscule gregariis globosis, ligno immersis, ostiolis epidermidem perforantibus, papillatoque prominulis; ascis clavato-fusoideis, 40-45 \approx 7-8; sporidiis octonis distichis breve fusoideis, rectiusculis 9-10 \approx 3-3,5 tenuiter 1-septatis, non constrictis, 4-guttatis hyalinis.

Hab. ad caules aridos *Laserpitii latifolii*, sociis spermo-
goniis, prope Freiburg Germaniæ.

149. **D. Euporthe inquilina** (Wallr.) Nits. Pyr. Germ. p. 272, *Sphæria* 2501
inquilina Wallr. Crypt. p. 779. — Stromate plerumque effuso at-
que ambiente, caulis superficiem colore ex fusco sordide et opace
nigricante tingente, intusque strato extimo, tenui, atrato, limitato;
peritheciis minutis, globosis v. globoso-depressis, substrati strato
extimo totis immersis, ordine inæquali sed plerumque laxè sparsis,
membrana pertenui, ex fusco nigricante structis, in collum brevis-
simum abrupte attenuatis; ostiolis minimis, prominulis, conicis v.
rarius abbreviatis, hemisphæricis, dein poro pro ratione latiusculo
pertusis; ascis anguste clavatis v. oblongis, octosporis, 33-40 \approx 5-7;
sporidiis distichis, fusiformibus, rectis, hyalinis, bicellularibus, qua-
driguttatis, 11-13 \approx 2-3.

Hab. in caulibus emortuis *Heraclei Sphondylii* in Germa-
nia, Britannia, Italia. — **D. uliginosa* Sacc. [*D. inquilina* Speg.
Arg. IV, n. 153]; ascis 50-55 \approx 8-10; sporidiis subellipticis, obtusis
14-15 \approx 2-5, constricto-1-septatis. In caule *Conii maculati* in
Argentina Amer. merid.

150. **D. Euporthe Eburensis** Sacc. Mich. II, p. 60. — Stromate late 2502
effuso, caulis superficiem nigricante, zona nigra infra haud limi-
tato; peritheciis dense gregariis, ligno immersis, $\frac{1}{3}$ mill. diam.,
globulosis, ostiolis conoideis breve extantibus matricemque aspe-
rulam reddentibus; ascis fusoides, 70 \approx 10-11, apice lumine bifo-
veolato, aparaphysatis, octosporis; sporidiis distichis fusoides, utrin-
que obtusiusculis curvulis, 15-16 \approx 4, constricto-1-suptatis, raro spu-
rie 3-septatis, 4-guttulatis, hyalinis.

Hab. in caulibus *Leucanthemi vulgaris*, Julio, in regione
Eburensi (*Eure*) Galliæ (MALBRANCHE). — A *Diap. Arctii* (Lasch)
sporidiis majoribus et constrictis ostiolisque abbreviatis obtusis dif-
fert; a *D. immersa* Nits. et *D. orthocerate* sporidiis curvis, con-
strictis, paulo majoribus; a *D. lineari* (Nees) linea stromatica nul-
la, ostiolis brevibus etc.

151. **D. Euporthe grammodes** (De Not.) Sacc. *Sphæria grammodes* 2503
De Not. Micr. ital. Dec. II, p. 74, fig. IV. Herb. myc. n. 1940. —
Peritheciis caule insculptis v. immersis, discretis v. contiguis, sub-
seriatis, minutis, globoso-pyriformibus, in ostiolum erumpens, pa-
pillatum desinentibus; ascis subclavatis, 40 \approx 6,5, aparaphysatis,
octosporis; sporidiis fusoides rectis, curvulisve 4-guttatis, hyali-
nis, 12-14 \approx 2,7-3.

Hab. ad caules siccos *Artemisiæ vulgaris* prope Milano, Ital. bor. — Stroma nullum manifestum.

152. **D. Euporthe orthoceras** (Fr.) Nits. Pyr. Germ. p. 270, Sacc. Myc. 2504
Ven. Spec. p. 142, t. XIV, f. 1-4, *Sphæria orthoceras* Fr. Elench. II, p. 97, *Sphæria Achilleæ* Auersw. Herb. Myc. n. 1448. — Stromate effuso, mox brevi, maculæformi, mox contra caules ambiente substrati superficiem tandem nigrificante, parte immersa linea nigra circumscripta; peritheciis minutis, subglobosis v. globoso-depressis, ordine vario sparsis, sæpissime gregatim stipatis, ligno immersis, in collum breve abrupte attenuatis; ostioliis plus minus elongatis, basim versus conico-incrassatis, rectis v. curvatis, tunc sæpe secundis, hinc inde nodulosis; ascis oblongis v. clavatis, octosporis, 36-50 \approx 6-8; sporidiis distichis, fusiformibus, plerumque re-ctis, bicellularibus, haud constrictis, quadriguttatis, hyalinis, 10-14 \approx 3-4. — Spermogonia phomatoidea: spermatiis 8-10 \approx 2,5, 2-guttatis, basidiis 26 \approx 1, hamatis.

Hab. in caulibus emortuis *Achilleæ*, *Lapsanæ*, *Cichorii*, *Senecionis*, *Verbesinæ*, *Asteris*, *Helianthi* in Gallia, Germania, Italia, Britannia, Am. mer. et bor. — Forma *Helianthi* (Ital. bor.) fert ascos 50 \approx 10; sporidia 12 \approx 5, lenissime constricta.

153. **D. Euporthe trinucleata** Niessl Not. Pyr. p. 52, t. IV, fig. 26. 2505
Stromate maculiformi, plerumque elongato, caulium superficiem nigrificante, parte interiori a parenchymate vix diverso; peritheciis plus minusve stipatis, sæpe seriatis, ligni strato extimo immersis, depresso-globosis, rostratis, atris, duriusculis, $\frac{1}{3}$ mill. circa diam.; ostioliis e basi conoidea subcylindricis vertice conicis, perithecorum diametrum æquantibus vel superantibus; ascis clavatis sessilibus 8-sporis 45-54 \approx 8-9; sporidiis distichis, oblongis, plerumque parum cuneatis, seu inferne paulum attenuatis, inæquilateralibus sæpe fere cymbiformibus, rarissime subrectis, utrinque obtusiusculis breve mucronatis, hyalinis, 3-nucleatis (2-septatis?) vix constrictis, 13-15 \approx 4-4 $\frac{1}{2}$.

Hab. in caulibus exsiccatis *Eupatorii cannabini* prope Gratz Styriæ.

154. **D. Euporthe phleodes** (Mont.) Fuck. Symb. mycol. App. III, 2506
p. 24, *Sphæria phleodes* Mont. Syll. Crypt. n. 830 et Notice etc., in Ann., 2, I, p. 339, t. 12, fig. 4. — Immersa, linea nigra circumscripta; peritheciis globosis nigris in ligno caulis nidulantibus ostiolo brevi subconico in macula cinerea vix prominulo; ascis fusiformi-subclavatis; sporidiis cymbiformibus, 4-nucleatis.

Hab. in caulibus emortuis Bardanæ, Oly prope Sedan Gallie (MONTAGNE), in caule Cirsii palustris prope Æstrich Germaniæ (FUCKEL).

155. **D. Euporthe perexigua** Sacc. Fungi Ven. Ser. IV, p. 10. — Stromate hinc inde caulem breviter ambiente et lignum subdealbatum penetrante, nigrolimitato; peritheciis minutissimis, globoso-depressis, $\frac{1}{5}$ mill. diam., atris, ligno omnino immersis, gregariis vel hinc inde crebrioribus, ostioliis cylindricis, epidermidem non decoloratam perforantibus parumque excedentibus; ascis fusoidis 40-50 \approx 7-8, 8sporis; sporidiis distichis oblongis, 12 \approx 3-4, utrinque obtusiusculis, medio tandem leniter constrictis, 4-guttulatis, hyalinis. — Spermogoniis sub epidermide nidulantibus, atris, socio fungo asco-phoro; spermatiis fusoidis, curvulis, deorsum attenuatis, 6-8 \approx 3, crassiuscule 2-guttatis, hyalinis, sterigmatibus filiformibus, usque 32 \approx 1, apice uncinatis suffultis.

Hab. in caulibus Carlinæ vulgaris in sylva Montello, Ital. bor. — Proxima *Diaporthi Arctii*, a qua differt stromate caulis superficiem non atroinquinante, ostioliis vix emergentibus punctiformibus, sporidiis rectis medio dein constrictis et crassioribus.

156. **D. Euporthe linearis** Nits. Pyr. Germ. p. 277, *Sphæria linearis* 2508
Nees in Fr. S. M. II, p. 529. — Stromate latissime effuso, caulem sæpe longissime ambiente, stratoque nigricante interiore, usque ad medullam centalem descendente limitato, superficiem tantum inquinante, immo maculis tandem aterrimis aspergente; peritheciis minutis, globosis v. depressis, nunc sine ordine sparsis, nunc contra, et quidem sæpius, secundum ligni fibras tractu lineari dispositis, hinc inde arctius sociatis, ligno immersis corticisque strato tenui tectis, in collum breve abrupte attenuatis; ostioliis satis elongatis, cylindricis, basim versus conico-dilatatis, crassiusculis, rectis v. rarius obliquis, corticem singulatim perforantibus v. per rimulas communes erumpentibus; ascis oblongis v. anguste clavatis, octosporis, 45-60 \approx 7-9; sporidiis distichis v. rarius oblique monostiehis, fusiformibus, quadriguttatis, bicellularibus, medio tandem parum constrictis, rectis vel curvulis, utrinque obtusiusculis, haud raro fere anisomeris, 12-14 \approx 3-4.

Hab. in caulibus emortuis Solidaginis Virgaureæ in Germania, Austria et Belgio.

157. **D. Euporthe indica** Sacc. et Speg. Mich. I, p. 391. — Stromate 2509
caules corticatos late ambiente atque parum infuscante, linea nigra per lignum flexuose excurrente limitato; peritheciis ligno infossis

globulosis, vix $\frac{1}{2}$ mill. diam; ostiolis corticem perforantibus, parumque excedentibus; ascis fusoideis, 45-50 \approx 8-9, apapophysatis, octosporis; sporidiis distichis, oblongis, 14-15 \approx 4, utrinque obtusiusculis, constricto-1-septatis, 2-4-guttulatis, hyalinis.

Hab. in caulibus emortuis *Tagetum hortensium*, Conegliano, Ital. bor. — Species *Diaporthi Arctii* (Lasch) Nits. affinis.

158. **D. Euporthe immersa** (Fuck.) Nits. Pyr. Germ. p. 270, *Sphæria* 2510
immersa Fuck. Fungi rhen. n. 1795. — Stromate latissime effuso, caules ambiente eorumque superficiem colore ex cinereo sordide atque opace fuscescente tingente intus undique nigrolimitato; peritheciis minutissimis, globosis vel depressis, ligni strato supremo totis immersis, laxe atque ordine subæquali vel fere lineari dispositis in collum abrupte attenuatis; ostiolis plus minus exsertis, punctiformibus, mox abbreviatis rotundatis, mox subconicis; ascis clavatis v. oblongis, octosporis, 50 \approx 8; sporidiis distichis, raro oblique monostichis, fusiformibus, obtusiusculis, rectis, hyalinis, bicellularibus, quadriguttatis, 10-12 \approx 3-4. — Spermogonia phomatoidea; spermatii 6-7 \approx 2-2,5; basidiis filiformi-arcuatis, 34 \approx 1.

Hab. in caulibus *Lappæ minoris* emortuis in Germania.

159. **D. Euporthe Acus** (Blox.) Cooke Grevill. VII, p. 81, *Sphæria* 2511
Acus Blox in Curr. Linn. Trans. XXII, p. 325, t. 58, fig. 93. — Peritheciis minutis subglobosis, depressis, tectis, ostiolis perforantibus, emergentibus acicularibus; sporidiis distichis v. stipatis, anguste-cymbiformibus, 2-4 nucleatis, 7,5-10 μ . longis, dein 1-septatis vix constrictis.

Hab. in caule *Lapparum* in Britannia.

160. **D. Euporthe Arctii** (Lasch) Nits. Pyr. Germ. p. 268, *Sphæria* 2512
Arctii Lasch in Kl. Herb. mycol. n. 1046. — Stromate plus minus late effuso, sæpissime ambiente caulesque longe lateque in superficie tandem nigrificante v. rarius peridermio cinerascete, immo omnino non decolorato, ostiolis exasperato tecto, parte immersa strato extimo, nigricante cincto; peritheciis exiguis ordine vario sed in plerisque laxe sparsis, multo rarius hinc inde dense stipatis, globosis v. depressis, ligni substantiæ omnino immersis, in collum tenuissimum abrupte attenuatis; ostiolis modo elongatis, tenuissime cylindricis v. basim versus paullo incrassatis, rectiusculis v. sæpius, flexuosis v. secundis, modo abbreviatis, conicis, immo hemisphæricis, punctiformibus, pertusis; ascis oblongis v. rarius clavatis sessilibus, octosporis, plerumque 40-50 \approx 6-9; sporidiis sub-

distichis, fusiformibus, utrinque acutiusculis, inæquilateralibus v. parum curvatis, raro rectiusculis, bicellularibus, quadriguttulatis, haud constrictis, hyalinis, $10-14 \approx 2\frac{1}{2}-3\frac{1}{3}$.

Hab. in caulibus emortuis Lapparum, Cirsii, Cardui, Tanacetii, Centaureæ, in Germania, Britannia, Italia, Amer. bor. — Teste Rehm paraphyses (genuinæ?) articulatae 6 μ . cr. adsunt. — An species a præcedente diversa?

161. **D. Euporthe Phaceliæ** Cooke et Harkn. Grev. 1881, IX, p. 86. 2513
Sub-effusa, stromate sub cortice nigricante; peritheciis subglobosis immersis; ostioliis cylindricis elongatis, flexuosis; ascis clavatis sessilibus; sporidiis rectis sublanceolatis, 4-nucleatis, dein 1-septatis, $15 \approx 3$.

Hab. in caule Phaceliæ, California Amer. bor.

162. **D. Euporthe adunca** (Desm.) Niessl in Kunze Exs. n. 134, *Sph.* 2514
adunca Rob. et Desm. XIX, Not. p. 14. — Sparsa, minutissima, macula purpurea vel nigricante insidens; peritheciis immersis tectis globosis, subnigris, mollibus albido-farctis; ostiolo erumpente cylindrico oblique arcuato vel apice incurvo longitudine peritheciorum; ascis subclavatis 50 μ . long.; sporidiis fusiformibus, sæpius rectis 2-4-guttulatis, $12-15 \approx 3,5-4,5$, hyalinis.

Hab. in scapis vetustis Plantaginis lanceolatae in Gallia, Germania et Italia.

163. **D. Euporthe demissa** Sacc., Fungi Ven. Ser. IV, p. 9. — Stro- 2515
mate breviter hinc inde per lignum immutatum excurrente linea tortuosa nigra limitato, stratoque exteriori corticali v. ligneo tandem atro-inquinato, peritheciis ligno immersis subglobosis, $\frac{1}{2}$ mill. diam., ostiolo cylindræo, brevi peridermium vix superante; ascis fusoidæo-oblongis $50 \approx 8-9$, 8sporis; sporidiis distichis, oblongis, $12-14 \approx 3\frac{1}{2}-3\frac{3}{4}$, utrinque rotundatis tenuiter 1-septatis, 3-guttulatis, hyalinis.

Hab. in ramis Clematidis Vitalbæ putrescentibus in sylva Montello, Treviso, Italia bor. — *D. crypticæ* Nits. affinis.

164. **D. Euporthe discors** Sacc. Mich. II, p. 60, *D. Rumicis* Plowr. 2516
Grev. VII. p. 197 (sine diagnosi). — Stromate varie effuso interruptoque, caulis ruperficiem nigrificante, linea nigra infra non limitato; peritheciis sparsis globulosis $\frac{1}{3}$ mill. diam., ostioliis vix extantibus punctiformibus; ascis fusoidæo-clavatis, 60-62 \approx 10-11, lumine apice 2-foveolato, aparaphysatis, octosporis; sporidiis fusoidæis curvulis, utrinque obtusiusculis, $17-18 \approx 4-4\frac{1}{2}$, 4-guttatis, hyalinis.

Hab. in caule Rumicis obtusifolii etc. in Gallia (BRUNAUD), Italia (PASSERINI), Britannia (PLOWRIGHT). — A *Diap. maculosa* Sacc. et Speg. Michel. I, 383 probe diversa.

165. **D. Euporthe Euphorbiæ** Cooke Grev. III, p. 67. — Stromate plangulas elongatas determinatas piceas formante; peritheciis ligno immersis; ostioli perforantibus cuticulamque leniter elevantibus; ascis subcylindricis 48-60 \approx 6-8; sporidiis fusoidis, quadriguttatis, hyalinis, 10-13 \approx 2,5-3,5.

Hab. in caule emortuo Euphorbiarum sylvaticarum, Darent Britannia, Treviso Ital. bor.

166. **D. Euporthe incrustans** Nits. Pyr. Germ. p. 267. — Stromate effuso, plagas magnitudine maxime varias, hinc inde ambientes, ambitu irregulares sistente, mox peridermio ostioli innumeris perforato, ceterum immutato velato, mox, peridermio v. rarius cortice etiam putredine destructo, nudato, matricemque nigrificante, immo crustulas formante aterrimas, sublæves nitidulas, intus vero nigro-limitato; peritheciis minutis, globosis, rarius depressis v. angulatis, ligni strato supremo, raro altius infossis dense sparsis, in collum abrupte attenuatis; ostioli elongatis, tenuissime cylindricis, nodulosis, sæpissime fasciculatim erumpentibus, rectiusculis v. flexuosis, aterrimis, multo rarius abbreviatis, punctiformibus; ascis anguste clavatis v. oblongis, octosporis, 50-64 \approx 6 $\frac{1}{2}$ -9; sporidiis distichis v. oblique monostichis, fusiformibus, obtusiusculis, rectis v. rarius parum curvatis, subhyalinis, bicellularibus, quadriguttatis, 12-14 \approx 3. — Spermogonia phomatoidea: spermatii 5-7 \approx 2-2,5; basidiis 20 μ . longis.

Hab. in caulibus induratis putrescentibus Brassicæ oleraceæ in Westphalia et Rhenogovia.

167. **D. Euporthe minuscula** Sacc. et Speg. Mich. I, p. 387. — Stromate longe et late caules decorticatos ambiente eosque superficie atro-inquinante; peritheciis globosis, $\frac{1}{4}$ mill. diam., ligno infossis, ostiolo perforante breveque exerto; ascis fusoidis, 45 \approx 7-8, paraphysatis, octosporis; sporidiis fusoidis, constricto-1-septatis, 13-16 \approx 3-4, 4-guttulatis hyalinis.

Hab. in caule Campanulæ Trachelii putrescente, Conegliano, Ital. bor. — A *Diap. Tulasnei* Nits. ostioli breve exertis præcipue recedit.

168. **D. Euporthe muralis** Speg. in Mich. I, p. 458. — Stromate caulem late ambiente; peritheciis globosis, atris, ligno immutato immersis, discretis vel rarius subaggregatis, $\frac{1}{5}$ - $\frac{1}{6}$ mill. diam., ostiolo

cylindraceo-conoideo, plus minusve exerto, nunc recto nunc obliquo ornatis; ascis oblongo-fusoideis, 40-50 \approx 8-10, 8-sporis, aparaphysatis; sporidiis distichis vel oblique monostichis oblongo-ellipsoideis, medio 1-septatis atque constrictis, utrinque obtusiuscule acuminatis, 15 \approx 4, quadriguttulatis, hyalinis.

Hab. in caulibus emortuis *Sedi albi*, Padovæ et *S. reflexi*, Belluno, Ital. bor.

169. **D. Euporthe neapolitana** Sacc. Mich. I, pag. 388. — Stromate 2521
longe et late ramulos decorticatos ambiente et superficie atro-inquinante; peritheciis gregariis, ligno infossis, globoso-depressis, $\frac{1}{2}$ mill. diam.; ostiolis conico-cylindraceis, $\frac{1}{2}$ mill. longis, emergentibus, apice obtusiusculis; ascis fusoideis, deorsum acutioribus, 50-60 \approx 10-12, aparaphysatis, octosporis; sporidiis distichis, oblongo-fusoideis, medio constrictis, 12-15 \approx 3-4 $\frac{1}{2}$, utrinque obtusiusculis, 4-guttulatis, hyalinis.

Hab. in ramis emortuis *Mesembryanthemi acinacifolii* in collibus di Posilippo prope Neapolim, Ital. merid. (Com. A. MAGNAGUTI-RONDININI).

170. **D. Euporthe obsoleta** Sacc. Fungi Ven. Ser. IV, p. 10. — Stro- 2522
mate late per caules ramulosque parum infuscatos excurrente intusque nigro-limitato; peritheciis discretis ligno infossis globosis, subdepressis, $\frac{1}{2}$ mill. diam., fuscis; ostiolis cylindraceo-conoideis corticem perforantibus et plerumque, cortice disrupto, spinulose exertis; ascis cylindraceo-fusoideis 50-60 \approx 10, 8-sporis; sporidiis distichis, oblongo-fusoideis, 15-18 \approx 4-4 $\frac{1}{2}$, utrinque obtuse acuminatis, tandem constricto-1-septatis, 4-guttulatis, hyalinis.

Hab. in caule ramisque *Hyperici calycini*, prope Treviso Ital. bor. (SACCARDO) et Shrewsbury Britannicæ (PHILLIPS). — *D. lineari* (Nees) Nits. affinis, sed peritheciis inordinatis et sporidiis majoribus satis distincta.

171. **D. Euporthe Vincæ** Cooke. Fungi Brit. II, n. 493. Grev. V, p. 63. 2523
— Peritheciis ligno immersis, maculasque definitas nigro-circumscriptas occupantibus; ostiolis papillatis, parce elongatis; ascis subclavatis; sporidiis lanceolatis, 4-nucleatis, 20-22 μ . longis.

Hab. in caule *Vincæ*, Forden Britannicæ (VIZE).

172. **D. Euporthe Desmazierii** Niessl Beitr. pag. 53. *Sph. inquilina* 2524
Desm. Crypt. Fr. II, 1766 nec Wallr. *Diaporthe Labiatæ* Cooke Grevill. V, p. 63. — Peritheciis caule superficie rufescenti-nigricato immersis, gregariis, globulosis; ostiolis longis spiniformibus erectis, basi subincrassatis; ascis clavatis, 40-50 \approx 6-7, subsessili-

bus; sporidiis anguste fusoides, uniseptatis 4nucleatis, subconstrictis, rectiusculis, 13-16 \approx 3.

Hab. in caulibus *Prunellæ* Caën Galliæ, Dinmore Britanniæ. — Var. *Melampyri*. In caule *Melampyrorum* in Austria et Italia.

173. **D. Euporthe salviæcola** C. et E. Grevill. V, p. 93. — Effusa vel sparsa; peritheciis globosis, matrici superficie denigratæ immersis; collo elongato facile diffracto; ascis clavatis; sporidiis anguste lanceolatis, quadrinucleatis, 15 μ . long. 2525

Hab. in caulibus *Salviæ*, New Jersey Amer. bor.

174. **D. Euporthe Tulasnei** Nits. Pyr. Germ. p. 274, ?*Rhytisma Urticæ* Tul. Carp. II, p. 64. — Stromate effuso, maculas ambitu et magnitudine maxime varias sed plerumque breviores, aterrimas in caulium superficie formante, intus mox decolorato et nigrolimitato; peritheciis exiguis, globosis v. globoso-depressis, ordine vario sed plerumque dense sparsis, stromati extimo totis immersis, sed sæpe nonnihil protuberantibus; ostiolis minutissimis vix prominulis, punctiformibus, rarius magis exsertis, conicis v. cylindricis; ascis oblongis v. clavatis, octosporis, 46-53 \approx 6-7; sporidiis distichis, fusiformibus, utrinque obtusiusculis, bicellularibus, quadriguttatis, medio nonnumquam constrictis, subhyalinis, 10-14 \approx 3. 2526

Hab. in caulibus *Lamii* Orvalæ, *Urticæ* dioicæ, *Hesperidis* matronalis, *Aristolochiæ*, *Solani* tuberosi, *Chenopodii* albi, *Verbasci*, *Medicaginis*, *Menthæ* in Gallia, Germania et Italia.

175. **D. Euporthe canina** Sacc. — Stromate hinc inde maculiformi ligni superficiem atroinquinante; peritheciis gregariis ligno dealbato immersis, ostiolis vix emergentibus, punctiformibus; ascis fusoides, subsessilibus, 60 \approx 10 lumine apice 2-foveolato; sporidiis distichis v. oblique monostichis oblongo-fusoides, utrinque obtusiusculis, constricto-1-septatis, 4-guttatis, 15 \approx 4, hyalinis. 2527

Hab. in caulibus crassioribus *Scrophulariæ caninæ*, *Vittorio* Ital. bor. — Paraffinis *D. Tulasnei*, a quæ ascis sporidiisque paulo majoribus differre videtur.

176. **D. Euporthe semiinsculpta** Sacc. *Sphæria semiimmersa* B. et C. North Amer. Fungi n. 932 (nec Nits.). — Deorsum immersa, sursum subcylindrica; sporidiis tereti-oblongis, curvis, quadrinucleatis, 15 μ . longis. 2528

Hab. in caulibus herbaceis, Connecticut (C. WRIGHT).

177. **D. Euporthe pratensis** Sacc. et Sp. Mich. I, p. 389. — Stroma- 2529

te caules corticatos v. decorticatos late ambiente et atroinquinante; peritheciis ligno immersis, globulosis, $\frac{1}{3}$ - $\frac{1}{2}$ mill. diam., laxe gregariis, ostiolis cylindræis, nunc vix, nunc breve emergentibus; ascis clavato-fusoideis, apice obtusioribus, $35-40 \approx 6\frac{1}{2}-7\frac{1}{2}$, paraphysatis, octosporis: sporidiis distichis v. oblique monostichis, ovato-oblongis, $14-15 \approx 3-4$, constricto-1-septatis, utrinque obtusiusculis, 4-guttulatis, hyalinis.

Hab. in caulibus languidis Medicaginis lupulinæ, Congliano, Ital. bor.

178. **D. Euporthe Winteri** J. Kunze F. sel. exs. n. 356 (absque diagnosi). 2530

— Stromate caules late ambiente corticisque superficiem denique nigrificante; peritheciis gregariis ligno subimmutato infossis, globulosis, ostiolis cylindræis peridermium perforantibus spinuloseque prominentibus; ascis fusoides-clavatis subsessilibus, (spurie?) paraphysatis, $42-46 \approx 7-9$, octosporis; sporidiis distichis breve fusoides, rectiusculis, $10 \approx 3,5$, tenuiter 1-septatis, non constrictis, hyalinis.

Hab. ad caules emortuos Ononidis repentis pr. Zurich Helvetiæ (WINTER).

179. **D. Euporthe Chailletii** Nits. Pyr. Germ. p. 276 *Sphæria spiculosa* § *Belladonna* Fr. El. II, p. 75. 2531

— Stromate plus minus late effuso, maculas in caulium superficie efformante irregulares, ex fusco tandem aterrimas, nitidulas, ostiolis minimis vix exasperatas, intus strato extimo nigricante undique limitato; peritheciis exiguis plerumque laxè sparsis, subglobosis v. depressis, ligno omnino et pro ratione alte immersis, in collum breve ac tenuissimum abrupte attenuatis; ostiolis punctiformibus, in plerisque vix prominulis, rarius parum exertis, conicis; ascis anguste clavatis v. oblongis, octosporis, $42 \approx 6$; sporidiis distichis, anguste fusiformibus, rectis, utrinque acutiusculis, hyalinis, bicellularibus, $12-13 \approx 2\frac{1}{2}-3$.

Hab. in caulibus emortuis *Atropæ Belladonnæ* in Germania, Britannia, Helvetia. — Var. *Molleri*: sporidiis in processum hyalinum utrinque abeuntibus. In caulibus *Dipsaci* sylv. pr. Coimbra Lusitanæ. Cfr. Thuem. Contr. Myc. Lus. n. 285.

180. **D. Euporthe Dulcamaræ** Nits. Pyr. Germ. p. 250, *Sphæria spiculosa* var. Mont. 2532

— Stromate latissime effuso, matricis caules surculosos, exsiccatos ambiens eorumque corticem sensim relaxando tandem discutiente, ligni subpositi superficiem vero longe lateque colore ex fusciscente nigricante tingente, parte immersa ni-

grolimitata; peritheciis minutis, globosis v. a vertice depressis, immo subhemisphæricis, ligni strato extimo infossis, plerumque laxe ac sine ordine sparsis, subinde protuberantibus, in collum abrupte attenuatis; ostioliis parum elongatis e basi conico-dilatatis, cylindricis, pro ratione crassiusculis, primo corticem perforantibus eumque paullo v. vix superantibus, deinde, stromate nudato liberis; ascis clavatis v. oblongis, octosporis, 60-80 \approx 10-12; sporidiis distichis, fusiformibus, obtusiusculis, bicellularibus, haud constrictis v. rarius parum torulosis, hyalinis, 15-18 \approx 3,5-5.

Hab. in caulibus emortuis Solani Dulcamaræ in Germania, Britannia, Italia, Gallia.

181. **D. Euporthe pampeana** Speg. Fung. Arg. Pug. IV, n. 155. — 2533

Maculis stromaticis versiformibus ac sæpius latiusculis, subdeterminatis, atris, caules ambientibus, linea per lignum excurrente ac limitante nulla; peritheciis ligno immutato immersis globosis, 200-250 μ . diam., tenui-membranaceis, in ostiolum subcarbonaceum superficiem stromatis attingens non v. vix exertum productis, contextu parenchymatico, fuligineo-olivaceo; ascis fusioideis, sursum obtusiuscule rotundatis, deorsum attenuato-subacuminatis, 50 \approx 7-8, aparaphysatis, octosporis; sporidiis distichis, cylindræo-ellipticis, utrinque subtruncato-rotundatis, 12-14 \approx 3, medio 1-septato-constrictis, majuscule 4-guttulatis, hyalinis.

Hab. in ramulis dejectis putrescentibus Solani glauci in uliginosis prope la Estancia de la Paciencia, Tuyù, Amer. Austr.

182. **D. Euporthe aculeata** (Schw.) Sacc. *Sphæria* (concrecentes) 2534

aculeata Schw. Syn. Am. bor. n. 1287. *D. Berkeleyi* et *D. spiculosa* var. Auct. — Longissime, indeterminate effusa, crusta tenui nigra, primum epidermide tenerrima tecta dein orbata; peritheciis omnino ligno caulino ime immersis, depresso-globosis, atris, sparsis; ostioliis longissimis, teretibus sursum subincrassatis demum decumbentibus ac diffractis; fructificatione generis.

Hab. frequentissime in caulibus emortuis maximarum herbarum præsertim Phytolaccæ, Bethlehem et Salem Amer. bor. — Valde affinis *D. spiculosa*.

183. **D. Euporthe eupina** C. et E. New Jersey Fungi in Grevill. V, 2535

p. 93. — Effusa, in matrice superficie nigrificata immersa; collo elongato; ascis clavatis; sporidiis lanceolatis, uniseptatis, quadri-nucleatis, 18 \approx 3.

Hab. in caule Chenopodii, New Jersey Americæ borealis. — Affinis *D. spiculosa*,

184. **D. Euporthe intermedia** Sacc. Fungi Ven. Ser. IV, p. 9. — Stromate caulem late ambiente per lignum sæpe infuscatum profunde excurrente, linea nigra stratoque ligni extimo atroinquinato circumscripto, cortice permanente, immutato v. leniter infuscato; peritheciis globosis atris, ligno immersis, discretis, rarius subaggregatis, $\frac{1}{4}$ mill. diam., ostiolis cylindraceo-conoideis epidermidem longiuscule, ut plurimum, superantibus, nunc rectis nunc subobliquis; ascis oblongo-fusoideis, $50 \approx 6$, 8sporis; sporidiis distichis v. oblique monostichis, oblongo-fusoideis, $12-14 \approx 3\frac{1}{2}-4$, medio denique constrictis, utrinque obtusiuscule acuminatis, 4-guttulatis, hyalinis. — Spermogoniis sphæroideis rugulosis inter corticem lignumque nidulantibus, aterrimis, nucleo fusco fœtis; spermatis breve fusoideis utrinque acutis, $6 \approx 2\frac{1}{2}$, crasse 2-guttatis, sterigmatibus filiformibus, hamatis, $20 \approx \frac{1}{2}$, suffultis.

Hab. in caulibus Saponariæ officinalis pr. Treviso Italiae bor. — Ambigit inter *D. immersam* et *D. orthoceras* sed *immersæ* affinior, a qua peritheciis inorditate dispositis, ostiolisque longioribus differt.

185. **D. Euporthe ambiens** Fuck. Symb. myc. App. II, p. 38. — Stromatibus plerumque ad caulium internodia late effusis et caules sæpe totos occupantibus, indeterminatis, rarius linea nigra determinatis, nigris; peritheciis spermatisiferis in stromate nidulantibus, majusculis, tectis, tuberculiformibus, atris, ostiolis papillatis, epidermidem perforantibus; spermatis oblongis hyalinis, biguttulatis, $8-10 \approx 4$; peritheciis ascigeris nondum inventis.

Hab. in caulibus siccis Cærestii trivialis, rarius prope Cëstrich Rhenogov. — Probabile, præeunte ipso Fuckelio, quod *Euryachora ambiens* (Lib.) Fuck. nonnisi stroma hujus sterile sistat.

C) In *Monocotyledoneis* et *Acotyledoneis*.

186. **D. Euporthe gloriosa** Sacc. et Sp. Mich. I, p. 390. — Stromate foliorum superficiei plagulas oblongas vel irregulares, parvas, attonitentes hinc inde afficiente; peritheciis parenchymate infossis, $\frac{1}{3}$ mill. diam., globosis, ostiolo acutiusculo parum excedente; ascis clavato-fusoideis $50 \approx 8-10$, apice lumine bi-foveolato, aparaphysatis, octosporis; sporidiis distichis rectiusculis, oblongo-fusoideis, $12-15 \approx 3-4$, medio constrictis, obsoleteque septatis, 4-guttulatis, hyalinis.

Hab. in foliis languidis *Yuccæ gloriosæ*, Conegliano Italiae borealis, rarius.

187. **D. Euporthe asphodelea** Sacc. Mich. II. p. 59. — Stromate effuso caulis superficiem nigrificante, zona nigra infralimitato; peritheciis immerso-prominulis, sparsis lenticularibus $\frac{1}{3}$ mill. diam., ostioli punctiformibus; ascis clavulatis, subsessilibus, 70–80 \approx 8, apice lumine bifoveolato, octosporis, aparaphysatis; sporidiis distichis breve fusoides, curvulis, 14–15 \approx 4–5, 1-septatis, vix constrictis, 4-guttulatis, hyalinis, utrinque obtusiusculis. 2539

Hab. in caule *Asphodeli* pr. Rouen Galliae (LETENDRE). — A *D. Asparagi* (Fuck.) Nits. certe diversa.

188. **D. Euporthe scandens** Sacc. et Sp. Mich. I, p. 389, *D. Tami* 5540
Sp. in M. Univ. n. 1657. — Stromate caules arcte corticatos late ambiente, superficiemque nitide nigrificante; peritheciis ligno intus dealbato lineolaque nigra circumscripto infossis, globulosis, $\frac{1}{4}$ – $\frac{1}{3}$ mill. diam., ostioli cylindræis, rostellatis, $\frac{1}{3}$ – $\frac{1}{2}$ mill. extantibus; ascis fusideo-clavatis, 40–50 \approx 6–6 $\frac{1}{2}$, sessilibus, aparaphysatis, octosporis; sporidiis distichis v. oblique monostichis oblongo-fusoides utrinque obtusiusculis, constricto-1-septatis, 4-guttulatis, hyalinis.

Hab. in sarmentis *Tami* communis putrescentibus Colfosco, Italiae borealis, prope Coimbra Lusitaniae.

189. **D. Euporthe pantherina** (Berk.) Cooke Grev. VII, p. 82. *Sphæria pantherina* Berk. in Cooke Handb. n. 2689. — Maculis stromaticis subellipticis, linea flexuosa nigra circumscriptis; peritheciis immersis, ostiolo loagicolli, prominente; ascis lanceolatis; sporidiis oblongo-fusoides, 2–4-nucleatis. — Spermatia fusioidea, angusta, 20 μ . longa. 2541

Hab. in stipitibus *Pteridis aquilinæ* in Britannia. — Linea stromatica lignum quoque penetrat.

190. **D. Euporthe pachystoma** (Lév.) Sacc. *Sphæria* (conferta) *pachystoma* Lév. Ann. Scienc. nat. 3, 1845, p. 51. — Innata, globosa vel elongata confluens inæquabilis nigra; peritheciis prominulis elongatis intus albis, stromate nigro immersis, ostioli crassis elongatis rostratis; ascis teretibus; sporidiis ellipticis submonostichis hyalinis, continuis (?). 2542

Hab. in Peruvia, ad caules *Lycopodii flabellati* (PÆPPIG).

III. *Tetrastaga* Nits.: peritheciis gregariis, cortice immutato vel denique atro-maculato immersis, intus sæpius linea nigra limitatis. (Etyim. *tetra*, quatuor et *stagon*, gutta, ob sporidia sæpissime 4-guttata).

A) *Arboricolæ et fruticicolæ.*

191. **D. *Tetrastaga rudis*** (Fr.) Nits. Pyr. Germ. p. 282, *Sphaeria* 2543
rudis Fr. Eleuch. II, p. 98, *Aglaospora rudis* Tul. Carp. II, p. 165, *Hercospora rudis* Auersw. — Stromate nunc late effuso, ramos ramulosque ambiente, nunc contra et quidem sæpius brevi, maculas sistente orbiculares, ovales v. irregulares, approximatas v. confluentes; ligni corticisque substantia vix tandem expallescens nigrolimitata, corticisque interioris superficie tandem sordide nigricante v. lineata; peritheciis globosis, cortici interiori plus minus alte immersis, ordine vario sparsis, collo ostioloque tenui, cylindrico breviterque exserto instructis; ascis clavatis v. oblongis, basi breviter attenuatis, octosporis, 62–70 \approx 8; sporidiis subdistichis, fusiformibus, plerumque obtusiusculis, rectis v. parum curvatis, hyalinis, medio parum constrictis v. torosis, bicellularibus, quadriguttatis, 14–16 \approx 4. — Spermogonia phomatoidea: spermatiis 6–7 \approx 2, biguttatis; basidiis hamatis, 21–30 \approx 1,3.

Hab. in ramis *Cytisi Laburni* et *C. nigricantis* emortuis in Germania, Italia, Gallia.

192. **D. *Tetrastaga ligulata*** Nits. Pyr. Germ. p. 291. — Stromate 2544
 effuso, ambitu et magnitudine maxime vario sed plerumque brevi, substrato toto immerso, strato nigricante, in lignum alte descendente undique circumscripto; peritheciis minutis, globosis v. parum depressis, corticis strato infimo v. ligno supposito ipso impositis, ordine valde inæquali sed plerumque laxè sparsis, hinc inde tamen densius congestis, tunc sæpe tractu lineari dispositis, in collum brevissimum v. parum elongatum abrupte attenuatis; ostioliis in plerisque longissime exsertis, tenuissimis, cylindricis v. sæpius a latere compressis, ligulatis, flexuosis v. secundis, raro abbreviatis, corticem perforatum parum tantum superantibus; ascis anguste clavatis v. fusiformibus, octosporis, 60 \approx 9–10; sporidiis subdistichis, fusiformibus v. subcylindricis, utrinque obtusiusculis, rectis v. inæquilateralibus, bicellularibus, bi-quadriguttatis, medio parum constrictis, hyalinis v. pallide lutescentibus, 12–13 \approx 4.

Hab. in ramis *Ulicis europæi* prope Münster Germaniæ et prope Saintes Galliæ (BRUNAUD). — Forma gallica dignoscitur:

ostiolis parum exertis; ascis fusoideis $60 \approx 8$; sporidiis oblongo-biconicis, $10-11 \approx 3-3\frac{1}{2}$, medio constrictis, utrinque obtusiusculis, 4-guttatis, hyalinis.

193. **D. Tetrastaga Sarothamni** (Auerswd.) Nits. Pyr. Germ. p. 303, 2545
Valsaria Sarothamni Auersw. in litt. — Stromatè rarius late effuso ramulosque ambiente, sæpius contra brevi, maculæformi, immo brevissimo valsæformi, quoad immersum, ligni materiam pallidam reddente, nigro-limitato; corticis parenchymate, dein nigrescente ac crustulas efformante induratas, aterrimas; peritheciis magnis, e globoso plus minus depressis, cortici intimo, immo basi ligno, supposito infossis, ordine mox subæquali, mox vario ordinatis, in collum breve constrictis; ostiolis crassiusculis, abbreviatis, parum v. vix exertis; ascis subcylindricis v. anguste oblongis, octosporis, $60-69 \approx 7-8$; sporidiis distichis v. rarius submonostichis, fusiformibus utrinque acutis, rectis, bi-cellularibus, quadriguttatis, medio haud constrictis, subhyalinis, $14-15 \approx 3-5$. — Spermogonia phomatoidea: spermatiiis $8-12 \approx 2$; basidiis $30 \approx 1$, hamatis.

Hab. in ramis siccis Sarothamni scoparii in Germania, Britannia, Gallia. — *Sphæria tetragona* Duby et *Sph. interrupta* Mont. huc forte spectant ex Nitschke. Verisimiliter huc quoque referenda *Sph. operta* Quel. Jura p. 507, nec *Sph. (circinata) operta* Kunze M. Heft. I, 61; quæ (sporidiis oblongo-acutis, fuscis) forte *Anthostoma*.

194. **D. Tetrastaga inæqualis** (Curr.) Nits. Pyr. Germ. p. 285, Sacc. 2546
Myc. Ven. p. 140, t. XIII, fig. 76-78, *Sphæria inæqualis* Curr. Linn. Trans. XXII, p. 270, fig. 79, *Sph. Fuckelii* Duby in Fuck. Fungi rhen. n. 919, *Melanconis Castri-Labatii* Speg. Dec. myc. n. 90. — Stromate effuso, ambitu et magnitudine maxime vario, mox ramos ramulosque longe ambiente, mox brevissimo ac peritheciis coalescentibus valseo simillimo; strato extimo nigricante v. in ligni superficiem tantum v. etiam in lignum ipsum descendente; peridermio haud decolorato; peritheciis majusculis, globosis v. sæpius depressis (basi applanatis), vel angulosis, nunc ordine fere æquali sparsis, nunc 2-15 densius aggregatis, immo omnino, stromatis more valsei, coalitis, in cortice infimo nidulantibus, peridermio corticeque substrati vetustate delapso, denique tamquam liberis, lignoque nigrefacto insidentibus; ostiolis crassiusculis, cylindricis, basim versus conico-dilatatis, plus minus elongatis et exertis, rectis v. inflexis, peritheciis coalitis fasciculatim erumpentibus; ascis cylindricis, in pedicellum breve basi attenuatis, octosporis,

70–100 \approx 8–11; sporidiis plus minus oblique monostichis, ovatis, utrinque obtusis v. rotundatis, bicellularibus, biguttatis, medio tandem parum constrictis, rectis v. rarius inequilateralibus, subhyalinis, 14–18 \approx 7–10. — Spermogonia phomatoidea; spermatis basidiis 21–27 \approx 2, curvulis.

Hab. in ramis corticatis Sarothamni, Cytisi, Genistæ, Ulicis in Germania, Britannia, Gallia, Italia. — Quoad sporidia, *D. fibrosæ* analogæ.

195. **D. Tetrastaga Dorycnii** (Mont.) Sacc., *Sphæria Dorycnii* Mont. 2547

Pl. Cell. Cent. IX, p. 11. — Sparsa, ramulicola; peritheciis globoso-depressis minimis, epidermide atrata tectis, intus gelatina grisea faretis, ostiolo obsoleto; ascis cylindrico-clavatis octosporis, 80–100 \approx 10; sporidiis hyalinis oblongis, 13–14 \approx 5, 2–4-nucleatis.

Hab. ad ramulos siccos Dorycnii suffruticosi in montibus Saint-Cyr dictis prope Massiliam Galliæ.

196. **D. Tetrastaga dorycnea** H. Fab. Sphér. Vaucl. p. 75, t. I. f. 2. 2548

— Peritheciis nunc acervulos punctiformes vel lineares efformantibus, globosis, flaccidis, atris, in corticis parenchymate nigrificato nidulantibus; ostiolis brevibus, crassis, epidermide ruptâ cinctis; ascis lanceolatis, brevissime stipitatis, 8-sporis, 60–70 \approx 14–16; sporidiis subdistichis, oblongis, hyalinis, medio constrictulis, subtiliter 1-septatis, loculis binis 1-magniguttatis, 15–27 \approx 4–6.

Hab. ad ramos emortuos Dorycnii suffruticosi, Vaucluse Galliæ. — Verisimiliter non satis diversa a præcedente.

197. **D. Tetrastaga seposita** Sacc. Fungi Ven. Ser. IV, p. 7. — Stro- 2549

mate ramos late ambiente per lignum immutatum tortuose et profunde excurrente, nigrolimitato; peritheciis discretis, globosis, $\frac{1}{4}$ – $\frac{1}{3}$ mill. diam., in cortice interiore immutato nidulantibus et fibris corticalibus sæpe velatis, nucleo fuscescente fœtis, ostiolis brevibus, cylindræo-conoideis, obtusis, epidermidem non decoloratam et leviter pustulatim elevatam vix perforantibus; ascis oblongo-fusoides 16–18 \approx 5–6, utrinque obtuse acuminatis, constricto-tenuiter 1-septatis, 4-guttulatis, hyalinis. — Spermogoniis globoso-depressis in cortice exteriori nidulantibus, pulpa atra fœtis; spermatis ellipsoideo-oblongis, 22 \approx 1, hamatis fultis.

Hab. in ramis Wisteriæ sinensis Padova Ital. bor. et in Gallia merid. — *D. resecanti* Nits. affinis, differt præcipue peritheciis majoribus et spermatis minoribus.

198. **D. Tetrastaga Sophoræ** Sacc. Fungi Ven. Ser. V, 202 et Mich. 2550

I, p. 384. — Stromate ramos corticatos late ambiente coloreque

nigro et cinereo inficiente; linea nigra intra lignum excurrente limitato; peritheciis gregariis, globosis $\frac{1}{3}$ mill. diam., cortice nidulantibus, ostioliis peridermium parum excedentibus obtusiusculis; ascis fusoides, 50-60 \approx 8-10, aparaphysatis, 8sporis; sporidiis distichis v. oblique monostichis, fusoides, 12-15 \approx 5-6, constricto-1-septatis, 4-guttatis, hyalinis. — Spermogonium sistit *Phomam Sophoræ* Sacc.

Hab. in ramulis *Sophoræ japonicæ*, Conegliano, Ital. bor. — Status spermogonicus hujus speciei adest in Rabh. F. E. sub n. 2017 tamquam *Sphæriæ controversæ* Desm. pertinens; sed hæc species, ut monuit cl. Nits., collectiva est ejusque forma primaria servanda est *Diap. controversa* (Desm. p. p.) Nits. in *Fraxino excelsiore*. Cfr. Fuck. Symb. App. I. 31.

199. **D. Tetrastaga occidentalis** Sacc. et Spég. Mich. I, p. 384. — 2551
Stromate ramos corticatos late ambiente et parum infuscante intra lignum linea nigra flexuosa limitato; peritheciis gregariis globosis cortice nidulantibus v. ligno basi infossis, $\frac{1}{2}$ mill. et ultra d., ostioliis longiusculis, flexuosis, peridermium excedentibus; ascis clavato-fusoides, 45-55 \approx 7-8, aparaphysatis octosporis; sporidiis distichis v. oblique monostichis, 12-14 \approx 3-4, ovato-oblongis, medio conspicue constrictis, septatisque, utrinque obtusiusculis 4-guttulatis, hyalinis.

Hab. in ramis corticatis *Gleditschiæ Triacanthi*, Conegliano, Ital. bor.

200. **D. Tetrastaga mendax** Sacc. Fungi Ven. Ser. IV, p. 9, *D. fasciculata* forma in *Albizzia* Sacc. Myc. Ven. p. 140. — 2552
Stromate ramos late ambiente per lignum leniter infuscatum v. immutatum, sinuose excurrente, nigrolimitato; peritheciis in cortice nidulantibus, discretis, globoso-depressiusculis, $\frac{1}{2}$ - $\frac{1}{3}$ mill. diam., ostioliis brevibus, cylindræis, epidermidem subimmutatam vix superantibus; ascis fusoides, 60 \approx 8, 8sporis; sporidiis distichis, oblongis, 12-15 \approx 5, sæpe inæquilateralibus, constricto-1-septatis, utrinque obtusiusculis, 4-guttulatis, hyalinis loculis quandoque secedentibus.

Hab. in ramis emortuis *Albizzia Julibrissin*, Padova Italiae bor. — *Diaporthe Ryckholtii* (West.) Nits. affinis.

201. **D. Tetrastaga disseminata** Sacc. Mich. II, p. 61. — 2553
effuso obsoleto, linea nigra nulla circumscripto; peritheciis subcutaneis lignoque partim infossis, sparsis, globosis, $\frac{1}{2}$ - $\frac{3}{4}$ mill. d., ostioliis vix extantibus; ascis cylindræo-fusoides, 80-90 \approx 12-14, apice lumine 2-foveolato, aparaphysatis, 8sporis; sporidiis biconi-

co-fusoideis utrinque obtusiusculis 15-20 \approx 5-6, constrictis, 4-guttulatis.

Hab. in ramis corticatis Ailanthi glandulosæ prope Saintes Galliæ (BRUNAUD). — A *Diap. Ailanthi* Sacc. stromate haud valseo, ascis sporidiisque majoribus satis superque recedit.

202. **D. Tetrastaga compressa** Sacc. Fungi Ven. Ser. IV, p. 8. — 2554

Stromate petiolos præcipue vero eorum basim incrassatam late ambiente, usque ad medullam penetrante, linea nigra corticeque atroinquinato limitato; peritheciis globoso-depressis, discretis, in cortice nidulantibus, $\frac{1}{4}$ mill. latis, atris, ostioliis brevissimis peridermium vix perforantibus, sed hinc inde leviter elevantibus; ascis fusoideo-oblongis, 50-55 \approx 6-7, 8sporis; sporidiis distichis, cylindraceo-fusoideis, 15 \approx 3 $\frac{1}{2}$ -4, utrinque obtusiusculis rectis v. sæpius curvulis, medio constrictis, tenuiter 1-septatis, 4-guttulatis, hyalinis.

Hab. in petioliis putrescentibus Ailanthi glandulosæ, Selva, Treviso, Ital. bor. — Teste cl. Spegazzini eadem species occurrit in petioliis Meliæ Azedarach prope Buenos-Aires Amer. meridionalis.

203. **D. Tetrastaga Wibbei** Nits. Pyr. Germ. p. 305. — Stromate in 2555

plerisque latissime effuso, ramos ramulosque ambiente, toto immerso, nigro-limitato, peridermio haud decolorato arctèque adhærente obducto; peritheciis majusculis e globoso mox vehementer depressis v. basi tantum applanatis, cortice interiore excepta, vertice plus minus protuberante peridermio pustulato-elevato vestitis, ordine haud conspicuo sparsis, sæpe gregatim stipatis v. 2-4 Valsarum in modum arcte aggregatis, collo brevissimo et ostiolo per peridermii poros v. rimulas exiguas rumpente sed vix extante instructis; ascis anguste clavatis, octosporis, 52-60 \approx 8; sporidiis distichis v. oblique monostichis, anguste fusiformibus, utrinque obtusiusculis fere cylindricis, rectis, subhyalinis, bi-cellularibus, quadriguttatis, medio haud constrictis, 17-18 \approx 3.

Hab. in ramis emortuis Myricæ Gales in Germania et Britannia.

204. **D. Tetrastaga Aubertii** (West.) Lamb. Fl. myc. Belg. II, p. 283, 2556

Sphæria Aubertii West. in Bull. Acad. Belg. Ser. II, t. VII, n. 5. — Peritheciis minutis, sphericis, membranaceis, fusco-nigricantibus, 2-5 aggregatis, cortice immersis; ostioliis perforantibus, solitariis v. fasciculatis, breviusculis; ascis fusoideis, minutis, paraphysatis; sporidiis distichis, ovoideo-oblongis, 1-septatis, hyalinis.

- Hab.* in truncis emortuis *Myricæ* *Gales* prope *Béverloo* *Belgii* (*TOSQUINET*). — Probabiliter non diversa a præcedente.
205. **D. Tetrastaga rostellata** (*Fr.*) *Nits. Pyr. Germ.* p. 298. *Sphæria rostellata* *Fr. S. M. II*, p. 476. *Sph. Rubi* *Mart. Erl.* p. 487. — Stromate latissime effuso, ambiente, Ruborum sarmenta haud raro per longitudinem integra infestante atque peritheciolorum ostiolorum exsertis setulosa reddente, omnino innato ac substrati massa ipsa, specie saltem nequaquam mutata formato; peritheciis perexiguis, globosis v. plus minus depressis, corticis interioris strato extimo infossis, ordine subæquali, denseque sparsis, in collum brevissimum, tenue subito angustatis; ostiolorum conicis, brevibus v. rarius e basi conico-incrassata sensim attenuatis, cylindricis, longiusculis tenuissimis, rectis, in plerisque autem peridermium perforatum haud decoloratum, cortici interiori arctissime adhærens parum tantum superantibus; ascis anguste oblongis rarius clavatis octosporis, 45–55 \approx 6–7; sporidiis distichis, fusoidis, curvulis, 13–15 \approx 3 $\frac{1}{2}$ –4, medio non v. lenissime constrictis, 4–guttatis, hyalinis, utrinque setulâ obliquâ 5–6 μ . longâ auctis.
- Hab.* in sarmentis *Rubi fruticosi*, *R. cæsii*, *R. villosi*, *R. idæi* in *Suecia*, *Germania*, *Britannia*, *Belgio*, *Italia*, *Gallia*, *America boreali*.
206. **D. Tetrastaga gallophila** *Ellis Bull. Torr. Cl.* 1881 pag. 90. — 2558 Dense gregaria; peritheciis subcutaneis, depresso-hemisphæricis, 200–250 μ . diam., rugulosis; ostiolorum cylindricis obtusis, asperulis, 150–200 μ . longis; ascis octosporis; sporidiis distichis oblongo-fusoidis, hyalinis, 2–4-nucleatis, constrictis, leniter curvis, 14–18 μ . longis, initio utrinque tenuiter appendiculatis.
- Hab.* in sarmentis *Rubi villosi* prope *Newfield* *New Jersey* *Amer. sept.* — Sarmenta fungillo invasa, ob ostiola nigro-velutina apparent.
207. **D. Tetrastaga vepris** (*De Lacr.*) *Fuck. et Nits. Pyr. Germ.* p. 300. *Sphæria vepris* *De Lacr. in Rabh. F. Eur.* n. 443. *Sph. rostellata* f. *minor* *Desm. Crypt. exs.* n. 783. — Stromate longe lateque effuso, ambiente substrato toto immerso ejusque substantiam extus intusque specie nullo modo mutante; peritheciis cortici interiori infossis v. sub peridermio tandem liberis, ordine fere æquali sparsis, minutissimis, e globoso mox valde depressis, in collum brevissimum abrupte attenuatis; ostiolorum minimis, punctiformibus, peridermium perforatum, ceterum arcte adhærens vix superantibus; ascis subcylindricis, basim versus sensim attenuatis octosporis

ris, 44-48 \approx 5-7; sporidiis oblique monostichis v. distichis, anguste fusiformibus, subcylindricis, rectis, hyalinis v. pallide luteolis, quadriguttatis deinde bicellularibus, 7-8 \approx 2. — Spermogonia photomatoidea; spermatiis 6 \approx 1 $\frac{1}{2}$, fusoideis biguttatis, brevissime stipitellatis.

Hab. in sarmentis Rubi fruticosi in Germania, Gallia, Britannia, Italia. — Var. *appendiculata* Rehm; sporidiis 19 \approx 2,5, setulâ 3-4 μ . longâ utrinque auctis. Ibidem.

208. **D. Tetrastaga insignis** Fuck. Symb. Myc. App. II. pag. 36. — 2560

Stromatibus sub corticis epidermide effusis, ambitu parenchymateque interiori linea nigra distincta circumscriptis, maculas nigras seu fusco-nigras, repandas, sæpe confluentes et tota sarmenta fere occupantes formantibus; spermogoniis in stromatibus junioribus sparsis, pustulæformibus, integris, demum vertice perforatis, albescensibus; spermatiis oblongis, utrinque obtusis, 3guttulatis, hyalinis, 8-10 \approx 4; peritheciis ascigeris in stromate corticis parenchymatis interioris nidulantibus, totis immersis, sparsis, globosis, majusculis, nigris, ostiolis prominulis, nigris, plerumque brevibus, conicis, raro magis elongatis, cylindræis, gracilibus; ascis elongatis; 8sporis, 48 \approx 8; sporidiis distichis, lato-fusiformibus, parum curvatis, utrinque subobtusis, 4guttulatis, medio non constrictis, hyalinis, 12 \approx 3,5.

Hab. in cortice sarmentorum Rubi fruticosi et R. idæi in Germania (FUCK.), Gallia (FABRE) et Italia bor. (SPAGAZZINI).

209. **D. Tetrastaga Zaviana** Sacc. Myc. Ven. Spec. p. 139, t. XIV, 2561

fig. 5-7. — Stromate late extenso e corticis substantia non mutata formato neque linea nigra limitato; peritheciis sparsis v. subaggregatis, cortice nidulantibus lignoque adnatis, minutissimis, diam. $\frac{1}{7}$ mill. circ., sphæroideis, subdepressis, atris, ostiolis brevissimis epidermidem parum sublevatam vix excedentibus; ascis oblongo-fusoideis, 26-30 \approx 7-8, 8sporis; sporidiis distichis pro genere minimis, 6 \approx 3-3 $\frac{1}{2}$ oblongo-ellipsoideis, medio non constrictis, hyalinis, 2-guttulatis.

Hab. in cortice ramulorum exsiccatorum Rubi fruticosi prope Montegrotto Euganeorum pr. Padova Ital. bor. (G. B. ZAVA). — Cum Diaporthe vepriis et D. rostellata, quibuscum hæc species communem habet matricem, ob sporidiorum fabricam diversissimam ne comparanda quidem.

210. **D. Tetrastaga Lirella** (Mong. et Nest.) Fuck. Symb. myc. pag. 206. 2562

Sphæria Lirella Moug. et Nest. in Fr. El. II, p. 105. *Gno-*

monia Lirella (Moug. et Nestl.) Auersw. Syn. Pyr. p. 22, t. 5, f. 61 et t. 10, f. 141. — Peritheciis sparsis vel subseriatis, epidermide atrata tectis eique detractæ adhærentibus, depresso-sphæroides, basi cupulæ instar collapsis, ostiolis verticalibus papilliformibus, epidermidem non perforantibus, nigris, latit. circiter 250 μ .; ascis creberrimis clavatis in pedicellum acutum attenuatis, 38–48 \approx 7 octosporis; sporidiis distichis, fusoides-elongatis, 4-guttulatis, hyalinis, 10 \approx 2.

Hab. ad caules Spirææ Ulmarie exsiccatos in Fennia, Britannia, Gallia, Germania, Belgio, et Kamschatka.

211. **D. Tetrastaga incarcerationata** (B. et Br.) Nits. Pyr. Germ. p. 297, 2563
Diatrype incarcerationata B. et Br. Ann. N. H. n. 842. — Stromate plerumque late effuso, sæpe ambiente, rarius brevi, maculæformi, omnino immerso, strato extimo, tenui, nigricante, peridermio arctissime adhærente obducto v. rarius tandem ex parte nudato; peritheciis ordine valde inæquali sparsis, corticis interioris parenchymati totis innatis, minutis, e globoso depressis, in collum tenue, breve constrictis; ostiolis in plerisque abbreviatis, peridermium perforatum v. fissum parum tantum superantibus, rarius elongatis, cylindricis vel nodulosis, flexuosis; ascis oblongis vel subcylindricis, basim versus sensim ac longiuscule attenuatis, membrana crassiuscula structis, octosporis, 69–75 \approx 0–10; sporidiis distichis v. oblique monostichis, oblongis v. subcylindricis, rectis, utrinque obtusiusculis, immo rotundatis, bicellularibus, quadriguttatis, medio plerumque haud constrictis, hyalinis, 15–18 \approx 4–5. — Spermogonia phomatoidea minima: spermatis 7 \approx 2, biguttatis; basidiis 24–30 \approx 7 curvulis.

Hab. in ramis emortuis Rosæ caninæ in Britannia, Gallia, Germania.

212. **D. Tetrastaga Murrayi** (B. et C.) Sacc., *Sphæria Murrayi* B. 2564
 et C. North Amer. Fungi n. 934. — Peritheciis epidermide tectis prominulis; ascis lanceolatis; sporidiis oblongis centro constrictis quadrinucleatis, dein 1-septatis.

Hab. in ramis Pyri Mali, New England, Amer. bor. (MURRAY). — Perithecia subinde supra albido-pilosula, an e mucedine heterogena?

213. **D. Tetrastaga ambigua** Nits. Pyr. Germ. p. 311. — Stromate 2565
 ambitu et magnitudine maxime vario, mox ramos longe ambiente, mox brevissimo, cortici lignoque supposito omnino immerso, nigro-limitato, peridermio haud decolorato, facile solubili, cribose per-

forato velato; peritheciis majusculis, globosis, rarius parum depressis, rarissime mutua pressione angulatis, cortici interiori plus minus alte immersis, immo passim ligno supposito infossis, ordine vario sparsis, haud raro acervatim densissimeque stipatis, collo brevi instructis; ostiolis plerumque abbreviatis, peridermium perforatum vix superantibus, rarius contra elongatis, sub peridermio relaxato in corticis interioris superficie nigrefacta decumbentibus, flexuosis, cylindricis v. basim versus sensim incrassatis; ascis anguste oblongis v. clavatis, octosporis, $60 \approx 8-10$; sporidiis subdistichis, anguste fusiformibus, utrinque acutis, hyalinis, rectis, bicellularibus, medio haud constrictis, $15 \approx 3,5-4$.

Hab. in ramulis corticatis *Pyr*i communis in Germania et Italia boreali.

214. **D. Tetrastaga Radula** Nits. *Pyr.* Germ. p. 313. — Stromate plerumque brevi effuso, maculæformi, toto immerso, strato nigricante cincto, peridermio arcte adhærente, peritheciis parum exstantibus pustulatim elevato, denseque cribroseque perforato tecto; peritheciis exiguis e globoso depressis v. basi applanatis, semiglobosis, in corticis parenchymate nidulantibus, ordine vario sed plerumque densissime sparsis, collo brevissimo, ostiolo minimo, abbreviato instructis; ascis anguste oblongis, octosporis, $60-66 \approx 9-10$; sporidiis distichis v. in inferiore asci parte monostichis, anguste oblongis v. fusiformibus, utrinque acutiusculis, plerumque rectis, hyalinis, bicellularibus, quadriguttulatis, medio septifero tandem constrictis, $14-15 \approx 4$. 2565

Hab. ad ramos siccos *Pruni spinosæ* in Germania et Gallia. — Quoad *Sph. Radulam* Pers. cfr. Syll. nostra n. 578.

215. **D. Tetrastaga oligocarpa** Nits. *Pyr.* Germ. p. 308. — Stromate latissime effuso, ambiente, ramorum cortici lignoque toto immerso, strato extimo nigricante, tenui, varie flexuoso circumscripto, peridermio nequaquam decolorato, arcissimeque adhærente obducto; peritheciis majusculis, primum globosis, deinde depressis v. basi applanatis, in corticis interioris parenchymate enatis, basi ligni suppositi superficiei affixis, immo parum insculptis, ordine valde inæquali sed plerumque laxissime sparsis, multo rarius stipatis et stroma valseum æmulantibus; collis brevissimis, ostiolis minimis, punctiformibus, abbreviatis per peridermii rimulas perexiguas angustissimasque, transversim directas rumpentibus, haud exstantibus; ascis anguste oblongis vel clavatis, octosporis, $54-60 \approx 7-9$; sporidiis distichis vel oblique monostichis, fusiformibus utrinque 2567

obtusis, subcylindricis, rectis, subhyalinis, bi-cellularibus, quadriguttatis, ad septum medium haud constrictis, 12-14 \approx 3 $\frac{1}{2}$.

Hab. in ramis siccis Pruni spinosæ prope Münster Germaniæ (FÜSTING).

216. **D. Tetrastaga viridarii** Sacc. Mich. II, p. 301. — A *D. oligo-* 2568
carpa Nits. differt ascis sporidiisque tertia parte majoribus, ostiolis quandoque paululum extantibus, crassiusculis, obtusis (ascis subfusoideis 70-80 \approx 8-12; sporidiis ovato-fusoideis, 15-16 \approx 5, constricto-1-septatis, utrinque obtusiusculis, 4-guttulatis, hyalinis).

Hab. in ramis corticatis Pruni Lauro-cerasi, Padova, Italia bor. (BIZZOZERO).

217. **D. Tetrastaga Rehmii** Nits. Pyr. Germ. pag. 301. — Stromate 2569
plerumque late effuso ramulosque ambiente, cortici lignoque omnino immerso, strato extimo, atro circumscripto, peridermio peritheiorum ostiolis erumpentibus, abbreviatis perforato vel fisso, ceterum haud mutato nec decolorato, velato; peritheciis minutissimis, globosis v. paullo depressis, in cortice interiore nidulantibus, ordine subæquali denseque sparsis v. sæpius 2-4 densius stipatis, in colulum tenuissimum, brevissimum abrupte attenuatis; ostiolis perexiguis nec elongatis, nunc singulatim, nunc 2-4 una erumpentibus peridermiique laciniis arrectas haud superantibus; ascis anguste clavatis v. subcylindricis, octosporis, plerumque 48-57 \approx 6-7; sporidiis subdistichis vel oblique monostichis, subcylindricis, rectis, hyalinis, bicellularibus, quadriguttatis, medio haud constrictis, perexiguis, 10-13 \approx 2 $\frac{1}{2}$.

Hab. in ramis tenuioribus Sorbi Aucupariæ prope Sugenheim Germaniæ (REHM).

218. **D. Tetrastaga Cerasi** Fuck. Symb. myc. App. I, p. 319, Sacc. 2570
Myc. Spec. p. 138, t. XIII, fig. 53-55. — Stromate subcorticali, late effuso lignoque atro circumscripto; peritheciis in cortice interiori nidulantibus, minutis, globosis, plerumque in gregibus orbicularibus dispositis, ostiolis minutis, subcylindræis, obtusis, atris, in corticis rimulis excavatis, atris orbicularibus irregularibusve erumpentibus, epidermidem corticis non superantibus; ascis oblongis, 8sporis, 20-55 \approx 8-9 p. sporif.; sporidiis distichis, oblongo-fusiformibus, utrinque obtusis, sed minutissime acute appendiculatis, 4guttulatis, medio parum constrictis, hyalinis, 12-14 \approx 3,7-5.

Hab. in ramis corticatis Pruni Avium et P. Cerasi in Germania et Italia boreali. — *D. Rehmii* et *D. revellenti* affinis.

219. **D. Tetrastaga Raveneliana** Thüm. et Rehm, Fungi Amer. tri. 2571

gint. n. 4 et in Myc. univ. n. 865. — Stromate tenui, subeffuso; peritheciis gregariis, mediis, primo tectis demum epidermidem perforantibus eaque cinctis, orbiculato- vel elliptico-prominentibus, in stromate nidulantibus, globosis, ostiolis subpapillatis, nucleo sordido-albescente; ascis fusiformibus vel longe ellipticis, tenerrimis, subovatis, utrinque acutatis, basi angustatis, octosporis, $60 \approx 8-9$; sporidiis distichis, plerumque bicellularibus, ad septum non constrictis, cellulis æqualibus, longe ellipsoideis, utrinque obtusis, quadri-nucleatis, hyalinis, $12 \approx 4$; paraphysibus (genuinis?) numerosissimis, brevibus, flexuosis, septatis, apice obtusis, simplicibus hyalinis.

Hab. ad ramulos emortuos *Quercus* albæ Aiken Carolinae australis in America septentrionali (H. W. RAVENEL.).

220. **D. Tetrastaga Quercus** Fuck. Symb. myc. App. II, p. 36. — 2572

Stromate nigro, in cortice interiore late effuso lignumque linea nigra circumdante, corticis superficiem non colorante; peritheciis in cortice interiore nidulantibus, minutis, nigris, globosis, collis plerumque brevibus, cylindræcis, atris, in disculis nigris erumpentibus, epidermidem fissam vix superantibus, raro longe exsertis; ascis oblongis, sessilibus, 8spor. $44 \approx 8$; sporidiis distichis, fusiformibus, rectis inæquilateralibusve, 4guttulatis, hyalinis, $12 \approx 5$.

Hab. in ramis siccis *Quercus*, rarius, prope Cestrich Germaniæ.

221. **D. Tetrastaga insularis** Nits. Pyr. p. 294. — Stromate effuso, 2573

in plerisque saltem brevi, ramorum cortici lignoque innato, corticis interioris superficiem tandem ex brunneo nigrificante, stratoque nigro intus limitato; peritheciis minutis, subglobosis v. mutua pressione angulatis, in cortice interiore nidulantibus, ordine vario sparsis, sæpissime vero dense stipatis, collo brevissimo ostioloque tenuissimo, maxime elongato, cylindrico piliformi, flexuoso instructis; ascis clavatis, octosporis, $56 \approx 9$; sporidiis distichis, fusiformibus v. subcylindricis, utrinque obtusiusculis, bi-cellularibus, quadriguttatis, rectis, rarius inæquilateralibus, medio tandem parum constrictis, $12-16 \approx 3-4$.

Hab. in ramis tenuioribus *Quercus* pedunculatæ prope Münster Germaniæ et prope Treviso Italiæ bor.

222. **D. Tetrastaga multipunctata** Fuck. Symb. myc. App. II, p. 37. 2574

— Peritheciis sub epidermide adhærentibus, media magnitudine, atris, depresso-globosis, ostiolis brevibus, papillæformibus, perforatis, demum prominulis, corticis superficiem dense punctulatam reddentibus; ascis cylindræcis, 8spor. $108 \approx 8$; sporidiis oblique

monostichis, oblongo-ovatis, utrinque obtusis, uniseptatis, ad septum constrictis, pallide fuscis, 16 \approx 8.

Hab. in ramis siccis Coryli Avellanæ, Vallengin prope Neuchâtel Helvetiæ (MORTHIER). — Sporidia iis *D. fibrosæ* analogæ.

223. **D. Tetrastaga revellens** Nits. Pyr. Germ. p. 302, Sacc. Myc. 2575
 Ven. Spec. p. 138, t. XIII, f. 50-52. — Stromate nunc peritheciis 2-6 arctius coalitis valseum æmulante, plerumque vero longe lateque effuso, ramos ramulosque, præsertim basim versus ambiente, multo rarius brevior, maculæformi, toto immerso, strato nigricante circumscripto, peridermio haud decolorato v. rarius denique obscurato obducto; peritheciis minutis, e globoso depressis, immo lentiformibus, cortici interiori immersis, ordine vario sparsis, sæpissime vero 2-6 dense aggregatis, tunc peridermium in pustulas exiguas elevantibus; collis brevissimis; ostiolis minutis abbreviatis, peridermium haud superantibus; ascis anguste clavatis v. subcylindricis, octosporis, 50-60 \approx 7-8; sporidiis subdistichis v. oblique monostichis, anguste fusiformibus, subcylindricis, utrinque obtusiusculis, rectis v. parum curvatis, subhyalinis, bi-cellularibus, medio haud constrictis, 11-14 \approx 3-6. — Spermogonia phomatoidea: spermatis oblongis, 2-guttatis, 6-7 \approx 3.

Hab. in ramis putrescentibus Coryli Avellanæ et C. Lambertianæ in Germania, Gallia et Italia. — Datur quoque forma ostiolis elongatis.

224. **D. Tetrastaga tenuirostris** Nits. Pyr. Germ. p. 293. — Stro- 2576
 mate plus minus late effuso, cortici lignoque supposito, specie haud mutato toto immerso, nigrolimitato, peridermio peritheciolorum ostiolis perforato, ceterum haud decolorato arctissimeque adhærente tecto; peritheciis corticis interioris parenchymati omnino infossis, ordine valde inæquali sparsis, sæpissime gregatim densius stipatis e globoso mox plus minus depressis, haud raro præterea mutua pressione angulatis, in collum breve, tenuissimum abrupte attenuatis; ostiolis in plerisque vehementer elongatis, tenuissimis, filiformi-cylindricis, longissime extantibus, varie flexuosis, singulatim v. sæpius 2-6 fasciculatim erumpentibus; ascis oblongis v. clavatis, octosporis, 60 \approx 7-8; sporidiis subdistichis, fusiformibus, utrinque obtusis, rectis v. rarius inæquilateralibus, bi-cellularibus, quadriguttatis, rarissime denique parum torulosis, hyalinis, 13-14 \approx 3.

Hab. in ramis Juglandis regiæ pr. Æstrich Rhénogoviæ. — Verisimiliter *Sphæria Juglandis* Curr. Simpl. Sphær. n. 332,

fig. 110 sistit formam brevirostrem: sporidiis 4-guttulatis, 10-13 μ . long.

225. **D. Tetrastaga juglandina** (Fuck.) Nits. Pyr. germ. pag. 281. 2577

Aglaospora juglandina Fuck. Fungi rhen. n. 2159. — Stromate longe lateque effuso, ramos etiam crassiores ambiente eorumque cortici crasso innato, strato nigricante undique cincto, superficiem corticis interioris, peridermio relaxatum hinc inde desquamato colore ex brunneo tandem nigricante tingente; peritheciis ordine inæquali sed plerumque dense sparsis, immo hinc inde densissime stipatis, globosis, rarius depressis v. mutua pressione angulatis, majusculis, corticis parenchymati plus minus alte, semper fere totis immersis; collis sub peridermio relaxato totis v. pro maxima parte liberis, plerumque maxime elongatis, cylindricis, sæpe nodulosiss, secundis v. varie flexuosis, raro subrectis, basi vix incrassatis; ascis anguste clavatis v. oblongis, immo subcylindricis, octosporis, 51-64 \approx 7-8; sporidiis distichis, fusiformibus, utrinque acutiusculis, rectis, bicellularibus, quadriguttatis, medio tandem constrictis, hyalinis, 12-18 \approx 4-5. — Spermogonia phomatoidea: spermatis fusoideis, 8-9 \approx 2, bi-guttatis, basidiis 15 μ . longis suffultis.

Hab. in ramulis corticatis Juglandis regię in Rhenogovia et in Italia boreali.

226. **D. Tetrastaga veneta** Sacc. et Sp. Mich. I, p. 383. — Stromate 2578

ramulos corticatos hinc inde ambiente et varie marmorante linea stromatica endoxyla nulla; peritheciis cortice nidulantibus, globulosis, $\frac{1}{4}$ mill. diam., ostiolo papillato peridermium vix excedente; ascis fusoideis, aparaphysatis, octosporis; sporidiis distichis, oblongis, 13-17 \approx 3, constricto-1-septatis, curvulis, 4-guttulatis, hyalinis.

Hab. in ramis corticatis Oleæ europææ, Conegliano, Italiae borealis.

227. **D. Tetrastaga Phillyreæ** Cooke Grev. VII, p. 81. — Stromate ma- 2579

culiformi subelliptico v. irregulari, variegato; peritheciis sparsis; ostiolis exiguis, peridermium perforantibus; ascis clavatis; sporidiis oblongis, 4-nucleatis, dein 1-septatis, hyalinis.

Hab. in ramis corticatis Phillyreæ in Britannia.

228. **D. Tetrastaga resecans** Nits. Pyr. Germ. p. 314. Sacc. Myc. 2580

Ven. Sp. p. 138. t. XIII, fig. 56-58. *Valsa Syringæ* Cooke F. Br. I. n. 492. — Stromate, latissime effuso, ramos plerumque in longitudinem integram infestante, cortici lignoque supposito omnino immerso, nigrolimitato, peridermio acte adhærente, poris v. rimu-

lis longitudinaliter directis perforato, haud decolorato obducto; peritheciis minutis, globosis v. parum depressis, corticis interioris parenchymati insculptis ordine subæquali laxèque sparsis, multo rarius seriatim v. gregatim dense stipatis, in collum brevissimum, tenuissimum abrupte attenuatis; ostiolis minutissimis, abbreviatis, ex peridermii foraminibus haud extantibus; ascis clavatis v. oblongis, octosporis, $60-76 \approx 12$; sporidiis subdistichis, oblongis, v. obtuse fusiformibus, rectis, subhyalinis, bicellularibus, quadri-, rarius biguttulatis, medio septifero constrictis, $12-18 \approx 4\frac{1}{3}-5$.

Hab. in ramulis emortuis *Syringæ vulgaris* in Germania, Ital. bor., Britannia, Gallia. — Teste Rehm. Asc. n. 334 paraphyses adsunt articulatae.

229. **D. Tetrastaga occultata** (Fr.) Sacc., *Sph. occultata* Fr. Elench. 2581
II, p. 72. *Sphaeria rugosa* Wallr. Crypt. n. 3765 (?). — Effusa, oblecta, stromate mere corticali linea flexuosa nigra circumscripto, ostiolis sparsis punctiformibus.

Hab. in ramis *Syringæ* in Germania (WALLROTH). — Perithecia æqualia nullo modo circinant et ostiola omnia distincta. Perithecia exigua, in cortice interiori nidulantia, sparsa, corticis fibris distincta, globosa, pallida, omnino erecta, collibus brevibus aucta, lineolis nigris flexuosis laxè circumscripta. Ostiola in cortice lævigato erumpentia, distantia, subglobosa, lævia, demum umbilicata. «Verisimillime species eadem ac *D. resecans* Nits., quæ vero multo posterior».

230. **D. Tetrastaga nodosa** Fuck. Symb. myc. p. 210. — Stromate 2582
pallido, sub corticis epidermide late effuso; peritheciis ascigeris tectis, in cortice nidulantibus, plerumque fasciculatis, globosis, majusculis, nucleo griseo, rostris teretibus, longe exsertis, basi valde nodosis, atris; ascis oblongo-lanceolatis, 8spor. $50 \approx 5$; sporidiis distichis, oblongo-lanceolatis, utrinque obtusis, subinæquilateralibus, uniseptatis, loculis singulis 2guttulatis, hyalinis, $10 \approx 2\frac{1}{2}$. Spermogonia phomatoidea; spermatiis oblongo-lanceolatis, $8 \approx 3$, biguttatis, hyalinis.

Hab. in ramis siccis corticatis *Syringæ vulgaris* in Germania et Italia boreali.

231. **D. Tetrastaga obscurans** Sacc. Fungi Ven. Ser. IV, pag. 7. — 2583
Stromate ramulos late ambiente, nunc plagulas sparsas efformante, linea nigra per lignum immutatum excurrente limitato; peritheciis discretis nunc 4-6 subacervatis zonaque nigra cinctis, in cortice parum protuberante et obscurato nidulantibus sphæroideis, depres-

sis, $\frac{1}{4}$ mill. diam., atris, ostioliis brevissimis epidermidem non superantibus sed minute punctulantibus; ascis crasse fusoides, 45-50 \approx 12, 8sporis; sporidiis distichis, rarius oblique monostichis, fusoides, utrinque obtusiusculis 12 \approx 4 $\frac{1}{2}$ -5, constricto-tenuiter 1-septatis, 4-guttulatis, hyalinis.

Hab. in cortice ramulorum Fraxini Orni, Selva prope Treviso, Italiæ bor. — Cum *Diap. scobina* Nits. et *Diap. controversa* Nits. in Fraxino excelsiore quoque degentibus non comparanda.

232. **D. Tetrastaga scobina** Nits. Pyr. Germ. p. 293. — Stromate 2584
latissime effuso ramosque plus minus longe ambiente, substrato omnino immerso ejusque substantiam haud decolorante, strato solo extimo, profunde in lignum penetrante nec non corticis interioris superficie sensim nigricante; peritheciis parvulis, in cortice interiore nidulantibus, ordine subæquali ac dense sparsis subglobosis v. paullo compressis, haud raro 2-4, immo pluribus arctius stipatis, tunc sæpe angulosis, in collum brevissimum abrupte attenuatis; ostioliis tenuissime cylindricis, basim versus vix incrassatis, mox breviter tantum mox valde elongatis, rectis, obliquis v. decumbentibus, singulatim v. 2-4 gregatim, tunc per majora peridermii foramina v. rimulas erumpentibus, nunc parum tantum v. vix exsertis, nunc contra longe extantibus, piliformibus; ascis anguste fusiformibus v. clavatis, octosporis, 51-60 \approx 9; sporidiis subdistichis, oblongis, fusiformibus v. subcylindricis utrinque plus minus obtusis, plerumque rectis, quadriguttatis, bi-cellularibus, medio haud constrictis, subhyalinis, 11-12 \approx 4.

Hab. in ramis emortuis Fraxini excelsioris in Germania et in Britannia.

233. **D. Tetrastaga controversa** (Desm.) Fuck. Symb. myc. App. I. 2585
Sphæria controversa Desm. 8 Not. 1841, p. 12 (p. p. *Fraxino*).
— Circumscripta, stromate corticali maculiformi, fusco-nigricante; peritheciis immersis, ostioliis erumpentibus prominulis; ascis oblongo-subclavatis, 56 \approx 8; sporidis octonis biseriatis, hyalinis, fusiformibus, uniseptatis, non constrictis, 12 \approx 4, 4-guttulatis, hyalinis.

Hab. in ramis exsiccatas Fraxini excelsioris in Gallia, Belgio et Germania.

234. **D. Tetrastaga ciliaris** (Curr.) Sacc. *Sphæria ciliaris* Curr. Micr. 2586
Journ. VII, p. 232, t. 11, fig. 15 et Cooke Handb. n. 2639. — Peritheciis subcutaneis, globulosis, minutis (supra *Helminthosporii* hyphas gerentibus), ostiolo papillato, perforante; ascis clavulatis,

octosporis; sporidiis distichis, anguste ovato-oblongis, subconstrictis, 4-guttatis, utrinque acutis, hyalinis, 13-20 μ . longis.

Hab. in ramis corticatis Fraxini in Britannia (CURREY) et Belgio (LAMBOTTE).

235. **D. Tetrastaga discutiens** (Berk.) Sacc. *Sphæria discutiens* Berk. 2587
Engl. Fl. V, p. 245. Curr. Linn. Trans. XXII, t. 47, fig. 112. — Late effusa; peritheciis cortice interiore nidulantibus, ostioliis longis, cylindricis, scabriusculis, peridermium perforantibus et denique excutientibus; stromate nigricante; ascis octosporis; sporidiis biserialis v. stipatis, fusioideo-navicularibus, 1-(3?)-septatis, 12-13 μ . longis, hyalinis.

Hab. in ramis Ulmi campestris in Britannia.

236. **D. Tetrastaga alnea** Fuck. Symb. mycol. p. 207, Nits. Pyr. Germ. 2588
p. 312. — Stromate plus minus late effuso, mox ramos ramulosque longe ambiente, mox contra, sed rarius plagas breviores, varie circumscriptas occupante, cortici lignoque toto immerso, strato nigricante limitato, peridermio haud decolorato, arcte adhærente sed poris rimulisve numerosissimis minutissimisque cribrose perforato, scabroso tecto; peritheciis minimis e globoso mox depressis, ordine subæquali densissimeque sparsis, corticis parenchymati plus minus alte immersis, collo brevissimo ostioloque minimo, abbreviato, punctiformi instructis; ascis oblongis v. subcylindricis, octosporis, 52-60 \simeq 7-9; sporidiis subdistichis, fusiformibus, utrinque obtusiusculis, subhyalinis, rectis, bi-cellularibus, quadriguttulatis, medio septifero tandem constrictæ, 12-13. — Spermogonia phomatoidea; spermatiis fusioideis 7 \simeq 3, biguttatis.

Hab. in ramis emortuis Alni glutinosæ in Germania et Italia boreali.

237. **D. Tetrastaga Lebiseyi** (Desm.) Niessl, Beitr. p. 54. *Sph. Lebiseyi* 2589
Desm. Ann. Sc. nat. XV. (1841), pag. 144. — Stromate expanso, sæpe vix evoluto sed linea atrata limitato; peritheciis, gregariis, solitariis, rarissime aggregatis, majusculis, 300-400 μ . diam., atris, subglobosis, demum collabentibus, basi impressa concava, peridermio detracto adhærentibus, ostiolo elongato tenuissimo teretiusculo curvato facile diffracto, 250 μ . longo; ascis oblongis sessilibus, 8spor. 30 \simeq 5-6; sporidiis subdistichis oblongis, utrinque attenuatis, obtusiusculis rectis, uniseptatis et parum constrictis, 2-4 guttulatis, subhyalinis, 8-9 \simeq 2-3.

Hab. in ramulis Aceris Negundinis prope Caën Galliæ (ROBERGE).

238. **D. Tetrastaga dubia** Nits. Pyr. Germ. p. 316. — Stromate latissime effuso, ramos longe ambiente eorumque cortici lignoque supposito toto immerso et nigrolimitato, peridermio adhærente, immutato tecto; peritheciis magnitudine media, globosis, exsiccando plerumque collapsis, corticis strato supremo infossis, peridermio detracto adhærentibus, ordine inæquali ordinatis, sæpissime vero 3-6 in modum valseum dense stipatis; collis brevissimis, tenuissimis, ostiolis minimis per peridermii poros perexiguos erumpentibus, haud extantibus; ascis clavatis v. oblongis, octosporis, 52-72 \approx 8-9; sporidiis subdistichis, oblongis, utrinque obtusiusculis, rectis, subhyalinis, bicellularibus, bi-, rarius quadriguttulatis, medio septifero constrictis, 12-16 \approx 4-6.

Hab. in cortice ramulorum Aceris Negundinis, Höxter Germaniæ, Conegliano Ital. bor. — *Diaporthe Lebiseyi* (Desm.) Niessl vere diversa est. An *Phoma Lebiseyi* Sacc. huic vel *D. dubiæ*, ut spermogonium, pertineat statuere nequeo.

239. **D. Tetrastaga blepharodes** (B. et Br.) Sacc. *Sphæria blepharodes* B. et Br. in Ann. N. H. n. 978, t. 17, f. 31. — Peritheciis tectis, depresso-globosis; ostiolis peridermium perforantibus perithecio duplo longioribus; ascis clavato-fusoideis; sporidiis biseriatis, fusoides, in æquilateralibus, guttulatis, 12-13 μ . longis.

Hab. in ramulis Aceris Pseudoplatani, Mossburnford Britannicæ (A. JERDON).

240. **D. Tetrastaga Beckhausii** Nits. Pyr. Germ. p. 295. *D. circumscripta* Fuck. Fung. rhen. 1991 (nec Otth). — Stromate latissime effuso, ambiente ramos sæpissime integros occupante, substrato toto immerso, strato extimo, profunde descendente, nigro-limitatis, corticisque interioris superficiem demum nigrificantibus; peritheciis minimis, cortici interiori totis infossis, ordine fere æquali densissimeque sparsis, globosis v. paulum depressis, in collum brevissimum, tenue subito attenuatis; ostiolis per peridermii poros exiguos singulatim erumpentibus, mox brevissimis, paulo tantum v. vix exertis, mox plus minus elongatis, e basi conica cylindricis, crassiusculis, rectis v. obliquis; ascis anguste oblongis v. subcylindricis, octosporis, 45-56 \approx 7; sporidiis angustissime fusiformibus, subcylindricis, hyalinis, quadriguttatis, denique bi-cellularibus, rectis v. rarius inæquilateralibus, utrinque sæpe acutiusculis, 10-14 \approx 3-4. — Spermogonia phomatoidea: spermatis anguste filiformibus 10-12 \approx 1, incurvis.

Hab. in ramis corticatis Viburni Opuli et V. Lantanæ in Germania (BECKHAUS, FÜCKEL), in Italia bor. (SACC.).

241. **D. Tetrastaga circumscripta** Otth, sec. Nits. in Fuck. Symb. myc. p. 207 (nec *Sph. circumscripta* Mont.) *D. leucostroma* Nits. in Fuck. F. rhen. n. 1989. — Stromate effuso, maculiformi, corticem occupante, in ligni superficie lineis tortuosis nigris circumscripto; peritheciis cortice immersis, lignoque adnatis, globulosis, gregariis; ostiolis perforantibus conicis plus minusve exertis; ascis fusoideis, apice lumine 2-foveolato, 50-60 \approx 8, aparaphysatis, octosporis; sporidiis distichis cylindraceo-fusoideis, utrinque obtusiuscule rotundatis, 11-15 \approx 3-4, constricto-1-septatis, 4-guttulatis, hyalinis.

Hab. in ramis siccis adhuc stantibus Sambuci nigræ et S. Ebuli in Germania, Italia et Gallia.

242. **D. Tetrastaga cinerascens** Sacc. Fungi Ven. Ser. IV, p. 8. — Stromate ramos late et continue ambiente per lignum cinerascens usque ad medullam excurrente tenuiter nigro-limitato, peridermio immutato permanente; peritheciis discretis, gregariis, in cortice nidulantibus, globoso-depressis, $\frac{1}{3}$ mill. diam., ostiolis cylindricis peridermium perforantibus et nonnumquam parum exertis, flexisque; ascis oblongo-fusoideis, 8spor. 50-55 \approx 6-7; sporidiis oblongo-fusiformibus, constricto-1-septatis, utrinque acutiusculis, 12-15 \approx 3-4, 4-guttulatis, hyalinis; spermogoniis in cortice exteriori nidulantibus e globoso depressis, atris; spermatis fusoideis, 8 \approx 2, hyalinis, 2-guttulatis.

Hab. in ramis corticatis Fici Caricæ, Selva, Treviso, Italiæ borealis.

243. **D. Tetrastaga Ophites** Sacc. Myc. Ven. n. 214. *Sphæria Ketmia* Ces.? — Stromate late effuso corticem lignique superficiem maculis oblongis, variis, fuscis, nigrisque marmorante intusque nigro-limitato; peritheciis gregariis globulosis, mediocribus, cortice (multo rarius ligno) infossis, ostiolis perforantibus, filiformibus, perithecio longioribus; ascis fusoideis, octosporis, 50-60 \approx 9-10; sporidiis distichis breve fusoideis constricto-1-septatis, 12-13 \approx 4-5-5, 4-guttulatis, utrinque obtusiusculis, hyalinis.

Hab. in ramis emortuis Hibisci syriaci in Italia boreali et Gallia.

244. **D. Tetrastaga Ryckholtii** (West.) Nits. Pyr. Germ. pag. 319. *Sphæria Ryckholtii* West. in Kickx Fl. Crypt. Fl. I, p. 323 (*Val-sa*). — Stromate effuso, ramulos plerumque ambiente intus, nigro-

limitato, peridermio arcte adhærente, haud decolorato tecto; peritheciis parvulis, subglobosis v. basi applanatis, ordine vario dispositis, sæpius pluribus aggregatis, vertice plerumque parum protuberantibus, pustulas minimas, peridermio obductas formantibus, basi contra ligno supposito plus minus alte immersis; ostioliis crassiusculis, abbreviatis sed peridermium poris exiguis perforatum sæpe parum superantibus: ascis oblongis, rarius clavatis, octosporis, 50-60 \approx 9-12; sporidiis distichis v. conglobatis, fusiformibus v. subcylindricis, utrinque obtusiusculis v. rotundatis, rectis, hyalinis, bicellularibus, bi-quadriguttulatis, medio septifero constrictis, 12-16 \approx 4-5. — Spermogonia phomatoidea: spermatiis obtuse fusoides, 6-8 \approx 2½, biguttatis, longiuscule stipitatis.

Hab. in trunculis ramisque *Symphoricarpi racemosæ* in Germania, Belgio, Britannia, Italia.

245. **D. Tetrastaga Rhois** Nits. Pyr. Germ. p. 315. — Stromate ple- 2597
rumque ramulos longe ambiente substrato toto innato, strato extimo nigricante cincto, peridermio adhærente, peritheciolorum ostioliis perforato, ceterum immutato velato; peritheciis minimis, globosis v. depressis in corticis interioris parenchymate nidulantibus, ordine inequali sparsis, collo brevi, ostiolo minutissimo, peridermium perforatum haud superante instructis; ascis oblongis v. clavatis, octosporis, 64 \approx 10-12; sporidiis subdistichis, v. oblique monostichis, oblongis, utrinque obtusis, hyalinis, rectis, bicellularibus, quadriguttulatis, medio septifero constrictis, 16 \approx 5-6.

Hab. in ramulis emortuis *Rhois Cotini* in Horto botanico Münster Germaniæ. — Teste Niessl, huc spectaret *Valsa Rhois* Cooke (Cfr. Syll. nostra n. 2382), quod vero ulterius est inquirendum.

246. **D. Tetrastaga resecta** (Fuck. et Nits.) in Nits. Pyr. Germ. 2598
pag. 304. — Stromate late effuso, ramulos enecatos ambiente substrato omnino immerso strato extimo nigricante circumscripto, corticis strato supremo immutato primo velato, deinde, illo hinc inde secesso, maculis tandem aterrimis, plerumque minutis corticem interiorem marmorante; peritheciis perexiguis, e globoso, plus minus depressis, ordine vario sed plerumque laxè sparsis, cortici insculptis, in collum brevissimum subito attenuatis; ostioliis minimis, abbreviatis, punctiformibus; ascis anguste clavatis, v. subcylindricis, octosporis, 60-63 \approx 6-7; sporidiis subdistichis, subcylindricis, utrinque obtusissimis, rotundatis, subyalinis, bi-cellularibus,

quadriguttatis, medio septifero haud constrictis, rectis, 13-16 \approx 3-4. — Spermogonia sistunt *Phomam sticticam* B. et Br.

Hab. in ramis siccis Buxi sempervirentis in Germania, Gallia et Italia.

247. **D. Tetrastaga spissa** Sacc. et Sp. Mich. I, p. 385. — Stromate 2599
 obsoleto nullove; peritheciis dense gregariis, corticolis, globulosis, $\frac{1}{3}$ mill. diam., ostiolis breve excedentibus, rostellatis; ascis fusioideis, utrinque obtusiusculis, 40-45 \approx 7-8, aparaphysatis, octosporis; sporidiis distichis v. oblique monostichis, fusioideis curvulis, 10-11 \approx $3\frac{1}{2}$, medio constrictis, utrinque obtusiusculis, 4-guttulatis, hyalinis.

Hab. in ramulis junioribus Catalpæ syringifoliæ, Conegliano, Ital. bor.

248. **D. Tetrastaga velata** (Pers.) Nits. Pyr. Germ. p. 287. *Sphæ-* 2600
ria velata Pers. Syn. p. 32. — Stromate latissime effuso, ramulos, ramosque crassiores longissime ambiente, intus lineis atris, varie flexuosis lignum marmorante nec non corticis interioris superficiem tandem ex sordide brunneo nigrificante; peritheciis parvulis, e globoso mox plus minus depressis, immo lentiformibus, corticis interioris strato supremo, raro profundius infossis, ordine fere æquali ac satis dense sparsis, passim 2-4 aggregatis, in cololum plerumque brevissimum abrupte attenuatis; ostiolis crassiusculis, breviter elongatis, parum tantum vel vix exertis, cylindricis v. basim versus incrassatis, singulatim v. rarius 2-6 immo pluribus gregatim erumpentibus, raro sub peridermio relaxato solito longioribus, decumbentibus, rarissime longe exertis; ascis anguste fusiformibus v. subcylindricis, octosporis, subsessilibus, 56-64 \approx 8-10; sporidiis distichis v. rarius oblique monostichis, anguste fusiformibus, obtusiusculis, immo subcylindricis, plerumque rectis hyalinis, quadriguttatis, 2-(4?)-cellularibus, rarissime medio tandem parum constrictis, 10-15 \approx 3. Spermogonia phomatoidea; spermatii 7-9 \approx 2, biguttatis; basidiis 24-27 \approx 1, hamatis.

Hab. in ramis corticatis Tiliæ in Germania, Gallia, Italia, Britannia, Suecia et Amer. bor.

249. **E. Tetrastaga Corni** Fuck. Symb. myc. p. 207, t. VI, fig. 39. 2601
 — Peritheciis ascigeris in corticis stromate nidulantibus, minutis, globosis, tenuissimis, nucleo sordido, ostiolis vix exertis, raro longioribus, cylindræis, obtusis, atris; ascis lanceolato-clavatis, stipitatis, 8spor. 60 \approx 8; sporidiis distichis, lanceolato-fusiformibus, sed utrinque obtusis, curvatis, 4guttulatis, hyalinis, 13 \approx 4, utrinque

appendiculis minutis, acutis. — Spermogoniis sparsis, sub epidermide nidulantibus, demum erumpentibus et epidermide nigrificata circumdatis, minutis, subglobosis, papillatis; spermatis cylindræo-oblongis, curvatis, 2-3guttulatis, $8 \approx 3$; stromate, demum sub spermogoniis explicato et spermogoniorum residua semper gerenti, distincte circumscripto, atro, late effuso.

Hab. in ramulis emortuis Corni albæ, in Germania, Gallia, Italia.

250. **D. Tetrastaga Delogneana** Sacc. et Roum. Reliq. myc. Lib. II, n. 91, t. XIX, f. 4. — Peritheciis hinc inde gregariis, corticolis, basi-2602
que ligno infossis, lineaque nigra tortuosa exceptis, $\frac{1}{2}$ mill. d., nigro-olivaceis; ascis fusoidis subsessilibus, 46-55 \approx 8, lumine apice bi-foveolato, aparaphysatis, octosporis; sporidiis distichis fusoidis rectiusculis utrinque acutiusculis obsoleteque appendiculatis, 12-14 \approx 3-3 $\frac{1}{2}$, 4-guttulatis, 1-septatis hyalinis.

Hab. in ramis corticatis Daphnes Mezerei Malmedy in finibus Galliæ et Germaniæ.

251. **D. Tetrastaga crustosa** Sacc. et Roum. Reliq. myc. Libert. II, n. 92, t. XIX, f. 3. — Peritheciis corticolis, gregariis, stromate crustaceo nigro exceptis, globulosis $\frac{1}{2}$ - $\frac{1}{2}$ mill. d., ostiolo tereti-usculo, perithecium sæpe excedente, erumpente; ascis crasse fusoides-clavatis, 60 \approx 12-13, subsessilibus, apice obtusatis, lumineque vix vel non foveolato, aparaphysatis, octosporis; sporidiis distichis vel subtristichis, tereti-fusoidis 15-17 \approx 3-3 $\frac{1}{4}$, utrinque obtusiusculis, initioque obsolete apiculatis, 1-septatis, levissime constrictis, 4-guttatis, hyalinis.

Hab. in ramis corticatis Ilicis Aquifolii, Malmedy, in finibus Galliæ et Germaniæ.

252. **D. Tetrastaga nobilis** Sacc. et Speg. Mich. I, p. 386. — Stromate ramos corticatos late ambiente et infuscante, linea nigra tortuosa intra lignum limitato; peritheciis gregariis, majusculis corticolis, $\frac{3}{4}$ mill. diam., ostiolo vix emergente papillato; ascis clavato-fusoidis, utrinque obtusiusculis, 50 \approx 7, aparaphysatis, 8spor-2604
is; sporidiis oblique 1-stichis, fusoidis, rectis, constricto-1-septatis, 13-16 \approx 4, 4-guttatis, hyalinis, initio appendiculâ utrinque auctis.

Hab. in ramis corticatis Lauri nobilis, Conegliano Italiæ borealis.

253. **D. Tetrastaga Mahoniæ** Speg. Mich. I, p. 456. — Stromate ra-2605
mos late ambiente per lignum immutatum tortuose et profunde

excurrente, nigrolimitato; peritheciis discretis, globosis, $\frac{1}{3}$ - $\frac{1}{4}$ mill. diam., ligno decorticato vel corticato totaliter vel semiimmersis, ostiolis brevibus, cylindraceo-conoideis, obtusis, exertis; ascis oblongo-fusoideis, 65-75 \approx 10, octosporis, aparaphysatis; sporidiis distichis vel oblique monostichis, elliptico-elongatis, 12-14 \approx 4-4 $\frac{1}{2}$, utrinque rotundatis, medio constricto-1-septatis, 2-6-guttulatis, hyalinis.

Hab. in ramulis emortuis Mahoniæ Aquifolii, Conegliano Italia bor.

254. **D. Tetrastaga pungens** Nits. Pyr. Germ. p. 296, *D. Strumella* 2606
var. *pungens* Karst. Myc. Fenn. II, p. 113. — Stromate longe lateque effuso, ambiente, ramorum cortici lignoque omnino innato, superficiem corticis interioris vel ligni tantum nigrificante; peritheciis ordine subæquali distributis, passim densius aggregatis, sphæroideis, cortici crassiori v. ligno infossis; ostiolis cylindraceis, haud raro nodulosis, flexuosis, singulatim vel gregatim per peridermium fissum erumpentibus, vulgo maxime elongatis vel longissime exsertis; ascis anguste clavatis, octosporis, 54-60 \approx 7-8; sporidiis fusoido-elongatis, rectis vel leviter curvulis, 12-16 \approx 3-4.

Hab. in ramis crassioribus Ribis Grossulariæ in Germania et Ribis nigri in Fennia. — *Diap. pungens* Nits. ut nobis videtur, varietas est tantum *Diap. Strumellæ* (Fr.), orta in truncis ramisque crassioribus locis humidis dejectis (Karst. l. c.).

255. **D. Tetrastaga mitis** Sacc. Mich. II, p. 61. — Stromate effuso 2607
obsoleto; peritheciis laxè gregariis, cortice nidulantibus, tumidulisque, globoso-depressis, $\frac{1}{2}$ mill. diam., ostiolis, brevissime conoideis; ascis fusoides, 70-75 \approx 9-10, apice bifoveolatis, aparaphysatis, octosporis; sporidiis fusoides, utrinque acutiusculis curvulis, 15 \approx 3-4, constricto-1-septatis, 4-guttulatis, hyalinis.

Hab. in ramis Ribis rubri corticatis prope Rouen Galliæ (LETENDRE). — A *Diap. pungente* Nits. (Ribis quoque incola) differt ostiolis abbreviatis, nec pungentibus, aliisque notis.

256. **D. Tetrastaga Landeghemii** (West.) Nits. Pyr. Germ. p. 318, 2608
Sphæria Landeghemii West. in Kickx Fl. I, p. 343. — Stromate ambitu et magnitudine maxime vario, mox ramulos ambiente, mox contra, et quidem sæpius, brevi, maculæformi, substrato omnino immerso, strato extimo, nigricante, sæpe usque in medullam centram descendente undique circumscripto, peridermio haud raro relaxato, perithecorum ostiolis perforato, ceterum non decolorato obducto; peritheciis minutis, e globoso depressis, lentiformibus, ple-

rumque in corticis interioris parenchymate nidulantibus, rarius ligno supposito adnatis, immo ei insculptis, ordine valde inæquali ordinatis, mox laxissime sparsis, mox 2-4 densius aggregatis, in collum brevissimum, tenue abrupte attenuatis; ostiolis abbreviatis, corticem perforatum haud superantibus; ascis oblongis v. subcylindricis, membrana incrassata structis, octosporis, 60-66 \approx 9-10; sporidiis subdistichis, fusiformibus, utrinque obtusiusculis, plerumque rectis, hyalinis, bicellularibus, bi-quadrigitulatis, medio septifero tandem parum constrictis, 14-16 \approx 4. — Spermogonia phomatoidea: spermatis fusoideis 8 \approx 2,5, biguttatis, breviuscule stipitatis.

Hab. in ramis emortuis Philadelphi coronarii in Germania Belgio et Italia. — Forma *Deutziae scabrae* Sacc. Mycol. Spec. p. 139, t. XIII, f. 59-61: ascis 50 \approx 8; sporidiis 15 \approx 4. In ramis *Deutziae* in Italia bor.

257. **D. Tetrastaga Laschii** Nits. Pyr. Germ. p. 292, *Sphæria ro-* 2609
stellata Lasch. (nec Auct.). — Stromate latissime effuso, ramos ambiente, toto innato, undique nigrolimitato, corticis interioris superficiem nigrificante, peridermio, peritheciolorum ostiolis perforato, immutato obducto; peritheciis in corticis parenchymate nidulantibus, majusculis, e globoso mox parum compressis, in collum per tenue abrupte attenuatis, ordine inæquali, plerumque laxè sparsis; ostiolis e basi sæpe conico-dilatata cylindricis, crassiusculis, parum tantum elongatis, per peridermii foramina minuta singulatim vel in rimis longitudinaliter directis ordine lineari pluribus erumpentibus, sed inter se distantibus, paulo tantum v. vix exserti; ascis clavatis v. oblongis, octosporis, 34-60 \approx 6-8; sporidiis distichis v. oblique monostichis, fusiformibus, utrinque obtusiusculis, plerumque rectis, hyalinis, medio haud constrictis, quadrigitulatis bi-cellularibus, 10-16 \approx 3-4. — Spermogonia *Phomam foveolarem* (Fr.) sistunt.

Hab. in ramis emortuis *Evonymi europæi* in Germania, Britannia, Gallia, Italia.

258. **D. Tetrastaga importata** Nits. Pyr. Germ. p. 415. — Stromate 2610
mox breviter effuso, mox ramulos ambiente, peritheciis coalescentibus subinde valseum æmulante, quoad immersum strato nigrificante circumscripto, peridermio adhærente, haud decolorato, tecto; peritheciis perexiguis, e globoso plus minus depressis, corticis strato infimo immersis tandem sæpe ligno supposito basi applanata adnatis, ordine inæquali dispositis, sæpissime vero 2-6 valseo modo stipitatis, tunc parum protuberantibus pustulasque minutas peridermio

velatas, vertice denique perforatas vel fissas perficientibus; collis brevissimis, ostiolis abbreviatis, punctiformibus; ascis anguste oblongis v. subcylindricis, octosporis, 66-75 \approx 9; sporidiis subdistichis v. oblique monostichis, fusiformibus, utrinque obtusis v. acutiusculis, bicellularibus, quadriguttulatis, medio septifero tandem parum constrictis, rectis vel inæquilateralibus, subhyalinis, 12-18 \approx 4-5.

Hab. in ramulis emortuis Lycii barbari, Höxter Germaniæ (BECKHAUS), King's Lynn Britanniæ (PLOWRIGHT).

259. **D. Tetrastaga Putator** Nits. Pyr. Germ. p. 306, *Sph. mutila* 2611
Fr. S. M. II, p. 424 ex parte, *Valsa convergens* Fuck. F. rhen. n. 1565 (nec Fr.). — Stromate raro brevi, maculæformi, multo sæpius latissime effuso, ramos per longitudinem integros ambiente, omnino alteque immerso, strato extimo nigricante, peridermio haud decolorato, ostiolis erumpentibus cribrose perforato, arcte adhærente tecto; peritheciis parvulis, e globoso parum depressis, ordine subæquali denseque sparsis, immo sæpissime stromatis modo valsei aggregatis, tunc hic illic mutua pressione angulatis, cortici interiore insculptis, demum sub peridermio fere liberis, exsiccando haud raro collapsis; ostiolis perexiguis, omnino abbreviatis, peridermium haud superantibus; ascis anguste clavatis v. oblongis, octosporis, 38-50 \approx 6-8: sporidiis subdistichis v. oblique monostichis, subcylindricis v. obtuse et anguste fusiformibus, bi-cellularibus, quadriguttulatis, medio septifero haud constrictis, hyalinis, plerumque rectis, 12-15 \approx 3.

Hab. in ramis emortuis Populi pyramidalis, P. nigræ et P. tremulæ in Germania et Britannia.

260. **D. Tetrastaga Spina** Fuck. Symb. myc. p. 210, t. IV, fig. 44. 2612
— Peritheciis sparsis gregariisve, semper tectis, cortice vix mutato immersis, media magnitudine, perfecte globosis, atris, rostro spiniformi, perithecii diametrum æquante, recto, prominulo, concolori; ascis oblongis ellipticisve, 8sporibus, sessilibus, 35-40 \approx 15-16, deorsum acutioribus, lumine apice bifoveolatis; sporidiis di-tristichis, fusiformibus, curvatis, subtilibus, hyalinis, constanter quadriguttulatis, 18-20 \approx 2,5-4, utrinque obtusiusculis, denique 1-septatis, subconstrictis.

Hab. in ramis siccis Salicis auritæ, rarius, prope Æstrich Germaniæ, Selva Italiæ bor., North Wootton Britanniæ. — *Tetrastaga* nec *Euporthe!*

261. **D. Tetrastaga Humboldtiana** Speg. Fungi Arg. Pug. III, n. 52. 2613

— Peritheciis laxè gregariis, fere totum ramulum occupantibus, cortice immutato immersis ac eum pustulatum efficientibus, atris, membranaceis, contextu dense parenchymatico, ostiolo conico, atro, carbonaceo, non v. vix supra matricem exerto ornatis, $\frac{1}{5}$ – $\frac{1}{6}$ mill. diam.; ascis fusiformi-clavatis, apice obtusiusculis, deorsum acutiuscule attenuatis, 50–60 \approx 7–8, octosporis, aparaphysatis; sporidiis oblique distichis, elongato-ellipticis, utrinque acutiuscule rotundatis, medio 1-septato-constrictis, 4-guttulatis, hyalinis, 13–14 \approx 4–5.

Hab. in ramulis dejectis Salicis Humboldtianæ in nemorosis prope la Recoleta, Argent. Amer. merid.

262. **D. Tetrastaga exasperans** Nits. Pyr. Germ. pag. 289. — Stro- 2614
mate effuso, ramos tenues interdum ambiente, sæpius contra brevi, maculæformi, immo hic illic, peritheciis dense aggregatis, valseum æmulante, strato extimo tenuissimo, aterritimo undique limitato, cortice ostiolis nigro-punctato arcte adhærente tecto; peritheciis minutissimis, corticis interioris parenchymati totis immersis, nonnumquam parum protuberantibus, e globoso mox maxime depressis, in collum pertenuè, brevissimum abrupte attenuatis, ordine subæquali sparsis vel 2–5 densius aggregatis; ostiolis in plerisque parum tantum elongatis, cylindricis vel subconicis, peridermium perforatum vix superantibus, multo rarius maxime elongatis, cylindricis, tenuissimis, sæpe fasciculatim erumpentibus, longe extantibus, flexuosis vel secundis; ascis clavatis vel oblongis, octosporis, 56–68 \approx 8–10; sporidiis subdistichis, bicellularibus, quadriguttatis, fusiformibus vel subcylindricis, utrinque obtusissimis, rectis vel rarius parum curvatis, medio tandem constrictis, hyalinis, 14–16 \approx 4–5.

Hab. in ramis emortuis Betulæ albæ prope Münster et Æstrich Germaniæ.

263. **D. Tetrastaga macrostoma** Nits. Pyr. Germ. p. 284. — Stro- 2615
mate latissime effuso, ramos ipsos crassiores sæpe ambiente, cortici lignoque supposito specie haud mutato toto innato, nigrolimitato, peridermio ostiolis erumpentibus lacerato, passim desquamato, ceterum non decolorato tecto, peritheciis ordine vario sparsis, sæpe 10–20 dense aggregatis, subglobosis vel depressis in corticis substantia infima nidulantibus; ostiolis plerumque valde elongatis, crassiusculis cylindricis vel basim versus parum sensimque incrassatis, hic illic nodulosis, rugulosis, sæpe decumbentibus varieque flexuosis; ascis clavatis vel anguste oblongis, octosporis; sporidiis subdistichis, fusiformibus, utrinque obtusiusculis, bicellularibus, qua-

driguttatis, medio tandem constrictis, hyalinis, rectis, $20 \approx 5$. — Spermogonia phomatoidea: spermatii fusoides $8-9 \approx 3$; basidiis hamatis $32-36 \approx 1$.

Hab. in ramis siccis Fagi sylvaticæ in Germania (FUCK., NITS.) et Italia boreali (SPEGAZZINI).

264. **D. Tetrastaga scabra** Nits. Pyr. Germ. p. 310. — Stromate 2616
effuso, magnitudine vario, raro ramos ambiente, multo sæpius contra breviori, immo brevissimo, tunc in ramorum epidermide lævi plagas sistente parum elevatas, varie circumscriptas, peridermio adhærente sed ostioliis cribose perforato tecta ideoque in superficie scabras, intus strato nigricante varieque flexuoso circumscripto; peritheciis minutis, globosis, plerumque parum depressis vel basi tantum deplanatis, ordine fere æquali ac dense sparsis, in corticis interioris parenchymate nidulantibus, in collum brevissimum angustatis; ostioliis exiguis, ex peridermii foraminulis omnino non v. parum tantum prominentibus; ascis anguste clavatis v. subcylindricis, octosporis, $60 \approx 9-10$; sporidiis distichis v. oblique monostichis, fusiformibus, utrinque acutiusculis, rectis, subhyalinis, bi-cellularibus, quadriguttulatis, medio septifero haud constrictis, $10-12 \approx 3$.

Hab. ad ramos Platani acerifoliæ prope Cappenberg et Münster Germaniæ.

265. **D. Tetrastaga? medusina** (Fr.) Sacc., *Sphæria medusina Fr. 2617
Elench. II, p. 75. — Peritheciis minimis parvis latentibus, stromate fuligineo-nigro inter epidermidem et corticem latissime effuso, ostioliis copiosis fasciculato-erumpentibus divergentibus flaccidis.*

Hab. ad cortices Platanorum in Gallia (GUEPIN, MOUGEOT). Perithecia admodum parca, minuta, globosa, atra, profunde in cortice interiori immersa, dispersa, ut singulus ostiolorum fasciculus unico tantum perithecio niti videatur. Ostiola numerosissima, in tuberculis erumpentibus collecta, sed valde tenuia, crinalia, divergentia, flaccida, fusca. Inter hæc ostiola supra epidermidem exserta et perithecia profunde in cortice interiori latentia vel inter epidermidem et corticem superiorem adest stroma latissime effusum, ambiens, pulveraceum, habitu seriaceo, fuliginoso-atrum, in quo infra singulum ostiolorum fasciculum maculæ albæ, cum disco *Melanconii bicoloris* analogæ, ipsumque stroma *Melanconio* persimile est. «Fructificatio mihi ignota».

266. **D. Tetrastaga Æsculi** Cooke et Harkn. Grevill. IX, 1881, p. 86. 2618
— Corticola, in plagas elongatas collecta; peritheciis globoso-de-

pressis; ascis lanceolatis, sessilibus; sporidiis sublanceolatis rectis quadrinucleatis $18 \approx 3,5$.

Hab. in ramis *Æsculi californicæ* in California Americæ borealis.

267. **D. Tetrastaga Coneglanensis** Sacc. et Speg. Mich. I, p. 29. — 2619

Peritheciis sparsis, cortici immutato immersis lineaque nigra maxime tortuosa per lignum excurrente limitatis, globosis, brevissime papillatis, nigris; ascis fusioideis $50-65 \approx 6-8$, aparaphysatis, octosporis; sporidiis distichis breve fusioideis utrinque obtusiusculis, $14-16 \approx 3-4$, constricto-1-septatis, 4-guttulatis, hyalinis.

Hab. in ramis *Æsculi Hippocastani*, rarius, Conegliano, Italia borealis.

268. **D. Tetrastaga minuta** Nits. Pyr. Germ. p. 307. — Stromate 2620

longe lateque effuso, ramos in longitudinem integros occupante, quoad immersum strato nigricante cincto, peridermio haud decolorato, plerumque arcte adhærente vestito; peritheciis minutissimis e globoso mox depressis, basi applanatis, corticis parenchymate exceptis vel ligno supposito affixis, ordine subæquali ac satis dense sparsis, collo brevissimo ostioloque perexiguo, abbreviato, punctiformi, peridermium perforante instructis; ascis clavatis v. oblongis octosporis, $45 \approx 6-8$; sporidiis anguste fusiformibus, utrinque obtusiusculis, subcylindricis, hyalinis, rectis v. inæquilateralibus, bicellularibus, bi-quadriguttatis, medio septifero haud constrictis, $11-12 \approx 3$.

Hab. in ramis tenuioribus *Carpini Betuli* prope Cappenberg Germaniæ.

269. **D. Tetrastaga carpinicola** Fuck. Symb. myc. App. II, p. 37. 2021

— Stromate in cortice interiore effuso e corticis substantia immutata formato, absque linea nigra limitata; spermogoniis tuberculæformibus, sub corticis epidermide nidulantibus, sparsis, siccis, unilocularibus, nigris demum vertice perforatis et spermata ut massam candidam pulveraceam expellentibus; spermatis lato-fusiformibus, uniseptatis, 2-3guttulatis, rectis, hyalinis, $10-12 \approx 5$; peritheciis ascigeris in cortice interiore nidulantibus, numerosis, nigris, pro ratione minutis, procumbentibus, globosis, ostiolis 2-3, minutissimis, papillæformibus, in corticis rimis transversalibus minutis vix prominulis, atris; ascis oblongis, sessilibus, 8sporibus, $80 \approx 8-10$; sporidiis distichis, fusiformibus, subinæquilateralibus, utrinque acutis, primo 4guttulatis, demum uniseptatis, ad septum parum constrictis, $16 \approx 4-5$, hyalinis,

Hab. in ramulis siccis, adhuc stantibus Carpini Betuli prope Æstrich Germaniæ. — Cl. Rehm ad hanc speciem ducit dubitanter meam *D. decipientem* (quæ *D. nigroannulata* Kunze!); sed res iterum inquiri meretur.

270. **D. Tetrastaga castaneti** Nits. Pyr. Germ. p. 320, Sacc. Mich. 2622

I. p. 249. — Stromate plus minus late effuso, mox ramos ramulosque longe ambiente, mox contra multo brevior, areas minutas tantum occupante sed plerumque dense approximatas, cortici ac ligno omnino inculpato eorumque substantiam lineis atris marmorante, peridermio adhærente, peritheciolorum ostioliis cribrose perforato tecto; peritheciis parvulis, subglobosis v. depressis, mox ordine subæquali ordinatis, mox 2-5 in modum valseum dense stipatis, in cortice interiore nidulantibus, rarius altius infossis, tunc basi tantum v. omnino ligno infossis, in collum breve v. brevissimum attenuatis; ostioliis erumpentibus plus minus exsertis obtusiusculis; ascis fusoidis, aparaphysatis, 70-80 \approx 10, 8sporis; sporidiis, distichis, fusoidis, constrictis, tenuiter 1-septatis, 15-18 \approx 4-5, utrinque obtuse attenuatis, rectis v. curvulis, 4-guttulatis, hyalinis.

Hab. in ramulis emortuis Castaneæ vescæ in Germania et Italia boreali.

271. **D. Tetrastaga pithya** Sacc. Fungi Ven. Ser. IV. p. 7. — Stro- 2623

mate ramulos hinc inde breviter ambiente lineaque nigra tortuosa per corticem lignumque non mutatum excurrente limitato; peritheciis discretis in cortice immutato nidulantibus, sphaeroideis, $\frac{1}{4}$ - $\frac{1}{3}$ mill. diam., intus fuscidulis, ostiolo brevi epidermidem vix superante, crassiusculo, rotundato; ascis oblongo-fusoidis, 50-55 \approx 6-7 8sporis; sporidiis plerumque distichis, raro oblique monostichis, fusoidis, hyalinis, 10-12 \approx 3 $\frac{1}{2}$ -4, 4-guttulatis, non v. vix medio constrictis.

Hab. in ramulis putrescentibus Abietis excelsæ, Selva pr. Treviso Ital. bor. — Ramuli immutati manent, neque fungillus detegitur nisi ramus findatur. *Diaporthe oligocarpæ* et *D. minuta* affinis videtur.

272. **D. Tetrastaga quadrinucleata** (Curr.) Sacc. *Sphæria quadrinu-* 2624

cleata Curr. Linn. Trans. XXII, p. 325, t. 58, f. 90. — Peritheciis minutis, subglobosis; ostioliis mammillatis, peridermium perforantibus; sporidiis biseriatis, stipatis, anguste oblongis utrinque acutiusculis v. obtusiusculis, 4-nucleatis, hyalinis, 15 μ . long.

Hab. in ramis corticatis, Weybridge Britannicæ.

B) *Herbicolæ*.(Ad sect. *Euporthem nutant*).273. **D. Tetrastaga mazzantioides** Sacc. et Sp. Mich. I, p. 385. — 2625

Stromate cauli corticato plagulas minutas nigricantes hinc inde afficiente sed vix penetrante; peritheciis in quaque plagula paucis, subcutaneis, prominentibus, globosis $\frac{1}{3}$ mill. diam. papillatis; ascis fusoido-clavatis, basi acutioribus, 50-60 \approx 7-8, lumine apice 2-foveolato, aparaphysatis, octosporis; sporidiis distichis, fusoidis, utrinque obtusiusculis, 10-12 \approx 3-3 $\frac{1}{2}$, sæpius curvulis, 4-guttulatis, spurie 1-septatis, non v. vix constrictis, hyalinis.

Hab. in caule Galii sylvatici, Conegliano, Ital. bor. — Habitu *Mazzantiam Galii* (Guép.) Mont. æmulatur, sed pluribus notis diversa.

274. **D. Tetrastaga maculosa** Sacc. et Sp. Mich. I, p. 383. — 2626

Stromate hinc inde caules corticatos breviter ambiente, hisque plagulas minutas versiformes, nigras afficiente; peritheciis corticolis globoso-depressis, $\frac{1}{3}$ - $\frac{1}{4}$ mill. diam., linea nigra stromatica circumdatis; ostiolis breve rostellatis; ascis crasse fusoidis, 40-45 \approx 10-12, apice obtusiore, lumineque 2-foveolato, aparaphysatis, 8sporis; sporidiis 2-3-stichis, oblongo-fusoidis, rectis, 10-11 \approx 3-4, 4-guttulatis, spurie 1-septatis, non constrictis, hyalinis.

Hab. in caulibus emortuis Rumicis obtusifolii, Conegliano, Ital bor. — Stromate crebre et parvi-maculoso species facile dignoscenda.

275. **D. Tetrastaga Epilobii** Cooke F. brit. n. 686 et Plow. Sph. brit. 2627

n. 42 nec Fuck. quæ *Didymella tosta* (Cfr. Additamenta). — Stromate hinc inde plagulas atras subcrustaceas oblongas minutas in caule corticato efficiente; peritheciis plagulæ innatis paucis, lignoque adnatis v. semiinfossis, globoso-depressis, ostiolo minutissimo vix erumpente; ascis fusoidis, sessilibus, octosporis, aparaphysatis; sporidiis distichis fusoidis, utrinque obtusiusculis, 8-10 \approx 2,5-3. 4-guttatis, dein 1-septatis, hyalinis.

Hab. in caule Epilobiorum emortuo, Dinmore, Hereford Britannicæ.

276. **D. Tetrastaga striæformis** (Fr.) Nits. in Fuck. Symb. myc. p. 2628

206, *Sphæria striæformis* Fr. S. M. II, p. 428. *Dothidea striæformis* Fr. Summa Veg. Scand. p. 386. — Epidermide atrata tecta, innata, demum medio rumpens, lanceolata, brevis, acuta, peritheciis seriatis albofarcis astomis; ascis oblongis, 8sporis, 50 \approx

6; sporidiis distichis, oblongis, 1-septatis, 4-guttulatis, 12 \approx 3, hyalinis.

Hab. in caulibus *Epilobii angustifolii* (et *Dipsaci?*) in Germania, Suecia, Lusitania. — *Leptostroma* refert, sed adsunt perithecia cellulæformia, serie simplici v. duplici disposita. Striæ confertæ, lanceolatæ $\frac{1}{2}$ -2 lin. longæ, utrinque acutæ, parallelæ, atræ, opacæ, epidermide oblectæ, sed rima longitudinali rumpentes, sæpius in macula dealbata. *S. striciformis* Auct. species plures complectitur. Persoon (Syn. pag. 32) suam ad caules *Pastinacæ?* legit, forsan nostram, sed nuperius ad *Xylomata* retulit (Ic. pict. t. 17, f. 3, a).

277. **D. Tetrastaga Racemula** (C. et P.) Sacc., *Sphæria* (caulicolæ) 2629

Racemula C. et P. 29 Rep. on the St. Mus. — Peritheciis cæspitosis, rugosis, minutis, depressis, nigris, denique collabentibus; ostiolis elongatis epidermidem perforantibus, ascis clavatis, sessilibus; sporidiis anguste lanceolatis, hyalinis, 4-nucleatis, 14 μ . long.

Hab. in caulibus *Epilobii angustifolii*, Adirondak Amer. bor. — Perithecia cuticulæ secedenti adhærent. An potius *Gnomoniella?*

278. **D. Tetrastaga oblita** Sacc. et Speg. Mich. I, p. 386. — Stro- 2630

mate ramos corticatos varie ambiente et nonnumquam infuscante, linea stromatica infra vix limitato; peritheciis corticulis, basi vero ligno infossis, globulosis, $\frac{1}{4}$ mill. diam., ostiolis breve rostellatis, parum excedentibus; ascis fusoidis deorsum acutioribus, 45-50 \approx 8, aparaphysatis, octosporis; sporidiis fusoidis, utrinque obtusiusculis 12-14 \approx 4-5, rectis, 1-septatis, leniter constrictis, 4-guttulatis, hyalinis.

Hab. in ramis corticatis *Artemisiæ camphoratae*, Colofosco, Ital. bor., rarius.

279. **D. Tetrastaga Valerianæ** Fuck. Symb. myc. App. I, p. 319. — 2631

Stromatibus linearibus, 1-2 lin. long. $\frac{1}{2}$ lin. lat., intus nigro-limitatis, in caulium cortice nidulantibus, atris; peritheciis stromati immersis, sparsis, parum protuberantibus, depresso-globosis, nigris, ostiolo brevissimo, punctiformi, prominulo; ascis oblongis, 8sporis; sporidiis distichis, fusiformibus, subrectis, 1-(3?)-septatis, 4guttulatis, hyalinis, 12 \approx 3 $\frac{1}{2}$.

Hab. in caulibus emortuis *Valerianæ officinalis* prope Æstrich Germaniæ et prope Treviso Ital. bor.

280. **D. Tetrastaga Desmodii** (Peck) Sacc., *Sph. Desmodii* Peck 26 2632

Rep. p. 87. — Peritheciis sparsis vel seriatim digestis, minutis,

epidermide ostiolo acuto vel conico pertusa velatis, nigris; ascis clavatis; sporidiis distichis, fusoides, hyalinis, 4-nucleatis, 9-10 μ . longis.

Hab. in caule emortuo Desmodii, Garrisons Amer. bor.

281. **D. Tetrastaga desmodiana** C. et E. Grevill. VI, p. 93. — Gre- 2633
garia. tecta; peritheciis semi-immersis; ostiolis erumpentibus, obtusis, atris; ascis clavatis; sporidiis lanceolatis, quadrinucleatis, hyalinis, 18 μ . longis.

Hab. in caulibus Desmodii New Jersey Amer. bor.

282. **D. Tetrastaga sarmenticia** Sacc. Mich. I, p. 386. — Stromate 2634
caules late ambiente, at superficie vix manifesto, intra lignum vero zona nigra tortuosa excurrente circumscripto; peritheciis gregariis, globosis, $\frac{1}{3}$ mill. diam., in cortice nidulantibus vel basi ligno insculptis, ostiolis epidermidem nonnihil excedentibus; ascis oblongo-fusoides 45 \approx 7-8, utrinque obtusiusculis, aparaphysatis, octosporis; sporidiis inordinate distichis, oblongis, 10 \approx 4-5, constricto-1-septatis utrinque subacutis, 4-guttulatis, hyalinis, strato mucoso initio obvolutis.

Hab. in sarmentis emortuis Humuli Lupuli, Selva, prope Treviso Ital. bor.

283. **D. Tetrastaga Phaseolorum** B. et E. Grev. VI, p. 93, t. 100, 2635
f. 39. — Gregaria. tecta; peritheciis globosis, immersis, minimis; ostiolis spinæformibus, atris, erumpentibus; ascis clavatis; sporidiis lanceolatis, quadrinucleatis, 16 μ . longis.

Hab. in caulibus Phaseolorum, New Jersey Amer. bor. — Tenuior quam *D. euspina*.

284. **D. Tetrastaga Baccharidis** Cooke in Grev. VII, p. 53. — Sparsa, 2636
punctiformis, cuticula tecta, ostiolis brevibus, erumpentibus; ascis clavatis; sporidiis fusiformibus, quadrinucleatis 18 \approx 2-3.

Hab. in caule Baccharidis, Darien Georgia America bor. (RAVENEL).

285. **D. Tetrastaga austro-americana** Speg. Fungi Arg. I, p. 181. 2637
— Stromate late et continuo ramos ambiente, intime penetrante, linea nigra atque cortice infuscato limitato; peritheciis confertis, globosis, basi ligno insculptis, epidermide tectis, $\frac{1}{4}$ - $\frac{1}{5}$ mill. diam., extus cinerascens, ostiolo acuto, atro-carbonaceo, robusto conico, corticem perforante, atque exertiusculo ornatis; ascis fusoides, octosporis, 65 \approx 10, aparaphysatis; sporidiis distichis, medio 1-septatis, non constrictis, 4-magni-guttulatis, 14-15 \approx 6, hyalinis.

Hab. in caulibus dejectis Jussiaë longifoliæ, a la Recoleta Argent. Amer. meridionalis.

286. **D. Tetrastaga aggerum** Sacc. et Speg. Mich. I, p. 387. — Stromate ramulos corticatos hinc inde ambiente et superficie nigrificante; peritheciis gregariis globulosis, $\frac{1}{3}$ mill. diam., cortice nidulantibus, ostiolo breve papillato, epidermidem parum excedente; ascis fusoideis, utrinque obtusiusculis, 50-60 \approx 7, aparaphysatis, octosporis; sporidiis distichis fusoideis, sæpe curvulis, medio constricto-septatis, 14-16 \approx 3-4, 4-guttulatis hyalinis. 2638

Hab. in caulibus Loti corniculati, Conegliano, Ital. bor.

287. **D. Tetrastaga pardalota** (Mont.) Fuck. Symb. myc. p. 206, *Sph. pardalota* Mont. Syll. Crypt. n. 839 et Notice etc., in Ann., 2, I, p. 304, t. 12, f. 1. — Maculæformis, epidermide cinerascente tecta, lineola flexuosa limitata; peritheciis sparsis hemisphærico-compressulis nigris intus cinereis astomis, stromate concolori immersis, tandem rimose erumpentibus; ascis fusoideo-clavatis 60-65 \approx 7-9, octosporis; sporidiis subdistichis fusoideis, acutis, 12-14 \approx 2-3, 4-guttulatis, dein 1-septatis non vel vix constrictis, hyalinis. 2639

Hab. in caulibus emortuis Convallariæ multifloræ in Gallia, Britannia et Germania.

288. **D. Tetrastaga Asparagi** Fuck. Symb. myc. p. 206. — Peritheciis in stromatibus elongatis, majusculis, nigris immersis, ostioliis prominulis; ascis elongatis, 88 μ . longis, 8sporibus; sporidiis subdistichis, elongatis, curvatis, 1-(3?)-septatis, loculo superiori crassiori, acuminato, 24 \approx 6, hyalinis. — Peritheciis spermogonicis in stromate tenuissimo, elongato, determinato sparsis, globosis, in ostiolum conicum attenuatis; cirrhis albis; spermatibus ovatis, biguttulatis, hyalinis. 2640

Hab. in caulibus siccis Asparagi officinalis prope Hattenheim Germaniæ. — Cl. Fuckel adscribit sporidia 4-septata, an ex errore?

289. **D. Tetrastaga exercitalis** (Peck) Sacc., *Sphæria* (caulicolæ) *exercitalis* Peck 40 Rep. on the St. Mus. New York. — Peritheciis minutis, confertis, in lineas longas digestis, initio epidermide velatis dein ea rimose fissa cinctis; ostioliis prominulis, subcylindricis; sporidiis oblongis vel subfusoideis, 1-nucleatis, 12-14 μ . longis, hyalinis. 2641

Hab. in caulibus herbarum in montibus Catskill Amer. bor. — Series militum armatorum in mentem revocat.

290. **D. Tetrastaga vacillans** (De Not.) Sacc., *Sphaeria vacillans* De Not. Sfer. ital. p. 66. t. 68. — In series longissimas secus caulium strias ut plurimum ordinata; peritheciis plerumque discretis vel hic illic rarius conjugatis et invicem concretescentibus exiguis, punctiformibus, hemisphærico-rotundatis, parte inferiore tota insculptis, vertice cum ostiolo abbreviato, crassiusculo, mammillari emergentibus, saturate fuscis, superficie opacis, rugatis, pachypleuris, fragilibus, cellulis ægre conspicuis, grumosis, fuscis, contextis; nucleo madore albidulo, gelatiniformi haud diffluente; ascis numerosissimis, teretibus, obtusis, $82 \approx 8$, octosporis, paraphysibus vix ullis; sporidiis fusoideis, elongatis, hyalinis 4-nucleolatis, subtorulosis, subinde sublunulatis, $24-25 \approx 5$.

Hab. in caulibus herbarum, prope Lago Maggiore Ital. bor.

Dubia.

291. **D. Euporthe? Kœlreuteriæ** (Dur.) Sacc. Mich. II, pag. 60. *Sph.* *Kœlreuteriæ* Dur. in Roum. F. Gall. n. 287.

Hab. in ramis *Kœlreuteriæ* paniculatæ Bordeaux Galliæ. — Specimina visa non prorsus matura. Adest simul: *Phoma Kœlreuteriæ* Sacc. peritheciis punctiformibus, subtectis; spermatiiis oblongo-cylindræis, $4 \approx 1-2$, basidiis duplo longioribus suffultis. Quæ verisimiliter spermogonium sistit.

REPERTORIUM

SPHÆRIACEARUM HYALODIDYMARUM

SECUNDUM MATRICES

Obs. A. indicat *Apiospora*. — B. *Bertia*. — D. *Diaporthe*. — Di. *Didymella*. — E. *Epicymatia*. — En. *Endothia*. — Er. *Eriosphaeria*. — G. *Gnomonia*. — Gi. *Gibbera*. — H. *Hercospora*. — L. *Lizonia*. — Le. *Lentomita*. — M. *Melanopsamma*. — Le. *Melanconis*. — My. *Myrmecium*. — S. *Sphaerella*. — St. *Stigmatea*. — V. *Venturia*.

Numeri 1819-1999 citantur 819-999; numeri vero 2001-2643 citantur 1-643.

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|--|---|
| Abies — S. 837. — Di. 136. — D. 400.
493. 623. | Alopecurus — S. 58. |
| Acacia — S. 917. | Amelanchier — D. 404. |
| Acanthus — D. 496. | Ammophila — S. 59. |
| Acer — S. 847. 848. 82. — Di. 131.
— G. 204. 205. 206. 224. — M. 269.
— Le. 286. — D. 359. 361. 362. 363.
365. 366. 367. 368. 416. 417. 460.
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| Achillea — D. 504. | Andromeda — S. 928. — St. 111. —
Di. 148. — Er. 330. |
| Adonis — S. 934. | Andropogon — A. 99. |
| Ægopodium — St. 125. | Angelica — S. 9. — St. 124. — Di. 163.
D. 494. 499. |
| Æsculus — S. 819. 820. — G. 206. —
En. 342. — D. 369. 618. 619. | Anthyllis — S. 944. |
| Agapanthus — S. 30. | Aralia — S. 916. |
| Agrostis — S. 41. 45. 47. | Arctostaphylos — S. 892. 8. — V. 327. |
| Ailanthus — S. 828. — D. 408. 553.
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| Aira — S. 39. | Armoracia — S. 89. |
| Albizzia — D. 552. | Arnica — S. 965. |
| Alchemilla — V. 314. | Aronicum — S. 92. |
| Allium — S. 22. 23. | Artemisia — S. 961. 90. — D. 503.
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— En. 342. — Me. 348. 349. 350.
— D. 360. 442. 588. | Arundinaria — A. 98. — St. 113. —
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| | Arundo — A. 98. 102. |
| | Aspidium — S. 65. 97. |
| | Asparagus — D. 640. |
| | Asphodelus — D. 539. |
| | Asplenium — S. 65. 67. 97. |
| | Aster — D. 504. |

- Astragalus — S. 986. 991. — Di. 174.
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 Aucuba — D. 446.
 Avena — V. 318.

 Baccharis — D. 636.
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 Bambusa — A. 98. 99. 103. — M. 261.
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 Calamagrostis — S. 58. 95. — A. 100.
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 Cannabis — S. 18.
 Capparis — D. 476.
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 Cercis — S. 913.
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 Cichorium — S. 993. — D. 504.
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 Coffea — S. 923. — M. 252.
 Comarum — S. 957.
 Convallaria — S. 26. 27. — D. 639.
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 Cucurbita — Di. 154.
 Cupressus — St. 110. — M. 267. — D. 493.
 Cydonia — S. 844. — D. 135.
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 Prinos — D. 455.
 Prunella — D. 525.
 Prunus — S. 844. 845. 899. — G. 214.
 V. 288. — D. 402. 403. 481. 488.
 566. 567. 568. 570.
 Psammisia — S. 884.
 Psoroma — E. 241.
 Pteris — S. 61. 62. 63. 64. 97. — Di.
 193. 194. 195. — D. 541.
 Pulsatilla — S. 930
 Punica — Di. 135.
 Pyrus — S. 842. 843. 844. 845. 846. —
 Di. 135. — V. 288. — Er. 336. —
 D. 564. 565.
 Quercus — S. 819. 821. 820. 823. 824.
 825. 826. 827. 829. 924. — G. 204.
 212. 213. 221. — M. 248. 259. 266.
 268. — B. 272. 278. — Le. 285. —
 V. 288. 297. — En. 342. — D. 383.
 384. 385. 386. 387. 426. 427. 456.
 457. 571. 572. 573.
 Ranunculus — St. 109.
 Rhamnus — D. 397. 398. 425. 463.
 Rhododendron — S. 822. — G. 200.
 Rhus — D. 381. 382. 597.
 Rhyncosia — St. 116.
 Ribes — S. 863. 864. 865. — G. 229.
 — V. 298. — D. 376. 606. 607.
 Robinia — S. 882. 883. — M. 254. —
 D. 370. 371. 372. 467.
 Rosa — St. 119. — Di. 150. — D. 484.
 563.
 Rosmarinus — M. 256.
 Rottlera — S. 79.
 Rubia — S. 10. 11.
 Rubus — S. 853. 854. 855. — St. 119.
 Di. 128. 129. 130. — G. 198. 225.
 M. 249. 257. 270. — V. 291. — D.
 428. 429. 487. 557. 558. 559. 560.
 561.
 Rumex — S. 980. 982. — Di. 194. —
 Di. 516. 626.
 Salicornia — S. 2. 3.
 Salvia — D. 525.
 Salix — S. 866. 867. 868, 869, 870.
 74. — Di. 137. 138. — G. 226. —
 M. 248. — B. 272. — V. 288. 290.
 293. — Er. 329. — Me. 348, — D.
 413. 432. 433. 434. 437. 468. 612.
 613.
 Sambucus — Di. 154. — B. 275. — D.
 450. 593.
 Saponaria — S. 971. — D. 536.
 Sarothamnus — D. 545. 546.
 Sarracenia — S. 941.
 Saussurea — S. 997.
 Scabiosa — S. 940.
 Scirpus — S. 53. 54. — Di. 188.
 Scleranthus — S. 2000.
 Scrophularia — Di. 173. — D. 526.
 Secale — S. 46.
 Sedum — D. 520.
 Senecio — S. 962. 968. 91. — Di. 169.
 — D. 504.
 Sequoja — St. 110.
 Sesleria — G. 203.
 Smilax — S. 28.
 Solanum — Di. 166. — D. 526. 532.
 533.
 Solidago — D. 508. — S. 996.
 Solorina — B. 276.
 Sophora — D. 550.
 Sorbus — S. 835, 898, 86. — Di. 135.
 B. 272. — V. 288. — Me. 346. —
 D. 392. 569.
 Sorghum — S. 38. 39. — Di. 182.
 Spiraea — S. 952. 953. — D. 482, 483.
 562.
 Staphylea — Di. 139. — D. 388.

- Stellaria — S. 972. 974.
 Stenactis — Di. 156.
 Sutherlandia — St, 115.
 Symphoricarpos — D. 596.
 Symplocos — S. 877.
 Syringa — D. 465. 580. 581. 582.

 Tagetes — D. 509.
 Tamus — D. 540.
 Tanacetum — D. 512.
 Taraxacum — S. 969.
 Taxus — S. 836-
 Thamnolia — E. 237.
 Tilia — S. 820. 860. 862. — G. 222.
 — Le. 281. — H. 352. — D. 396.
 600.
 Tofieldia — S. 58.
 Torilis — S. 7. — D. 494.
 Tormentilla — S. 949.
 Trifolium — S. 990. — Di. 164. G. 227.
 Triticum — S. 48. 58. — Di. 182.
 Tussilago — S. 963. 964.
 Typha — S. 58. 60. — Di. 183.

 Ulex — D. 393, 544, 546.
 Ulmus — S. 885. 75. — G. 230. M. 248.

- En. 342. — D. 430. 431. 442. 443.
 444. 587.
 Umbelliferae — S. 7. 19. — Di. 162.
 166. — G. 228.
 Urtica — Di. 161. 166. — D. 526.

 Vaccinium — S. 820. 901. 902. 903. 76.
 — St. 120. — V. 301. 302. 303. —
 Gi. 338. — D. 412.
 Valeriana — S. 15. — D. 631.
 Verbascum — D. 525.
 Verbena — Di. 156. 157.
 Verbesina — D. 504.
 Viburnum — S. 831. 832. 833. 834. —
 D. 592.
 Vicia — 986.
 Vinca — S. 909. — D. 523.
 Vitis — S. 925. 73. — B. 277. — Le.
 284. — V. 207. — Er. 337. — D.
 454.
 Wisteria — S. 978. — D. 549.

 Yucca — D. 538.
 Zea — S. 33. 34. 35

Sect. 5. *Phæodidymæ* Sacc.

(Didymosporæ Sacc. Consp. gener. Pyr. p. 9, ex parte).

Sporidia ovoidea v. oblonga v. fusoidea, 1-septata, fuliginea v. intense olivacea.

Clavis analytica generum.

A) Simplices.

a) Tectæ.

Didymosphæria. Perithecia minuta, membranacea. Sporidia strato hyalino carentia.*Massariella*. Perithecia majuscula, subcoriacea. Sporidia strato hyalino obvoluta.

b) Superficiales v. basi insculptæ.

1. Perithecia erostrata.

Parodiella. Perithecia phyllogena, adnato-superficialia, subcoriacea.*Amphisphæria*. Perithecia xylogena v. corticola, basi insculpta, emergentia, carbonacea.*Delitschia*. Perithecia coprogena, innato-emergentia, submembranacea.

2. Perithecia rostrata.

Rhynchostoma. Perithecia innato-emergentia, carbonacea.

B) Cæspitosæ.

Othia. Perithecia cæspitosa, erumpenti-superficialia carbonacea, vix papillata.

C) Compositæ, stromaticæ.

Melanconiella. Stroma subcoriaceum cortice immersum, valseum, conidiis *Melanconiorum* comitantibus. Asci aparaphysati.*Valsaria*. Stroma subcoriaceum, erumpens v. immersum, valseum, diatrypeum v. eutypeum, atrum, *Melanconio* nullo. Perithecia globulosa. Asci aparaphysati.*Camarops*. Stroma crustaceum, hypoxyleum, emergens; *Melanconio* nullo. Perithecia subtubulosa. Ostiola prominula hemisphærica, per-tusa. Asci aparaphysati.

DIDYMOSPHERIA Fuck. Symb. myc. pag. 140 emend. (Etym. *didymos* h. e. Sphæria *didymospora*). — Perithecia epidermide nunc immutatâ nunc nigrificatâ velata, submembranacea, minute papillata. Asci paraphysati, 4-8-spori. Sporidia ovoideo-oblonga, 1-septata, fuliginea. — Spermogonia et pycnidia in plerisque nota. — Cum hoc genere p. p. convenit *Microthelia* Körb., lichenibus adscripta,

quæ a ceteris *Didymosphæriis* distingueretur, teste Niesslio, ob clypeum nigricantem circa ostiolum et cum *Massariopside* Niessl conflueret; quæ postrema vero, observante Rehmio, apice ascorum jodo coerulescente insuper dignoscitur. Cl. Niessl distinguit quoque gen. *Phorcys*, tunica ascorum perforata. Sed notæ hæ cum in pluribus speciebus nondum plene observatæ sint, genus collectivum pro interim adhibere coactus fui.

I. *Eudidymosphæria*: peritheciis epidermide non nigrificata tectis (v. saltem maculis nigricantibus non indicatis).

1. **Didymosphæria conoidea** Niessl Neue Kernp. p. 202, Sacc. F. it. 2644 t. 208. — Peritheciis sparsis, tectis, tandem liberis, majusculis, conoideis, basi applanatis, vertice interdum paulo depressis, ostiolo papillæformi vel subconico, atris, nitidis, coriaceis, duriusculis; ascis cylindræcis, stipite brevi, 8-sporis, 60-79 \approx 5-7; sporidiis monostichis, obovatis medio septatis pauloque constrictis, pallide olivaceis, 6-9 \approx 5; paraphysibus angustis, simplicibus.

Hab. in caulibus siccis *Salviæ*, *Origani*, *Urticæ*, *Solidaginis*, *Lythri* in Italia, Germania, Gallia, sæpe socia *Leptosphaeria Doliolo*, a qua extus non distinguenda.

2. **Didymosphæria Schröteri** Niessl Neue Kernpilze 199. — Peritheciis sparsis gregariis, peridermio immutato tectis, minutis, hemisphæricis, ostiolo conoideo, prominulo, coriaceis sed tenellis, basi fibrillosis, atris; ascis cylindræco-clavatis; stipite brevi, octosporis 50-60 \approx 8-9; sporidiis monostichis, ovoideo-vel oblongo-lanceotis medio septatis, valdeque constrictis, rectis curvatisve, dilute olivaceis 10-14 \approx 4-5; paraphysibus ascos superantibus, subramulosis.

Hab. in caulibus siccis *Enotheræ biennis* pr. Rastatt Germaniæ (Doct. SCHRÖTER).

3. **Didymosphæria Winteri** Niessl Neue Kernp. p. 165. — Peritheciis nunc sparsis, nunc laxè gregaris, minutis, hemisphæricis, tandè m depressis, peridermio haud decolorato tectis, ostiolo papillæformi perforantibus, coriaceo-membranaceis atris; ascis clavatis stipitatis 8-sporis 60-80 \approx 10-12; sporidiis distichis, rarissime monostichis, lanceolatis vel lanceolato-oblongis, obtusiusculis, medio vel supra medium septatis valdeque constrictis, rectis vel leniter curvatis, luteo virescentibus seu olivaceis 11-14 \approx 4 $\frac{1}{2}$ -5; paraphysibus numerosis, angustis, ascos longe superantibus, simplicibus vel sparse ramosis.

Hab. in caulibus emortuis Solani Dulcamaræ, Lysimachiae vulgaris et Spirææ Arunci in Moravia et Styria.

4. **Didymosphæria Parnassiæ** (Peck) Sacc. *Sphæria Parnassiæ* Peck 2647
27 Rep. on the St. Mus. New York. — Peritheciis sparsis, convexis v. subhemisphæricis, prominulis, perforatis, nigris; ascis cylindræis; sporidiis oblongis, angustis, uniseptatis, subconstrictis, subinde curvulis, 37–40 μ . long. 2–4-nucleatis, coloratis.

Hab. in caulibus emortuis Parnassiæ carolinianæ, Albany in America boreali.

5. **Didymosphæria zerbina** (De Not.) Sacc. *Amphisphæria zerbina* 2648
De Not. Sf. ital. p. 70, t. 73. — Peritheciis sparsis, basi applanata insculptis initio epidermide velatis, dein liberis, hemisphæricis, papillatis, dein papilla amissa pertusis; ascis crasse clavatis, filiformi-paraphysatis, octosporis 80–90 \simeq 16–17; sporidiis oblongis, bilocularibus, septo constrictis, badio-fuligineis, utrinque appendicula seu locello diaphano rotundato auctis, 20–22 \simeq 9–10.

Hab. in caulibus exsiccatis herbarum pr. Genova Italiæ bor. — Ad suum *Byssothecium circinans* ducit hanc speciem cl. Fockel, quod mihi absonum videtur.

6. **Didymosphæria diplodioides** (Crouan) Sacc. *Sphæria diplodioides* 2649
Crouan Finist. p. 26. — Peritheciis sphæricis, nigris, sparsis, 1 mill. diam., ostiolo obsoleto; ascis cylindræis octosporis; sporidiis ovoideis, fuligineis, uniseptatis; paraphysibus filiformibus ascos subæquantibus.

Hab. in caule emortuo Eupatorii, Finistère Galliæ.

7. **Didymosphæria maritima** (Crouan) Sacc. *Sph. maritima* Crouan 2650
Finist. p. 27. — Peritheciis subsphæricis, nigris, 1 mill. diam., ostiolo obsoleto; ascis cylindricis, octosporis; sporidiis ovoideis, fuligineis, 1-septatis, bi-nucleatis; paraphysibus filiformibus.

Hab. in caulibus emortuis Obionis, Finistère Galliæ.

8. **Didymosphæria Vizeana** (Cooke) Sacc. *Sphæria Vizeana* Cooke 2651
Calif. Fungi in Grevill. VII, p. 12. — Caulicola, sparsa; peritheciis atris, prominulis; ascis clavatis; sporidiis biseriatis, subellipticis, uniseptatis, hyalino-luteolis, 30 \simeq 10, loculo superiore latiore.

Hab. in caulibus Lathyri venosi in California Amer. bor.

9. **Didymosphæria adelphica** (Cooke) Sacc. *Sphæria* (caulicolæ) *adelphica* Cooke Grev. VII, pag. 42. — Peritheciis.....; sporidiis uniseptatis, fuligineis, 16 \simeq 6,5. 2652

Hab. in caulibus Phytolaccæ, New Jersey in America boreali et in Britannia.

10. **Didymosphæria Oxycedri** H. Fab. Sphær. Vaucl. p. 84, t. II, fig. 2653
 14. — Peritheciis sparsis, cortici exarido semi-immersis, globosis conoideis, atris poro pertusis, $\frac{1}{2}$ – $\frac{2}{3}$ mill. diam.; ascis late clavatis, sessilibus, 8-sporis, 150–175 \approx 30–40; sporidiis nunc inordinatis, nunc subdistichis, ovalibus, didymis, medio constrictis vel non, fuscis, luculis 1–magniguttatis, 30–35 \approx 12–15.
Hab. ad corticem ramorum exaridorum Juniperi Oxycedri, Vaucluse Galliæ.
11. **Didymosphæria bacchans** Pass. in Thüm. Pilze d. Weinst. p. 134, 2654 t. IV, f. 8. — Peritheciis cortice exteriori immersis, minutis, seriatis, subglobosis, ostiolo brevi, conico, atro, erumpentibus; ascis oblongo-clavatis, basi attenuatis, quadri-vel octosporis; sporidiis obliquis, uniserialibus, elliptico-navicularibus, uniseptatis, fuscis; perithecia majora stylosporea adsunt.
Hab. in sarmentis aridis Vitæ viniferæ, Parma Italiæ superioris (PASSERINI).
12. **Didymosphæria Rhamni** H. Fab. Sphær. Vaucl. pag. 83, fig. 13. 2655
 — Peritheciis solitariis, sparsis, globosis, atris, sub epidermide in pustulam inflatâ nidulantibus, vertice poro perforato per epidermidem stellatim fissam erumpente, 0,5 mill. diam.; ascis nunc longissimis, cylindraceis, stipitatis, 20 \approx 15, et tunc sporidiis monostichis, nunc sed rarius clavatis, 100 \approx 20, et tunc sporidiis subdistichis; parte non sporifera, 25 μ . long.; sporidiis oblongo-ovatis, didymis, medio constrictulis, obscure fuliginis, 23–30 \approx 9–12.
Hab. ad ramos exaridos Rhamni infectorii, Vaucluse Galliæ.
13. **Didymosphæria Sellæ** (Bagnis) Sacc. *Amphisphæria Sellæ* Bagnis Micol. Rom. Cent. I, p. 17, t. I, fig. 6. — Peritheciis gregariis, epiphyllis, epidermide tectis, demum perforantibus, atris, pyriformibus, ascis cylindraceis, rectis apice subacutis, hyalinis 120 \approx 10; sporidiis ovatis utrinque acuminatis bicellularibus ad septum constrictis, binucleatis, uniseriatis, 15 \approx 4–5, fuliginis; paraphysibus elongatis tenuibus, hyalino-lutescentibus apice clavato-capitatis.
Hab. in foliis aridis Ilicis paraguayensis, Roma in Horto botanico.
14. **Didymosphæria Empetri** (Fr.) Sacc. *Sphæria Empetri* Fr. S. M. 2657 II, 552. Grevill. V, p. 63. — Gregaria v. sparsa, innata, nigra, initio levis et nitida, dein depressa et rugosa, ostiolo papillato; ascis cylindraceis, 50 μ . long.; sporidiis tereti-oblongis, uniseptatis, pallide brunneis, 17 μ . longis.

Hab. in foliis *Empetri nigri* in Britannia. — *Sphæria Empetri* Fuck. videtur *Leptosphæria*.

15. **Didymosphæria trivialis** (B. et Br.) Sacc. *Sphæria trivialis* B. 2658
et Br. Ann. N. H. n. 632, t. 10, f. 16. — Sparsa tecta; peritheciis depressis, minutis; ostioliis obsoletis; ascis crassis, clavatis, obtusis octosporis; sporidiis ellipticis, uniseptatis.

Hab. in ramis emortuis, Batheaston Britannia. — Cuticula supra perithecia fuscescit, sed re vera quia perithecia translucet.

16. **Didymosphæria Vitis** H. Fab. Sphér. Vaucl. p. 83. — Peritheciis 2659
confertis, initio epidermide tectis, dein semi-liberis, globosis, atris, in seriebus longitudinalibus inter corticis fibras nidulantibus, ostiolo inconspicuo, $\frac{1}{5}$ mill. diam.; ascis cylindraceutis, stipitatis, 8-sporis, $125 \approx 16$; sporidiis monostichis, ovatis, atro-brunneis, didymis, ad septum non constrictis, $16-20 \approx 10-12$.

Hab. ad ramos emortuos *Vitis viniferæ*, Vaucluse Gallia.

17. **Didymosphæria? Cerasorum** (Fr.) Sacc. *Sphæria* (obtectæ) *Ce-* 2660
rasorum Fr. in Curr. Simpl. Sphær. p. 323, n. 300, fig. 80. — Peritheciis obtectis, simplicibus.....; ascis anguste elongatis; sporidiis distichis oblongo-fusoideis, curvulis, constricto-1-septatis, obscure fuscis, utrinque obtusiusculis, $22-23 \mu$. longis.

Hab. in ramis *Cerasorum*..... ubi?

18. **Didymosphæria incarcerationata** (Desm.) Sacc. *Sphæria* (subtecta) *in-* 2661
carcerata Desm. 13. Not. 1846, p. 73. — Peritheciis sparsis subapproximatis, minutis, $\frac{1}{4}$ mill. diam., nigris, epidermide tectis, globosis, astomis, intus albis, demum depressis; ascis amplis, subcylindricis 125μ . longis; sporidiis 8, uniserialibus ellipsoideis 20μ . longis, olivaceis, uniseptatis.

Hab. in ramis *Spartii juncei* exsiccatis in Gallia.

19. **Didymosphæria Genistæ** Fuck. Symb. myc. p. 141. — Peritheciis 2662
sparsis, punctiformibus, primo tectis, demum subliberis, deplanatis, ostiolo cylindraceuto, minuto, papillato, atro; ascis oblongis, substipitatis, sporidia 8, disticha, oblonga, didyma, fusca includentibus.

Hab. in ramulis subviviis *Genistæ pilosæ* pr. Æstrich Rhe-nogoviæ.

20. **Didymosphæria celata** (Curr.) Sacc. *Sphæria celata* Curr. in 2663
Berk. Outl. p. 398, *Sphæria oblecta* Curr. Micr. Journ. VII, p. 233, t. XI, fig. 16, B. et Br. Ann. N. H. n. 979, t. 17, f. 32. — Peritheciis globosis, epidermide tectis, solitariis v. subaggregatis; ostiolo brevi, depressiusculo hiantibus; ascis clavatis; sporidiis

biseriatis, atro-fuliginis, oblongis, v. biconicis, constricto-1-septatis, 30-35 μ . longis.

Hab. in ramis Ulmi in Britannia.

21. **Didymosphæria dochmia** (B. et Br.) Sacc. *Sphæria dochmia* B. 2664

et Br. Ann. N. H. n. 630. t. 10, f. 13, Cooke Handb. n. 2672. — Sparsa, tecta; peritheciis solitariis, ovoideis, obliquis, denique collabentibus, ostioliis brevissimis constrictis, vertice obtusis pertusis; ascis clavato-cylindraceis, obtusis; sporidiis distichis oblongis, leniter curvis, denique uniseptatis, hyalinis (?) dein coloratis (teste Cooke l. c.).

Hab. in ramis emortuis Ulmi, Batheaston Britannia. — Perithecia peridermium pustulatum leniter sublevant; — An *Didymella*?

22. **Didymosphæria permutata** Sacc. *Didymosphæria diplospora* Sacc. 2 35

Mich. IV. p. 374, F. it. t. 372, nec Cooke, nec Fuck, teste Rehm. — Peritheciis gregariis innato-erumpentibus, globulosis, exquisite papillatis, minutis, nigris; ascis cylindraceis apice rotundatis, 100-110 \approx 10-11, breviter stipitatis, octosporis; sporidiis oblique monostichis ovato-biconicis, utrinque acutiusculis, 1-septatis, non constrictis, 15-20 \approx 8-10, olivaceo-fuliginis.

Hab. in sarmentis emortuis Rubi fruticosi in sylva Montello, Ital. bor. — A *D. diplospora* differt sporidiis ovato-biconicis utrinque acutiusculis.

23. **Didymosphæria gregaria** Speg. Fungi Arg. Pug. IV, n. 159. — 2666

Peritheciis lenticulari-subglobosis, parvulis, 150-180 μ . diam., atris, carbonaceo-submembranaceis, epidermide velatis, dense gregariis, glaberrimis, ostiolo minuto non v. vix papillulato, non exerto ornatis; ascis cylindraceo-clavatis, sursum rotundatis, crasseque tunicatis, deorsum attenuato-stipitatis, 70 \approx 10, octosporis, paraphysibus filiformibus obvallatis; sporidiis oblique monostichis, utrinque obtusiuscule rotundatis, medio septato-constrictis, 14-15 \approx 5-5.5, primo hyalinis, 4-guttulatis, dein eguttulatis, diluteque fuliginis.

Hab. in sarmentis putridis Rubi discoloris in dumetis prope el Bañado de San José de Flores Argent. Amer. merid. — Species cum *D. epidermidis* et *D. diplospora* non comparanda.

24. **Didymosphæria Rubi fruticosi** (Crouan) Sacc., *Sphæria Rubi fru-* 2667

fruticosi Crouan Finist. p. 28. — Peritheciis conicis, nigris, 1 mill. diam., ostiolo papillato; ascis subcylindricis, octosporis; sporidiis distichis subfusoidis, 1-septatis, granulosis, olivaceo-lutescentibus, appendiculatis.

Hab. in sarmentis putridis Rubi fruticosi, Finistère Galliæ.

25. **Didymosphæria Betulæ** (Niessl) Sacc., *Phorcys Betulæ* Niessl Not. 2668

Pyr. p. 41. — Peritheciis sparsis, innatis, peridermio turgido tectis, amplis, $\frac{3}{4}$ mill. diam., ellipsoideis, carbonaceis, atris, ostiolo minuto parum erumpente; ascis valde elongatis, tubulosis, membrana interna apice incrassata perforataque, stipite brevi 200–250 \approx 20; sporidiis 8 oblique monostichis, oblongis vel cylindræo-oblongis medio septatis constrictisque, rectis, utrinque obtuse rotundatis, atro-fuscis, subopacis 23–26 \approx 8–9; paraphysibus crassis, guttulatis, simplicibus.

Hab. in ramis emortuis Betulæ albæ, Rastatt Germaniæ (SCHRÖTER). — Sec. Niessl l. c. genus *Phorcys* distinguitur: ascorum membrana interna apice incrassata perforataque; paraphysibus distinctis; sporidiis didymis, (hucusque) fuscis v. nigricantibus.

26. **Didymosphæria anaxæa** Sacc. Fungi Ven. Ser. II, p. 325, Fungi 2669

ital. t. 134. — Peritheciis remote gregariis, primo epidermide velatis, dein semierumpentibus, globoso-lenticularibus, 120 μ . diam., atris, ostiolo vix papillato anguste pertuso; contextu parenchymatico laxiusculo, fuligineo; ascis clavatis, apice rotundatis, longiuscule attenuato-stipitatis, quandoque ima basi nodulosis, 100 \approx 10, paraphysibus filiformibus obvallatis, 8-sporis; sporidiis oblique monostichis v. distichis, oblongo-clavatis, curvulis, 25–27 \approx 6, bicellularibus. loculo supero brevior crassior rotundato, infero subpyramidato acutiusculo, ad septum leniter constrictis, minute pluriguttulatis, olivaceo-fuliginis (initio simplicibus, clavulatis, 4-guttulatis hyalinis).

Hab. in calamis Scirpi Holoschœni in alveo fluminis Piave (Anaxum), Covolo pr. Treviso, Ital. bor. — Ob formam peculiarem sporidiorum facile dignoscitur.

27. **Didymosphæria polysticta** (B. et C.) Sacc., *Sphæria polysticta* 2670

B. et C. North Amer. Fungi n. 945. — Ostiolo excepto, epidermide tecta; ascis linearibus; sporidiis oblongis uniseptatis, fuscis, 7,5 \approx 3–3,5.

Hab. in caule Smilacis in Amer bor. (BEAUMONT). — Perithecia vix epidermidem sublevant, nec nisi ostiola nigra punctiformia conspiciuntur.

28. **Didymosphæria smaragdina** (Ces.) Sacc., *Sphæria smaragdina* 2671

Ces. in Rabh. F. E. 2659. — Peritheciis depresso globosis, epidermide tectis, demum vertice perforato erumpentibus, contextu celluloso; ascis grosse cylindræis, interdum leviter arcuatis, pa-

raphysibus filiformibus ramosis intermixtis, 60 \approx 14; sporidiis 1-serialibus, octonis, pulchre viridibus, oblongis, 1-septatis ad septum constrictis, quovis loculo in contiguitate septi 1-ocellato, 14 \approx 4.

Hab. in foliis corruptis Phœnicis dactyliferæ in Horto Neapolitano (CESATI). — Esset eadem ac *Didymosphæria Nubecula* Pass., observante cl. Wintero; sed in hac sporidia multo breviora (nempe 9 μ . long.) describuntur.

29. **Didymosphæria trachodes** (Mont.) Sacc., *Sphæria trachodes* Mont. 2672

Syll. Crypt. n. 832 et Cent. II, n. 58, Ann., 2, XVI, p. 386. — Subtecta; peritheciis confertis confluentibusque hemisphæricis atris, opacis, intus albo-cinereis, ostiolo papillæformi acuto; sporidiis ex ovoideo oblongis, brunneis, specie bilocularibus, opacis, 20-30 \approx 15.

Hab. ad folia Monocotyledonearum in sylvis, secus amnem Gabaret Guyanæ (LEPRIEUR).

30. **Didymosphæria yuccogena** (Cooke) Sacc., *Sphæria yuccogena* 2673

Cooke Calif. Fungi in Grev. VII, p. 12. — Gregaria, tecta; peritheciis prominulis, atris; ascis cylindræcis; sporidiis uniseriatis, ellipticis, uniseptatis, constrictis, brunneis, 28 \approx 10.

Hab. in caulibus Yuccæ in California Amer. bor.

31. **Didymosphæria palustris** (B. et Br.) Sacc., *Sphæria palustris* B. 2674

et Br. Ann. N. II, n. 654, t. 12, fig. 39. — Peritheciis sparsis, epidermide tectis, globosis, ostiolis minutis papillatis, denique poro rotundo hiantibus; ascis linearibus; sporidiis monostichis v. subdistichis, ellipsoideis, leniter curvulis, uniseptatis, fuligineis, utrinque hyalino-appendiculatis, oculis subinde conoideis.

Hab. in foliis emortuis Iridum, Caricum etc. in Britannia.

32. **Didymosphæria Peltigeræ** Fuck. Symb. myc. p. 140. — 2675

Peritheciis gregariis, in macula expallescenti, tectis, globoso-conicis, atris, ostiolo conico, prominulo, punctiformi; ascis cylindræcis, substipitatis, 64 \approx 12, sporidia 8, monosticha, ovata, suboblonga, didyma, pallide fusca, 18 \approx 7, includentibus.

Hab. in thallo vivente Peltigeræ caninæ in Rhenogovia (Fuck.) et in Franconia (REHM).

33. **Didymosphæria infestans** Speg. F. Arg. Pug. IV, n. 160. — 2676

Peritheciis densiuscule gregariis, innato-prominulis, subgloboso-emisphæricis, 180-200 μ . diam., atris, crassiuscule membranaceis, ostiolo non v. vix papillulato 25 μ . diam., pertusis, contextu dense parenchymatico, olivaceo, circa ostiolum subcarbonaceo; ascis cylindræcis obtuse rotundatis, crasseque tunicatis, deorsum breviuscule attenuato-stipitatis, 80-85 \approx 6-6,5, octosporis, aparaphysatis; spo-

ridiis recte v. oblique monostichis, elliptico-subclavulatis v. obovatis, superne sæpius obtuse rotundatis, inferne attenuato-acutiusculis, 12-14 \approx 5-6, medio 1-septato-constrictis, loculo infero minore, primo granuloso faretis, hyalinis, dein guttulatis, olivaceis.

Hab. in thallo v. apotheciis languentibus *Theloschistidis flavicantis* ad palos vetustos, Conchas Argent. Amer. merid. — Species prædistincta; an sporidia primitus strato mucoso exiguo induta?

II. *Microthelia* Korb., Niessl: peritheciis epidermide circa ostiolum nigrificata tectis.

34. ***Didymosphæria epidermidis*** (Fr.) Fuck. Symb. myc. p. 141 *Sphæria epidermidis* Fr. S. M. II, p. 499 ex parte, *Sphæricæ atomaria* Wallr. Crypt. n. 3731. *Sph. Araucariæ* Cooke Seem. Journ. IV, t. 45, f. 12. — Sparsa; peritheciis tectis vix prominentibus, lævibus, minimis, demum collabescentibus depressis, ostiolo minuto erumpentibus; ascis cylindræis, 75-100 \approx 7-8, paraphysibus ramulosis obvallatis, octosporis; sporidiis monostichis, rarius subdistichis, ellipsoideis, uniseptatis, dein constrictis, rectis curvulisve, 2-guttulatis, 8-11 \approx 6, fuliginæis. — Spermogonia et pycnidia nota teste Fuck. l. c.

Hab. ad ramos corticatos subvivos *Berberidis vulgaris*, *Salicis*, *Eucalypti*, *Sambuci* in Suecia, Belgio, Britannia, Lusitania, Gallia, Italia, Amer. bor. — Adest forma ascis tetrasporis. Varietates sequentes, quas distinxi in F. Ven. Ser. II. p. 323, forte specificè distinguendæ sunt. Var. *Coryli Avellancæ*: ascis 85-90 \approx 8; sporidiis 14-16 \approx 7,5, fuliginæis. Pr. Treviso Italia bor. — *Salicis babylonicæ*: ascis 110 \approx 9; sporidiis 15-18 \approx 8-9, olivaceo-badiis. Ibidem.

35. ***Didymosphæria brunneola*** Niessl Neue Kernp. p. 201. — Peritheciis sparsis vel laxè gregariis, sub epidermide pallescente nidulantibus, macula fusca vel atro-purpurea tectis, majusculis, depresso-hemisphæricis vertice umbilicatis, papillatis, atro-fuscis, coriaceis, duriusculis; ascis subcylindræis stipite brevi, octosporis 60-90 \approx 6-8; sporidiis monostichis, ovoideo-oblongis, medio septatis pauloque constrictis, olivaceis, 7-12 \approx 4-6; paraphysibus numerosis, elegantissime ramosis, angustis. — Spermogonia punctiformia, sparsa, hemisphærica, atro-fusca, submembranacea; spermatii angustissimis, cylindræis, rectis 2-4 \approx $\frac{1}{5}$ hyalinis.

Hab. in caulibus siccis *Verbasci*, *Artemisiæ*, *Hyperici*,

Rubi, Galii, Salviæ, Menthæ, Origani, Epilobii, Lythri in Germania, Italia, Austria. — Var. *sarmentorum* Niessl l. c.: major; ascis elongatis 90-100 \approx 7-8; sporidiis sæpe inæquilateralibus v. subcurvulis ex olivaceo fusciscentibus 10-16 \approx 5-6. In sarmentis Humuli Lupuli in Germania et Austria. — Var. *limitata* Kunze F. Sel. n. 89: major; ascis 65-76 \approx 6; sporidiis vix constrictis 10-12 \approx 6. In caule Meliloti albæ, Eisleben Germaniæ. — Var. *Hyperici calycini*; ascis 90-100 \approx 9-10; sporidiis 16-18 \approx 7-7,5, 2-guttatis, fuliginis. In Ital. bor.

36. **Didymosphæria Meretrix** (Mont.) Sacc. *Sphaeria Meretrix* Mont. 2679
N. Cell. Cent. VIII, p. 145. — Caulicola, sparsa aggregatave; peritheciis velatis subsphærico-depressis atro-fuscis nitidis, ostiolo mammillari minuto; ascis cylindræco-subclavatis, octosporis, paraphysatis. 70-80 \approx 10 paraphysibus dichotomis; sporidiis serie unica imbricatis ex ovoideo oblongis, tandem olivaceis, 12-18 μ . longis. — Spermogonia adsunt minora; spermatis oblongis 3 μ . longis, hyalinis.

Hab. ad caules Meliloti leucanthæ, Montaud-lès-Miramas Galliæ (CASTAGNE).

37. **Didymosphæria albescens** Niessl Neue Kernp. p. 202. — Peritheciis sparsis sub peridermio pallescente nidulantibus, macula atropurpurea tectis, majusculis, depresso-hemisphæricis, tandem vertice collapsis, papillatis, fusco-atris, coriaceis; ascis clavato-cylindræcis, stipite brevi octosporis 58-86 \approx 7-8; sporidiis monostichis, hinc inde distichis, ovoideo-oblongis, medio septatis constrictisque 9-13 \approx 5-6; paraphysibus angustis, ramulosis. 2680

Hab. in ramis Loniceræ Xylostei et Myricariæ vulgaris in Germania et Austria. — Vix diversa a *D. brunneola*.

38. **Didymosphæria diplospora** (Cooke) Rehm, Hedw. 1879, pag. 167. 2681
Sphaeria diplospora Cooke Seem. Journ. (1866) t. 45, f. 7. *D. Rubi* Fuck. Symb. myc. p. 141 (1869). — Peritheciis sparsis, sub epidermide nidulantibus, minutis, subglobosis, atris, ostiolis erumpentibus, minutis, obtusis, demum perforatis umbilicatisque, atris: ascis stipitatis, cylindræcis, 8-sporis, 120 \approx 10; sporidiis oblique monostichis, ovatis, didymis, medio perparum constrictis, loculis uniguttulatis, fuscis, 14 \approx 8; paraphysibus simplicibus, multiguttulatis, filiformibus. Teste Fuck., pycnidium sistit *Diplodiam Rubi* Fr.

Hab. in sarmentis corticatis Rubi fruticosi, rarius in Britannia, Germania, Belgio et Gallia. — Præeunte cl. Rehm forte *D. epidermidis* varietas.

39. **Didymosphæria Loniceræ** Sacc. *Amphisphæria Loniceræ* Sacc. 2682
Myc. Ven. Spec. p. 114, t. XI, fig. 30-32. — Peritheciis sparsis sub cortice denique dejecto nidulantibus, e sphærico depressis, $\frac{1}{4}$ mill. diam., ostiolo non prominulo, atris; ascis cylindricis basi attenuatis, $188 \approx 8$, paraphysibus filiformibus obvallatis, 8sporis; sporidiis recte monostichis, ellipsoideis, constricto-didymis, utrinque acutiusculis, $12-14 \approx 6\frac{1}{2}$, septo medio evidentissimo, fuliginis.
Hab. sub cortice dejecto trunci *Loniceræ* sempervirentis emortui, Selva, agri Tarvisini, Ital. bor.
40. **Didymosphæria Galiorum** Fuck. Symb. myc. p. 140 (nec *Sphæria Galiorum* Desm.). 2683
— Peritheciis subsparis, epidermide leniter nigrificata tectis, globoso-depressis, ostiolo perforante minuto; ascis cylindræcis, substipitatis, 8sporis, $34-44 \approx 10$; sporidiis monostichis, ovatis, uniseptatis, $12-15 \approx 7-8$, fuscis.
Hab. in caule *Galii* veri, *G. Aparines*, *G. sylvatici*, *G. Molluginis* in Germania, Gallia, Italia, Belgio. — *Sph. Galiorum* Desm. est *Leptosphæria Aparines* (Fuck.)
41. **Didymosphæria opulenta** (De Not.) Sacc. *Amphisphæria opulenta* 2684
De Not. *Sphæria opulenta* De Not. Micr. ital. Dec. I, pag. 64, fig. VII. — Peritheciis sphæroideo-conicis firmis, rugulosis, atrofuscis, immersis, cortice nigrescente initio tectis, ostiolo cylindraceo-conico, peritheciium fere æquante, erumpente et eminente; ascis cylindræceo-clavatis, paraphysatis, $150 \approx 20-23$, octosporis; sporidiis distichis, didymo-constrictis, utrinque, v. uno polo obtuse attenuatis, badio-fuscis, $20-25 \approx 10$.
Hab. ad ramos dejectos *Opuntiarum* in Sardinia austr., Gallia merid. et in Cuba.
42. **Didymosphæria tenebrosa** (B. et Br.) Sacc. *Sphæria tenebrosa* 2685
B. et Br. An N. H. n. 649, t. 12, fig. 35. — Sparsa cuticulâ mycelio toruloideo obscuratâ tecta; peritheciis depressis; ascis crasse cylindræceo-clavatis, obtusis, deorsum attenuatis; sporidiis fuscis, uniseptatis, binucleatis, loculis subconicis.
Hab. in caulibus emortuis *Arctii*, superficie nigrificatis, King's Cliffe Britannicæ et *Vernoniæ novæboracensis* in Pennsylvania Amer. bor. — Sporidiis majusculis mycelioque toruloideo mox dignoscenda species.
43. **Didymosphæria appendiculosa** Spæg. Fung. Arg. pug. IV, n. 158. 2686
— Peritheciis immersis e globoso lenticularibus $250-300 \mu$. diam., sparsis, superne epidermidi nigrificata aduatis, glaberrimis, atris, membranæceo-subcarbonæcis, contextu indistincte parenchymatico;

ascis cylindræis sursum subattenuatis, apice truncatis, deorsum breve attenuato-stipitatis 150-170 \approx 10-12, octosporis, aparaphysatis; sporidiis recte v. oblique monostichis, primo hyalinis, fusoides, sæpius inæquilateralibus utrinque truncatis 28-30 \approx 6-7 (sine caudis) et appendiculis (supera vix minore) concoloribus conico-elongatis, acutis 5-8 \approx 3-4 auctis, diu continuis, grosse 1- v. pluri-guttatis, dein medio 1-septatis, non constrictis, cauda superiore diffluente orbatis, postremo elongato-ellipsoideis, utrinque obtusiuscule rotundatis, ac muticis, 28-30 \approx 10, inæquilateralibus v. curvulis, medio 1-septatis, non constrictis, granuloso-farctis, amoene ac intense roseo-fuliginis.

Hab. in foliis dejectis putrescentibus *Eryngii pandanifolii* in paludosis ultra el Riachuelo Argent. Amer. merid. — Species habitu, magnitudine et notis juvenilibus fructificationis cum *Anthostomella appendiculosa* (B. et Br.) Sacc. (cujus formam tantum sporidiis hyalinis donatam adhuc inveni) perfecte conveniens, sed sporidiis postremo distinctissime medio 1-septatis recedens: an cum citata identica et observatio præcl. Saccardi specimenibus adhuc immaturis adscribenda? an lusus naturæ climatisque? an vere nova species? Speg. l. c.

44. **Didymosphæria Spartii** (Castag.) Fab. Sphær. Vaucl. p. 83. *Sphæria Spartii* Castag. Cat. pl. Mars. p. 169. — Peritheciis sparsis, globosis, punctiformibus, in cortice interiori nidulantibus, epidermide nigrificatâ tectis, vertice deplanatis et coronulâ albâ epidermidis fissæ cinctis, ostiolo inconspicuo; ascis cylindræis, stipitatis. 8-sporis. 150 \approx 12; sporidiis monostichis, ovato-oblongis. 1-septatis, medio constrictulis, atro-ardosiaceis, 24-30 \approx 7-10. 2687

Hab. in ramulis delapsis *Spartii juncei* et *Genistæ Scorpii*. — An diversa a *D. incarcerata* (Desm.)?

45. **Didymosphæria Syringæ** H. Fab. Sphær. Vaucl. p. 84, f. 15. — *Sphæria Syringæ* H. Fab. Cat. pl. Mars. p. 170. — Peritheciis sparsis, minutis, sub epidermide nigro-punctatâ nidulantibus, globosis, atris, vertice poro pertusis; ascis cylindræis, breve stipitatis, 8-sporis, 90-120 \approx 8; sporidiis oblique monostichis, didymis, medio subconstrictis, pallide fuscis, loculis 1-guttatis. 15 \approx 5-6. 2688

Hab. ad ramos emortuos *Syringæ vulgaris*. Vaucluse Galliæ.

46. **Didymosphæria futilis** (B. et Br.) Rehm, Hedw. 1870, p. 167, *Sphæria futilis* B. et Br. Ann. N. H. n. 638 t. 11, fig. 23. — Sparsa, epidermide nigricante tecta; peritheciis subglobosis; ascis linearibus; 2689

sporidiis monostichis, oblongo-ellipticis, uniseptatis, leniter constrictis, hyalinis (an tandem fuscescentibus?).

Hab. in ramis emortuis Rosæ, King's Cliffe Britanniaë. — An *Didymella*? Sed Cooke Handb. n. 2674 inter chromosporas citat.

47. **Didymosphæria nitidula** Sacc. Mich. I, p. 30 et 98, F. it. t. 132. 2690

— Peritheciis sparsis, e globoso depressis, $\frac{3}{4}$ –1 mill. diam., cortice innatis et epidermide tumidula nigrificata nitidissima, medio perforata, velatis, ostiolo subimpresso pertuso; ascis cylindricis prælongis, 150 \approx 10–12 p. sporif., breviter stipitatis apice tunica integra rotundatis, paraphysibus filiformibus guttulatis, octosporis; sporidiis oblique monostichis, oblongo-fusoideis, 25–26 \approx 10, rectis curvulisve, utrinque acutiusculis, constricto–1–septatis, granulosis, olivaceo-fuligineis.

Hab. in ramulis corticatis Carpini Betuli in sylva Montello, Ital. bor. — Habitu perfecte cum *Clypeosphæria Notarisii* Fuck. et *Anthostomella nitidula* Sacc. convenit sed sporidia distincte constricto–bilocularia.

48. **Didymosphæria socialis** Sacc. Fungi Ven. Ser. II, p. 324. — Pe. 2691

peritheciis dense gregariis, cortice immersis et epidermide circa ostiolum tumidula atque denigrata tectis, globosis, $\frac{1}{2}$ mill. diam., nucleoque crassiusculo nigris, ostiolo breviter papillato, vix erumpente; ascis cylindræis, 110–120 \approx 6, apice rotundatis, basi vix attenuatis subsessilibus, pseudo–paraphysibus parcis guttulatis obvallatis, 8–sporis; sporidiis oblique monostichis, oblongo–ovoideis, interdum subinæquilateralibus, 15 \approx 6, granulosis, 2–guttulatisque, tandem obscure 1–septatis non constrictis, pallide olivaceis.

Hab. in ramis emortuis Robiniaë Pseudacaciæ, Selva, Treviso, Ital. bor. Ex clar. Doct. G. Winter in litt. crescit idem fungillus etiam in Populo Tremula in Germania. — Peritheciis crassiusculis, sporidiorum forma et colore et in primis habitu peculiari a cæteris speciebus statim dignoscitur. — **D. nobilis* Sacc. Mich. I, p. 32 differt sporidiis longioribus, nempe 18–20 \approx 5–6, medio distincte constrictis, 4–guttulatis v. 2–nucleatis, fuligineis. In ramis corticatis Lauri nobilis, Conegliano, Italia boreali (SPERGAZZINI).

49. **Didymosphæria oblitescens** (B. et Br.) Sacc. *Sphæria oblitescens* 2692

B. et Br. Ann. N. H. n. 887, t. 11, fig. 32. Cooke Handb. n. 2675 nec Fuck. — Peritheciis epidermide velatis, depressis, majusculis, ostiolis obscuris; ascis cylindricis elongatis; sporidiis oblongo-el-

lipticis, utrinque obtusissimis, uniseptatis, leniter constrictis 12-13 μ . longis.

Hab. in ramulis emortuis Corni, Spye Park Britanniae. Epidermis supra perithecia subinde decolorata. Paraphyses lineares, interdum sporidium unum alterumve gerentes. *Didymosphæria oblitescens* Fuck. aliena est et sub nomine *Dydimella vexata* jam descripsi.

50. **Didymosphæria acerina** Rehm Ascom. n. 237 (1874) et in Hedwigia 1879, p. 168. *Massariopsis subtecla* Niessl (1875) in Notizen p. 39. — Peritheciis in cortice suberoso nidulantibus globulosis, 1 mill. circ. diam., gregariis, ostioli peridermium superficie leniter cinereo-nigrificatum punctulato-perforantibus, leniterque pustulatum elevantibus; ascis cylindræis, crassis, 100-120 \approx 8, apice incrassato jodoque cærulescente; sporidiis monostichis, oblongis, uniseptatis, utrinque obtusis, non v. vix constrictis, binucleatis, fuscis, 14-17 \approx 5-7,5; paraphysibus articulatis subramosis.

Hab. in ramis Aceris campestris et Pruni spinosæ in Germania, Helvetia, Austria et Britannia. — Var. *Fraxini* Wint. herb. (vix diversa). In ramis Fraxini pr. Leipzig Germaniæ.

51. **Didymosphæria pulchella** Sacc. et Sp. Mich. I, p. 375. — Peritheciis globulosis, ultra $\frac{1}{2}$ mill. diam., papillatis, initio subcutaneis; ascis cylindraceis, 100-150 \approx 10-13 apice obtusis, lumine truncato minuteque 1-foveolato, paraphysibus filiformibus obvallatis, octosporis; sporidiis monostichis v. partim distichis, oblongis, constricto-1-septatis, 20 \approx 8, olivaceo-fuligineis.

Hab. in ramulis sub cortice denigratis Aceris Negundinis, Conegliano, Ital. bor. — Ab affini *Did. acerina* certe distinguenda.

52. **Didymosphæria grumata** (Cooke) Rehm Ascom. n. 441. *Sphæria grumata* C. et Ellis N. Am. Fungi n. 185. — Peritheciis hinc inde gregariis epidermide tumidula et nigrificata tectis, globosis, $\frac{1}{2}$ mill. diam., obtuse papillatis, nigris; ascis clavatis, 120 \approx 15, paraphysibus ramosis obvallatis, octosporis; sporidiis ovoideo-clavulatis 1-septatis, demum constrictis, 2-4-guttatis, diu hyalinis, demum (teste Rehm) dilute fuligineis, strato mucoso 3 μ . cr. obductis, 21 \approx 8, monostichis v. subdistichis.

Hab. in ramis adhuc vivis Andromedæ ligustrinæ. New Jersey Amer. bor.

53. **Didymosphæria nubecula** Pass. Micr. ital. Diagn. n. 11. — Peritheciis gregariis, minutis, immersis tectis, nubeculas griseo-fuscas, subdisciformes efficientibus, vel sparsis; ascis cylindricis sub-

curvulis basi breviter attenuatis 8sporis, 75-90 \approx 10; sporidiis oblique uniserialibus elliptico-oblongis, castaneo-fuscis, loculis gutturalis, 9 \approx 3 $\frac{1}{2}$; paraphysibus copiosis ascos excedentibus.

Hab. ad folia arida Phœnicis dactyliferæ, Bordighera in Liguria.

54. **Didymosphæria donacina** (Niessl) Sacc. *Microthelia donacina* 2697

Niessl in Thuem. Contr. Myc. Lusit. n. 536. Peritheciis gregariis, plerumque seriatim dispositis, majusculis, 0,5 mill. diam., depresso-globosis, coriaceis, duriusculis, atris, ostiolo papillæformi; ascis anguste clavatis, longe pedicellatis, octosporis, 90-100 \approx 12-13, p. sp. 50-60, stip. 40-50 μ . long.; sporidiis di-tristichis, stipatis, oblongis, medio uniseptatis seu didymis, rectis, inæquilateralibus vel parum curvatis, fuscis, 12-15 \approx 4; paraphysibus ramulosis.

Hab. in Donacis culmis emortuis, Ribeira de Cozelhas pr. Coimbra, Lusitaniæ (MOLLER).

55. **Didymosphæria minuta** Niessl Neue Kernp. p. 200. — Peritheciis 2698

sparsis, macula fusca in peridermio pallescente tectis, minutis globosis, ostiolo papillæformi vel subconico, atro-fuscis, coriaceo-membranaceis; ascis clavato-cylindraceis stipite brevi, 8sporis, interdum 4sporis, 60-80 \approx 6-7; sporidiis monostichis, oblongo-obovatis, medio septatis pauloque constrictis olivaceis vel fuscescentibus 10-11 \approx 5-6; paraphysibus angustis, simplicibus vel raro laxe ramosis. — Spermogonia sparsa, minutissima, punctiformia, papillata; spermatis cylindraceis angustissimis, rectis, hyalinis, 3 \approx 1 $\frac{1}{3}$ mill.

Hab. in foliis putridiis Caricis paludosæ et calamis Junci effusi pr. Brünn et Graz Austriæ.

III. *Species lichenibus adscriptæ.*

56. **D. Microthelia Micula** Flot., Rehm Hedw. 1879, p. 162. 2699

Hab. in cortice vetusto Tiliæ in tota Europa.

57. **D. Microthelia Wallrothii** (Hepp.) Rehm Hedw. 1879, p. 163. 2700

Hab. in cortice Betulæ in Germania, Italia etc. — An affinis *D. Phorcidi Betulæ* Niessl?

58. **D. Microthelia atomaria** Körb. Rehm Hedw. 1879, p. 164. 2701

Hab. in cortice subvivo Cratægi in tota Europa. — Peraffinis *D. epidermidis*.

59. **D. Microthelia analeptoides** Bagl. Rehm Hedw. 1879, p. 164. 2702

Hab. in cortice subvivo Daphnes Mezerei in Germania, Tyrolia, Italia.

60. **D. Microthelia grandiuscula** Anzi, Rehm Hedw. 1879, p. 165. 2703
Hab. in cortice *Salicum* in Italia media.
61. **D. Microthelia confusa** (Garov.) Rehm Hedw. 1879, p. 165. 2704
Hab. in cortice nucis *Juglandis* prope Loveno Ital. bor.

MASSARIELLA Speg. Fungi Arg. Pug. I., pag. 2 tabulæ. (Etym. a *Massaria*, cujus est analogum genus). — Perithecia cortice nidulanta, subcoriacea; ostiolo vix erumpente, pertuso. Asci octospori, paraphysati. Sporidia bilocularia, fuliginea, strato hyalino obvoluta.

1. **Massariella bufonia** (B. et Br.) Speg. l. c., *Massaria bufonia* (B. et Br.) Tul. Carp. II, p. 237, Sacc. Fungi ital. t. 421, *Sph. bufonia* B. et Br. Ann. N. II. n. 629, t. 10, fig. 13. — Peritheciis sparsis, globosis, depressiusculis, majusculis; ostiolis brevibus peridermium perforantibus; ascis cylindricis $200 \approx 20$, paraphysatis, octosporis; sporidiis monostichis ellipsoideis, uniseptatis, leniter constrictis, utrinque rotundatis, fuligineis, varie guttatis, strato hyalino obvolutis, $25-30 \approx 15$ (sine mucō). 2705

Hab. in ramis corticatis *Quercum* in Britannia, Italia, Germania, Amer. bor. — Specimina americana præbent sporidia paulo minora, nempe $15-20 \mu$. longa. *Massaria* n. 74 in Britz. et Rehm Augsb. Pilz. p. 81 huic verisimiliter affinis est.

2. **Massariella vibratilis** (Fuck.) Sacc., *Massaria vibratilis* Fuck. 2706
 Symb. myc. p. 154 (nec Fr.), Sacc. Reliq. Lib. II, n. 134, t. XIX, fig. 5. — Peritheciis peridermio tectis, gregariis, globoso-depressis, majusculis, ostiolo crasso perforato erumpente; ascis teretibus, breve stipitatis, $160-170 \approx 16-20$, octosporis; sporidiis oblique monostichis, oblongis, utrinque rotundatis, medio constricto-1-septatis, $22-25 \approx 9-10$, olivaceo-fuligineis, nubiosis, strato hyalino tenui obvolutis. — Pycnidium *Diplodiam Cerasorum* sistit: peritheciis maximis, semper tectis, sparsis cæspitosisve, lentiformibus, extus olivaceo-pulverulentis; stylosporibus oblongis, didymis, fuscis, subopacis, $20 \approx 8$ sistit.

Hab. in cortice *Pruni domesticæ* et *Cerasi* in Gallia et Germania.

3. **Massariella australis** (Cooke) Sacc. *Massaria australis* Cooke 2707
 Grev. VIII. p. 67. — Sparsa, tecta, inconspicua; peritheciis depressis; ascibus clavatis; sporidiis lanceolatis, uniseptatis, constrictis. brunneis, $45-50 \approx 12-14$; stylosporibus associatis (*Corynei*?) clavatis, 3-5-septatis. brunneis, hyalino-stipitatis. $50 \approx 14$.

Hab. in corticibus, Melbourne Australiæ.

4. **Massariella sudans** (B. et C.) Sacc. *Massaria sudans* B. et C. 2708
North Amer. Fungi n. 980. — Omnino tecta; peritheciis circinantibus («genuine?»); ascis linearibus; sporidiis oblongis, obtusis, uniseptatis, 40 μ . longis.

Hab. in cortice Aceris in Carolina infer. Amer. bor.

5. **Massariella Curreyi** (Tul) Sacc. *Massaria Curreyi* Tul. Carp. II, 2709
p. 231, Sacc. Fungi ital. t. 420, Cooke Handb. n. 2534, *Sphæria Tiliæ* Curr. Linn. Trans. XXII, t. 59, f. 104 (nec Auct.). — Peritheciis tectis $\frac{1}{3}$ – $\frac{1}{2}$ mill. diam.; nigris, globulosis, ostiolo papillato, vix peridermium perforante; ascis crasse clavatis 80–90 \approx 25, paraphysibus, octosporis; sporidiis subdistichis obclavatis, 1-septato-constrictis, fuligineis, loculo superiore crassiore, 35 \approx 12–14, strato hyalino obvolutis.

Hab. in ramis Tiliæ europææ in Britannia (CURREY) et Italiæ bor. (PASSERINI).

6. **Massariella syconophila** (Schulz.) Sacc., *Splanchnonema ficophilum* 2710
Schulz. Myk. Beitr. 1820, p. 653. — Peritheciis corticulis, subcoriaceis, globoso-depressis; ascis crasse cylindraceo-clavatis, longe paraphysatis 4–6-sporis; sporidiis inæqualiter bilocularibus, biguttatis, fuligineis, strato angusto mucoso cinctis, loculis subinde secedentibus, 42–54 \approx 20–32.

Hab. in ramis corticatis Fici Caricæ in Austria, socia *Diplotidia*.

PARODIELLA Speg. Fungi Arg. Pug. I, p. 178. (Etym. a cl. D. Parodi, chemico et botanico Bonariæ). — Perithecia superficialia, globosa, astoma, atra, basi foliis adnata. Asci cylindraceo-clavati, octospori, typice paraphysati. Sporidia didyma, obscure fuliginea.

1. **Parodiella perisporioides** (Berk. et Curt.) Speg. l. c. *Dothidea perisporioides* B. et C. North Amer. Fungi n. 880. — Peritheciis globosis, 150–200 μ . diam., astomis, lævibus, atris, superficialibus, basi adnatis, densissime gregariis, sæpe totum folium occupantibus, contextu membracaceo-parenchymatico, olivaceo-fuligineis; ascis clavatis, breve pedicellatis, sursum rotundatis, 120 \approx 20–24, paraphysibus filiformibus obvallatis, octosporis; sporidiis distichis, elliptico-biconicis, medio 1-septato-constrictis, primo loculis uniguttulatis dein eguttulatis, loculo superiore paulo tumidiore, quandoque leniter curvulis, utrinque obtusiusculis, læte fuligineis, 28–30 \approx 10–11.

Hab. ad folia viva Rhyncosia, Indigoferæ, Desmodii

etc. in Amer. bor. et austr., Ceylon, Bombay, Natal. — Perithecia sæpe dense reticulatim digesta.

2. **Parodiella circinata** (Kalch. et Cooke) Sacc., *Dothidea circinata* 2712
K. et C. Grev. IX, p. 32. — Amphigena, inæqualis, minuta, convexa, atro-nitida, circulari-gregaria; ascis clavatis; sporidiis distichis, inæqualiter 1-septatis, 12 = 6, fuscis.

Hab. in foliis vivis Leguminosarum in Africa australi.

3. **Parodiella puncta** (Cooke) Sacc., *Dothidea puncta* Cooke in Grev. 2713
vol. X, p. 128. — Sparsa, atra, convexa, punctiformis; ascis clavatis; sporidiis ellipticis, utrinque leniter attenuatis, uniseptatis, fuscis, 20 = 7.5.

Hab. in foliis Dalbergiæ armatæ, Inanda Natal (I. M. Wood). — Perithecia parcissime sparsa.

AMPHISPHERIA Ces. et De Not. Schem. Sfer. ital. pag. 49, p. p. (Etyim. *amphi*, circa et *sphæria*). — Perithecia sparsa vel subgregaria, superficialia vel emergentia, sphæroidea, ostiolo conoideo, raro inconspicuo, glabra, atra, plus minusve carbonacea. Asei cylindraceuti, octospori, paraphysati. Sporidia ellipsoidea vel oblonga, uniseptata, fuliginea vel intense olivacea.

1. *Arboricolæ et fruticicolæ.*

1. **Amphisphæria applanata** (Fr.) Ces. et De Not. Schema Sf. it. 224, 2714
Trematosphæria applanata Fuck. Symb. myc. pag. 162. *Sphæria applanata* Fr. S. M. II, p. 463. — Sparsa, atra, opaca; peritheciis lævibus orbiculatis convexis subtus applanatis, ostiolo simplici pertuso; ascis; sporidiis oblongis, inæqualiter didymis, loculo superiori minori, obtuso, loculo inferiori majori, ventricoso, acuminato, fuscis, 24 = 8.

Hab. in ligno duriore *Quercus* in Suecia, Germania, Italia. — *Trematosphæria pertusa* subaffinis, sed forma differt et peritheciis innato-superficialibus, basi applanata, demum collabentibus, fere concavo-planis. Sub lente bene augente rugulosa; passim duo perithecia confluent.

2. **Amphisphæria sardoa** De Not. Schema Sf. p. 223, *Sphæria sar-* 2715
doea De Not. Micr. ital. Dec. VII, p. 110, fig. V. — Peritheciis ligno basi inculptis v. semiimmersis, e basi applanata globoso-conicis, carbonaceis; atris, ostiolo acutiuscule papillato, brevi; ascis

cylindræcis breve stipitatis, aparaphysatis, $80 \approx 7,5-8$, octosporis; sporidiis oblique monostichis, bilocularibus, loculo superiore crassiore, leniter constrictis, badio-fuscis, $8-9 \approx 4,5$.

Hab. ad ligna vetusta quercina, Iglesias (Sardinia).

3. **Amphisphæria conica** (Lév.) Ces. et De Not. Schema Sf. it. p. 224, 2716

Sphæropsis conica (Lév.) in Demid. Voy. Crim. Bot. p. 112, *Sphæria Leveillei* Dur. et Mont. Syll. Crypt. n. 802 et Fl. Alg. p. 501, non Tulasne. — Denudata; peritheciis gregariis, basi applanata conoideis, lævigatis nitidis, ostiolo poriformi pertusis; ascis clavatis maximis, inter sese in nucleum subcellulosum conglutinatis; sporidiis octonis biseriatis ex ovoideo cymbiformibus transversim medio uniseptatis, fuscis, $50 \approx 20$.

Hab. ad truncos *Quercus pubescentis*, circa Castropoulo in Taurica (LÉVEILLÉ), *Quercus Suberis* prope Philippeville in Algeria (DURIEU), circa Brescia Longobardiæ (CESATI).

4. **Amphisphæria sepulta** (Mont.) Sacc., *Sphæria sepulta* Mont. Pl. 2717

Cellul. Cent. IX, p. 11. — Seriata; peritheciis phialiformibus immersis intus et extus atris, collis brevibus in tuberculo elliptico nigrefacto per porum evadentibus; ascis inter paraphyses elongatis cylindræco-clavatis 8spor. $150 \approx 15$; sporidiis ellipticis, fuscis, bilocularibus, leniter constrictis, uniseriatis, $30 \approx 10$.

Hab. in sarmentis *Vitis viniferæ* in Gallo-Provincia (B. CASTAGNE).

5. **Amphisphæria fallax** De Not. Sf. ital. p. 69, t. 62. — Peritheciis 2718

dimidium millimetrum diametro vix excedentibus, superficiali-insculptis, epidermide tectis. sparsis, raro uno alterove contiguis, cum epidermide fusciscente, maculam superficialem supra perithecia ipsa sistente concretis, lenticulari-rotundatis, nigrescentibus, tenuibus, fragilibus, vertice in collum crassum, apice obtusum, epidermidem perforans, ostiolo exiguo, vix conspicuo perforatum abrupte attenuatis: ascis cylindræcis, 8-sporis, paraphysibus filiformibus, nucleiferis; sporidiis didymis, fusco-badiis, translucidis, junioribus in ascis adhuc inclusis, velamento mucoso obductis, $20-22 \mu$. long.

Hab. in cortice *Quercuum* prope Milano et Conegliano Ital. bor. — *Sphæria fallax* Pers. Icon. et descript. t. X, fig. 11-12 huc pertinere mihi videtur, etsi inter dubias a Friesio relata.

6. **Amphisphæria botulispora** (Cooke) Sacc., *Sphæria botulæspora* 2719

Cooke Fungi Texas 143. — Gregaria, immersa; peritheciis atris, elongato-compressis, poro pertusis; ascis saccatis; sporidiis cylin-

draceis, rectis vel leviter curvulis, utrinque obtusis, uniseptatis, fuscis, cellulis inæqualibus 70-80 \approx 12.

Hab. in ligno vetusto quercino, Houston, Texas Amer. bor. (RAVENEL).

7. **Amphisphæria umbrina** (Fr.) De Not. Sfer. ital. p. 69, Sacc. Myc. Ven. Spec. p. 111, t. XI, fig. 15-17, Fungi ital. t. 442, *Sphæria umbrina* Fr. S. M. II, p. 461, *Sph. carata* et *Sph. convexa* Nyl. — Peritheciis sparsis, semiemersis, sphæroideis, parte emersa hemisphærico-depressis, firmis, atris, ostiolo minuto, papillato, circiter 1 mill. lat; ascis cylindraceutis, 115 \approx 7, paraphysibus filiformibus obvallatis, octosporis; sporidiis monostichis fusoides-oblongatis, 20-26 \approx 6-8, 1-septatis, initio hyalinis. 2-nucleatis, dein fuliginis. 2720

Hab. in cortice crassiore Ulmi, Salicis, Alni, Quercus, Fraxini in Germania, Italia, Gennia.

8. **Amphisphæria pseudo-umbrina** Sacc. Myc. Ven. Spec. p. 112, t. XI, f. 18-20 a, b. Fungi ital. p. 443. — Peritheciis subsparsis, $\frac{1}{2}$ - $\frac{3}{4}$ mill. d., peridermio circumcirca nigrificato insculptis, dein emergentibus, depressis, ostiolo breve papillato; ascis cylindraceutis, 90 \approx 7, paraphysibus filiformibus sæpe nucleiferis obvallatis, 8-sporis; sporidiis ellipsoideis 16-18 \approx 6-7, recte monostichis, initio lutescenti-hyalinis binucleatis, dein fuliginis, 1-septatis. 2721

Hab. in cortice duriore Aceris campestris, Prunorum etc. in Italia bor. et Gallia. — Hæc species et præcedens, in statu saltem juvenili, ad *Didymosphæriam* (sect. *Microthalam*) nutant.

9. **Amphisphæria Spegazziniana** Sacc. Mich. I, pag. 32, Fungi ital. tab. 135. — Peritheciis dense gregariis, superficialibus vel basi breviter insculptis, e globoso depressis, $\frac{1}{4}$ mill. diam., carbonaceis, rugulosis, brevissime applanato-papillatis; ascis cylindraceutis breve stipitatis 80-85 \approx 8-9 apice membrana integra truncatis, paraphysibus filiformibus crebris obvallatis, octosporis; sporidiis distichis vel oblique monostichis, breve fusoides 15-18 \approx 5-5 $\frac{1}{4}$, constricto-1-septatis granulosis, olivaceo-fuscis. 2722

Hab. in ligno decorticato putri Pyri, Conegliano, Ital. bor. (SPEGAZZINI). — Habitus *Melanommatis Pulvisculæ* (Curr.).

10. **Amphisphæria Hesperidum** Penz. Fung. Agrum. n. 28. — Peritheciis basi adnata superficialibus, gregariis, globulosis, vertice obtusis, obsolete ostiolatis 205 μ . diam.; contextu indistincte celluloso, subcarbonaceo; ascis teretiusculis, brevissime crasseque stipitatis, 54-57 \approx 10-12, paraphysibus filiformibus crassiusculis obvallatis, octosporis; sporidiis distichis, breve clavulato-fusoides, 2723

14-15 = 4-5, leviter curvis, uniseptatis, constrictis, dilute fusco-olivaceis.

Hab. in ligno decorticato Citri Aurantii in frigidariis Horti Patavini, Ital. bor. (PENZIG).

11. **Amphisphæria bisphærica** (C. et E.) Sacc., *Sphæria* (sub-tectæ) 2724
bisphærica C. et E. Grev. VIII, p. 41. — Semi-immersa; peritheciis atris, papillatis, hinc inde gregariis; ascis cylindraceutis; sporidiis uniseriatis, ellipticis, uniseptatis, medio constrictis, brunneis, 12 = 7.

Hab. in ligno decorticato Pyri Mali, New Jersey Amer. bor.

12. **Amphisphæria stilbostoma** Niessl Hedw. 1876, p. 117. — Peritheciis gregariis, erumpentibus, sphæroideis, subtilissime rugulosis atris, duris, amplis, ostiolo crasso, abrupte conico, nitido; ascis tubulosis vix 120 = 20; sporidiis 8 monostichis oblongis, rectis vel parum curvatis, utrinque obtuse rotundatis medio septatis, vix vel haud constrictis, fuscis, 18-22 = 8-9. 2725

Hab. in cortice Fraxini, Baden Germaniæ. — Sporidia fere *Amph. umbrinae*, sed ostiolo crasso nitido mox distinguenda species.

13. **Amphisphæria striata** Niessl Hedw. 1876, p. 117. — Peritheciis sparsis, immersis demum semierumpentibus, conoideis, cum ostiolo crasso retuso confluentibus, duris, fusco atris, subtilissime striatis, amplis; ascis valde elongatis, clavato-cylindraceutis, stipitatis, 200-240 = 21-24; sporidiis 8 primitus laxè distichis oblongo-lanceolatis, utrinque acutiusculis medio septatis valdeque constrictis, plerumque rectis, fuscis, 30-36 = 15-18. 2726

Hab. in cortice Fraxini, Baden Germaniæ.

14. **Amphisphæria monstrosa** Bagn. Micol. Rom. Cent. II, p. 15, f. 2. 2727
 Peritheciis minutis superficialibus, gregariis non contiguis, nigrescentibus, conoideis, vertice in collum crassum oblongatum apice obtusum; ostiolo minuto, superficie externa peritheciolorum tuberculata; nucleo ochraceo; ascis ovoideis oblongatis 8-sporis, paraphysibus crassis, articulatis, hyalinis; sporidiis didymis, fusco-ochraceis, junioribus translucidis lutescentibus.

Hab. in ramis Phillyreæ mediæ, Villa Pamfili, Roma.

15. **Amphisphæria inæqualis** H. Fab. Sphér. Vaucl. p. 85, t. II, f. 17. 2728
 — Peritheciis sparsis, ligno exsiccato semi-immersis, globoso-conoideis, ad latera compressiusculis, obtusis, atris, apice pertusis, 1 mill. diam.; ascis cylindraceuto-clavatis, brevissime stipitatis, 8-sporis, 90 = 15; sporidiis submonostichis, didymis, obscure brunneis; loculis inæqualibus, altero majore, ovato, brunneo, altero minore, conoideo ut plurimum dilutiore, fere hyalino, 20-25 = 10-12.

Hab. ad ramos denudatos Oleæ europææ. Vacluse Galliæ.
— Inæqualis dicta ob loculos inæquales, alter forsan sterilis, alter fertilis. An status normalis?

16. **Amphisp hæria Olearum** De Not. et Ces. Schema Sf. ital. p. 224, 2729
Sphæria Olearum De Not. Micr. ital., Dec. VI, p. 100, fig. VI.
Peritheciis gregariis, initio immersis, dein superficialibus globoso-conicis, carbonaceis, atris, ostiolo papillato-conico; ascis cylindricis, subsessilibus, paraphysatis 220 \approx 17-18; sporidiis monostichis, oblongis, constricto-1-septatis, fusco-badiis, utrinque oculis minutis subtruncatis, hyalinis auctis, 38-40 \approx 13.

Hab. in peridermio (déalbato) truncorum Oleæ europææ, Sardinia, Liguria, Nicææ etc.

17. **Amphisp hæria dichroa** (Dur. et Mont.) Ces. et De Not. Schema 2730
p. 224, *Sph. dichroa* Dur. et Mont. Syll. Crypt. n. 821 et Fl. Alg. p. 514, t. 26, f. 6. — Immersa; peritheciis solitariis in tuberculo ligneo nigrefacto globoso aut oblongo prominulo nidulantibus atris, intus, basi deficiente(?) albis; ascis cylindraceis deorsum attenuatis 80-90 \approx 10; sporidiis oblongis, bilocularibus, fuligineo-olivaceis, 15 \approx 10, quoque loculo guttulam globosam fovente.

Hab. in ramis decorticatis Pistaciæ Lentisci, Oran Algeriæ (DURIÉU).

18. **Amphisp hæria æthiops** (B. et B.) Sacc., *Sphæria æthiops* B. et C. 2731
North Am. F. n. 918. — Nigerrima; peritheciis subglobosis, ostiolo papillæformi; ascis clavato-oblongis; sporidiis biseriatis clavato-oblongis, uniseptatis, 30-33 μ . long. strato mucoso interdum obductis.

Hab. in lignis putridis denigratis in montibus New-York.

19. **Amphisp hæria agnocystis** (B. et Br.) Sacc., *Sphæria* (Pertusæ) 2732
agnocystis B. et Br. Fungi of Ceylon n. 1108. — Innata, conica, coffeicolor, lævissima; ostiolo papillæformi; sporidiis biconicis utrinque hyalinis.

Hab. in ligno emortuo in insula Ceylon australiore.

20. **Amphisp hæria Beccariana** Ces. Myc. Born. p. 31. — Sparsa, su- 2733
perfacialis, cubili insculpta; peritheciis magnis, ovalibus, umbonatis, nigrescentibus, gibberulosis; contextu valde duro anthracino; nucleo griseo-albescente; ascis ignotis; sporidiis fuscis, compressis, 15 \approx 5-6, didymis, linguiformibus, episporio lineolato vel plicato viso.

Hab. ad lignum denudatum cariosum, Sarawak Bornei (BECCARI). 2734

21. **Amphisp hæria atrograna** (C. et E.) Sacc., *Sphæria* (Psilosphæria)
atrograna C. et E. Grev. VIII, p. 15. — Sparsa, superficialis; pe-

ritheciis subglobosis, parvulis, leniter scabrosis, obtusis, atris, opacis; ascis cylindræis; sporidiis uniseriatis, anguste ellipticis, uniseptatis, brunneis, 12-14 \approx 5.

Hab. in ramis Liquidambaris, New Jersey Amer. bor.

22. **Amphisphæria dunarum** Speg. Fungi Arg. Pug. IV, n. 162. — 2735

Peritheciis sparsis v. subgregariis, superficialibus, basi ligno, sæpius circum circa nigrificato insculptis, lenticulari-conoideis, 250-300 μ . diam., carbonaceis, atris, nitidulis, ostiolo minute papillato-obtuso, vix pervio donatis; ascis cylindræis, sursum obtuse rotundatis, deorsum breviuscule attenuato-stipitatis, 80-85 \approx 10, paraphysibus filiformibus, longioribus obvallatis, octosporis; sporidiis ellipticis, utrinque obtusiuculis, 12-15 \approx 5, non v. vix inæquilateralibus, medio l-septatis non v. vix constrictis, granuloso-farctis, fuliginæis.

Hab. in ramis truncisque decorticatis vivis Margyricarpi setosi, in dunis oceanicis prope «el Medano Blanco» Argent. Amer. merid.

23. **Amphisphæria majuscula** Speg. F. Argent. Pug. III, n. 59. — Pe- 2736

ritheciis globosis, levibus, majusculis $\frac{1}{5}$ mill. diam., ostiolo crasso, umboniformi-papillato, pertuso donatis, atris, crasse membranaceo-subcarnosis, contextu parenchymatico olivaceo; ascis cylindræis, apice obtuse rotundatis, crassiuscule tunicatis, luce refracta l-foveolatis, deorsum breve ac crassiuscule attenuato-pedicellatis, 90-100 \approx 10, octosporis, aparaphysatis: sporidiis oblique monostichis, ellipticis utrinque plus v. minus obtuse rotundatis, l-septatis, vix constrictis pluriguttulatis, 14-16 \approx 6-7, olivaceis.

Hab. in foveolis cariosis rami decorticati emortui Schini molis en Barracas del Sur, Argent. Am. merid.

24. **Amphisphæria congruella** Karst. Myc. Fenn. II, p. 56. *Amphi-* 2737

sphæria mediella Karst. Symb. Myc. Fenn. II, p. 245. — Peritheciis sparsis, superficialibus, sphæroideis, ostiolo brevi, conoideo, atris, latit. circiter 1 mill.; ascis cylindræis, 200 \approx 22 p. sporif., octosporis; sporidiis monostichis, elongatis vel oblongatis, utrinque attenuatis, uniseptatis, medio constrictis, loculo utroque uniguttulato, demum fuscis, 36-50 \approx 14-19; paraphysibus numerosissimis, gracilibus.

Hab. supra corticem Populi tremulæ crassiorem in Mustiala Fennicæ. — *Roselliniæ dispersellæ* (NYL.), quacum mixtim crescit, extus sat similis. Qua nota differat *Amph. mediella* Karst. non liquet.

25. **Amphisphæria Emiliana** H. Fab. Sphér. Vaucl. p. 85, fig. 16. — 2738
 Peritheciis sparsis, semi-immersis, globoso-conicis, mammæformibus, rugosiusculis, atris, ostiolo cylindrico, brevi, prominulo $\frac{2}{3}$ mill. diam.; ascis cylindræis, elongatis, brevissime stipitatis. Sporidis, 125–175 \approx 12–15; sporidiis monostichis, ellipsoideis, initio hyalinis, multiguttatis, dein didymis, fuscis, loculis obscure 1-magniguttatis, 18–25 \approx 10.
Hab. ad corticem duriores basi truncorum Populi albæ et Populi nigræ, rarius Ulmi campestris, Vaucluse Galliæ.
26. **Amphisphæria megalospora** (Mont.) Sacc. *Sphæria megalospora* 2739
 Mont. Syll. Crypt. n. 807. Cent. II. n. 55, l. c., XIV, p. 324, t. 19. f. 4, non De Not. — Innato-erumpens; stromate effuso tenui nigro; peritheciis convexo-applanatis solitariis confluentibusque, epidermide primo tectis, demum denudatis pulvere albo velatis intus albo-farctis, ostiolo acuminato pertuso brevi; ascis cylindricis, 300 μ . longis; sporidiis monostichis, oblongis maximis, bilocularibus, medio constrictis utrinque obtusis, subinde loculo superiore crassiore, fuliginis, 40–50 \approx 20.
Hab. ad cortices arborum, Cayenna (LEPRIEUR), Ceylon et Cuba (BERK.).
27. **Amphisphæria pædida** (B. et Br.) Sacc. *Sphæria* (pertusa) *pædida* 2740
 B. et Br. Ann. Nat. H. n. 1396, t. X, f. 13, Grevill. t. 22, f. 5. — Peritheciis ovoideis, rugosis, opacis, liberis, brunneo-fuscis, ostiolo conico, denique deciduo; ascis linearibus; sporidiis monostichis, oblongis, bilocularibus, medio constrictis, fuscis, 12–15 \approx 5–7,5.
Hab. in ligno fagineo, in Britannia.
28. **Amphisphæria pusiola** Karst. Myc. Fenn. II, p. 57. *Did. pusiola* 2741
 (Karst.) Rehm. Ascom. ill. n. 589. — Peritheciis subgregariis sparsisve, superficialibus, ovoideis aut sphæroideis verticeque conoideo-attenuatis, lævibus, ostiolo inconspicuo, atris, latit. 0,2 mill. (basi pilis brevibus, simplicibus, obtusis sparse cinctis, sec. Rehm); ascis cylindræis, 95 μ . long., 70–85 \approx 7–8 p. sporif.; sporidiis octonis monostichis, oblongatis, uniseptatis, fuscidulis, 10–14 \approx 4–5.
Hab. in ligno vetusto Salicis nigricantis prope Mustiala Fenniæ et ad ramulos querneos in Franconia Germaniæ. — Paraphyses, teste Rehm, ramosæ, septatæ. Cl. Rehm ad *Didymosphæriam* serius duxit, sed peritheciis liberis ad genus *Amphisphæriæ* multo propius accedit.
29. **Amphisphæria fæda** De Not. Sfer. it. p. 71, fig. Sacc. Myc. Ven. 2642

Spec. p. 112, t. XI, f. 21-23, F. it. t. 445. — Peritheciis superficialibus e globoso conicis inæquali-gibbis, ostiolo acutiusculo; ascis crasse cylindræis, $80 \approx 8-10$, 8sporis; paraphysibus filiformibus obvallatis; sporidiis sparsis, distichis v. monostichis, obscure fuliginæis, ovato-subclavatis, bilocularibus, loculo supero angustiore, apice subtruncatis, $12-15 \approx 5\frac{1}{2}-6$.

Hab. in palis Salicis cariosis pr. Valle Intrasca et Treviso, Italia boreali.

30. **Amphisphæria papillata** (Schum.) De Not. Sf. it. 68, f. 71, Sacc. 2743
Myc. Ven. Spec. p. 112, t. XI, fig. 24, *Sphæria papillata* Schum. Sæll. II, 161, Fr. S. M. II, p. 461. — Subsparsa; peritheciis orbicularibus semiimmersis lævibus atrofuscis, ostiolo papillato circumcirca impresso; ascis cylindricis, guttulato-paraphysatis, octosporis; sporidiis ellipsoideis subinde utrinque acutiusculis, $15 \approx 8$, uniseptatis, non constrictis, opace fuliginæis.

Hab. in ligno carioso Salicum in Germania, Rossia, Italia. — Perithecia sparsa subinde duo confluentia, dimidiata, basi deficientia et ligno immersa, ceterum eximie superficialia, hemisphæricoglobosa, majuscula, dura, persistentia; ostiolum papillæforme. Subiculum prorsus nullum, sed extus floccis tenuissimis quasi corticata apparet, licet glabra potius dicenda sit.

31. **Amphisphæria phileura** (C. et P.) Sacc. *Sphæria* (pertusæ) *phileura* C. et Peck., in Grev. V, p. 55, t. 81, f. 6. — Sparsa; peritheciis orbicularibus, depressis, semi-immersis, atris; ostiolo simplici, pertuso, ascis clavatis; sporidiis biseriatis, ellipticis, uniseptatis, brunneis, parum constrictis, $22 \approx 10$.

Hab. in cortice Tiliæ americanæ, New York Americæ borealis (PECK).

32. **Amphisphæria melasperma** (Cooke) Sacc. *Psilosphæria melasperma* Cooke Grevill. VIII, p. 118. — Erumpens, demum denudata; peritheciis gregariis, globosis, atris, lævibus, subnitidis; ostiolo crasso, prominulo; ascis cylindræis; sporidiis elliptico-acuminatis, nucleatis, demum uniseptatis, dein nigrescentibus, opacis, $35 \approx 12$.

Hab. in ligno denudato, New York Amer. bor.

33. **Amphisphæria Passerinii** Sacc. et Sp. Mich. I, p. 374, F. it. t. 623. 2746
Lophiostoma angustilabrum Pass. in herb. Thüm. (*Lophiostomei* n. 4), non B. et Br. — Peritheciis sparsis, initio peridermio tumidulo velatis, dein eo secedente superficialibus, ligno nigrificato adnatis, globoso-depressis, majusculis $\frac{1}{2}-\frac{3}{4}$ mill. diam., obtuse papillatis, perforatis, contextu carbonaceo atro; ascis cylindricis deor-

sum attenuato-stipitatis, 150-180 \approx 10-11 p. sporif. stipite 50-60 long., apice rotundato, obturaculo jodo intense cærulescente, paraphysisibus copiosis guttulatis, obvallatis, octosporis; sporidiis monostichis, oblongo-didymis, 22-23 \approx 8-9, leniter constrictis, initio hyalinis, dein roseo-fuscis, denique fuligineis, 2-guttatis, vel 2-nucleatis.

Hab. in ramis emortuis Ulicis europæi, Parma Ital. bor. ubi legit cl. prof. G. PASSERINI et ad cl. THUEMEN misit. — Ab *A. pseudo-umbrina* Sacc., aliisque affinibus rite diversa.

34. **Amphisphæria salebrosa** (C. et P.) Sacc. *Sphæria* (denudatæ) *salebrosa* C. et P. 29 Rep. on the St. Mus. New York. — Peritheciis gregariis v. confertis, globosis, nigris, depresso-umbilicatis, pertusis, radiatim sulcatis, $\frac{1}{2}$ - $\frac{3}{4}$ mill. diam.; ascis cylindræis v. clavatis; sporidiis lanceolatis, acutis, uniseptatis, constrictis, fuligineis, 35-50 \approx 8-10; paraphysisibus numerosis filiformibus.

Hab. in ramis emortuis fruticum, Center, Amer. bor.

35. **Amphisphæria fibricola** Sacc. Mich. II, pag. 248. — Peritheciis sparsis, ligno semi vel fere penitus immersis, ovoideo-globulosis, carbonaceis, majusculis, $\frac{3}{4}$ -1 mill. diam., ostiolo minuto papillato; ascis..... (senio jam resorptis); sporidiis ovato-ellipsoideis, 14-16 \approx 8-10, 1-septatis, denique leniter constrictis, 2-guttatis, fuligineis.

Hab. in ligno pineo aëri diu exposito et indurato, Venezia (A. Rossi). — Etsi asci sint adhuc ignoti species optime distinguenda.

36. **Amphisphæria pinicola** Rehm Ascom. n. 135 (1872), *Didymosphæria alpina* Haszl. in Hözlem. Banat. 1873, p. 49, fig. 16. — Peritheciis sparsis, erumpentibus, dein in cortice sessilibus, semiglobosis, breviter papillatis, poroque pertusis, dimidiatis, atris, circa 0,5 mill. diam.; ascis cylindræo-clavatis, crassis, (4-6-) 8-sporis, 120 \approx 15, jodo cærulescentibus; sporidiis ellipticis, medio constrictis, massa granulosa repletis, primitus, 1- dein 2-cellularibus hyalinis, denique fuscis, 21-24 \approx 9-10 plerumque monostichis; paraphysisibus numerosissimis, parce ramosis.

Hab. ad ramos siccos Pini pumilionis et Mughii in alpinis editioribus Tyrolensibus et in Banatu. — Sec. Hazl. sporidia paullo angustiora, nempe 25 \approx 7.

37. **Amphisphæria thujna** (Peck) Sacc., *Sphæria thujna* Peck 27 Rep. p. 110. — Peritheciis sparsis subliberis, hemisphæricis vel conicis, leniter rugulosis, fragilibus, tenuibus, ostiolis initio leniter

papillatis, dein pertusis; sporidiis crassis, uniseptatis, oblongo-ellipsoideis, ad septum constrictis, 36-45 μ long. coloratis.

Hab. in Amer. bor. Adirondack, in ligno emortuo Thujæ occidentalis.

38. **Amphisp hæria tumulata** (Cooke) Sacc. *Sphæria* (immersa) *tumulata* Cooke Grev. VII, p. 4. — Immersa; peritheciis subglobosis, atris, ostiolis erumpentibus; ascis cylindræis; sporidiis sublanceolatis, obtusis, uniseptatis, atro-brunneis, utrinque hyalino-apiculatis, 35-40 \approx 12. 2751

Hab. in ligno Pini contortæ Sierra Nevada Californiæ. — Affinis *Valsariæ apiculatæ* sed sporidia multo crassiora et habitus alienus.

39. **Amphisp hæria sapinea** Karst. Fung. Fenn. exsicc. 880, Myc. Fenn. I. p. 56. — Peritheciis sphæroideis, fusco-atris, ostiolo papillato; sporidiis monostichis, ellipsoideis, uniseptatis, fuscis, 34-44 \approx 16-22. 2752

Hab. in ramis pineis in Fennia. — Præeunte ipso auctore, species ulterius inquirendæ.

40. **Amphisp hæria? acicola** (Cooke) Sacc. *Lasiosphæria acicola* Cooke Grev. VII, p. 87. — Peritheciis subglobosis, papillatis, superne glabris, atro-brunneis, in bysso effusa, intricata nidulantibus; ascis cylindræis; sporidiis uniserialibus, ellipticis, utrinque subattenuatis, uniseptatis, leniter constrictis, brunneis 28 \approx 10. 2753

Hab. in foliis dejectis Pini, Rocky Mountains Amer bor. (Doct. LYALL). — In genere anceps ob byssi præsentiam: si sporidia hyalina fuissent, vera *Esiosphæria*; ceterum perithecia parte superiore prorsus glabra.

II. *Herbicolæ.*

41. **Amphisp hæria pulcherrima** Speg. Nov. Add. n. 72 et Mich. II. p. 249. — Peritheciis globoso-conicis, in matrice sæpius dealbata quandoque superficialibus, atris, ostiolo obtusiusculo perforato donatis, contextu atro-carbonaceo 250-300 μ . d.; ascis cylindræo-ventricosis, brevissime ac nodulose stipitatis, apice truncato-rotundato, paraphysibus paulo longioribus, crassiusculis, septatis ac guttulatis, obvallatis, octosporis 100-120 \approx 30; sporidiis distichis vel rarius submonostichis, ellipticis medio uni-septato-constrictis, læte fuliginis, utrinque rotundatis, atque duobus parvulis protuberantiis depressis, hyalinis, mucosis cito diffluentibus donatis, longitudinaliter 2-3-striatis, rarius 2-guttulatis, 30 \approx 12-14. 2754

Hab. in caulibus dejectis putrescentibus Thalictri aquile-

gifolii in alpinis *M. Marmolada* Ital. bor. — Species distinctissima: obturacula ascorum iodi ope intense cœrulescentia!

42. **Amphisphæria enteroxantha** Ces. Myc. Born. p. 21. — Peritheciis 2755
sparsis, minutis, superficialibus, obovatis, vertice depresso, ostiolo punctiformi, coriaceis, brunneis; nucleo aurantio; ascis longe stipitatis, e cylindræo clavatis, acutis, 40-41 \approx 4-5 (cum stipite), paraphysibus filiformibus æquilongis obvallatis, octosporis; sporidiis uniserialibus, invicem accumbentibus, luteolis, fusiformibus, septatis et medio constrictis, utrinque in apiculum hyalinum brevem acuminatis, 10 \approx 2.

Hab. ad caulem lignescentem putridum, Sarawak, Borneo (BÈCCARI). — Post perithecorum delapsum foveola aurantiaca in matrice superest.

43. **Amphisphæria australis** Speg. F. Arg. Pug. I, p. 182. — Peri- 2756
theciis densissime gregariis, constipatis, globosis, ostiolo majusculo umbilicato, primo fulvescenti-rubescente donatis, glabris, dein totis atris $\frac{1}{2}$ - $\frac{3}{4}$ mill.; ascis cylindræeis, apice rotundatis deorsum in pedicellum breviusculum desinentibus, octosporis, 120 \approx 10-12 paraphysibus filiformibus obvallatis; sporidiis distichis vel oblique monostichis, elongatis, fusoideis 30-32 \approx 6-7, medio 1-septato-constrictis, utrinque acutiuscule rotundatis crasse 1-guttulatis, fuliginis.

Hab. ad corticem secedentem caulium emortuorum *Jussiaea longifoliae* in paludosis secus Rio de la Plata a la Recoleta Amer. merid. — Species distinctissima; externe *Cucurbitariam* æmulans, sed superficialis nec erumpens; ostiolo umbilicato-perforato, ruforubescente; pulcherrima!

III. In Monocotyledoneis et Acotyledoneis.

44. **Amphisphæria culmicola** Sacc. Myc. Ven. Sper. p. 113, tab. XI, 2757
f. 26-29, F. it. t. 444. — Peritheciis sparsis, conoideis, $\frac{1}{4}$ mill. diam., ostiolo acutiusculo, atris, epidermide nigrificata insidentibus; ascis clavato-cylindræeis, subsessilibus, 90 \approx 20, paraphysibus filiformibus ramosis obvallatis, 8sporis; sporidiis ovatis, didymis, medio constrictis, polis obtusiusculis, 24-26 \approx 9-10, initio hyalinis 2-magniguttulatis, dein fuscis, 2-4-guttulatis.

Hab. ad basim culmorum emortuorum *Cynodontis Dactyli*, Padova et Cadore Ital. bor. — *A. melanommoides* Sacc. Mich. l. pag. 455, Fungi it. t. 455. A typo recedit peritheciis globosis, superficialibus, papillulatis, dense gregariis; notæ fructificationis

perfectissime tamen quadrant cum typo. In radicibus et culmis Arundinis Donacis putrescentibus Conegliano, Ital. bor.

45. **Amphisphæria diplasia** (Dur. et Mont.) Sacc. *Sphæria diplasia* 2758
Dur. et Mont. Syll. crypt. n. 822. Fl. Alg. p. 515, t. 27, f. 8. — Immersa; peritheciis sparsis ampullaceis membranaceis nucleoque fuscis, ostiolo dilatato exerto convexo perithecium lenticulare papillatum mentiente; sporidiis badio-fuscis, $25 \approx 10$, cymbiformibus medio constrictis bilocularibus.

Hab. in parte lignosa culmorum Arundinis mauritanicæ, Alger (DURIEU).

46. **Amphisphæria biturbinata** (Dur. et Mont.) Sacc. *Sphæria biturbinata* Dur. et Mont. Syll. n. 800 et Fl. Alg., I, p. 497, t. 26, f. 7. — Denudata, sparsa, majuscula; peritheciis crassis, sphæricis, atris opacis rigidis, basi inflexa subliberis; ascis sacciformibus obovatis, $160 \approx 80$, sporidia pauca biturbinata maxima fœventibus.

Hab. in Posidonia oceanica, Alger (DURIEU).

47. **Amphisphæria Posidonix** (Dur. et Mont.) Ces. et De Not. Schema 2760
Sf. p. 224 *Sphæria Posidonix* Dur. et Mont. Syll. n. 804 et Fl. Alg. p. 502, t. 25, f. 8. — Denudata, adnato-superficialis, sparsa; peritheciis liberis dimidiatis hemisphærico-conicis, depressis, crassis, lævibus, extus intusque atris opacis, apice poro pertusis, tandem diffractis; ascis diffluentibus inter paraphyses dichotomas erectis, $250-300 \approx 20$; sporidiis $50-56 \approx 16-17$, nevicularibus, medio septatis, brunneis.

Hab. in ima parte denudata caulium tam emortuorum quam vivorum in profundo mari scilicet adhuc vegetantium Posidonix oceanicæ, in pluribus locis littoris Africani, italici, gallici. — Species maxime insignis et quoad vegetationis medium fere paradoxo.

48. **Amphisphæria ventosaria** (Linds.) Sacc. *Sphæria ventosaria* Linds. 2761
Linn. Trans. XXVII, p. 346, t. 56. f. 10. *Microthelia ventosicola* Mudd. — Peritheciis thalli protuberantiis insidentibus, excipulo spurio thallino cinctis, levibus nigris v. pruinosis; sporidiis continuis, dein 1-septatis, constrictis, ellipsoideis v. ovoideis, fuligineis.

Hab. in thallo Lecanoræ ventosæ, Lochnagar Britannix.

IV. Dubiæ.

49. **Amphisphæria? umbrinella** (B. et Br.) Sacc. *Hypoxyton umbrinellum* B. et Br. Fungi of Ceyl. n. 1075. — Late effusa; peritheciis minutis ovatis metulæformibusque umbrinellis materie fur-

furacea vestitis; ascis linearibus; sporidiis subellipticis uniseptatis, demum echinulatis 12-13 \approx 6-7.

Hab. in ligno denudato, Central province pr. Ceylon. — An potius *Valsaria* (Sect. *Phæosperma*)?

50. **Amphisphæria? prorumpens** (Bon.) Sacc. *Ascotricha prorumpens* 2763

Bonord. Abhand. p. 151, nec *Sphæria prorumpens* Wallr. — Peritheciis globosis, atris, aggregato-confluentibus, subimmersis, papilla parva conica præditis; ascis clavatis, simpliciter paraphysatis; sporidiis ellipticis, curvatis, 1-septatis, 2-guttulatis, fusco-nigris.

Hab. in ligno denudato in Germania. — Quoad *Sph. prorumpentem* Wall. conf. Syll. nostra n. 642.

RHYNCHOSTOMA Karst. Myc. Fenn. II, p. 7. (Etym. a *rynchos*, rostrum et *stoma* ostiolum). — Perithecia sparsa vel gregaria, immersa vel erumpentia, sphæroidea, rostro diametrum perithecii æquante vel excedente ornata, carbonacea, atra, glabra. Asci cylindranei vel clavati, octospori, plerumque paraphysati. Sporidia ellipsoidea, uniseptata, fusca. — Fungilli ligni- vel corticolæ.

1. **Rhynchostoma cornigerum** Karst. Myc. Fenn. II, p. 57. — Peri- 2764

theeciis subsparsis, immersis, demum semiimmersis, sphæroideis vel sphæroideo-ovoideis, atris, basi filamentis sparsis, longiusculis concoloribus obsessis, rostro valido, rudi, recto vel leviter curvulo, plerumque infra apicem nonnihil coarctato, longitudine perithecii, circiter 0,6 mill. lat.; sporidiis ellipsoideis vel oblongo-ellipsoideis, medio haud vel paullo constrictis, uniseptatis, fuscis, 8-10 \approx 3-4.

Hab. in cortice vetusto Betulæ in Lapponia rossica, ad Soukelo. — Asci nondum inventi.

2. **Rhynchostoma minutum** Karst. Myc. Fenn. II, p. 58. — Peri- 2765

theeciis sparsis, erumpentibus, sphæroideis vel sphæroideo-ovoideis, atris, rostro cylindraneo, nonnihil curvato, lævi, subconcolore, perithecio triplo longiore, circiter 0,7 mill. long., glabris, lævibus, circiter 0,2 mill. lat.; ascis clavatis, 30 \approx 8, octosporis; sporidiis distichis, ellipsoideis, uniseptatis, dilute fuscis, 6-8 \approx 3-4; paraphysibus filiformibus, ascos superantibus.

Hab. in ligno vetusto duro truncorum stantium Juniperi communis prode Tammela Fennia.

3. **Rhynchostoma exasperans** Karst. Myc. Fenn. II, p. 58. — Peri- 2766

theeciis gregariis, ligno immersis, sphæroideis, basi filamentis sparsis, longiusculis obsessis, rostro cylindraneo, rudi, stricto, cras-

siusculo, perithecio duplo longiore, rigido, apice obtusiusculo emergente, atris, circiter 0,5 mill. lat.; ascis subsessilibus, cylindraceis, 65 = 6, p. sporif. 55 μ . longa, octosporis; sporidiis oblique monostichis, ellipsoideis, guttulis 2 majusculis præditis vel spurie tenuiter uniseptatis, 9-12 = 4-5.

Hab. in ligno vetusto molli Salicis capreæ, Mustiala Fennia.

4. **Rhynchostoma Julii** H. Fab. Sphér. Vaubl. p. 84, f. 18-20. — Peritheciis initio epidermide tectis, tandem denudatis, solitariis vel 4-20 et ultra irregulariter coacervatis, basi globosis et in ligno fracido nidulantibus, sursum conico-clypeiformibus, expansis, rugosis, opaco-atris, in rostrum cylindricum nunc breve nunc perithecii altitudinem æquans aut superans abrupte productis; rostro recto vel cernuo, sub apice plerumque subtiliter marginato diam. partis immersæ 1 mill., partis emersæ et clypeiformis, 1½, 2 mill.; ascis cylindraceis, breve stipitatis, 8-sporis, 100-125 = 10-15; sporidiis oblique monostichis, oblongo-ellipticis, didymis, initio hyalinis, medio constrictulis, loculis magniguttatis granulosisque; dein opaco-fuscis, 18-25 = 7-10.

Hab. ad ramos exsiccatos Genistæ Scorpii, Vacluse Gallia. — Rostrum quandoque in papillam degenerat, et perithecia vertice poro modo perforantur.

5. **Rhynchostoma pachyceras** (Dur. et Mont.) Sacc., *Sphæria pachyceras* Dur. et Mont. Syll. n. 828 et Fl. Alg. pag. 486. — Tecta, emergens: peritheciis parallele seriatis, nigris, ovoideis cum ostiolo crasso corniformi subsulcato cuticulam discutiente confluentibus, demum seminudis; ascis tubulosis 165 μ . longis; sporidiis oblongis fusco-brunneis, medio septatis ibique leniter constrictis.

Hab. in ramis Clematidis cirrhosæ, Bouzareah Algeria (DURIEU).

6. **Rhynchostoma altipetum** (Peck) Sacc., *Sphæria altipeta* Peck Bot. Gaz. 1880. — Peritheciis minutis, subglobosis, immersis, nigris; ostiolis emergentibus subconicis, vel cylindraceis, perithecium subæquantibus; ascis cylindricis; sporidiis monostichis, oblongis, 16-17 = 5, initio hyalinis, dein coloratis, prope extremitatem 1-septatis, prope alteram subhyalinis.

Hab. in lignis emortuis, in montibus Washington Amer. bor. (C. G. PRINGLE). — Perithecia subinde seriatim disposita.

7. **Rhynchostoma badium** (Preuss) Sacc., *Sphæria badia* Preuss Fungi Hoyersw. n. 302. — Sparsum, dein liberum; peritheciis subglo-

bosis lævibus, dilute badiis; ostiolo cylindrico-truncato; ascis cylindricis, octosporis: sporidiis ovatis, uniseptatis, subbicoilis (bilocularibus?) fuscis.

Hab. ad ramos Populi, Hoyerswerda Germaniæ.

DELITSCHIA Auersw. in Hedw. 1866, p. 49. (Etym. a prof. *Delitsch* Lipsiensi). — Perithecia sparsa, fimo immersa, sphæroidea, rostro emerso, atra, coriaceo-membranacea. Asci cylindranei paraphysati, octospori. Sporidia subellipsoidea, uniseptata, fusca, strato hyalino circumdata.

1. **Delitschia Auerswaldii** Fuck. Symb. myc. p. 241. *Delitschia di-* 2771
dyma Auersw. in Hedw. 1866, p. 49. — Peritheciis sparsis, immersis, coriaceo-membranaceis, $\frac{3}{4}$ mill. diam., ovatis, fuscis rostro crasso brevissime conico coronatis; ascis cylindraneis, 8spor., paraphysibus filiformibus obvallatis, 250-300 μ . longis; sporidiis oblique monostichis, oblongo-ovatis, utrinque obtusis, bilocularibus, medio constrictis, fuscis opacisque, $52 \approx 18$, demum in articulos binos secedentibus.

Hab. in stercore Capreolorum, Leporum et Cuniculorum in Saxonia et Rhenogovia.

2. **Delitschia bisporula** (Crouan) Hans. Fungi fim. dan. p. 107, t. IX, 2772
f. 7-11, Grevill. t. 94, f. 4, *Hormospora bisporula* Crouan Finist. p. 21. — Peritheciis ovoideis, nigricantibus, circ. $\frac{1}{2}$ mill. altis, in ostiolum breve conicum obtusum atteauatis, pilis rigidulis sursum vestitis; ascis cylindraneis, octosporis paraphysatis, $150 \approx 15$; sporidiis monostichis, oblongis, 1-septatis, constrictis, $27 \approx 10$, strato hyalino obvolutis, fuliginis.

Hab. in fimo vaccino, cuniculorum etc. in Gallia, Britannia, Dania. — *Del. moraviczæ* affinis,

3. **Delitschia chætomioides** Karst. Myc. Fenn. II, p. 60. — Perithe- 2773
ciis sparsis vel subgregariis, immersis, sphæroideis, atris, villo detersili fusco obvolutis, circiter 0,7 mill. diam., rostro emerso, rudi, inæquali, crasso, sæpe tuberculato, forma varia, 0,7 mill. long., 0,6 mill. crass.; ascis cylindraneis, $250 \approx 30$ p. sporif., parce paraphysatis; sporidiis monostichis, subellipsoideis, uniseptatis, fuscis, opacis, $38-50 \approx 17-20$.

Hab. in fimo equino prope Mustiala Fenniæ.

4. **Delitschia congregata** Speg. Fungi Arg. Pug. IV, n. 163. — Pe- 2774
ritheciis dense gregariis superficialibus vel semiimmersis, globosis 400-450, levissimis, in ostiolum cylindricum subæquilongum, molle

rectum vel reflexum productis, atris, carnosulo-membranaceis, contextu parenchymatico, olivaceo-fusco; ascis cylindraceutis, sursum truncato-rotundatis, crasse tunicatis, luce refracta 1-foveolatis, deorsum breve attenuato-stipitatis, 110-120 \approx 8, octosporis, paraphysibus filiformibus septulatis vel guttulatis obvallatis; sporidiis oblique monostichis, elliptico-elongatis, 16-20 \approx 6-7, utrinque obtusiuscule rotundatis, medio 1-septatis, non constrictis, 4-guttulatis. v. granuloso-farctis, non v. vix inæquilateralibus, fusco-olivaceis.

Hab. in trunco salicino putrescente socia *Coryne urnali*, rarissime, Recoleta, Argent. Amer. merid.

5. **Delitschia graminis** Niessl Not. Pyr. p. 48, tab. IV, fig. 23. — 2775

Peritheciis in culmis nigrescentibus v. fusciscentibus sparsis, erumpentibus, majusculis, 350-400 μ . diam., globosis, demum depressis, atro-fuscis, carnosulo-coriaceis, glabris, ostiolo conico, peritheciis semidiametrum subæquante; ascis e maximis, polymorpho-clavatis, superne inferneque attenuatis, stipitatis 200-300 \approx 24-46, membrana interna apice incrassata, sporidiis 8, laxè distichis v. monostichis, oblongis, rectis, utrinque obtusiusculis, medio uniseptatis, biguttatis, atro-fuscis, opacis, strato gelatinoso cinctis, 33-36 \approx 12-15; paraphysibus multis, parum superantibus, tenuibus, ramosis.

Hab. in culmis putridis Avenæ Parlatorii prope Liezen Styriæ. — Teste ipso Niessl *Amphisphæria culmicolæ* Sacc. affinis; an ergo (et quia non fimicola) potius ex hoc postremo genere?

6. **Delitschia minuta** Fuck. Symb. myc. p. 242, Grev. t. 94, f. 4. — 2776

Peritheciis multo minoribus, quam *D. Auerswaldii*, tectis, globosis, minute papillatis, atris; ascis sessilibus, cylindraceuto-elongatis, 8sporis, 136-145 \approx 14-15; sporidiis oblique monostichis, oblongo-ovatis, didymis, medio constrictis, fuscis, demum subopacis, anulo hyalino, angusto cinctis, 22 \approx 8.

Hab. in stercore leporino et caprino prope Königstein Germaniæ et Forres Britannicæ.

6. **Delitschia moravica** Niessl Not. Pyr. p. 47, t. IV, f. 22. — Pe 2677

Peritheciis subliberis, plus minus gregariis, minutis, vix 200 μ . diam., subglobosis, cum ostiolo brevi crassoque conoideo sæpe curvato confluentibus, atris instructis carnosulo-coriaceis; ascis tubulosis rarius parum clavatis, stipitatis 120-150 \approx 20-28 p. sporif.; stipite 10-14 μ . long.; sporidiis 8, oblique monostichis, interdum irregulare distichis, oblongis v. ellipsoideis, rectis, medio septatis valdeque constrictis, utrinque apiculo verruciformi diluto v. subhyalino, strato

gelatinoso cinctis, atro-fuscis, subopacis, 20–21 \approx 8; paraphysibus crassis, articulatis, ascos superantibus simplicibus vel sparse ramosis.

Hab. in stercore leporino prope Brünn Moraviæ, sociis *Sporormia intermedia*, *Sordaria macrospora* et *S. discospora*.

8. **Delitschia sordarioides** Speg. Fungi Arg. Pug. II, n. 73. — Pe. 2778

Peritheciis globoso-lenticularibus, $\frac{1}{3}$ – $\frac{1}{4}$ mill. diam., olivaceo-fuscis, glabris, matrici semiimmersis, ostiolo papillato coriaceo-atro ornatis. contextu membranaceo, parenchymatico, dilute fusco-atro; ascis longe cylindraceutis. sursum truncato-rotundatis, basi in pedicellum longum, ac gracilem attenuatis, 150–170 \approx 10–14. octosporis, paraphysatis (?); sporidiis subdistichis, primo continuis, cylindraceutis, hyalinis, dein ellipticis, fuligineo-sub-opacis. utrinque rotundato-truncatis, 14–15 \approx 7–8, excentrice (inferne) 1-septatis, ad septum non constrictis. loculis, jodi ope, nucleo-atro-fuligineo hyalino-ocellato ornatis, duas caudas cylindraceutas hyalinas gerentibus, superiore sporidium æquantem; inferiorem pluries longiorem, 30–35 \approx 5.

Hab. in fimo vaccino secus Rio de la Plata cerca de la Recoleta, Argent. Amer. merid. — *Sordaria coprophilæ* affinis, sed septo recedens; an generi *Delitschiæ* certe adscribenda sit non nihil dubius sum. Speg. l. c.

9. **Delitschia Winteri** Plowr. Brit. Fung. in Grev. II, p. 188, t. 25, 2779

fig. 1. — Peritheciis semiimmersis, v. immersis, ostiolo cylindraceuto, crassiusculo, curvulo, tuberculato, apice truncato subinde curvulo; ascis cylindraceutis, deorsum breve attenuato-stipitatis, 450 \approx 65–70, apice rotundatis, paraphysibus septulatis, hyalinis obvallatis, octosporis; sporidiis oblique monostichis, oblongis, constricto-1-septatis, 65–75 \approx 29–35, utrinque rotundatis, primo flavis, dein opace fuliginis, strato gelatinoso crasso obvolutis.

Hab. in fimo vaccino, ovino et cuniculorum, North Wootton Britanniae, Conegliano Ital. bor.

10. **Delitschia elephantina** Pass. Funghi Abiss. p. 190, t. V, fig. 14. 2780

— Peritheciis minutis conicis hyphis reptantibus brevibus paucis affixis; ascis subclavatis rectiusculis vel curvis vix pedicellatis 8-sporis; sporidiis obscure distichis fusiformibus septatis, apicibus acutis, ad septum vix constrictis, primo hyalinis, tandem fuscescentibus.

Hab. in stercore Elephantis, Keren Abyssiniae (Beccari). — Ascis (ex icone) 27 μ . circ. longi, sporidia 10 μ . circ. longa; sed dimensiones pro genere justo multo minores videntur.

OTTHIA Nits. in Fuck. Symb. myc. pag. 169. (Etym. a *C. A. Otth*, phytographo bernensi). — Perithecia erumpentia, cæspitosa, subsphæroidea, minute papillata, atra, glabra, carbonacea. Asci cylindracei octospori, paraphysati. Sporidia ellipsoidea, uniseptata, fusca. — Pycnides ut plurimum *Diplodice* species sistunt.

1. *Eu-otthia*: sporidiis fuliginis.

1. **Otthia Cratægi** Fuck. Symb. myc. App. I, p. 19. — Peritheciis in cæspites densos erumpentibus, majusculis, aterrimis, globosis, minute papillatis, demum perforatis; ascis stipitatis, cylindraceis, 8-sporis, 180–216 \approx 14–16; sporidiis oblique monostichis, ovato-oblongis, didymis, ad septum constrictis, fuscis, subopacis, 25–28 \approx 12–14. — Status pycnidicus sistit *Diplodiam Cratægi* Fuck.; status spermogonicus *Phomam Cratægi* Sacc. 2781

Hab. in ramis corticatis *Cratægi Oxycanthæ*, Hallgarten Rhenogoviæ, Vittorio Italiæ bor., Vaucluse Galliæ.

2. **Otthia Pyri** Fuck. Symb. myc. App. I, p. 307. — Peritheciis ascigeris cæspitosis, erumpentibus, dein liberis, media magnitudine, ovato-globosis, papillatis, atris; ascis stipitatis, cylindraceis, 8-sporis; sporidiis oblique monostichis, ovato-oblongis, utrinque obtusis, didymis, medio constrictis, fuscis, 28 \approx 14; paraphysibus filiformibus. — Stat. pycnidicus sistit prob. *Diplodiam Pseudodiplodiam* Fuck. et *D. Malorum* Fuck. 2782

Hab. in ramis corticatis *Pyri* communis, rarius pr. *Æstrich* Rhenogoviæ.

3. **Otthia Pruni** Fuck. Symb. myc. p. 169. — Peritheciis gregariis, transversim erumpentibus, demum liberis, media magnitudine, ovatis, nigris, opacis, collo brevi, conico-cylindraceo, obtuso, quandoque oblique truncato, perforato; ascis elongatis, stipitatis, octosporis; sporidiis monostichis (?), ovato-oblongis, didymis, medio parum constrictis, atro-fuscis, 24 \approx 12. — Stat. pycnidicus sistit *Diplodiam Pruni* Fuck. 2783

Hab. in ramis corticatis *Pruni spinosæ* in Germania (Fuck.) et Gallia (Fabre).

4. **Otthia Spirææ** Fuck. Symb. myc. p. 170. — Peritheciis gregariis cæspitosisve, erumpentibus, sæpe confluentibus, globosis, in collum conicum cylindraceumve, obtusum, perforatum, perithecium subæquans attenuatis, demum depressis, subtiliter rugulosis, fusco-atris; ascis cylindraceis, stipitatis, 8-sporis, sporidiis didymis, ovato-oblongis, fuscis. 2784

Hab. in ramulis siccis *Spirææ opulifoliæ* et *S. salicifoliæ*, Reichartshausen Germaniæ, Gorizia Illyrii italici.

5. **Otthia populina** (Pers.) Fuck. Symb. myc. p. 170. *Sphæria populina* Pers. Sym. p. 50. Fr. S. M. II, p. 413. — Cæspitosa stromate compacto, peritheciis ovatis lævibus atris, ostiolo papillæformi; ascis cylindræis, stipitatis; sporidiis monostichis, didymis, pallide fuscis. — St. pycnidicus sistit *Diplodiam mutilam* (Fr.) Mont. 2785

Hab. in ramis corticatis emortuis *Populi pyramidalis* et *nigræ* in Germania, Gallia, Britannia et Belgio. — Perithecia prominentia, oblongo-ovata, lævia, subnitida, primo massa ceracea facta. Cæspites sæpius ampli, sed et subinde exigui; in his perithecia minus divergunt, subconnata.

6. **Otthia diminuta** Karst. Myc. Fenn. II, p. 58 (ut var. *O. populina*). 2786
Sphæria populina Fr. Syst. myc. II, p. 413, pr. p. — Peritheciis in cæspites per peridermium erumpentes, orbiculares densissime stipatis vel subconnatis, subsphæroideis vel subovoideis vel mutua pressione difformibus, vertice interdum depressis, ostiolo obsoleto vel impresso vel minute papillato, nitidulis, lævibus, glabris, atris, latit. circiter 0.4 mill.; ascis cylindræis, 70-78 \approx 7, octosporis; sporidiis monostichis, ellipsoideis, uniseptatis, ad septum haud vel vix constrictis, subfuscis, 10-12 \approx 5-6; paraphysibus filiformibus, ramosis.

Hab. in ramulis exsiccatis *Populi nigræ* in Mustiala Fennicæ. — Ab *Otthia populina* differt cæspitibus minoribus, 1-1,5 mill. latit., stromate tenuiore, peritheciis subsphæroideis, subconnatis, minus divergentibus etc. Occurrunt peritheciis commixta spermatogonia erumpentia, sphæroidea, atra, peritheciis minora, spermatia oblongata, simplicia, incoloria. 5-6 \approx 2 includentia.

7. **Otthia ambiens** Niessl Hedw. 1881 p. 98. — Peritheciis dense cæspitosis hemisphæricis vel subglobosis, coriaceo-carbonaceis, atris, obscure umbilicatis, et papillatis; ascis clavato-oblongis, amplis 130-150 \approx 40-50; sporidiis 8, inordinate 2-3-distichis, oblongis vel parum semilanceolatis vel elongato-pyriformibus, inæqualiter diblastis (uniseptatis), parte superiori valde majori, inferiori minori attenuatis, atro-fuscis, 45-52 \approx 15-20; paraphysibus numerosis ramulosis guttulatis. 2787

Hab. in ramis *Betulæ albæ* siccis in Germania (ut videtur). 2788

8. **Otthia Doberæ** Pass. Funghi abiss. p. 189. — Cæspitosa, stromate cortici interiori similari; peritheciis globosis, atris, rugulosis, ostiolo papillæformi; ascis cylindrico-clavatis, inferne attenuatis, 8spo-

ris; sporidiis elliptico-oblongis, uniseptatis, ad septum non constrictis, castaneo-fuscis.

Hab. in cortice ramorum Doberæ glabræ, Kelseret Abyssiniæ (BECCARI).

9. **Otthia Quercus** Fuck. Symb. myc. p. 170 *Cucurbitaria Quercus* 2789

(Fuck.) Sacc. Myc. Ven. Spec. p. 118, t. XII, fig. 10. — Pycnidium: *Diplodia Quercus* Fuck. l. c. — Peritheciis cæspitosis, confluentibus, primo tectis, dein liberis, maximis, hemisphæricis, punctulato-scabris, atris; ostiolis minutis, papillæformibus; stylosporibus oblongis, guttulatis, fuscis, $30 \approx 10 \mu$. crass.; peritheciis ascophoris pycnidia imitantibus, ostiolis vero longioribus, cylindræcis; ascis amplis, stipitatis, subclavatis, tunica crassa, $96 \approx 24 \mu$. sporif.; sporidiis octonis, inordinatis, oblongis, l-septatis, guttulatis, fuscis, $32 \approx 12$.

Hab. in ramis corticatis Quercus in Germania et Italia. — «Asci late cylindræci, $140 \approx 12-14$, breve crasseque stipitati, 8spori; sporidia oblique monosticha, ovato-oblonga, fusca, $25 \approx 12-14$, plerumque constricto-didyma, raro loculo altero l-septato et rarissime septulo longitudinali quoque diviso».

10. **Otthia Rosæ** Fuck. Symb. myc. p. 169. — Peritheciis cæspitosis, 2790

globosis irregularibusve, nigris, opacis, minutissime papillatis; ascis cylindræcis, 224μ . long., 8sporis; sporidiis monostichis, ovato-oblongis, utrinque obtusis, didymis, fuscis, $27-28 \approx 11-15$, sæpius 4-guttulatis. — St. pycnidicus sistit *Diplodiam Rosarum* Fr.

Hab. in ramis Rosæ caninæ in Germania (Fuck. et REHM).

11. **Otthia Syringæ** (Fr.) Niessl Hedw. 1876, p. 2. *Sphæria Syringæ* 2791

Fr. S. Myc. II, p. 492. — Cæspitosa, suberumpens, peritheciis subglobosis, depressis, rugulosis, nigris, ostiolo subtili; ascis cylindræcis, octosporis, $115-120 \approx 12-13$; sporidiis monostichis, ellipsoideis, constricto-l-septatis, $24 \approx 10$, fuliginis.

Hab. in ramulis emortuis Syringæ vulgaris in Suecia et Britannia, — Perithecia mediæ magnitudinis, ad medium erumpentia, glabra, opaca, sub lente rugulosa, evacuata intus atra. Ostiolum sub lente papillatum conspicitur.

12. **Otthia Xylostei** Fuck. Symb. myc. App. I, p. 307. — Peritheciis in cæspitibus per epidermidem erumpentibus, ovato-globosis, 2792

opaco-nigris, in ostiolum conicum, demum perforatum attenuatis, mediæ magnitudine; ascis cylindræcis, stipitatis, 4-8sporis; sporidiis oblique monostichis, oblongo-ovatis, didymis, ad septum constrictis, fuscis, $28 \approx 14$. — St. pycnidicus (*Diplodia* et *Hendersonia*) et spermogonicus adsunt, teste Fuck. l. c.

Hab. in ramis corticatis siccis Loniceræ Xylostei, in Rhénogovia.

13. **Otthia Ulmi** H. Fab. Sphér. Vaucl. p. 86. — Peritheciis acervulos deusos erumpentes efformantibus, rarius subsolitariis, globosis, atris, papillatis, $\frac{1}{2}$ mill. diam.; ascis amplis, cylindræis, breve stipitatis, 8-sporis, 125–150 \approx 18–20; sporidiis oblique monostichis, didymis, medio constrictis, initio pallidis, pluriguttatis granulosisque, tandem atro-fuscis; loculis plerumque 1-magniguttatis, 25–30 \approx 10–15.

Hab. ad ramos emortuos Ulmi campestris, Vaucluse Galliæ.

14. **Otthia corylina** Karst. Myc. Fenn. II, p. 59. *Otthia Coryli* Fuck. 2794
Symb. myc. App. I, p. 19. — Peritheciis in cæspites per peridermium erumpentes, plerumque dense stipitatis, forma varia, plerumque sphæroideis, ostiolo obsoleto vel minute papillato vel impresso, atris, latis, 0,3–0,6 mill.; ascis pedicellatis, cylindræis, 160 \approx 18–20 octosporis; sporidiis oblique monostichis, ellipsoideis, uniseptatis, ad septum constrictis, fuscis, 22–30 \approx 12–14, 2-guttatis; paraphysibus filiformibus. — Status pycnidicus sistit *Diplodiam Coryli* Fuck.

Hab. in ramis exsiccatis Coryli Avellanæ in Fennia, Germania, Italia, Gallia. — Spermogonia (teste Karst.) peritheciis commixta, solitaria vel subcæspitosa, sphæroidea, peritheciis paullo minorâ, spermatia elongata, simplicia, hyalina, recta, 3–4 \approx 0,5–1 crassa continentia.

15. **Otthia urceolata** Fuck. Symb. myc. p. 170. — Peritheciis gregariis cæspitosisve, majusculis, urceolatis, basi globosis, collo crasso, obtuso, retrorsum parum dilatato, perithecio triplo breviorè, rarius collo cylindræo, obtuso, atris, subtilissime reticulatis; ascis stipitatis, cylindræis, 8-sporis; sporidiis monostichis, ovatis vel ovato-oblongis, didymis, medio constrictis, magnitudine varia, plerumque 24 \approx 16–18, fuscis; macrostylosporibus in eodem perithecio, oblongis, 2–3septatis muriformibusque, fuscis.

Hab. in ramis siccis corticatis Ribis alpini in Rhénogovia. 2796

16. **Otthia Brunaudiana** Sacc. Mich. II, p. 58. — Peritheciis globoso-depressis, breve papillatis, $\frac{1}{4}$ mill. diam., in cæspitulos parvos subcutaneos denique erumpentes aggregatis; contextu celluloso-pachydermatico, fusco; ascis cylindræis breve stipitatis, apice tunica integra obtusis, 150 \approx 16, paraphysibus filiformibus obvallatis, 8-sporis; sporidiis oblique monostichis ovoideo-oblongis, 30 \approx 14–15, con-

stricto-didymis, 2-guttatis, initio olivaceis, dein atrofuligineis, strato hyalino pertenui sæpe obvolutis.

Hab. in ramis Ribis sanguinei, Saintes Galliæ (BRUNAUD). Peritheciorum forma, sporidiisque longioribus ab *O. urceolata*, satis differre videtur.

17. **Otthia Aceris** Winter in Hedw. 1871, p. 162. — Peritheciis cæspitosis, erumpentibus, ovato-globosis, applanatis, papillatis, atris; ascis stipitatis, cylindraceis, 8-sporis; sporidiis monostichis, ovato oblongis, didymis, medio constrictis, fuscis, $34 \approx 10$; fungus pycnidicus sistit *Diplodiam sublectam* Fr. (= *D. Aceris* Fuck.). 2797

Hab. in Saxonia, Cæderan, ad ramos aridos Aceris platanoidis (WINTER).

18. **Otthia Alni** Winter in Hedw. 1871, p. 162. — Peritheciis tectis demum per epidermidem fissam erumpentibus, 3-5 aggregatis, nigris, rugulosis e basi globosa brevissime conicis, apice obtusis; ascis cylindraceis, breviter stipitatis, 8-sporis, $148 \approx 14$; sporidiis monostichis, ovatis v. ovato-oblongis, utrinque rotundatis, didymis, medio constrictis, fuscis, $21 \approx 10$, 2798

Hab. in Saxonia, Cæderan, ad ramos aridos Alni glutinosæ (WINTER).

19. **Otthia lignyodes** (B. et Br.) Sacc. *Sphæria* (cæspitosæ) *lignyodes* B. et Br. F. of Ceyl. n. 1111. — Effusa, congesta; peritheciis clavatis collabascendo cupulæformibus, opacis, subtiliter tomentosis; ascis clavatis; sporidiis oblongis uniseptatis leniter curvulis, 25μ . longis (an tandem 3-septatis?). 2799

Hab. in ligno decorticato, Ceylon.

20. **Otthia Lisæ** (De Not.) Sacc. *Sphæria Lisæ* De Not. Micr. ital. Dec. III, p. 4, fig. III. Hedw. 1853, p. 34. *Cucurbitaria* (Lizonia) *Lisæ* Ces. De Not. Schema Sf. p. 215. — Peritheciis stromate tenui fuliginoso subcorticali insidentibus, confertis, atrofuscis globosis, v. subangulatis, rugulosis, ostiolo punctiformi impresso, dein subumbilicato; ascis lineari-oblongis, paraphysatis, $85 \approx 18$, octosporis; sporidiis didymis, ovatis, utrinque rotundatis vix constrictis e hyalino luteo-olivaceis, $30 \approx 11-12$. 2800

Hab. in ramis Berberidis in Italia boreali.

II. *Otthiella*: sporidiis subhyalinis (an tandem fuscis?).

21. **Otthia seriata** (Peck) Sacc. *Cucurbitaria seriata* Peck 28 Rep. on the St. Mus. New York. — Peritheciis cæspitosis, erumpentibus, in series longas flexuosas interruptas digestis, minutis, sub- 2801

globosis, nigris, intus albidis, subinde collabentibus, stromate mere corticali subferrugineo vel obsoleto; ascis cylindraceutis vel subclavatis; sporidiis monostichis, v. stipatis, oblongo-ellipsoideis, leniter constrictis, 1-septatis, 10-13 μ . long., hyalinis (semper?).

Hab. in cortice emortuo *E vonymi*, Albany Americæ borealis. (C. DEROL).

22. *Otthia Winteri* Rehm Ascom. Diagn. n. 86. *Gibbera Winteri* 2802

Rehm Ascom. n. 86, Wint. Diagn. in Flora 1873, p. 543. — Peritheciis cæspitosis, primo tectis, demum erumpentibus, semiliberris, fusco-atris, globosis, verruculoso-rugosis, papillatis, demum collabascentibus. 240-300 μ . diam.; ascis cylindraceutis, sessilibus, 8-sporis, 90-130 \approx 12-17; paraphysibus filiformibus, simplicibus, obscure septatis, guttulatis, ascos æquantibus; sporidiis distichis oblongis, uniseptatis, ad septum plerumque non constrictis, inæqualiter didymis, rectis vel parum curvatis, pallide luteolis, 17-22 \approx 7-8.

Hab. in ramulis siccis stantibus *Aceris campestris* Sugenheim Germaniæ.

23. *Otthia Hazslinszkyi* Sacc. *Sphæria*..... Hazsl. Sphær. Ros. 2803

p. 217, fig. 16-17. — Peritheciis subsparsis, majusculis, glabris, nigris verrucosis, subtectis, ostiolo erumpente; ascis simpliciter paraphysatis, cylindraceutis, breve stipitatis, octosporis; sporidiis oblique monostichis, obovatis, apice obtusioribus, 1-septatis, vix constrictis, hyalinis.

Hab. in ramis emortuis *Rosæ* in Banatu.

24. *Otthia alnea* (Peck) Sacc. *Cucurbitaria alnea* Peck 28 Rep. on 2804

the St. Mus. New York. — Peritheciis cæspitosis, erumpentibus, subastomis, nigris, intus albidis; cæspitulis peridermio transversim fissis cinetis; ascis cylindraceutis, octosporis; sporidiis monostichis, oblongis, subacuminatis, uniseptatis, ad septum constrictis, subhyalinis, 2-4-nucleatis, 20-25 μ . longis.

Hab. in ramis emortuis *Alni*, Center Amer. bor. — Adest simul *Torula alnea*, quæ forte st. conidicus *Otthiæ*.

MELANCONIELLA Sacc. (Etym. a *Melanconis*, cujus est analogum genus). — Perithecia in acervulos valseos, cortice innato, erumpentes digesta, conidiis *Melanconiorum* in eodem stromate comitantibus. Asci octospori, paraphysati. Sporidia ovoideo-oblonga, 1-septata, hyalina, tandem olivacea v. fuliginea.

1. *Melanconiella spodiæa* (Tul.) Sacc. *Melanconis spodiæa* Tul. Carp. 2805

II, p. 127, t. 24, f. 10-13. — Pustulata; peritheciis circinantibus,

decumbentibus, ostiolis in discum vix erumpentem $\frac{1}{2}$ mill. diam., conjunctis, stromate olivaceo-fuscescente; ascis cylindræis deorsum attenuatis, 110 \approx 9-12, octosporis; sporidiis oblique monostichis v. distichis ovato-oblongis, 18-20 \approx 7-8, olivaceo-fuliginæis, biguttatis, utrinque obtusis appendiculaque brevi truncata hyalina auctis. — St. conidicus sistit, teste Fuck., *Melanconium bicolor* Corda.

Hab. in ramis corticatis siccis Carpini Betuli in Gallia, Germania, Belgio et Italia. — *Sphæria melasperma* West., Lamb. Fl. myc. Belg. II, p. 357 (nec Fr.) verisimiliter huc spectat.

2. **Melanconiella chrysostroma** (Fr.) Sacc. *Valsa chrysostroma* Fr. 2806
Summa Veg. Scand. p. 412. *Sph. xanthostroma* Mont. et Fr. Ann. Nat. 1834, t. 12, fig. 4 (nec Schw.) *Melanconis chrysostroma* (Fr.) Tul. Carp. II, p. 125, t. XXIV, f. 14-20. Sacc. F. it. t. 453 (junior). — Pustulata; peritheciis circinantibus, subinæqualibus, decumbentibus, ostiolis breviter exsertis, pertusis, stromate discoque lutescentibus; ascis stipitatis, cylindræis, 8spor. 100-120 \approx 10; sporidiis submonostichis, ovatis, utrinque obtusis, uniseptatis, ad septum constrictis, fuscis, 16 \approx 8, initio hyalinis obtuseque utrinque apiculatis, raro cum macrostylospor. oblongis, 8-10guttulatis, flavo-fuscis, 48 \approx 16. — St. conidicus *Melanconium bicolor* β . *ramulorum* Corda sistit.

Hab. in ramis corticatis Carpini Betuli in Gallia, Germania, Britannia, Italia, Am. bor. — Citationes in Corylo et Quercu dubiæ mihi videntur.

VALSARIA De Not. et Ces. Schema Sf. it. p. 205 (Etym. a *Valsa*, cui vegetatione accedit). — Stroma *Valsæ* v. *Diatrypellæ*, innato-erumpens, corticolum (*Euvalsaria*), v. effusum, indeterminatum lignoque immersum (*Phæosperma* Sacc.). Asci typice paraphysati, tetra-octospori, cylindræo-clavati. Sporidia elliptico-oblonga, 1-septata, fusca. — Pycnidia et spermogonia in nonnullis nota. — Huc duco *Myrmæcium* Nits. (nec Sacc.) et *Phæosperma* Karst. (an Nits.?) ; ego vero hoc postremo nomine utor ad species *Valsariæ* eutypeas distinguendas.

I. *Euvalsaria*: stromate valseo v. verruciformi, corticolo.

1. **Valsaria insitiva** Ces. et De Not. (sensu ampliore). Sacc. Myc. Ven. 2807
Spec. p. 148, t. XV, f. 5-10 (nec *Sph. insitiva* Tode), *Myrmæcium rubricosum* (Fr.) Fuck. Symb. myc. p. 227 p. p. — Stromate

forma et magnitudine variabilissimo nigro; nunc valseo, nunc diatrypeo; acervulis pulvinatis, sinuosis, tumidis, modo 1 mill. diam. non attingentibus, modo 5 mill. superantibus, atris; peritheciis stromate immersis, phialiformibus, sæpe angulato-compressis, nigris, ostiolis discum non superantibus obsoletis, interdum substellatis; ascis cylindricis brevissime stipitatis, 90-100 \approx 8-10, paraphysibus copiosis filiformibus, nucleolatis obvallatis, 8sporis; sporidiis constricto-1-septatis, didymis, utrinque rotundatis, 15-18 \approx 8-9, primo lutescentibus, 2-4-nucleatis, dein obscure fuligineis. — St. micro-pycnidicus sistit *Coniothyrium insitivum* Sacc.

Hab. in cortice truncorum, ramorumque Gleditschiæ, Robiniæ, Berberidis, Evonymi, Quercus, Carpini, Æsculi, Ulmi, Fici, Broussonetiæ, Vitis, Cydoniæ, Pruni, Alni, Meliæ, Populi, Ulicis, Cratægi, Paliuri, Coryli, Rhamni, Syringæ, Rhois, Celtidis, Hibisci, Corni, Rosæ, Aceris, Fraxini, Sambuci, Calycanthi etc. in Germania, Italia, Lusitania, Gallia. — Ad hanc speciem vulgo citatur *Sphæria insitiva* Tode Meckl. II. p. 36, t. XIII, fig. 108, sed hæc, meo sensu, perfecte refert *Cryptovalsam ampelinam* Nits. Distinguenda est quoque *Valsaria rubricosa* (Fr.).

2. **Valsaria Celtidis** (Cooke) Sacc. *Valsa Celtidis* Cooke Grevill. V. 2808
p. 55, t. 81, f. 3. — Peritheciis irregulariter circinantibus, subimmersis; ostiolis atris, in discum brunneum pruinose emergentibus; ascis cylindricis deorsum attenuatis, octosporis; sporidiis uniseriatis, ellipticis, constricto-uniseptatis, brunneis, 20 \approx 10.

Hab. in ramis Celtidis in Carolina inf. Amer. bor. (RAVENEL). — Perithecia 6-8 aggregata, linea nigra circumscripta.

3. **Valsaria cincta** (Curr.) Sacc. *Diatrype cincta* (Curr.) B. et Br. 2809
Ann. N. H. n. 846, *Valsa cincta* Curr. Linn. Trans. XXII, t. 48, f. 135. *Melogramma rubricosum* Plowr. Grev. VI, p. 25. — Peritheciis irregulariter ovoideis, stromate subcoriaceo immersis, congestis; ostiolis peridermium perforantibus, pustulasque subrotundas efformantibus, furfure olivaceo-viridi conspersis; ascis cylindraceis, breve stipitatis, 8sporis; sporidiis obtusis, constricto-1-septatis, fuligineis, 17-18 μ . longis.

Hab. in ramis denique decorticatis Fagi, Alni, Robiniæ (?) Brandon, Ringstead, Blackheath Britannicæ (CURR. PLOWR.). — An vere distincta a *V. insitiva*?

4. **Valsaria Notarisii** (Mont.) Sacc. *Valsa Notarisii* Mont. Syll. n. 754. 2810
et Fl. Alg., I. p. 470, t. 25, f. 6. *Sph. Periplocæ* De Not. Microm. ital.

VIII. — Pustulata, epidermidem perforans, tandem nuda; peritheciis ovoideis circinantibus atris, stromati corticali e cinereo nigricante immersis, ostioliis inclusis in discum erumpentem planum nigrum opacum rugulosum connatis; ascis cylindræcis 100 \approx 10; sporidiis oblongis, medio septatis-fuscis 20 \approx 10.

Hab. in ramis *Periplocæ*, circa Genuam (DE NOTARIS) variarum arborum plantarumque in Algeria (DURIËU), in ramis *Robinia* et *Gleditschia* in Carolina Americæ borealis.

5. **Valsaria syconophila** Schulz. Myk. Beitr. 1870, p. 652. — Pustulis corticolis, peridermio substellatim fisso cinctis; peritheciis nigris paucis, subglobosis in ostiola obtusa vix convergentia attenuatis; ascis cylindræcis, octosporis, paraphysatis; sporidiis monostichis constricto-bilocularibus, 18–23 \approx 7–9, atro-fuliginosis. 2811

Hab. in ramis corticatis *Fici Caricæ* in Austria. — An vere distincta a *Valsaria insitiva*?

6. **Valsaria? viticola** (Schw.?) Sacc. *Diatrype viticola* Schw. p. p. 2812 sec. Berk. N. Am. Fungi p. 166. — Tecta, emergens, in series parallelas crescens, fusco-nigra, stromate brunneo; peritheciis majusculis paucis globosis, ostioliis latentibus; sporidiis elliptico-oblongis, uniseptatis, leniter constrictis, 15 μ . longis.

Hab. in ramis corticatis emortuis *Vitis rotundifolia* in Carolina inf. Amer. bor. — Etsi sporidiorum color non indicatus, tamen *Valsariæ* species videtur.

7. **Valsaria Diospyri** (Schw.) De Not. Recl. in Comm. Critt. II, pag. 2813 482. *Sphæria Diospyri* Schwein. Syn. Car. n. 57, Fr. S. M. II, p. 372. — Tecta, emersa, verrucæformis, stromate corticali, peritheciis subepiphericis sparsis, ostioliis obsolete; sporidiis (teste De Not.) ellipsoideis, bilocularibus, ad septum sæpius leniter constrictis, badiis.

Hab. in ramis emortuis *Diospyri Loti* in Carolina (SCHWEIN.) et in Ital. bor. (DALDINI). — Pustulæ prominentes, difformes, 2 lin. latæ, epidermide tectæ, demum atroinquinatæ, indeque erumpenti-nudæ apparent. Perithecia minuta, globosa, monosticha, collo brevi, nam supra tuberculum innatum collocata, ob epidermidem tegentem fere peripherica, ostioliis minutis obsolete prominulis, demum perforatis pulverulentis inquinantibus. Stroma fuscum.

8. **Valsaria rubricosa** (Fr.) Sacc. M. Ven. n. 690. F. Ven. Ser. V, 2814 p. 183. F. it. t. 640. *Sphæria rubricosa* Fr. Elench. II, pag. 63. *Myrmæcium abietinum* Niessl Hedw. 1874, p. 42 et 49. *M. rubricosum* (Tul.) Fuck. Symb. 227 (sect. I). — Difformis tubercu-

losa, rimoso-rugosa, rubiginosa, intus albido-cinerea, peritheciis periphericis immersis atris, nitidis; ascis cylindræis, 110-120 \approx 12-14, breve stipitatis, paraphysibus filiformibus copiosis obvallatis, 8-sporis; sporidiis oblique monostichis, ovoideo-oblongis, 15-16 \approx 9-10, 1-septatis, leniter constrictis, fuligineis; adsunt spermætia ovoidea, 2-3 \approx 1, hyalina.

Hab. in cortice Abietis, Juglandis, Quercus, Fagi, Alni, Cerasi in Gallia, Italia, Germania, Fennia, Chili, Guiana, Cuba, Ceylon. — Stromate molliore extus rubiginoso, intus pallidior, rimoso-rugoso, sporidiisque crassioribus rite hæc species a *V. insitiva* dignoscitur. Descriptio Friesii l. c. (etsi Fr. in litt. ad Fuck. ad genuinum *Hypoxyton* pertinere asserat) bene quadrat cum specie præsentem non vero cum *Myrm. rubricoso* auctorum, quod, meo sensu, *Valsariæ insitivæ* respondet.

9. **Valsaria Kunzeana** De Not. Recl. Pir. in Comm. Critt. ital. II, 2815 p. 482. *Sphæria decorticans* Kunze exs. nec Fr. — Acervulis valsoideis, pustulatis; peritheciis subdifformibus, aggregatis; ostioliis minutis subumbilicatis; sporidiis didymis, loculis subinæqualibus, badio-fuscis, dein prorsus opacis.

Hab. in ramis Fraxini, Locarno Ital. bor. (DALDINI).

10. **Valsaria parmularia** (Berk.) Sacc. *Valsa parmularia* Berk. n. 2816 Dec. fung. n. 308. Cooke Handb. n. 2506, Curr. Comp. Sphær. fig. 163 (nec n. 39). — Pustulis minutis; peritheciis circinantibus e latere compressis, ostioliis subindistinctis, umbonatis; ascis lineariibus, octosporis; sporidiis monostichis, late ellipsoideis, 1-septatis, vix constrictis, fuligineis, 35 μ . longis.

Hab. in cortice subvivo Quercuum in Gallia, Hispania et Britannia. — Extus *Anthostomatis turgidi* æmula.

11. **Valsaria anthostomoides** Sacc. Fungi Ven. Ser. IV, p. 18, F. it. 2817 t. 152. — Stromate diatrypeo oblongato, tumescente, indurato, ligno decorticato semiimmerso, superficie læviusculo, atronitidulo; peritheciis stromate inordinate immersis, globulosis v. sæpius e mutua pressione verticaliter ovoideis, angulosive, vix $\frac{1}{2}$ mill. d., intus et extus nigris, ostioliis collo cylindræo, superficiem stromatis non v. perparum excedentibus, obtusis; ascis cylindræis, breve angusteque stipitatis, 100 \approx 5, paraphysibus filiformibus obvallatis, 8-sporis; sporidiis rectis v. suboblique monostichis, oblongo-ellipsoideis utrinque rotundatis, 14-15 \approx 4-4 $\frac{1}{2}$, 1-septatis, non constrictis, 2-guttulatis, fuligineis.

Hab. in ligno denique denudato quercino, Vittorio Ital. bor.

- *Anthostomatis gastrini* formæ liberatæ similis, sed sporidiis bilocularibus statim dignoscitur. A *Valsaria Niesslii* Winter (sec. specim. orig.) stromate oblongo ligno decorticato semiimmerso præcipue differt.
12. **Valsaria quadrata** (Schw.) Sacc. *Myrmæcium quadratum* (Schw.) 2818
Rehm Asc. n. 325. *Diatrype quadrata* Schw. *Diatrype obesa* B. et C. *Diatrype exasperans* Gerard. in Hedw. 1874, p. 174. — Peritheciis subglobosis, stromate olivaceo-virente exceptis, peridermium pustulatim elevantibus, perforantibus, acervulosque elongatos efficientibus; ascis cylindricis $105 \approx 8$; sporidiis late ovoideis, obtusis, uniseptatis, medio constrictis, $14-15 \approx 7,5-8$, obscure fuligineis; paraphysibus filiformibus, guttulatis.
Hab. in ramis corticatis Fagi ferrugineæ, Quercus, Ulmi, Liquidambaris, Aceris, Pruni, Rhois, in Carolina, Pénsylvania etc. Amer. bor.
13. **Valsaria melastroma** (Fr.) Sacc. *Sphæria melastroma* Fr. S. M. 2819
II, 399. Scl. Suec. n. 223, ex Cooke Vals. of Un. St. 122, sub *Valsa* — *Pustulata*, subverrucæformis, peritheciis aggregatis, disco erumpente angulato nigro obsolete pertuso: sporidiis ellipticis, uniseptatis, fuligineis $32 \approx 14$.
Hab. in cortice Ulmi in Suecia et Amer. bor. — Habitus *Diatrypellæ verrucæformis*, sed minus prominet et conceptaculum omnino corticale. Perithecia subsena, erectiuscula, conferta, profunde immersa, verticaliter collabentia. Discus epidermide angulato-fissa erumpens, a cortice interiore formatus, sed superficies plana, lævis, opaca, nigro-facta. Ostiola discum perforant, sed non prominent.
14. **Valsaria angularis** (Peck) Sacc. *Diatrype angularis* Peck Bot. 2820
Gaz. 1880. — Stromate minuto, vix 2 mill. diam., erumpente externe nigro v. nigricante, intus rubiginoso; peritheciis majusculis, paucis 1-6; ostiolis prominentibus, angulosis, compressis v. pyramidalibus; ascis cylindræcis; sporidiis monostichis, magnis oblongo-ellipsoideis, obtusis 1-septatis, fuligineis, $27-54 \approx 15-18$.
Hab. in cortice Tiliæ americanæ, Vermont Amer. bor. (C. G. PRINGLE). — Stromata lignum non penetrant; sporidia subinde medio subconstricta.
15. **Valsaria æthiops** (C. et E.) Sacc. *Diatrype æthiops* C. et E. 2821
Grevill. VI, p. 10. — Irregularis, convexa, atra; peritheciis in stromate coriaceo congestis, ostiolis prominulis; ascis cylindræcis; sporidiis ellipticis, uniseptatis, brunneis, $20 \approx 10$.

Hab. in ramis corticatis Mori New Jersey. Amer. bor. — Pustulæ e 3-4 peritheciis constantes. Perithecia ligno adnata et cortice excepta. Lignum circa pustulas nigrescit.

16. **Valsaria apatosa** (C. et E.) Sacc. *Valsa apatosa* C. et E. Gre-vill. VI. p. 12. t. 95, f. 1. — Orbicularis, tecta, convexa; peri-theciis, 4-6 atris, congestis; ostiolis erumpentibus, in discum mi-nutum, punctiformibus, atrum conjunctis; ascis cylindraceutis; spo-ridiis 4-8, ellipticis, uniseptatis, brunneis, 35 ≈ 15. 2822

Hab. in ramis Nyssæ, New Jersey Amer. bor. — Perithecia majuscula peridermio tenui, cui adhærent, tecta.

17. **Valsaria Eucalypti** (K. et C.) Sacc. *Melogramma Eucalypti* Kalch. 2823 et Cooke. Grev. IX, 1880, p. 31. — Argillacea, elevata; stromate convexo, irregulari, confluyente; pseudo-peritheciis in contextu ex-cavatis; ascis cylindraceutis; sporidiis uniseriatis, ellipticis, medio constrictis, uniseptatis, fuscis 15-18 ≈ 8, loculis subglobosis.

Hab. in cortice Eucalypti Globuli in Africa australi.

18. **Valsaria Farlowiana** Sacc. Mich. II. p. 137. — Acervulis depres-so-pulvinatis, gregariis, 1-1½ mill. diam., nigris, initio subcuta-neis dein, cortice secedente, denudatis lignoque nigrificato imposi-tis, peritheciis numerosis, globulosis, ostiolis in discum circularem umbilicatum desinentibus; ascis cylindraceutis (evanidis), octosporis; sporidiis oblique monostichis oblongo-ellipsoideis, utrinque rotun-datis, 15-18 ≈ 7-8. 1-septatis, leniter constrictis, granulosis fuli-gineis. 2824

Hab. in ramis Berberidis vulgaris Cambridge (Mass.) in Amer. bor. (FARLOW). — Ab affinibus *V. insitiva* et *V. cincta* dif-fert præcipue disco umbilicato, numquam virescente, stromatibus carbonaceis, potius quam coriaceis etc.

19. **Valsaria Peckii** (Howe) Sacc. *Valsa Peckii* Howe n. 27. Rep. on 2825 the St. Mus. t. I, f. 15-18. Ellis N. Am. Fungi n. 171. Cooke Val-sa of Un. St. 122. — Peritheciis in acervulos valseos peridermio tectos, conoideos aggregatis, globulosis, majusculis; ostiolis conjun-ctim erumpentibus, teretiusculis, obtusis, atronitidulis; ascis cylin-draceutis stipitatis, 90-110 ≈ 6-6½ p. sporif., octosporis; sporidiis monostichis uniseptatis, fuliginis, 14-15 ≈ 5-6.

Hab. in ramis Kalmiæ latifoliæ, New York (HOWE), Vac-cinii corymbosi, New Jersey (ELLIS). — Perithecia ligno im-mersa v. semiimmersa.

20. **Valsaria Toxici** (Schw.) Sacc. *Valsa Toxici* (Schw.) Cooke Vals. 2826 of U. S. p. 122. *Sphæria* (circumscrip.) *Toxici* Schw. Syn. Am.

bor. n. 1330. — Conceptaculis majusculis, subrotundis, nigris rugosis, primitus tectis, demum cortice orbatis, sæpe longitudinaliter confluentibus; ostiolo centro aggregatis, teretibus obtusis; interdum difformibus et apice substellatis; peritheciis oblongis, stipatis seorsum in collum junctis, fuligineis: stromate parco albescenti, demum fuligineo circumdatis; ascis octosporis; sporidiis monostichis ellipsoideis, 1-septatis, fuligineis, $12 \approx 5$.

Hab. frequens in sarmentis et ramis Rhois radicans in Carolina inf. Amer. bor. (RAVENEL).

21. **Valsaria phlyctænodes** (Mont.) Sacc. *Valsa phlyctænodes* Mont. 2827
Syll. Crypt. n. 771 et Fl. Alg. p. 468, sub *Sphæria*. — Initio cortici innata, demum nuda, confluens, convexa; peritheciis tenuibus stromati cinereo-nigro immersis, ostiolis erumpentibus quateruatim connexo-stellatis; ascis cylindraceo-clavatis, 130μ . longis; sporidiis oblongis tandem fuscis, bilocularibus, $15 \approx 4$.

Hab. in ramis Salicis pedicellatæ emortuis, Bone (DURIÉU). 2828

22. **Valsaria? purpurascens** (DC.) Sacc. *Sphæria purpurascens* Dec. Flore Fr. 2, p. 118. *Valsa purpurascens* (DC.) Cr. Finist. p. 32. — In plagas transversales digesta; pustulis corticulis, v. tandem in ligno denudatis, planis leviter carnosis, sordide purpureis, rotundatis, 3-4 lin. latis, sæpe confluentibus et punctis exiguis nigris punctatis; peritheciis ovalibus, nigris in collum attenuatis; ascis....; sporidiis, teste Crouan, ovoideis 1-septatis.

Hab. in ramis Cerasi et Castaneæ in Gallia.

23. **Valsaria complexa** (Mont.) Sacc. *Valsa complexa* Mont. Syll. 2829
Crypt. n. 765. Cent. IV, n. 92, in Ann., 2, XX, p. 370. — Immersa, confluens, plana; stromate fuliginoso; peritheciis ovoideis in conceptaculo cupulæformi marginato atro incusis, ostiolis discum exsertum fuligineo-nigrescentem perforantibus nitidis; ascis subcylindricis 100μ . longis; sporidiis suboctonis, oblongis, brunneis, medio transversim septatis; paraphysibus filiformibus, $2,5 \mu$. crassis.

Hab. in cortice populino, Reims Galliæ (SAUBINET junior).

24. **Valsaria oleifera** (Tul.) Sacc. *Valsa oleifera* Tul. Carp. II, p. 2830
197. (vix nominata). — Peritheciis valseis.....; ascis.....; sporidiis ovatis, crassis, didymis, oleoso-granulosis albidis intra ascum, fuscis asco liberatis.

Hab. in ramis Populorum pr. Versailles Galliæ, frequens.

25. **Valsaria fulvo-pruinata** (Berk.) Sacc. *Diap. Chorostate fulvo-* 2831
pruinata (Berk.) Sacc. Syll. n. 2407. *Valsa fulvo-pruinata* (Berk.) Curr. Comp. Sphær. n. 129, fig. 125. — Pustulata, suban-

gulata. basi effusa; peritheciis oblongis collo elongato, stromate discoque ostiolis punctulato fulvis; ascis cylindraceutis, breve stipitatis, octosporis; sporidiis submonostichis, ellipsoideis sæpius utrinque acutiusculis, 15-18 μ . long. primo pallidis dein atro-fuliginis, interdum biguttatis.

Hab. in ramis Platani occidentalis, Ohio Amer. bor. (F. G. LEA), Carolina (CURT.), Connect. (WRIGHT). — Pustulæ 2 mill. cr. Species disci colore mox dignoscenda. — Colore sporidiorum a cl. Berkeleyo non indicato, ad *Chorostatem* spectare speciem censi, sed serius, visa descriptione et icone Curr., ad *Valsariam* ducendam non dubito.

26. **Valsaria Cinnamomi** (Ces.) Sacc, *Melogramma Cinnamomi* Ces. 2832

Myc. Born. p. 19. — Tuberculis erumpentibus, globosis, extus rubiginosis, ostiolis nigris punctiformibus, intus nigris; ascis tenuibus subclavatis demum linearibus 90 μ . longis; sporidiis uniseriatis ellipticis 10 μ . longis, fuscillis, uniseptatis.

Hab. ad corticem Cinnamomi, Ceylon ad Kandy (BECCARI). — Facies fere *Hypoxyli fusci*.

27. **Valsaria clethricola** (C. et E.) Sacc. *Valsa clethræcola* C. et E. 2833

Grevill. V, p. 92. — Peritheciis magnis, collis una erumpentibus; ascis cylindraceutis; sporidiis biglobosis, brunneis, uniseptatis, 18 \approx 9.

Hab. in ramis Clethræ alnifoliæ, New Jersey Amer. bor.

28. **Valsaria nigrificata** (C. et E.) Sacc., *Valsa nigrofacta* C. et E. 2834

Grevill. VI, p. 12, t. 95, f. 4. — Peritheciis paucis magnis, epidermide nigrificata, nitida, tectis; ostiolis convergentibus; ascis cylindraceutis; sporidiis uniseriatis, anguste ellipticis, uniseptatis, medio valde constrictis, brunneis, 22 \approx 9, loculis fere globosis.

Hab. in ramis Sassafras, New Jersey Amer. bor.

29. **Valsaria durissima** (Fuck.) Sacc. *Myrmecium durissimum* Fuck. 2835

Symb. myc. p. 228. — Stromatibus durissimis, fragilissimis, profunde diffractis, erumpentibus, demum subliberis, orbicularibus oblongisve, ad unciam longis, 2-4 lin. latis, ferruginoso-atro-fuscis, intus subsuberosis, concoloribus; peritheciis periphericis, in stromate nidulantibus, minutissimis, globosis, atris; ostiolis prominulis, umbilicatis perforatisque, aterrimis, primo spermatiferis; spermatibus minutis, cylindraceutis, curvatis, hyalinis; demum ascigeris; ascis?; endosporis oblongo-ovatis, didymis, opaco-fuscis, 16 \approx 8.

Hab. in caudicibus corticatis siccis Alni glutinosæ, pr. Æstrich Rhenogoviæ.

30. **Valsaria fœdans** (Karst.) Sacc. *Phvosperma fœdans* Karst. Myc. 2836

Fenn. II, p. 55. — Stromate cortici basi immerso peridermioque tecto, orbiculari, hemisphærico-applanato, substantia corticis fere immutata formato; peritheciis in singulo stromate 7-25, concentricæ monostichis, plus minus dense confertis, subsphæroideis, mutua pressione angulatis, atris; ostiolis in discum vel tuberculum disciforme, per peridermium erumpens, plus minus protuberans, atrum, forma varia, plerumque rotundatum, 0,5-1,5 mill. latum collectis, raro plus minus exsertis, obtuse conoideis; ascis cylindraceis, 75-85 \approx 5-6 p. sporif.; sporidiis octonis monostichis, oblongatis, utrinque obtusis, vulgo rectis, tenuiter uniseptatis vel 2-guttulatis, ad septum haud constrictis, fuscis, 10-15 \approx 4-5; paraphysibus discretis, filiformibus, guttulatis, gracilibus.

Hab. in ramis aridis Alni circa Mustiala Fennicæ. — Sporidia expulsa discum partesque corticis adjacentes ut pulvis olivaceo-ater sæpissime obtegunt.

31. **Valsaria Niesslii** (Wint.) Sacc. *Phæosperma Niesslii* Winter in 2837
Hedw. 1874, p. 131. — Stromate cortice interiore immerso, crasso e basi suborbiculari vel ovali hemisphærico, intus fuscescente disco elliptico vel orbiculari, primo fusco, demum (sporidiis expulsis) nigro, erumpente, ruguloso; peritheciis in singulo stromate 10-40, basi stromatis immersis, irregulariter dispositis, plus minus dense stipatis, subglobosis vel pressione angulatis, atris, 600-700 μ . latis; ostiolis longissimis, crassis, rugoso-tuberculosis, apice incrassatis, aterrimis, discum papillæformiter superantibus, cir. 0,8-1,0 mill. long.; ascis cylindraceis longissime pedicellatis, 8-sporis 70-90 \approx 6-7 p. sporif.; paraphysibus filiformibus, tenuissimis, guttulatis; sporidiis monostichis oblongatis, utrinque rotundatis, rectis vel curvatis, medio septatis, ad septum non constrictis, pallide fusco-atris, 8-15 \approx 4-5.

Hab. in ramis corticatis Betulæ albæ, Harth prope Leipzig Germaniæ. — *Valsariæ fœdanti* peraffinis.

32. **Valsaria megalospora** Auersw. Tauschver. *Myrmæcium megalosporum* (Auersw.) Niessl Not. Pyr. p. 55. — Stromate plus minus discreto, valseo, hemisphærico vel conoideo pulvinate ac peridermio cincto subtecto, stipato, rarius confluyente, extus atrofusco haud pruinoso, intus fusco; peritheciis in singulo stromate 3-5 plerumque 4 monostichis, globosis, vel mutua pressione angulosis, collis crassis, brevibus, vertice conicis, parum compressis, prominentibus et convergentibus; ascis grandiusculis subcylindraceis inferne attenuatis et pedicellatis 240-250 \approx 24-26, p. sporif.; 2838

stipite 50-70 μ . long.; sporidiis monostichis, cylindræo-oblongis, utrinque sphæroideo-rotundatis, rectis, medio uniseptatis vix constrictis, saturate fuscis 33-42 \approx 13-15; paraphysibus crassis simplicibus articulatis et guttulatis.

Hab. in cortice Alnorum pr. Leipzig Germaniæ (AUERSWALD).
— Habitus fere *Anthostomatis turgidi*.

33. **Valsaria moroides** (C. et P.) Sacc. *Diatrype moroides* C. et Peck, 2839
29 Rep. on the St. Mus. New York. — Minuta, erumpens, ostiolis confertis, prominulis hemisphæricis nigris discum denique obliterantibus; peritheciis stipatis, nigricantibus; ascis cylindricis; sporidiis monostichis, oblongis, 1-septatis, coloratis, 12-15 \approx 5.

Hab. in ramis emortuis Alni, Sandlake Amer. bor.

34. **Valsaria donacina** De Not. Schema Sfer. p. 305, *Sphæria dona-* 2840
cina De Not. Micr. ital. Dec. VI. p. 95, fig. III. — Acervulis convexo-colliculosis sæpe parallelis, confluentibusque erumpenti-superficialibus, nigris, peritheciis crassiusculis, duris, irregularibus, stromate immersis, ostiolis vix exertis, subobsoletis; ascis cylindræis, basi angustatis, paraphysatis, octosporis, 100-150 \approx 10-11; sporidiis monostichis, biloculari-constrictis, utrinque rotundatis, rufo-badiis, 15 \approx 6-8,

Hab. in culmis siccis sæpius ad internodia Arundinis Donacis etc. in Liguria, Venetia et Algeria. — *Sphæria donacina* Fr., teste Montagne, est sphæropsidea.

35. **Valsaria lophiostoma** (Hazsl.) Sacc., *Myrmecium lophiostomum* 2841
Hazsl. Hedw. 1874, p. 142 et Frig. Ban. p. 55, fig. 11. — Mycelio corticem interiorem, sæpe etiam stratum supremum ligni penetrante passim in stromata atra carbonacea, hæmisphærica concreto, solummodo ostiolis perithecorum epidermidem perforantibus; peritheciis in singulo stromate 3-multis, simplicibus, duplici immo et triplici strato super-positis, stratis perithecorum successive evolutis, inferioribus recentioribus; nucleo primum albo, denique nigro; ascis linearibus, octosporis, paraphysibus septatis, obvallatis; sporidiis ovalibus, obtusissimis, diblastis, nigro-fuscis, 22 \approx 12; perithecorum ostiolis maximis, obovatis, compressis, lophiiformibus. radiatim circa columellam dispositis, rima radiali dehiscentibus.

Hab. in ramis siccis ad Lunkany Banatus.

II. *Phæosperma* Sacc.: stromate effuso indeterminato endoxylo.

36. **Valsaria anserina** (Pers.) Sacc. Fungi Venet. Ser. IV, pag. 19, 2842
Sphæria anserina Pers. Icon. et descript. p. 5, tab. I, fig. 8-10.

Cooke Handb. n. 2637. — Stromate effuso libri vel ligni superficiem tandem infuscante eisque immerso; peritheciis subdiscretis, gregariis, sphæroideis, vix $\frac{1}{2}$ mill. diam., ligno vel libro penitus vel fere immersis, atris, ostiolo ligni superficiem attingente et pustulatim elevante, rotundato; ascis cylindricis, breve stipitatis, 8-sporis; sporidiis monostichis, ovoideis vel suboblongis, didymis, ad septum lenissime constrictis, $16-20 \approx 6-7$, quandoque loculo altere paulo angustiore, 2-guttulatis, fuligineis.

Hab. in lignis in Britannia et Germania; in ramis decorticatis Broussonetiæ papyriferae et Fici Caricæ, Selva, Treviso, sociis micropycnidii (*Coniothyrium anserinum* Sacc.) globoso-angulosis, nigro-faretis, ligno immersis microstylosporas ellipsoideas, $5-5\frac{1}{2} \approx 2\frac{1}{2}$, fuligineas foventibus. — Huc verisimillime *Sphæria anserina* Pers. secundum B., Br. et Cooke, non vero sec. Roussel in Ces. et De Not. Schema 222, ubi sporidia 6 locularia habentur.

37. **Valsaria cariei** Sacc. Fungi Ven. Ser. IV, p. 19, Fungi it. t. 151. 2843

— Peritheciis uniserialiter tortuose per ligni superficiem subimmutatam contigue dispositis immersisque, globosis, $\frac{1}{2}-\frac{1}{3}$ mill. d., carbonaceis atronitentibus hyphulis fuligineis inferius vestitis; ostiolo crasso cylindræo, breviter emergente, apice obtuse rotundato, subinde latiuscule hiante; peritheci contextu parenchymatico fuligineo; ascis cylindræis $150 \approx 12$, apice obtusis, breve crassiuscule stipitatis, paraphysibus copiosis filiformibus guttulis obvallatis, 8-sporis; sporidiis oblique monostichis, oblongo-ovoideis, $25 \approx 9-10$, utrinque obtusiuscule acuminatis, medio constricto-1-septatis, 2-pluriguttulatis, intense fuligineis.

Hab. in ligno pineo fabrefacto, carioso; ubi perithecia tortuosas larvarum excavationes ordine sequuntur, Padova Italiæ bor. — A *Valsaria apiculata* (Curr.) cui habitu simillima, differt sporidiis absolute exappendiculatis medio (non excentrice) 1-septatis, constrictisque saturatius fuligineis, peritheciis inferne vestitis etc.

38. **Valsaria Saccardiana** Speg. in Mich. I, p. 393, Fungi it. t. 401. 2844

— Stromate lignum decorticatum late ambiente atque superficie atro-inquinante; peritheciis gregariis, ligno infossis, globosis, $\frac{3}{4}$ mill. diam., ostiolo rotundato, pertuso vix emergente; ascis cylindricis, noduloso-stipitatis, apice, lumine integro, obtusiusculis, p. sporif. $120-140 \approx 7-8$, stipite $50 \approx 5-6$, pseudoparaphysibus guttulis obvallatis, octosporis; sporidiis monostichis oblongis, subfusoides, $18-22 \approx 5-6$, constricto-1-septatis, utrinque obtusiusculis,

2- vel sæpius 4-nucleatis, indeque simulate 3-septatis, dilute olivaceis.

Hab. in ligno putri Lauri nobilis, Susegana, Italia bor. (SPEGAZZINI). — A *Vals. anserina* (Pers.) Sacc., cui affinis, ascis conspicue longioribus, sporidiis longioribus, angustioribus, 4-nucleatis, dilute coloratis differt.

39. **Valsaria apiculata** (Curr.) Sacc. *Sphæria apiculata* Curr. Linn. 2845
Trans. XXII, p. 326, fig. 96 Cooke Handb. n. 2635. *Anthostoma trabeum* Niessl Beitr. p. 56, t. VII, f. 48. — Stromate immerso, exiguo ex albido cinerascete, vix evoluto; peritheciis nunc gregariis seriatis, nunc solitariis, innatis, majusculis, 300 μ . diam. ovoideo-subglobosis, carbonaceis, atris, collo crasso cylindrico, ostiolo ventricosò-incrassato, prominulo; ascis cylindricis, inferne attenuatis stipitatis, superne, retusis, 8sporis, 130-154 \approx 12 p. sporif.; sporidiis monostichis, oblongis sæpe inæquilateralibus, 18-20 \approx 6-7, unicellularibus plasmate bipartito, dein distinctissime infra medium uniseptatis (!), atrofuscis, opacis, utrinque obtuse rotundatis basi appendicula hyalina obtusa (ex episporio protuberante) auctis; paraphysibus filiformibus guttulatis ascorum longitudine.

Hab. in ligno pineo denudato pr. Graz Austriæ et in Britannia.

40. **Valsaria fennica** (Karst.) Sacc. *Phæosperma fennica* Karst. M. F. 2846
II. 54. — Stromate effuso, forma varia, plerumque longitudinaliter expanso, valde elevato, e fusco atro, parte inferiore intus substantia ligni plus minus mutata formato, fuscescete, long. 0,5-0,3 cm., lat. circiter 0,5 cm.; peritheciis monostichis sed ordine inæquali dispositis, alte immersis, ovoideo-oblongatis, majusculis, atris, in colla elongata abrupte attenuatis, ostioliis superficialibus, valde incrassatis, elongatis, cylindræis, integris, lævibus vel rugosis, interdum subrotundatis, demum pertusis, usque ad 0,5 mill. longis; ascis cylindræis, 70-90 \approx 6 p. sporif., octosporis, paraphysatis; sporidiis oblique monostichis. 2-guttulatis, v. uniseptatis, oblongatis, rectis, fuscis, 9-14 \approx 3-4.

Hab. in ligno vetusto Betulæ? in par. Tammela Fennicæ.

41. **Valsaria? gregalis** (Schw.) Sacc. *Sphæria gregalis* Schw. in Fr. 2847
Elench. Fung. II, p. 68. — Irregulariter effusa, peritheciis tenerimis globosis acutiusculis, pulverulentis, liberis connatisque, papillatis, fuscis, stromate tenuissimo; sporidiis oblongis, uniseptatis 12-13 μ . longis.

Hab. ad ligna putrida Carolinae Americae borealis. — Stroma

tenuissimum, indeterminatum. Perithecia minuta, exacte globosa, nunc connata, nunc tantum stipata, admodum fragilia, diffracta cellulas referentia, colore obscure fusco-nigricante. Ostiolum exiguum, papillæforme.

42. **Valsaria? Beaumontii** (B. et C.) Sacc. *Hypoxyylon Beaumontii* 2848
B. et C. North Amer. Fungi n. 864. — Peritheciis globosis connatis; ostiolo distincto papillæformi; ascis linearibus; sporidiis oblongo-ellipticis uniseptatis, 10 μ . long., monostichis.

Hab. in ramis decorticatis Coniferarum, Alabama, Helderberg, Amer. bor. (BERK., PECK.). — Perithecia satis minuta, brunnea dein nigra, glabra.

43. **Valsaria? nudicollis** (B. et C.) Sacc. *Hypoxyylon nudicolle* B. et 2849
C. North Amer. Fungi n. 848. — Peritheciis connatis materie umbrina tectis; ostioliis prominentibus, nigris; ascis linearibus; sporidiis oblongis, angustis, uniseptatis.

Hab. in ligno pineo, Carolina inf. Amer. bor. — Stratum subfuligineum continuum v. subinterruptum efficit.

44. **Valsaria hysterooides** Rehm Ascom. n. 633, Hedw. 1882, p. 75. 2850
— Stromatibus dense gregariis, ligno decorticato adnatis, elongatis, subobtusis, habitu fere *Hysteriorum*, 1-3 \approx 1-1,5 mill. convexis, atris, longitudinaliter subtilissime striatulis ibique ostioliis perpaucis minutissimis, globosis, hic illic ornatis, intus albidis; peritheciis globosis, stromati immersis, in quoque stromate paucis; ascis cylindræceis, 8sporis, 120 \approx 6-7; sporidiis ellipticis obtusis, medio plus minusve constrictis, 2-cellularibus, fuscis, 14-18 \approx 4-5-6, monostichis; paraphysibus filiformibus, apice irregularibus, hyalinis, 2,5 μ . crass.

Hab. ad truncum emortuum Sorbi Chamæmespili in alpe Haustatt prope Benediktenwand alpium Baviaræ (ARNOLD). — Ob stromata ligno decorticato adnata et subinsculpta ad hanc sectionem pertineret; sed ob eadem stromata definita aptius forte inter *Euvalsarias*.

CAMAROPS Karst. Myc. Fenn. II, p. 6. (Etym. *camara*, fornix et *ops* facies, ob stromata concamerata). — Stroma oblongum, parte immersa e substantia substrati plus minus mutata formatum, parte emersa crusta propriæ indolis, dura, crassiuscula, lævigata, atra undique tectum. Perithecia stromati immersa, monosticha, cylindræcea vel tubuliformia, inæqualia, longissima, collo crustam penetrante ostioloque prominulo, hemisphærico, poro pertuso. Ascis

cylindræci, octospori, aparaphysati. Sporidia subellipsoidea, fuscidula, uniseptata, 2-guttulata. — Genus *Bolinia* analogum inter phæodidymas.

1. **Camarops hypoxyloides** Karst. Myc. Fenn. II, p. 53. — Stromate 2849
cortici innato substantiaque ejus fere immutata formato, parte superiore deinde per peridermium laciniatum fissum erumpente substantiaque propriæ indolis, crustam crassiusculam, atram vel fusco-atram efficiente, superne undique tecto, discreto vel confluento, effuso, ellipsoideo vel oblongato, planiusculo, longit. 1,5-7 cm., latit. 1-3 cm.; peritheciis stromati immersis, monostichis, densissime stipatis, subcylindræcis vel tubuliformibus, inæqualibus, varie angulatis vel complanatis, tenuibus, atris, longissimis, longit. 3-4 mill., crassit. 0,3-0,6 mill. collo brevi, angustissimo crustam penetrante ostioloque prominulo, hemisphærico, perforato vel umbilicato-pertuso instructis; ascis cylindræcis, 33 \approx 4 p. sporif.; sporidiis octonis, oblique monostichis, subellipsoideis, spurie tenuiter uniseptatis vel 2-guttulatis, fuscidulis, 5-6 \approx 2-2,5.

Hab. in cortice trunci Alni glutinosæ emortui Mustiala Fennicæ, parce.

REPERTORIUM

SPHÆRIACEARUM PHÆODIDYMARUM

SECUNDUM MATRICES

Obs. A. indicat *Amphisphæria*. — C. *Camarops*. — D. *Didymosphæria*.
 — De. *Delitschia*. — M. *Massariella*. — Me. *Melanconiella*. — O. *Othia*.
 — P. *Parodiella*. — R. *Rhynchostoma*. — V. *Valsaria*.

Numeri 2644-2851 citantur 644-851.

- | | |
|--|---|
| Abies — V. 814. | Citrus — A. 723. |
| Acer — D. 693. 694. — M. 708. —
A. 721. — O. 797. 802. — V. 807.
818. | Clematis — R. 768. |
| Æsculus — V. 807. | Clethra — V. 833. |
| Alnus — A. 720. — O. 798. 804. — V.
807. 809. 814. 835. 836. 838. 839.
C. 851. | Coniferæ — V. 848. |
| Andromeda — D. 695. | Cornus — D. 692. — V. 807. |
| Arctium — D. 685. | Corylus — D. 677. — O. 794. — Me.
806. — V. 807. |
| Artemisia — D. 678. | Cratægus — D. 701. — O. 781. — V.
807. |
| Arundo — D. 697. — A. 757. 758. —
V. 840. | Cydonia — V. 807. |
| Avena — De. 775. | Cynodon — A. 757. |
| Berberis — D. 677. — O. 800. — V.
807. 824. | Dalbergia — P. 713. |
| Betula — D. 668. 700. — R. 764. —
O. 789. — V. 837. 846. | Daphne — D. 702. |
| Broussonetia — V. 807. 842. | Desmodium — P. 711. |
| Calycanthus — V. 807. | Diospyros — V. 813. |
| Carex — D. 674. 698. | Dobera — O. 788. |
| Carpinus — D. 690. — Me. 805. 806.
V. 807. | Empetrum — D. 657. |
| Castanea — V. 828. | Epilobium — D. 678. |
| Celtis — V. 807. 808. | Eryngium — D. 686. |
| Cinnamomum — V. 832. | Eucalyptus — D. 677. — V. 823. |
| | Eupatorium — D. 649. |
| | Evonymus — O. 801. — V. 807. |
| | Fagus — A. 740. — V. 809. 814. 818. |
| | Ficus — M. 710. — V. 807. 811. 842. |

- Fraxinus — D. 693. — A. 720. 725.
 726. — V. 807. 815.
 Galium — D. 678. 683.
 Genista — D. 662. 687. — R. 767.
 Gleditschia — V. 807. 810.
 Hibiscus — V. 807.
 Humulus — D. 678.
 Hypericum — D. 678.
 Ilex — D. 656.
 Indigofera — P. 711.
 Iris — D. 674.
 Juglans — D. 704. — V. 814.
 Juncus — D. 698.
 Juniperus — D. 653. — R. 765.
 Iussiaea — A. 756.
 Kalmia — V. 825.
 Lathyrus — D. 651.
 Laurus — D. 691. — V. 844.
 Lecanora — A. 761.
 Leguminosæ — P. 712.
 Liquidambar — A. 734. — V. 818.
 Lonicera — D. 680. 682. — O. 792.
 Lysimachia — D. 646.
 Lythrum — D. 644. 678.
 Margyricarpus — A. 735.
 Melia — V. 807.
 Melilotus — D. 678. 679.
 Mentha — D. 678.
 Monocotyledoneæ — D. 672.
 Morus — V. 821.
 Myricaria — D. 680.
 Nyssa — V. 822.
 Obione — D. 650.
 Oenothera — D. 645.
 Olea — A. 728. 729.
 Opuntia — D. 684.
 Origanum — D. 644. 678.
 Paliurus — V. 807.
 Parnassia — D. 647.
 Peltigera — D. 675.
 Periploca — V. 810.
 Phillyrea — A. 727.
 Phœnix — D. 671. 696.
 Phytolacca — D. 752.
 Pinus — A. 748. 749. 751. 752. 753.
 — V. 843. 845. 849.
 Pistacia — A. 730.
 Platanus — V. 831.
 Populus — D. 691. — A. 737. 738. —
 R. 770. — O. 786. — V. 807. 829.
 830.
 Posidonia — A. 759. 760.
 Prunus — D. 660. 693. — M. 706. —
 A. 721. — O. 783. — V. 807. 814.
 828.
 Pyrus — A. 722. 724. — O. 782.
 Quercus — M. 705. — A. 714. 715.
 716. 717. 718. 720. 741. — O. 789.
 Me. 806. — V. 807. 814. 816. 817.
 818.
 Rhamnus — D. 655. — V. 807.
 Rhus — V. 807. 818. 826.
 Rhynchosia — P. 711.
 Ribes — O. 795. 796.
 Robinia — D. 691. — V. 807. 808. 810.
 Rosa — D. 689. — O. 790. 803. 807.
 Rubus — D. 665. 666. 667. 678. 680.
 Salix — D. 677. 703. — A. 720. 741.
 742. 743. — R. 766. — De. 774.
 V. 827.
 Salvia — D. 644. 678.
 Sambucus — D. 677. — V. 807.
 Sassafras — V. 834.
 Schinus — A. 736.
 Scirpus — D. 669.
 Smilax — D. 670.
 Solanum — D. 646.
 Solidago — D. 644.
 Sorbus — V. 850.
 Spartium — D. 661. 687.
 Spiræa — D. 646. — O. 784.
 Syringa — D. 688. — O. 791. — V.
 807.

- Thalictrum — A. 754.
Theloschistis — D. 676.
Thuja — A. 750.
Tilia — D. 699. — M. 709. — A. 744.
 V. 820.
Ulex — A. 746. — V. 807.
Ulmus — D. 663. 664. — A. 720. 738.
 — O. 793. — V. 807. 818. 819.
- Urtica — D. 644.
Vaccinium — V, 825.
Verbascum — D. 678.
Vernonia — D. 685.
Vitis — D. 654. 659. — A. 717. — V.
 807. 812.
Yucca — D. 673.
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ADDENDA ^{*)}

51. **Podosphæra minor** Howe in Bessey The Erys. p. 4. — Peritheciis spar- 51
sis vel confertis; appendiculis 10-20 perithecium subæquantibus vel paulo
superantibus.
Hab. in foliis Spirææ in America boreali (HOWE).
52. **Podosphæra Bresadolæ** QuéL. in Bresad. Fungi Trid. fasc. II, p. 25, t. 5²
XXX, f. 2. — Peritheciis globosis, membranaceis, superficialibus sparsis,
minutissimis, laxe reticulatis e luteolo rufescentibus, demum nigricanti-
bus, 90 μ . diam., appendiculis hyalinis perithecio duplo longioribus, apici-
bus turgidis dichotomo-ramosis; asco subgloboso, octosporo, mox evanido,
50 μ . diam., sporidiis ovatis luteolis, echinulatis, 15-20 \approx 12.
Hab. in pileo Arrheniæ Auriscalpii in sylvis cumbrosis, Val di Sole
Tyroliaë italicæ. — Etsi matrix tam absona, species generis optima videtur.
15. **Uncinula parvula** C. et P. in Bessey The Erysiph. p. 7. — Hypophylla; 31
mycelio effuso, delicato, evanescente; peritheciis sparsis, globosis, minutis,
appendiculis simplicibus, numerosis, peritheci diametrum vix æquantibus;
ascis ellipsoideis, rostratis; sporidiis senis.
Hab. in foliis Celtidis occidentalis in America boreali.
151. **Uncinula heliciformis** Howe in Bessey The Erysiph. p. 6. — Mycelio 31¹
obsoleto; peritheciis sparsis minutis, globosis, appendiculis 15-30, diame-
trum peritheci unum vel duplum æquantibus, sursum spiraliter convo-
lutis, deorsum coloratis; ascis 4-6; sporidiis 3-6.
Hab. in foliis Populi balsamiferæ in America bor. — «An eadem
ac *U. luculenta* Howe, mihi ignota?».
3. **Microsphæra Viburni** Howe in Bessey The Erysiph., *M. sparsa* Howe. 35¹
— Mycelio arachnoideo; peritheciis sparsis globosis, appendiculis, sub-vi-
ginti vel paucioribus, peritheci diametro longioribus, dichotome ramosis,
apicibus plus minus curvis; ascis 6-10; sporidiis ut plurimum 6.
Hab. in foliis Viburni (*Sheepberry*) in America bor. (HOWE).
23. **Microsphæra Platani** Howe in Bessey The Erysiph. pag. 9. — Mycelio 55
evanescente; peritheciis minutis globosis, sparsis; appendiculis 10-18, pe-
ritheci diametro longioribus, apicibus vehementer curvatis; ascis 4-5; spo-
ridiis 4-5.
Hab. in foliis Platani in America boreali (HOWE).

*) Studiosorum commodo diagnoses specierum v. generum addendorum ita impressæ sunt ut sin-
gula argumenta seorsim exsecari et hinc suis locis inseri possint.

24. **Microsphæra Symphoricarpi** Howe in Bessey The Erysiph. pag. 9. — 56
Mycelio effuso, subpersistente; peritheciis sparsis v. confertis; appendiculis
8-16, perithecii diametro bis-quater longioribus, ter-quinquies dichotomis,
ramulis divaricatis, sæpe truncatis rectis; ascis 4-6; sporidiis 3-5.
Hab. in foliis Symphoricarpi racemosæ in America bor. (Howe).
25. **Microsphæra Menispermi** Howe in Bessey The Erysiph, p. 9. — My- 57
celio arachnoideo, effuso, subinde evanido; peritheciis sparsis v. gregariis
minutis, globosis; appendiculis 10-20, perithecii diametrum subæquantibus;
ascis 5-6; sporidiis 3-6.
Hab. in foliis Menispermi canadensis in Amer. bor. (Howe).
26. **Microsphæra densissima** (Schw.) Peck, Adde: peritheciis sparsis; ap- 58
pendiculis 6-10; ascis 4-8; sporidiis 8. (Conf. Bessey The Erysiph. p. 11).
261. **Microsphæra elevata** Burrill in Bessey The Erysiph. p. 11. — Epiphyll- 581
la; mycelio arachnoideo, subevanido; peritheciis conspicue reticulatis, 1
mill. diam., prominentibus; appendiculis circ. 12, basi coloratis, simplicibus,
subinde prope basim ramosis, solite bis- quater dichotome furcatis, longis-
simis; ascis 4, ovoideis, conspicue rostratis.
Hab. in foliis Catalpæ in America boreali. — Ascis 6-8spori.
11. **Myriococcum Everhartii** Sacc. et Ellis N. Am. Fung. n. 766. — Peri- 1191
theciis dense gregariis, globosis, obtusis, astomis, $1\frac{1}{6}$ - $1\frac{1}{5}$ mill. diam., in-
dumento bombycino tenuissimo pallide cinereo (in aqua mox disparente)
dense vestitis; contextu perithecii areolato, tenui-membranaceo, rufo;
ascis . . . ?; sporis (spermatiiis?) initio conglutinatis, e globoso angulosis,
subinde fere apiculatis, 8-12 μ . diam., granuloso-guttulatis, hyalinis.
Hab. in lignis putrescentibus, Newfield. New Jersey Amer. bor. (ELLIS).
— A *M. præcoci* indumento byssino copioso potissimum dignoscitur hæc
species, quam clariss. B. M. EVERHART ex West Chester Pensylvaniæ dic-
camus.
11. **Pisomyxa? Amomi** B. et Br. Fungi of Ceylon n. 1187. — Peritheciis 1201
globosis, celluloso-contextis, ex apice hypharum curvarum, intricatarum,
nigricantium oriundis, pelliculas atras oblongas formantibus, initio opacis
dein hyalinis; ascis sporidiis globosis hyalinis. — Pyrenidia adsunt:
stylosporis oblongis 1-septatis.
Hab. in foliis Amomi, Ceylon.
91. **Asterina diplocarpa** Cooke in Grev. X, pag. 129. — Epiphylla, effusa; 1701
peritheciis applanato-convexis, orbicularibus 130 μ . diam., fuscis, sparsis
vel segregatis; ascis obovatis; sporidiis fuscis uniseptatis, valde constrictis
16 \times 8, loculis subglobosis; peritheciis aliis minoribus, subglobosis, macro-
stylosporas ovatas, fuscas, continuas 18-20 \times 10-12 continentibus.
Hab. in foliis Sidæ cordifoliæ, Inanda, Natal (WOOD).

92. **Asterina similis** Cooke in Grev. X, pag. 130. — Epiphylla, atra, maculæformis; peritheciis hemisphæricis 80-120 μ . diam., stellato-fissis, hyphis ramosis, radiantibus circumdatis; ascis clavatis; sporidiis ellipticis, uniseptatis, fuscis, utrinque rotundatis 15-17 \approx 6; microstylosporidis minutis, ovatis, hyalinis.

Hab. in foliis Sidæ rhombifoliæ, Inanda, Natal (Wood). — Affinis *A. myriadeæ*.

93. **Asterina Grewiæ** Cooke in Grev. X, p. 130. — Peritheciis hemisphæricis, atris, opacis, gregariis, punctiformibus 120-140 μ . d., mycelio fusco obsoleto; ascis anguste clavatis; sporidiis cylindræcis, uniseptatis, fuscis, utrinque rotundatis 18 \approx 5; hinc illinc conidiis lanceolatis, brunneis, triseptatis, stipitatis, peritheciis immixtis.

Hab. in foliis Grewiæ lasiocarpæ, Inanda, Natal (Wood).

94. **Asterina toruligena** Cooke in Grev. X. p. 129. — Atra, velutina, orbicularis; peritheciis applanatis, subdiscoideis, convexis 1 mill. diam. opacis, rugulosis; hyphis fuscis radiantibus, circumdatis; ascis clavatis; sporidiis arcte ellipticis, uniseptatis, fuscis, leniter constrictis 12 \approx 5; stromate toruloideo; hyphis erectis, simplicibus, subramosis, fuscis, articulis ellipticis, 8-10 \approx 4, dissilientibus.

Hab. in foliis vivis Inanda, Natal (Wood).

95. **Asterina myriadea** Cooke in Grev. X, pag. 130. — Amphigena, sparsa; peritheciis numerosissimis, fuscis, punctiformibus, subglobosis, ad basim applanatis, vel hemisphæricis 70-100 μ . diam. sub lente olivaceis, membranaceis, aliis microstylosporas, ovales, hyalinas 6 \approx 3, aliis ascosporas gerentibus; ascis arcte clavatis; sporidiis sublanceolatis, utrinque obtusis, uniseptatis, 10 \approx 3, luteo-fuscis.

Hab. in foliis vivis, Inanda, Natal (Wood).

161. **Asterina phæostroma** Cooke in Grev. X, pag. 130. — Atra, velutina, orbicularis, demum confluens, vel late effusa; peritheciis hemisphæricis 60-100 μ . diam.; brunneis inter hyphas nidulantibus; ascis amplis, subpyriformibus; sporidiis ellipticis, arcte constrictis, utrinque obtusis, pallidis, uniseptatis, 22 \approx 10; mycelio ramosissimo, læte fusco, aculeis rigidis erectis opacis 100 μ . longis, dense ornato.

Hab. in foliis Pavettæ Natalensis (et Kraussiæ?), Inanda, Natal (Wood). — Affinis *A. velutinæ*.

461. **Asterina Himantia** (Pers.) Sacc., *Sphaeria Himantia* Pers. Syn. p. 89, *Asteroma Himantia* (Pers.) Fr. Summa Veg. p. 325, *Ascospora Himantia* (Pers.) Rehm Ascom. n. 131. — Macula nigra ambiente e fibrillis centrifugis orta; peritheciis prominulis seriatis centro confertioribus; ascis initio ovoideis, sessilibus, dein clavatis 30 \approx 12, aparaphysatis, octosporis; sporidiis ellipticis, obtusis, continuis, 2-guttulatis, 8-10 \approx 3,5, hyalinis.

Hab. in caulibus emortuis Umbelliferarum, e. g. Peucedani in Suecia, Gallia, Germania.

- 70¹. **Asterina? stylospora** Cooke in Grev. X, pag. 129. — Gregaria, atra, 231¹
hypophylla; peritheciis hemisphaericis, opacis, inter hyphas parcas nidulan-
tibus; macrostylosporibus ellipticis 26-30 \times 10-12 supra rotundatis, infra in
mucronem, hyalinum, stipitiforem productis, plasmate fusco, medio fa-
scia hyalina bipartito.
Hab. in foliis Sponiæ guineensis, Inanda, Natal (Wood). — Dubia,
quia asci ignoti.
- 12¹. **Dimerosporium Collinsii** (Schw.) Thuem. M. U. n. 849, *Sph.* (Byssised.) 243¹
Collinsii Schw. Syn. Amer. bor. n. 1512, Peck 29 Rep. on the St. Mus. —
Tomento crasso densissime intertexto efficiente plagas latas effusas inter
nervos paginæ aversæ foliorum e fusco-nigras, floccis suberectis; perithe-
ciis subiculo huic floccoso, creberrime insidentibus globosis, nigris astomis,
vel saltem indistincte ostiolatis, sed demum globulo spermatico irregulari,
coronatis; ascis cylindraceutis; sporidiis monostichis, hinc abrupte attenua-
tis, septo (spurio?) inæqualiter divisus, 10-13 μ longis, hyalinis.
Hab. in pagina inf. foliorum *Amelanchieris canadensis*, Center,
New York, etc. Amer. bor. (COLLINS, PECK). — Mala dispositio nominum
in Thuem. Diagn. M. U. Cent. VII-IX p. 8, me decipit ut Thuemenio false
tribuerim adscriptionem hujus speciei diversissimæ *Asterinæ orbiculari*,
quod corrigendum (Cfr. Syll. p. 46 et 54).
38. **Meliola triseptata** B. et Br. — Effusa, magna, velutina, ceterum ut *Mel.* 313
amphitricha; teste Cooke in litt. ex herb. Berk. n. 1137. — Ceylon.
39. **Meliola tenuis** B. et C. Rav. Fungi Amer. exsic. n. 831 (sine diagnosi). 214
— Epiphylla, maculas atras subcirculares minutas, atras, velutinas for-
mans; peritheciis globosis setulis rigidis, rectis acutis vestitis; ascis 2-
4-sporis, ellipsoideis; sporidiis oblongis, 50 \times 18-20, 4-septatis leniter con-
strictis, utrinque rotundatis, fuliginosis. — Adsunt perithecia minora pyc-
nidica; stylosporibus oblongis, 1-septatis, pluriguttulatis, hyalinis, 25-26 \times 6-7.
Hab. in foliis *Arundinariæ*, Darien Georgia Amer. bor.
32. **Capnodium Thwaitesii** Berk. Introd. Crypt. p. 274, t. 63 a. (sine dia- 354
gnosi). — Peritheciis subfasciculatis oblongo-pyriformibus, sursum atte-
nuatis, extus granulosis, nigris.
Hab. in capsulis *Ardisiæ* speciei, ubi?
78. **Valsa subcongrua** Rehm Ascom. n. 632, Hedw. 1882, p. 75. — Perithe- 506¹
ciis monostichis, globosis, in cortice interiore nidulantibus, circa 8 in quo-
vis stromate, dense stipatis, collis plerumque breviusculis, interdum usque
ad 1 mill. long. elongatis et subcurvatis, in disculum atrum, planum v. sub-
convexulum, 0,7 mill. lat., rotundatum conjunctis, disculo corticem pustula-
tim elevatum coronante; stromatibus gregariis, ramulos ambientibus et
epidermidem cribrantibus; ascis clavatis, 8-sporis, 21 \times 4-5; sporidiis cylin-
dricis, hyalinis rectis vel subcurvatis, distichis 3-4 \times 1; paraphysibus long-
is, teneris, septatis c. 5 μ . crass.
Hab. ad ramum putrescentem *Alni* viridis in Monte Buchenegg prope
Oberstauffen apud Algoviam Germ. (BRITZELMAYR).

- 109¹. **Valsa sibirica** Thuem. Beitr. Pilz. Fl. Sib. V, p. 19, n. 920. — Peri- 537¹
 theciis sparsis, stromate vix ullo, cortice interiore nidulantibus, 9-12, glo-
 bosico-conicis, prominulis; ostioli perforatis, discum fusco-atrum albido-fur-
 furaceum sistentibus; ascis clavato-cylindraceis, curvulis, apice acutiuscu-
 lis, substipitatis $40 \approx 6-7$, octosporis; sporidiis subdistichis, arcuatis, utrin-
 que rotundatis, hyalinis, eguttatis, $15 \approx 3$.
Hab. in ramulis aridis Cotonæstri melanocarpæ in desertis prope
 Minussinsk Sibiriae asiaticæ (MARTIANOFF). — *Valsæ leucostomæ* cognata.
- 6¹. **Philocopra polyspora** (Ph. et Pl.) Sacc., *Sordaria polyspora* Ph. et Pl. 911¹
 Grev. X, p. 73, t. 158, f. 1. — Peritheciis semiimmersis, sparsis, globosis,
 setulis parvis nigris superne vestitis; ostiolo elongato; ascis cylindraceis
 poly-(128?)-sporis $60 \approx 10$; sporidiis ellipsoideis, continuis 5-8 \approx 4-5, nigri-
 cantibus.
Hab. in fimo Cuniculorum, prope Bristol Britanniae (BUCKNALL). —
 Præcipue sporidiis minutis dignoscenda species.
- 44¹. **Anthostomella ammophila** (Ph. et Pl.) Sacc. *Sphæria ammophila* Ph. 1071¹
 et Pl. Grev. X, p. 73, t. 158, f. 5. — Peritheciis immersis, majusculis, 2-3
 hinc inde confertis, epidermideque nigro-circumscripta velatis; ostioli mi-
 nutis, punctiformibus; ascis cylindraceis $80 \approx 8-10$; sporidiis octonis, ovoi-
 deis, monostichis, atro-fuligineis, 8-10 \approx 5-6, utrinque appendicula tenui
 hyalina auctis.
Hab. in *Ammophila arundinacea* prope Norfolk Britanniae.
- 33¹. **Anthostoma gastrinoides** Ph. et Pl. Grev. X, p. 71. — Disco concavo, 2166¹
 nigro, stromate nigrescente; peritheciis 8-10, circinantibus ligno semiim-
 mersis; ascis cylindraceis $80 \approx 8-10$, octosporis; sporidiis oblique monosti-
 chis, atro-fuligineis, ellipsoideis, $15 \approx 5$, initio nucleatis.
Hab. in ramis *Viburni*, Bristol Britanniae (BUCKNALL). — *Anth. ga-*
strino peraffine.
- 41¹. **Didymella Rehmii** (J. Kunze) Sacc., *Didymosphæria Rehmii* Kunze 1129¹
 Fung. Sel. exic. n. 1875 (absque diagnosi). — Peritheciis dense gregariis
 epidermide velatis, tumidulis, globoso-depressis, nigris, vix papillatis; ascis
 clavulatis, 80-90 \approx 10, paraphysibus filiformibus obvallatis, octosporis; spo-
 ridiis monostichis, ellipsoideis, obtusiusculis, uniseptatis, 4-guttulatis, le-
 niter constrictis, 15-17 \approx 5, hyalinis.
Hab. in caulibus subvivi *Verbenæ officinalis* prope Eisleben Ger-
 maniae.

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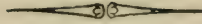
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