

The genera of Coelomycetes, including genera of lichen forming, sexual morphs and synasexual morphs with coelomycetous morphs (genera A–C)

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Abstract

Identification, classification and nomenclature of asexual fungi (including coelomycetes) have been changing rapidly. However, nomenclatural changes of coelomycetous fungi have not been thoroughly discussed since Sutton (1977). Hence, it is essential to compile all scattered data and revisit the list of generic names. In this study, we compiled all published generic names of coelomycetous taxa including invalid and illegitimate names. Further, sexual genera which have coelomycetous asexual morphs are also provided. The present paper is a part of a series of papers on coelomycetous genera.

Keywords: asexual genera – checklist – classification – illegitimate – invalid

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Introduction

In traditional taxonomy of fungi, coelomycetes, hyphomycetes and agonomycetes (mycelia sterilia) have been considered as three main groups of asexual fungi (Hughes 1953, Sutton 1977, 1980). The main difference between coelomycetes and hyphomycetes is the structure of conidiomata i.e. any hyphal structure which bears conidia, e.g. separate conidiophore, synnema, acervulus, pycnidium and sporodochium (Sutton 1980). In coelomycetes, 'conidia are formed within a cavity lined by either fungal tissue, host tissue, or a combination of both' (Sutton 1980), while hyphomycetes 'form their conidia on or from conidiophores that may be single or aggregated into synnemata (coremia) or sporodochia, but never develop under the shelter of any protective integument' (Kendrick and Nag Raj 1979).

Coelomycetes is a general term for asexual morphs of Ascomycota and Basidiomycota which produce conidia (“mitospores”) within conidiomata *viz.* pycnidial, pycnothyrial, acervular, cupulate or stromatic and several intermediate forms between pycnidia and acervuli (Nag Raj 1993, Kendrick 2000, McKenzie 2001, Gehlot et al. 2010, Wijayawardene et al. 2012, 2016). Coelomycetes occur in many ecological niches as pathogens of terrestrial plants (Cortinas et al. 2004, 2006, Wikee et al. 2011, Maharachchikumbura et al. 2012) or aquatic plants (www.tastecate.com), endophytes (González and Tello 2011, Rocha et al. 2011, Rajagopal et al. 2012), or saprobes (Dai et al. 2012, 2017, Wijayawardene et al. 2016). Some are found in soil (Someya et al. 1997), while others are symbiotic mycobionts of lichens (lichenized coelomycetes) (Hawksworth and Poelt 1986) or lichenicolous (Diederich et al. 2001, 2012, Lawrey et al. 2011). They can also be pathogens of vertebrates including humans, and insects (Madelin 1968). Coelomycetes are also capable of growing, reproducing and surviving in a wide range of aquatic environments (Sutton 1980, Kirk et al. 2008) including freshwater (Hyde 1993, Luo et al. 2004, Zhang et al. 2012), marine (Jones et al. 2009, Hodhod et al. 2012) and saline water (Papizadeh et al. 2018) ecosystems.

Historical works in nomenclature of coelomycetes

Sutton (1977) is an important publication that discusses nomenclatural issues of coelomycetes. Sutton (1980) is also important as a monograph of coelomycetes which discusses both taxonomic and nomenclatural issues (such as synonyms, typification details). Nag Raj (1993) provided a comprehensive background (nomenclature and taxonomy) on appendage bearing coelomycetes. Since Nag Raj (1993) there are no major exclusive publications on nomenclature or taxonomy of coelomycetes, except Wijayawardene et al. (2016) who provided classification and taxonomy of dematiaceous coelomycetes.

Aim of this paper

Seifert et al. (2011) compiled all the names of hyphomycetous fungal genera, which provides a comprehensive background of this group. Nevertheless, since Sutton (1977) there has been no major exclusive publication on nomenclature of coelomycetes. Sutton (1980), Nag Raj (1993) and Wijayawardene et al. (2016) provided a comprehensive background to the taxonomy of acervuli, pycnidial and stromatic forms, appendages bearing genera and dematiaceous genera, respectively. However, these publications did not list suppressed names, invalid and illegitimate names. In this study, we aimed to fill this gap and provide all names of coelomycetes with notes on their nomenclature. This is a part of a series of papers and this particular paper covers the genera from A–C.

Materials and Methods

Genera which have been published before 1977 were listed from Sutton (1977). Genera which have been introduced after 1977 were gathered from Sutton (1980), Nag Raj (1993), Hyde et al. (2011) and Wijayawardene et al. (2012, 2017b). Kirk et al. (2013) and Wijayawardene et al. (2017a) were used to check the validity of names.

We provide valid generic names in upper case, bold (e.g. **ABROPELTA**) followed by author, publication details, type species, number of species known, and generic status while providing invalid, illegitimate names in lower case without bold (e.g. *Acanthothecium*) (Kirk et al. 2013, Index Fungorum 2019). Notes are provided if there are important taxonomic works since Sutton (1980) or otherwise important references are provided.

CHECKLIST OF COELOMYCETOUS FUNGI

- ABROPELTA** B. Sutton, Trans. Br. Mycol. Soc. 86(1): 19 (1986)/ *A. fusarioides* B. Sutton/
one species/ *Ascomycota* genera *incertae sedis*
Conidiomata: pycnothyria. Conidiogenous cells: holoblastic. Conidia: fusiform, 2-septate,
hyaline, with basal appendage
Typification details: saprobes, Asia, IMI236263, lacks DNA, known only from
coelomycetous morph
Refs.: Sutton (1986a), Nag Raj (1993), Hyde et al. (2011), Kirk et al. (2013),
Wijayawardene et al. (2012, 2017a, b, 2018)
- ACANTHORUS** Bat. & Cavalc., Atas Inst. Micol. Univ. Pernambuco 4: 246 (1967)/ *A.*
maranhensis Bat. & Cavalc./ one species/ *Dothideomycetes* genera *incertae sedis*
Conidiomata: pycnidial, setose, globose to subglobose, ostiolate, brown to dark brown,
pseudoparenchymatous. Conidiophores: cylindrical, septate, hyaline. Conidiogenous
cells: data inadequate. Conidia: ellipsoidal, smooth, hyaline.
Typification details: On living leaves, Brazil, IMUFPe 50864, lacks DNA, known only
from coelomycetous morph.
Notes: Causes fumagine in *Bertholletia excelsa* O. Berg (Batista and Cavalcanti 1967).
Refs.: Batista and Cavalcanti (1967), Hyde et al. (2011), Kirk et al. (2013),
Wijayawardene et al. (2012, 2017a, b, 2018).
- Acanthothecium* Speg., Boln Acad. nac. Cienc. Córdoba 11(4): 606 (1889)
= *YPSILONIA* Lév., Anns Sci. Nat., Bot., sér. 3 5: 284 (1846) *fide* Sutton (1977),
Index Fungorum (2019).
- ACARELLA** Syd., Anns mycol. 25(1/2): 123 (1927)/ *A. costaricensis* Syd./ three species/
Ascomycota genera *incertae sedis*
Conidiomata: pycnidial. Conidiogenous cells: data inadequate. Conidia: hyaline.
Typification details: saprobes, Puerto Rico, Malaysia, known only from coelomycetous
morph.
Notes: DNA sequence data is unavailable, thus taxonomic placement is uncertain.
Generic revision needed.
Refs.: Farr (1986), Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012,
2017a, b, 2018).
- ACARELLINA** Bat. & H. Maia, Publicações Inst. Micol. Recife 246: 4 (1960)/ *A. psidii* Bat.
& H. Maia/ one species/ *Ascomycota* genera *incertae sedis*
Conidiomata: pycnothyrial. Conidiogenous cells: data inadequate. Conidia: aseptate,
hyaline, ellipsoidal.
Typification details: saprobes, Brazil, known only from coelomycetous morph.
Notes: DNA sequence data is unavailable, thus, taxonomic placement is uncertain.
Refs.: Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018).
- ACAROCONIUM** Kocourk. & D. Hawksw., Lichenologist 40(2): 106 (2008)/ *A. punctiforme*
Kocourk. & D. Hawksw./ one species/ *Ascomycota* genera *incertae sedis*
Conidiomata: pycnidial. Conidiogenous cells: enteroblastic. Conidia: ellipsoid, rounded at
both ends, aseptate, becoming pale brown at maturity while inside the pycnidial cavity,
smooth-walled.
Typification details: lichenicolous, Czech Republic, PRM 892643, lacks DNA, known
only from coelomycetous morph.

Notes: The genus needs phylogenetic revision since it resembles *Phoma sensu lato*.

Refs.: Kocourková and Hawksworth (2008), Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2016, 2017a, b, 2018).

ACAROPELTIS Petr., in Sydow & Petrak, *Annls mycol.* 35(2): 95 (1937)/ *A. costaricensis* Petr./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnothyrial. Conidiogenous cells: data inadequate. Conidia: aseptate, hyaline, ellipsoidal.

Typification details: saprobes, Central America, known only from coelomycetous morph.

Notes: DNA sequence data is unavailable, thus taxonomic placement is uncertain.

Refs.: Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018)

ACAROSPORINA Sherwood, *Mycotaxon* 5(1): 33 (1977)/ five species/ *A. monilifera* (Ellis & Everh.) Sherwood/ *Stictidaceae*, *Ostropales*, *Lecanoromycetes*

Notes: Kirk et al. (2008) stated that this genus has *Phacidiella*-like coelomycetous morphs. Information on cultures and DNA sequences is available in GenBank.

Acarosporium Bubák & Vleugel ex Bubák, *Ber. dt. bot. Ges.* 29: 384 (1911)

= **PYCNOPEZIZA** W.L. White & Whetzel, *Mycologia* 30(2): 187 (1938) *fide* Johnston et al. (2014)

Notes: Johnston et al. (2014) proposed to adopt younger sexual typified name (i.e. *Pycnopeziza*) over older asexual typified name (i.e. *Acarosporium*).

Acerviclypeatus Hanlin, *Mycotaxon* 37: 380 (1990)

= **OPHIODOTHELLA** (Henn.) Höhn., *Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1* 119: 940 (1910) *fide* Hanlin and González (2013)

ACERVULOSEPTORIA Crous & Jol. Roux, *Persoonia* 32: 275 (2014)/ *A. ziziphicola* Crous & Jol. Roux/ two species/ *Mycosphaerellaceae*, *Mycosphaerellales*, *Dothideomycetes*

Conidiomata: acervuli. Conidiophores: subcylindrical, straight to once geniculate, pale brown. Conidiogenous cells: phialidic. Conidia: obclavate (subcylindrical in culture), flexuous, guttulate, hyaline.

Typification details: Pathogens, South Africa, known only from coelomycetous morph.

Notes: Crous et al. (2014c) introduced this septoria-like genus which has acervuli type conidiomata and pigmented & verrucose conidiophores. Furthermore, the genus is phylogenetically distinct from *Septoria sensu stricto* which also resides in *Mycosphaerellaceae*.

ACHOROPELTIS Syd., in Sydow & Petrak, *Annls mycol.* 27(1/2): 79 (1929)/ *A. modesta* Syd./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnothyrial. Conidiogenous cells: data inadequate. Conidia: aseptate, hyaline, ellipsoidal.

Typification details: saprobes, Costa Rica, known only from coelomycetous morph.

Notes: DNA sequence data is unavailable, thus taxonomic placement is uncertain.

Refs.: Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b).

ACICULOSPORIUM I. Miyake, *Bot. Mag., Tokyo* 22: (307) (1908) (= *Albomyces* I. Miyake ex I. Hino, *Trans. Mycol. Soc. Japan* 3: 113 (1908))/ four species/ *A. take* I. Miyake/ *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*

ACTINOTHECIUM Ces., Klotzschii Herb. Viv. Mycol., Fasc.: no. 1976 (1854)/ *A. caricicola* Ces./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnothyrial. Conidiogenous cells: Data inadequate. Conidia: Hyaline.

Typification details: saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: DNA sequence data is unavailable, thus taxonomic placement is uncertain.

Refs.: Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018).

Actinothyrella Edward, Kr.P. Singh, S.C. Tripathi, M.K. Sinha & Ranade, *Sydowia* 26(1-6): 270 (1974)

Notes: Sutton (1977) stated that the generic name was not validly published since the type was not indicated in Edward (1974).

ACTINOTHYRIUM Kunze, *Mykologische Hefte* (Leipzig) 2: 81 (1823)/ *A. graminis* Kunze ex Fr./ c. ten species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnothyrial. Conidiogenous cells: data inadequate. Conidia: hyaline.

Typification details: saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: DNA sequence data is unavailable, thus taxonomic placement is uncertain.

Refs.: Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018).

Actinotrichum Wallr. **nom. nud.** fide Sutton (1977)

Adea Petr., *Bot. Jb.* 62(Beibl. 141 ('142')): 144 (1928)

= **SEIRIDIUM** Nees, *Syst. Pilze* (Würzburg): 22 (1816) [1816-17]

Notes: *Adea* Petr. morphologically resembles *Seiridium* but Sutton (1980) doubts the placement of the former under the latter. However, Nag Raj and Kendrick (1985) confirmed that the type of *Adea*, *A. canariensis* is congeneric with *Seiridium s. str.*, thus introduced as a new species, *Seiridium canariense* (Petr.) Nag Raj & W.B. Kendr. Nevertheless, *Seiridium canariense* is not known from DNA sequences, thus the synonymy of *Adea* under *Seiridium* needs to be confirmed based on molecular phylogeny. Since, the later study by Nag Raj (1993) also agreed with Nag Raj and Kendrick (1985), we tentatively place *Adea* under *Seiridium*.

Adella Petr., *Annls mycol.* 34(3): 228 (1936)

= **WOJNOWICIA** Sacc., *Syll. fung.* (Abellini) 10: 328 (1892)

Notes: Sutton (1977, 1980) regarded *Adella* as a synonym of *Wojnowicia*.

AEGEANISPORA E.B.G. Jones & Abdel-Wahab, in Abdel-Wahab et al., *Bot. Mar.*: 60 (4): 470 (2017)/ one species/ *A. elanii* E.B.G. Jones & Abdel-Wahab/ *Incertae sedis*, *Pleosporales*, *Dothideomycetes*

Conidiomata: pycnidial. Conidiogenous cells: holoblastic. Conidia: hyaline, unicellular, globose, subglobose, ovate, surrounded by ephemeral large gelatinous sheath.

Typification details: Saprobes, Turkey, known only from coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Refs.: Abdel-Wahab et al. (2017).

AEQUABILIELLA Crous, *Persoonia* 34: 225 (2015)/ one species/ *A. effusa* (Damm & Crous) Crous/ *Celotheliaceae*, *Phaeomoniellales*, *Eurotiomycetes*

Conidiomata: pycnidial. Conidiophores: Reduced to conidiogenous cells. Conidiogenous cells: Enteroblastic. Conidia: Hyaline, 1-celled, cylindrical to obovate.

Typification details: Saprobes, South Africa, known only from coelomycetous morph.

Notes: Information on cultures and DNA sequences is available on GenBank.

Refs.: Crous et al. (2015).

AGYRIELLOPSIS Höhn., *Annl. mycol.* 1(5): 404 (1903) / *A. caeruleoatra* Höhn./ two species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic or pycnidial. Conidiogenous cells: data inadequate. Conidia: subhyaline.

Typification details: saprobes, Europe, Asia, known only from coelomycetous morph

Notes: DNA sequence data is unavailable, thus taxonomic placement is uncertain.

Refs.: Sutton (1980), Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018).

AHMADIA Syd., *Annl. mycol.* 37(4/5): 445 (1939)/ *A. pentatropidis* Syd./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: acervuli. Conidiogenous cells: holoblastic, annellidic. Conidia: hyaline, 0-3-septate.

Typification details: saprobes, Asia, known only from coelomycetous morph.

Notes: DNA sequence data is unavailable, thus taxonomic placement is uncertain.

Refs.: Sutton (1980), Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018).

Ahmadinula Petr., *Sydowia* 7(5-6): 375 (1953)

= **TRUNCATELLA** Steyaert, *Bull. Jard. bot. État Brux.* 19: 293 (1949)

Notes: Sutton (1977, 1980) regarded *Ahmadinula* as a synonym of *Truncatella*.

AJREKARELLA Kamat & Kalani, *Mycopath. Mycol. appl.* 24: 300 (1964)/ *A. polychaetriae* Kamat & Kalani/ three species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic to pycnidial. Conidiogenous cells: holoblastic, annellidic. Conidia: hyaline, with 1–2 apical appendages.

Typification details: saprobes, Asia, known only from coelomycetous morph

Notes: DNA sequence data is unavailable, thus taxonomic placement is uncertain.

Refs.: Sutton (1980), Nag Raj (1993), Dharkar et al. (2011), Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018).

ALANPHILLIPSIA Crous & M.J. Wingf., *Persoonia* 31: 197 (2013)/ five species/ *A. aloes* Crous & M.J. Wingf./ *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*

Conidiomata: globose. Paraphyses: hyaline, smooth, subcylindrical, branched at base or not, aseptate or transversely septate. Conidiophores: hyaline, smooth, subcylindrical, septate. Macroconidiogenous cells: hyaline, subcylindrical to lageniform, proliferating percurrently near apex. Macroconidia: solitary, golden-brown to medium brown at maturity, verruculose, surrounded by a persistent, hyaline outer layer (absent in some species, or reduced to a basal frill or basal and apical appendage), ellipsoid to obclavate or subcylindrical with truncate scar on hyaline layer. Microconidiogenous cells: hyaline, smooth, subcylindrical, proliferating inconspicuously percurrently at apex. Microconidia: hyaline, smooth, granular, subcylindrical to ellipsoid, apex obtuse, base truncate, with minute marginal frill.

Typification details: Saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: Information on cultures and DNA sequences is available on GenBank.

Refs.: Crous et al. (2013), Wijayawardene et al. (2016).

ALFARIA Crous, Montañó-Mata & García-Jim., *Persoonia* 32: 239 (2014)/ 15 species/ *A. cyperi-esculenti* Crous, Montañó-Mata & García-Jim./ *Stachybotryaceae*, *Hypocreales*, *Sordariomycetes*

Conidiomata: acervuli. Conidiophores: cylindrical. Conidiogenous cells: enteroblastic, phialidic. Conidia: ellipsoidal, truncate base, aseptate, pale brown when young, becoming dark brown at maturity.

Typification details: Saprobies, cosmopolitan.

Notes: Cultures and DNA sequences are available in GenBank.

Ref.: Crous et al. (2014c, 2017, 2018a, b), Hyde et al. (2016), Lombard et al. (2016), Wijayawardene et al. (2016, 2020), Lin et al. (2017), Liang et al. (2019).

Allantophoma Kleb., *Phytopath. Z.* 6: 237 (1933) **nom. inval.** *fide* Kirk et al. (2008)

Allantophomoides S.L. Wei & T.Y. Zhang, *Mycosystema* 22(1): 9 (2003)

= **SEPTORIA** Sacc., *Syll. fung. (Abellini)* 3: 474 (1884)

Notes: Videira et al. (2017) mentioned that the genus resembles *Phoma*, *Coleophoma* and *Allantophomopsis*. However, *Allantophomoides* is not known from DNA sequence data to confirm its relationships with these genera.

ALLANTOPHOMOPSIELLA Crous, *IMA Fungus* 5(2): 180 (2014)/ one species/ *A. pseudotsugae* (M. Wilson) Crous/ *Phacidiaceae*, *Phacidiales*, *Leotiomyces*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells or branched, septate. Conidiogenous cells: ampulliform to subcylindrical or lageniform, hyaline. Conidia: ellipsoid to fusiform, hyaline, smooth, aseptate, guttulate, bearing mucoid apical appendages.

Typification details: Pathogens, UK, known only from coelomycetous morph.

Notes: Information on cultures and DNA sequences is available on GenBank.

Refs.: Crous et al. (2014b).

ALLANTOPHOMOPSIS Petr., *Annls mycol.* 23(1/2): 104 (1925)/ *A. cytisporea* (Fr.) Petr./ four species / *Phacidiaceae*, *Phacidiales*, *Leotiomyces*

Conidiomata: pycnidial. Conidiogenous cells: enteroblastic. Conidia: hyaline, with apical/ or and basal mucoid appendages.

Typification details: saprobies, cosmopolitan, known only from coelomycetous morph.

Notes: Sutton (1980) provisionally listed the genus as a synonym of *Cytospora* Ehrenb. ex Fr. but Nag Raj (1993) accepted it as a distinct genus. Gene sequences are unavailable. Crous et al. (2015a) regarded *Apostrasseria* Nag Raj as a synonym of *Allantophomopsis*.

Refs.: Sutton (1980), Nag Raj (1993), Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018), Crous et al. (2014b, 2015).

Allantozythia Petr., *Annls mycol.* 21(1/2): 232 (1923) **nom. inval.** *fide* Index Fungorum (2019)

Allantozythia Höhn., *Annls mycol.* 22(1/2): 203 (1924)

= **PHLYCTEMA** Desm., *Annls Sci. Nat., Bot., sér. 3* 8: 16 (1847) *fide* Sutton (1980)

Allantozythiella Danilova, in Naumov & Danilova, Bot. Mater. Otd. Sporov. Rast. Bot. Inst. Komarova Akad. Nauk S.S.S.R. 7(1/12): 140 (1951)
= *ENDOTHIELLA* Sacc., Annl. mycol. 4(3): 273 (1906) *fide* Sutton (1977, 1980)

Allelochaeta Petr., Sydowia 9(1-6): 464 (1955)
= *SEIMATOSPORIUM* Corda, in Sturm, Deutschl. Fl., 3 Abt. (Pilze Deutschl.) 3(13): 79 (1833) *fide* Index Fungorum (2019)

ALLOCONIOTHYRIUM Verkley, Göker & Stielow, Persoonia 32: 33 (2014)/ one species/
A. aptrootii Verkley, Göker & Stielow/ *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*
Conidiomata: pycnidial or eustromatic. Conidiophores: reduced to conidiogenous cells.
Conidiogenous cells: holoblastic to annellidic. Conidia: olivaceous-brown and irregular in outline, surface roughened, with 1 large oil-droplet.
Typification details: From soil, Papua New Guinea, known only from coelomycetous morph
Notes: Information on cultures and DNA sequences is available on GenBank.
Refs.: Verkley et al. (2014), Wijayawardene et al. (2016)

ALLOPHOMA Qian Chen & L. Cai, Stud. Mycol. 82: 162 (2015)/ nine species/ *A. labilis* (Sacc.) Q. Chen & L. Cai/ *Didymellaceae*, *Pleosporales*, *Dothideomycetes*
Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: phialidic. Conidia: variable in shape and size, hyaline.
Typification details: Saprobic or pathogenic, cosmopolitan, known only from coelomycetous morph.
Notes: Information on cultures and DNA sequences is available on GenBank.
Refs.: Chen et al. (2015).

ALLONEOTTIOSPORINA Nag Raj, Coelomycetous Anamorphs with Appendage-bearing Conidia (Ontario): 121 (1993) / *A. polychaetriae* Kamat & Kalani/ two species / *Ascomycota* genera *incertae sedis*
Conidiomata: stromatic to pycnidial. Conidiogenous cells: holoblastic, annellidic. Conidia: hyaline, with 1–2 apical appendages
Typification details: saprobes, Asia, known only from coelomycetous morph.
Notes: DNA sequences are unavailable.
Refs.: Sutton (1980), Nag Raj (1993), Dharkar et al. (2011), Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018).

ALLOTHYRIELLA Bat., Cif. & Nascim., Mycopath. Mycol. appl. 11(1-2): 11 (1959) / *A. marcgraviae* Bat., Cif. & Nascim./ three species/ *Ascomycota* genera *incertae sedis*
Conidiomata: pycnothyrial. Conidiogenous cells: holoblastic. Conidia: brown, septate.
Typification details: saprobes, America, Africa, known only from coelomycetous morph.
Notes: DNA sequences are unavailable.
Refs.: Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018).

ALLOTHYRINA Bat. & J.L. Bezerra, Portug. acta biol., Sér. B 7(4): 384 (1964) / *A. serjaniae* Bat. & J.L. Bezerra/ one species/ *Ascomycota* genera *incertae sedis*
Conidiomata: pycnothyrial. Conidiogenous cells: data inadequate. Conidia: hyaline, ellipsoidal.
Typification details: saprobes, Brazil, known only from coelomycetous morph.
Notes: DNA sequences are unavailable.

Refs.: Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018).

ALLOTHYRIOPSIS Bat., Cif. & H. Maia, Mycopath. Mycol. appl. 11(1-2): 14 (1959)/ *A. landolphiae* Bat., Cif. & H. Maia/ one species/ *Ascomycota* genera *incertae sedis*
Conidiomata: pycnothyrial. Conidiogenous cells: data inadequate. Conidia: hyaline to olive, septate.

Typification details: saprobes, South America, Africa, known only from coelomycetous morph

Notes: DNA sequences are unavailable.

Refs.: Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b).

ALPAKESA Subram. & K. Ramakr., J. Indian bot. Soc. 33: 204 (1954)/ *A. yuccifolia* (J.G. Hall) Subram. & K. Ramakr./ four species/ *Ascomycota* genera *incertae sedis*
Conidiomata: pycnidial. Conidiogenous cells: holoblastic. Conidia: hyaline, 0–3 septa, with several apical, filiform, unbranched appendages.

Typification details: saprobes, South America, Africa, known only from coelomycetous morph.

Notes: Sutton (1980) accepted this as a distinct genus but Nag Raj (1993) treated it as a synonym of *Kellermania* Ellis & Everh. Gene sequences are unavailable.

Refs.: Sutton (1980) Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018).

ALPAKESIOPSIS Abbas, B. Sutton, Ghaffar & A. Abbas, in Abbas, Sutton, Ghaffar & Abbas, Pakist. J. Bot. 35(2): 249 (2003)/ *A. ghaffarii* Abbas, B. Sutton & Al. Abbas/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: holoblastic. Conidia: hyaline, 0–3 septa, with several apical, filiform, unbranched appendages.

Typification details: saprobes, Asia, known only from coelomycetous morph.

Notes: Compare with *Bartalinia*, *Hyalotiella*.

Refs.: Abbas et al. (2003), Wijayawardene et al. (2012, 2017a, b, 2018).

ALVEOPHOMA Alcalde, An. Inst. bot. A.J. Cavanilles 10: 247 (1952)/ *A. caballeroi* Alcalde/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: holoblastic. Conidia: hyaline, aseptate, filiform, unbranched appendages.

Typification details: saprobes, Europe, known only from coelomycetous morph.

Notes: Gene sequences are unavailable.

Refs.: Sutton (1964b, 1980), Wijayawardene et al. (2012, 2017a, b), Kirk et al. (2013).

Alysia Cavalcante & Silva, Publ. Inst. Mic. Univ. Recife 647: 32 (1972)

= **VOUAUXIELLA** Petrak & Sydow, Beih. Rep. spec. nov. regni veg. 42: 482 (1927)

fide Sutton (1980)

Alysisporium Peyronel 1922, Bull. Soc. mycol. Fr. 38(3): [140] (1922)

= **PHRAGMOTRICHUM** Kunze, in Kunze & Schmidt, Mykologische Hefte (Leipzig) 2: 84 (1823) *fide* Sutton (1980)

AMARENOGRAPHIUM O.E. Erikss., Mycotaxon 15: 199 (1982)/ four species/ *A. metableticum* (Trail) O.E. Erikss./ *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: holoblastic, phialidic. Conidia: clavate, ellipsoid, ovoid or fusoid, muriform, yellowish brown to brown.

Typification details: Saprobic or pathogenic, cosmopolitan, known only from coelomycetous morph.

Notes: Information on cultures and DNA sequences is available on GenBank.

Refs.: Abdel-Wahab et al. (2012), Wijayawardene et al. (2016).

AMERODISCOSIELLA M.L. Farr, Mycopath. Mycol. Appl. 14: 77 (1961) / *A. renispora* M.L. Farr/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: data inadequate. Conidia: sub-hyaline to pale yellow, with two polar setulae.

Typification details: saprobes, on leaves of *Cynodon dactylon*, Cambodia, lacks DNA sequences, known only from coelomycetous morph.

Notes: Nag Raj (1975, 1993) treated as *nomen dubium*.

Refs.: Sutton (1973, 1980), Nag Raj (1975, 1993) Wijayawardene et al. (2012, 2017a, b, 2018), Kirk et al. (2013).

AMERODISCOSIELLINA Bat. & Cavalc., Atas Inst. Micol. Univ. Pernambuco 3: 185 (1966) / *A. annonacearum* Bat. & Cavalc./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnothyrial. Conidiogenous cells: data inadequate. Conidia: hyaline, with two polar setulae.

Typification details: on living leaves of *Annona coriacea*, Brazil, IMUFP 47852, known only from coelomycetous morph.

Notes: DNA sequences are unavailable.

Refs.: Wijayawardene et al. (2012, 2017a, b, 2018), Kirk et al. (2013).

Amerosporina (Petra) Petra, Sydowia 18: 377 (1965)

= **AMEROSPORIUM** Speg., Ann. Soc. Cient. Arg. 13: 20(1882) *vide* Sutton (1980)

AMEROSPORIOPSIS Petr., Bot. Arch. 43: 84 (1941)/ *A. gaubae* Petr./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: enteroblastic, phialidic. Conidia: hyaline, aseptate, fusiform to limoniform.

Typification details: saprobes, Iran, known only from coelomycetous morph.

Notes: DNA sequences are unavailable, thus taxonomic placement is uncertain.

Refs.: Sutton (1980), Wijayawardene et al. (2012, 2017a, b, 2018), Kirk et al. (2013).

AMEROSPORIUM Speg., Anal. Soc. cient. argent. 13(1): 20 (1882)/ c. two species *vide* Kirk et al. 2008/ *A. polynematoides* Speg./ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Paraphyses: present. Conidiogenous cells: enteroblastic, phialidic. Conidia: Pale brown to olivaceous, aseptate, fusiform to limoniform.

Typification details: saprobes, ?pathogens, Iran, known only from coelomycetous morph.

Notes: Sutton (1980) mentioned that the taxonomy of the genus is confusing. Wijayawardene et al. (2016) and Index Fungorum (2019) listed the genus as a member of Sclerotiniaceae. However, DNA sequences are lacking, thus Wijayawardene et al. (2017a, b, 2018) accepted it as *Ascomycota incertae sedis*.

Refs.: Sutton (1980), Srivastava et al. (1981), Wijayawardene et al. (2012, 2016, 2017a, b, 2018), Kirk et al. (2013).

AMPELOMYCES Ces. ex Schltdl., Bot. Ztg. 10: 303 (1852)/ *A. quisqualis* Ces./ one or two
vide Kirk et al. 2008/ *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*
 Conidiomata: pycnidial. Paraphyses: absent. Conidiogenous cells: enteroblastic, phialidic,
 doliiform to ampulliform, Conidia: pale brown, aseptate, cylindrical to fusiform.

Typification details: mycoparasites.

Notes: Biocontrol agents (Sztejnberg et al. 1989; Tsay and Tung 1991; Szentiványi and Kiss 2003).

Refs: De Gruyter et al. (2009), Aveskamp et al. (2010), Hyde et al. (2011, 2013), Phookamsak et al. (2014), Wijayawardene et al. (2012, 2014b, 2016, 2017a, b, 2018).

Amphichaeta McAlpine, Proc. Linn. Soc. N.S.W. 29: 118 (1904)

= **SEIMATOSPORIUM** Corda, in Sturm, Deutschl. Fl., 3 Abt. (Pilze Deutschl.) 3(13): 79 (1833) *vide* Kirk et al. (2008), Index Fungorum (2019)

Amphiciliella Höhn., Ber. dt. bot. Ges. 37: 160 (1919)

= **DISCOSIA** Lib. ex Durieu & Mont., Fl. d'Algérie, Cryptog. 1: 587 (1849) [1846-49]
vide Sutton (1977)

Amphicytostroma Petr., Annls mycol. 19(1/2): 63 (1921)

= **AMPHIPORTHE** Petr., Sydowia 24(1-6): 257 (1971) [1970] *vide* Rossman et al. (2015a)

AMPHIPORTHE Petr., Sydowia 24(1-6): 257 (1971) [1970] (= *Amphicytostroma* Petr. 1921 *vide* Rossman et al. 2015a)/ *A. hranicensis* (Petr.) Petr./ three species/
Gnomoniaceae, *Diaporthales*, *Sordariomycetes*

Conidiomata: stromatic. Conidiophores: restricted to the basal region, hyaline, septate, Conidiogenous cells: enteroblastic, phialidic. Conidia: hyaline, aseptate, cylindrical.

Typification details: saprobes, Europe, known from both sexual and coelomycetous morphs.

Notes: Rossman et al. (2015a) adopted younger sexual typified name over older asexual typified name, *Amphicytostroma* Petr. Maharachchikumbura et al. (2015, 2016) and Wijayawardene et al. (2017a, b, 2018) agreed with this taxonomic arrangement.

Amphiporthes aculeans (Schwein.) M.E. Barr, *A. castanea* (Tul. & C. Tul.) M.E. Barr, and *A. leiphaemia* (Fr.) Butin have been transferred to *Synnemaspora* and *Dendrostoma*, respectively (Fan et al. 2018; Senanayake et al. 2018 Jaklitsch and Voglmayr 2019).

Ref.: Sutton (1980).

AMPHISPHAERIA Ces. & De Not., Comm. Soc. crittog. Ital. 1(fasc. 4): 223 (1863)/ 66 species/ *A. umbrina* (Fr.) De Not./ *Amphisphaeriaceae*/ *Amphisphaeriales*/ *Sordariomycetes*

Conidiomata: globose. Conidiophores: septate, branched. Conidiogenous cells: elongate conical, septate, annellidic. Conidia: hyaline, elongate-fusiform.

Typification details: Saprobes, cosmopolitan.

Notes: Senanayake et al. (2015) reported coelomycetous asexual morphs of *Amphisphaeria*.

Amphisporium Link, Mag. Gesell. naturf. Freunde, Berlin 7: 40 (1816) [1815]

= **DIDYMIUM** Schrad., Nov. gen. pl. (Lipsiae): 20 (1797) *vide* Sutton (1977)

Amphitariospora Agnihotr., Sydowia 16(1-6): 75 (1963) [1962]

= *DINEMASPORIUM* Lév., *Annls Sci. Nat., Bot., sér. 3 5*: 274 (1846) *fide* Sutton (1977)

AMPHOROPYCNIUM Bat., *Quad. Lab. crittogam., Pavia 31*: 19 (1963)/ *A. philippinense* Bat./ two species/ *Ascomycota* genera *incertae sedis*.

Conidiomata: Pycnidial. Conidiogenous cells: Data inadequate. Conidia: Ellipsoidal, hyaline

Typification details: saprobes, Brazil, known only from coelomycetous morph

Notes: DNA sequences are unavailable, hence its taxonomic placement is unknown.

Refs.: Kirk et al. (2008, 2013), Wijayawardene et al. (2017a, b, 2018)

Amphorula Grove, *J. Bot., Lond.* 60: 82 (1922)

= *CHAETOCONIS* Clem., *Gen. fung. (Minneapolis)*: 125 (1909) *fide* Sutton (1977)

Ampullaria A.L. Sm., *J. Bot., Lond.* 41: 258 (1903)

= *MELANOSPORA* Corda, *Icon. fung. (Prague) 1*: 24 (1837) *fide* Index Fungorum (2019)

ANAPHYSMENE Bubák, *Annls mycol.* 4(2): 124 (1906)/ *A. heraclei* (Lib.) Bubák/ two species/ *Ascomycota* genera *incertae sedis*

Conidiomata: acervuli. Conidiogenous cells: holoblastic, annellidic. Conidia: hyaline, 1-euseptate, fusiform.

Typification details: saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: DNA sequences are unavailable, thus taxonomic placement is uncertain.

Refs.: Sutton (1980), Sutton and Hodges (1990), Kirk et al. (2013), Wijayawardene et al. (2017a, b, 2018).

Anarhyma M.H. Pei & Z.W. Yuan, *Bull. bot. Res., Harbin* 6(4): 119 (1986)

= *NAGRAJOMYCES* Mel'nik, *Mikol. Fitopatol.* 18(1): 9 (1984)

Notes: The genus *Anarhyma* was introduced with *A. rhododendri* M.H. Pei & Z.W. Yuan as the type (from dead branch of *Rhododendron chrysanthum* *fide* Pei and Yuan 1986). *Anarhyma rhododendri* is similar to *Nagrajomyces dictyosporus* Mel'nik, the type of *Nagrajomyces* Mel'nik. Both taxa have been reported from *Rhododendron aureum* (Mel'nik 1984, Nag Raj 1993, Wijayawardene et al. 2016). Hence, we treat *Anarhyma* as a synonym of *Nagrajomyces*, the older typified genus.

Angiopoma Lév., *Annls Sci. Nat., Bot., sér. 2 16*: 235 (1841)

= *DRECHSLERA* S. Ito, *Proc. Imp. Acad. Japan* 6: 355 (1930) (*fide* Sutton 1977, Seifert et al. 2011); *Nom. rejic.*, see Arts 14.6, Ex. 5 and 14.7 *fide* Index Fungorum (2019).

ANGIOPOMOPSIS Höhn., *Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1 121*: 407 (1912)/ *A. lophostoma* Höhn./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: enteroblastic, phialidic. Conidia: brown, 3-distoseptate, straight or slightly curved.

Typification details: saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: DNA sequences are unavailable, thus taxonomic placement is uncertain.

Refs.: Sutton (1980), Kirk et al. (2013), Wijayawardene et al. (2016, 2017a, b, 2018).

ANNELLOLACINIA B. Sutton, *Mycol. Pap.* 97: 31 (1964)/ two species/ *A. dinemasporioides* B. Sutton/ *Sporocadaceae, Amphisphaeriales, Sordariomycetes*

Conidiomata: acervuli. Conidiogenous cells: holoblastic, annellidic. Conidia: falcate, fusiform, apex tapered into a single, cellular unbranched appendage.

Typification details: saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: Wijayawardene et al. (2016) tentatively placed the genus in *Sporocadaceae* based on its similarity with other genera in the family (e.g. *Bartalinia* Tassi).

Refs.: Sutton (1964a, 1980), Morgan-Jones et al. (1972), Fröhlich et al. (1993), Nag Raj (1993), Kirk et al. (2013), Wijayawardene et al. (2016, 2017a, b, 2018).

Anomomyces Höhn., in Weese, Mitt. bot. Inst. tech. Hochsch. Wien 5: 90 (1928) **nom. dub.**
fide Sutton (1977), Kirk et al. (2008)

ANTENNARIELLA Bat. & Cif., Quad. Lab. crittogam., Pavia 31: 22 (1963)/ five species/
Capnodiaceae, Capnodiales, Dothideomycetes

Conidiomata: pycnidia. Conidiogenous cells: data inadequate. Conidia: hyaline, ellipsoid, aseptate.

Typification details: saprobes, cosmopolitan, known from coelomycetous morph.

Notes: Wijayawardene et al. (2014b) regarded *Antennariella* as synonym of *Antennulariella* Woron. 1915 (Art. 59.1), but, Rossman et al. (2015b) did not agree. GenBank (2019) accepted the genus as a member of *Capnodiaceae* based on DNA sequences submitted by Vu et al. (2019).

Index Fungorum (2019) lists eight epithets but Species Fungorum accepts only seven. Kirk et al. (2008) accepted only five. As no new species were introduced since Kirk et al. (2008), we accept that the genus comprises five species.

Anthasthoopa Subram. & K. Ramakr., Proc. Indian Acad. Sci., Sect. B 43: 173 (1956)
= *CONIELLA* Höhn., Ber. dt. bot. Ges. 36(7): 316 (1918) *fide* Sutton (1969, 1977)

ANTHRACODERMA Speg., Boln Acad. nac. Cienc. Córdoba 11(2): 286 (1887) [1888]/ *A. hookeri* Speg./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate, ellipsoidal.

Typification details: saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: DNA sequences are unavailable, thus taxonomic placement is uncertain.

Refs.: Sutton (1980), Kirk et al. (2013), Wijayawardene et al. (2016, 2017a, b, 2018).

Antimanopsis Petr., Sydowia 2(1-6): 46 (1948)

= *MONOSTICHELLA* Höhn., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1 125(1-2): 95 (1916) *fide* Sutton (1977)

AORIA Cif., Atti Ist. bot. Univ. Lab. crittog. Pavia, Ser. 4 19: 89 (1962)/ *A. amphistroma* Cif./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: hyaline, ellipsoid.

Typification details: saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: DNA sequences are unavailable, thus taxonomic placement is uncertain.

Refs.: Sutton (1980), Kirk et al. (2013), Wijayawardene et al. (2016, 2017a, b, 2018).

APHANOFALX B. Sutton, Trans. Br. Mycol. Soc. 86(1): 21 (1986)/ *A. mali* B. Sutton/ two species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: holoblastic, cylindrical to lageniform. Conidia: fusiform, curved, hyaline.

Typification details: saprobes, Zambia, Pakistan, known only from coelomycetous morph.

Notes: DNA sequences are unavailable, thus taxonomic position is uncertain.

Refs.: Sutton (1986a), Sutton and Abbas (1986), Kirk et al. (2013), Wijayawardene et al. (2016, 2017a, b, 2018).

APICULOSPORA Wijayaw., Camporesi, A.J.L. Phillips & K.D. Hyde, Fungal Diversity: 10.1007/s13225-016-0360-2, [42] (2016)/ *A. spartii* Wijayaw., W.J. Li, Camporesi, A.J.L. Phillips & K.D. Hyde/ one species/ *Helotiales* genera *incertae sedis*, *Leotiomyces*
Conidiomata: pycnidial. Conidiogenous cells: enteroblastic, phialidic with percurrent proliferation, subcylindrical to ovoid. Conidia: ellipsoid to subcylindrical, pale brown to dark brown.

Typification details: saprobes, Europe, known only from coelomycetous morph.

Refs.: Wijayawardene et al. (2016, 2017a, b, 2018).

APIOCARPELLA Syd. & P. Syd., Anns mycol. 17(1): 43 (1919)/ *A. macrospora* (Speg.) H. & P. Syd./ five species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: holoblastic, doliiform to ampulliform. Conidia: fusiform, curved, 1-septate, hyaline.

Typification details: saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: Compare with *Ascochyta*. DNA sequences are unavailable, thus taxonomic position is uncertain.

Refs.: Sutton (1980), Kirk et al. (2013), Wijayawardene et al. (2016, 2017a, b, 2018).

APIOGNOMONIA Höhn., Ber. dt. bot. Ges. 35(8): 635 (1917) (= *Discula* Sacc., Syll. fung. (Abellini) 3: 674 (1884))/ 28 species/ *A. veneta* (Sacc. & Speg.) Höhn./ *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*

Conidiomata: acervuli. Conidiophores: branched. Conidiogenous cells: usually phialidic, rarely annellidic, lageniform to cylindrical. Conidia: Hyaline, aseptate, ellipsoid to oval.

Typification details: Saprobes, cosmopolitan.

Notes: Senanayake et al. (2017) reported coelomycetous asexual morph from *A. veneta*, the type species of *Apiognomonina*.

Apiosporella Speg., Anal. Mus. nac. Hist. nat. B. Aires 20: 364 (1910) **nom illegit.**

= **APIOCARPELLA** Syd. & P. Syd., Anns mycol. 17(1): 43 (1919) *vide* Sutton (1980)

APIOSPORIUM Kunze, in Kunze & Schmidt, Mykologische Hefte (Leipzig) 1: 8 (1817)/ *A. salicis* Kunze/ two species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: hyaline, ellipsoid.

Typification details: saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: Kirk et al. (2013) did not accept this genus, but Kirk et al. (2008) mentioned the genus as an asexual morph of *Capnodium*. Index Fungorum (2019) listed the genus as a synonym of *Capnodium*. Chomnunti et al. (2011) listed *A. citri* Briosi & Pass. and *A. salicis* Kunze as synonyms of *Capnodium citri* Berk. & Desm. Wijayawardene et al. (2017a, b, 2018) listed as a member of *Ascomycota* genera *incertae sedis* since DNA sequences are unavailable for this genus. The genus has not been revisited recently, thus it is essential to recollect and epitypify. Index Fungorum (2019) lists 37 epithets but

Species Fungorum (2019) accepts only five species. Kirk et al. (2008) accepted only two species. Since Kirk et al. (2008) no new species has been introduced. Hence, we regard that the genus comprises two species.

Refs.: Chomnunti et al. (2011), Wijayawardene et al. (2016, 2017a, b, 2018).

APLOSPORELLA Speg., Anal. Soc. cient. argent. 10(4): 157 (1880)/ type: *A. chlorostroma* Speg./ c. 70 species/ *Aplosporellaceae*, *Botryosphaerales*, *Dothideomycetes*
Conidiomata: pycnidial, ostiolate. Conidiogenous cells: holoblastic, filiform or cylindrical or doliiform. Conidia: ellipsoidal to subcylindrical, dark brown.

Typification details: saprobes, worldwide, known only from coelomycetous morph.

Notes: This genus is well-established (Slippers et al. 2013, Wijayawardene et al. 2016).

Refs.: Sutton (1980), Damm et al. (2007); Hyde et al. (2013), Kirk et al. (2013), Slippers et al. (2013), Trakunyingcharoen et al. (2015), Crous et al. (2016), Ekanayaka et al. (2016b), Wijayawardene et al. (2016, 2017a, b, 2018).

Aplosporidium Speg., Anal. Mus. nac. Hist. nat. B. Aires 23: 130 (1912)

= **ASTEROMELLA** Pass. & Thüm., in Thümen, Mycoth. Univ., cent. 17: no. 1689 (1880) *vide* Sutton (1977), Index Fungorum (2019)

APIOSPOROPSIS (Traverso) Mariani, Atti Soc. ital. Sci. nat. Mus. Civico Storia nat. Milano 50: 165 (1911)/ three species/ *A. saccardoana* Mariani/ *Apiosporopsidaceae*, *Diaporthales*, *Sordariomycetes*

Conidiomata: acervuli. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: usually phialidic, rarely annellidic, lageniform to cylindrical. Conidia: hyaline, aseptate, ellipsoid to oval.

Typification details: Saprobes, cosmopolitan.

Notes: Senanayake et al. (2017) reported coelomycetous asexual morph from *A. carpinea* (Fr.) Mariani.

Apocoryneum B. Sutton, Mycol. Pap. 138: 148 (1975)

= **MASSARIOTHEA** Syd., Annls mycol. 37(3): 249 (1939) *vide* Sutton (1977, 1980), Index Fungorum (2019)

Apocytospora Höhn., Mitt. bot. Inst. tech. Hochsch. Wien 1(3): 43 (1924)

= **PLENODOMUS** Preuss, Linnaea 24: 145 (1851)

Notes: Sutton (1977, 1980) treated *Apocytospora* as a synonym of *Plectophomella* Moesz. and mentioned that the type (*Apocytospora visci* Höhn.) is identical to *Phyllosticta visci* Sacc. De Gruyter et al. (2012) treated *Apocytospora* as a synonym of *Plenodomus* Preuss, as *Apocytospora visci* is accommodated in *Plenodomus sensu stricto*.

APOGLOEUM Petr., Sydowia 8(1-6): 57 (1954)/ *A. concinnum* Petr./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: holoblastic, doliiform to ampulliform. Conidia: fusiform, curved, 1-septate, hyaline.

Typification details: saprobes, Australia, known only from coelomycetous morph.

Notes: Compare with *Ascochyta*.

Refs.: Sutton (1977), Kirk et al. (2008, 2013), Wijayawardene et al. (2016, 2017a, b, 2018).

APOHARKNESSIA Crous & S.J. Lee, Stud. Mycol. 50(1): 239 (2004)/ 3 species/ *A. insueta* (B. Sutton) Crous & S.J. Lee/ *Apoharknessiaceae*, *Diaporthales*, *Sordariomycetes*

Conidiomata: acervuli. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: holoblastic. Conidia: obclavate, conical, aseptate, pale brown.

Typification details: saprobes, cosmopolitan.

Notes: Cultures and DNA sequences are available in GenBank.

Refs.: Lee et al. (2004), Crous et al. (2017b), Marin-Felix et al. (2017), Senanayake et al. (2017).

APOMELASMIA Grove, British Stem- and Leaf-Fungi (Coelomycetes) (Cambridge) 2: 188 (1937)/ *A. urticae* (Fr.) Grove/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: enteroblastic, phialidic, cylindrical or long lageniform. Conidia: cylindrical to fusiform, aseptate, hyaline.

Typification details: saprobes, Europe, known only from coelomycetous morph.

Notes: Species Fungorum (2019) listed *Diaporthopsis urticae* (Fr.) Arx & E. Müll. as the current name of *Apomelasmia urticae* (Fr.) Grove. Maharachchikumbura et al. (2015, 2016) listed the genus under *Diaporthales* genera *incertae sedis*. However, Wijayawardene et al. (2017, 2018) treated the genus as *Ascomycota* genera *incertae sedis* as it lacks DNA sequences.

Refs.: Sutton (1977, 1980), Kirk et al. (2008, 2013), Maharachchikumbura et al. (2015, 2016), Wijayawardene et al. (2016, 2017a, b, 2018).

Apomella Syd., Anns mycol. 35(1): 47 (1937)

= **BOTRYOSPHAERIA** Ces. & De Not., Comm. Soc. crittog. Ital. 1(fasc. 4): 211 (1863) *fide* Phillips et al. (2013), Index Fungorum (2019)

Aporella Syd., Anns mycol. 37(4/5): 416 (1939) **nom illegit.** *fide* Index Fungorum (2019)

= **APORELLULA** B. Sutton, Sydowia 38: 324 (1986) [1985]

APORELLULA B. Sutton, Sydowia 38: 324 (1986) [1985]/ *A. erigerontis* (Syd.) B. Sutton/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidia. Conidiogenous cells: holoblastic. Conidia: oblong, aseptate, hyaline.

Typification details: saprobes, Ecuador, known only from coelomycetous morph.

Notes: Sutton (1986b) introduced this genus to replace *Aporella* Syd., the latter is a homonym of *Aporella* Podp. 1916.

Refs.: Sutton (1977), Kirk et al. (2008, 2013), Wijayawardene et al. (2016, 2017a, b, 2018).

Aposphaeria Berk., Outl. Brit. Fung. (London): 315 (1860) **nom. rejic.** *fide* Sutton (1977), Index Fungorum (2019)

APOSPHAERIA Sacc., Michelia 2(no. 6): 4 (1880)/ *A. pulviscula* (Sacc.) Sacc./ c. 88 species/ *Melanommataceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: pycnidia, ostiolate. Conidiogenous cells: enteroblastic, phialidic. Conidia: cylindrical or ellipsoidal, aseptate, hyaline.

Typification details: saprobes, worldwide, known only from coelomycetous morph.

Notes: Index Fungorum (2019) lists 208 epithets but Species Fungorum (2019) accepts only 88 species.

Refs. Sutton (1977, 1980), Kirk et al. (2008, 2013), De Gruyter et al. (2009, 2012),

Wijayawardene et al. (2016, 2017a, b, 2018).

Apostrasseria Nag Raj, Can. J. Bot. 61(1): 13 (1983)

= *ALLANTOPHOMOPSIS* Petr., Anns mycol. 23(1/2): 104 (1925) *fide* Crous et al. (2015a)

Notes: See under *Allantophomopsis*.

Aposphaeriella Died., Anns mycol. 10(2): 140 (1912)

= *CHAETOSPHERIA* Tul. & C. Tul., Select. fung. carpol. (Paris) 2: 252 (1863) *fide* Species Fungorum (2019)

Notes: Sutton (1977) and Kirk et al. (2008) listed *Aposphaeriella* as a synonym of *Zignoella* Sacc. (current name: *Menispora* Pers. *fide* Species Fungorum 2019).

Aposphaeriopsis Died., Anns mycol. 11(1): 44 (1913)

= *CEPHALOTHECA* Fuckel, Jb. Nassau. Ver. Naturk. 25-26: 297 (1871) *fide* Sutton (1977), Species Fungorum (2019)

AQUASUBMERSA K.D. Hyde & Huang Zhang, Cryptog. Mycol. 33(3): 340 (2012)/ two species/ *A. mircensis* Huang Zhang & K.D. Hyde/ *Aquasubmersaceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: holoblastic, lageniform, hyaline. Conidia: unicellular, ellipsoidal, hyaline.

Typification details: Saprobic, Thailand, known only from coelomycetous morph.

Notes: Information on cultures and DNA sequences is available on GenBank.

Refs.: Zhang et al. (2012).

Aristadiplodia Shirai, in Numata, Journal of Dai Nippon Forestry Society 438: 27 (1919) **nom. dub.** *fide* Sutton (1977), Kirk et al. (2008)

Notes: Sutton (1977) mentioned that the type material is not available. Based on the description of the type of *Aristadiplodia* (*A. pini* Shirai), Sutton (1977) regarded that *Aristadiplodia* shares similar morphologies with *Mycohypallage* B. Sutton.

ARISTASTOMA Tehon, Mycologia 25(4): 248 (1933)/ *A. oeconomicum* (Ell. & Tracy) Tehon/ eight species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidia, ostiolate. Conidiogenous cells: holoblastic, doliiform to ampulliform. Conidia: cylindrical to irregular, 1 to numerous transverse septa, hyaline.

Typification details: saprobes, worldwide, known only from coelomycetous morph.

Notes: DNA sequences are unavailable. Index Fungorum (2019) and Species Fungorum (2019) accept eight species epithets but Kirk et al. (2008) accepted only five species.

Refs.: Sutton (1964a, 1977, 1980), Kirk et al. (2008, 2013), De Gruyter et al. (2009, 2012), Wijayawardene et al. (2016, 2017a, b, 2018).

Articulariella Höhn., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1 118: 410 [136 repr.] (1909)

= *MICROSTOMA* Bernstein, Nova Acta Acad. Caes. Leop.-Carol. Nat. Cur. 23: 649 (1852)

Notes: von Arx (1970) treated *Articulariella* Höhn. as a synonym of *Microstoma* Bernstein. This was followed by Sutton (1977) and Index Fungorum (2019).

Asbolisia Speg., Physis, Rev. Soc. Arg. Cienc. Nat. 4(no. 17): 293 (1918) **nom. dub.** *fide* Sutton (1977), Kirk et al. (2008)

Asbolisiomyces Bat. & H. Maia, Publicações Inst. Micol. Recife 322: 5 (1961) **nom. dub.** *fide* Kirk et al. (2008)

Aschersonia Mont., Annls Sci. Nat., Bot., sér. 3 10: 121 (1848)
= **HYPOCRELLA** Sacc., *Michelia* 1(no. 3): 322 (1878) *fide* Rossman et al. (2016), Wijayawardene et al. (2017a)

Aschersoniopsis Henn., *Hedwigia* 41: 7 (1902)
= **MUNKIA** Speg., *Anal. Soc. cient. argent.* 22(4): 202 (1886) *fide* Sutton (1977)

ASCOCALYX Naumov, *Bolêz. Rast.* 14: 138 (1926) (= **Bothrodiscus** Shear, *Bull. Torrey bot. Club* 34(6): 312 (1907) *fide* Art. 59.1; Johnston et al. (2014)/ *A. abietis* Naumov/ four species/ *Godroniaceae, Helotiales, Leotiomyces*

Conidiomata: stromatic. Conidiogenous cells: holoblastic. Conidia: cylindrical to irregular, 1-septate, hyaline. Ascomata: immersed, solitary or scattered. Asci: 8-spored, bitunicate, fissitunicate, cylindric-clavate. Ascospores: hyaline, 0-7-septate, falcate.

Typification details: Saprobes, cosmopolitan, known from sexual morph *Ascocalyx* and asexual morph *Bothrodiscus*.

Notes: Sutton (1977, 1980) accepted *Bothrodiscus* as a genus in coelomycetes with three species. Groves (1936) showed that *Ascocalyx* and *Bothrodiscus* represent sexual and asexual morphs, respectively, of the same fungus based on culture methods. Hence, Johnston et al. (2014) proposed to adopt the sexual typified name (*Ascocalyx*) over asexual typified name (*Bothrodiscus*) agreeing with Art. 59.1 (Hawksworth 2012).

Ref.: Sutton (1980)

ASCOCHYTA Lib., *Pl. crypt. Arduenna, fasc. (Liège) 1(Praef.):* 8 (1830) (= **Heracleicola** Tibpromma, Camporesi & K.D. Hyde *fide* Chen et al. 2015)/ c. 400 species/ *A. pisi* Lib./ *Didymellaceae, Pleosporales, Dothideomycetes*

Conidiomata: pycnidia, ostiolate. Conidiogenous cells: enteroblastic, phialidic, doliiform to lageniform. Conidia: cylindrical to irregular, 1-septate, hyaline. Ascomata: immersed, solitary or scattered. Asci: 8-spored, bitunicate, fissitunicate, cylindric-clavate. Ascospores: overlapping 1–2-seriate, hyaline, 3-septate, fusiform.

Notes: The taxonomy, generic and species boundaries, and pathogenicity of *Ascochyta* have been discussed in various studies since Sutton (1977, 1980). Chen et al. (2015) provided detailed phylogenetic analyses on *Ascochyta* and introduced *Neoascochyta* Qian Chen & L. Cai to accommodate *Ascochyta*-like species which are not congeneric with *Ascochyta sensu stricto*. Moreover, Chen et al. (2015) treated *Heracleicola* as a synonym of *Ascochyta*.

Index Fungorum (2019) lists 1436 epithets but it is doubtful whether they belong to *Ascochyta s. str.* Fourteen new species have been introduced since Kirk et al. (2008) (Index Fungorum 2019). The correct species number is unknown.

Refs.: Chilvers et al. (2009), Aveskamp et al. (2010), De Gruyter et al. (2009), Wijayawardene et al. (2012, 2014b, 2017), Hyde et al. (2013), Kirk et al. (2013), Chen et al. (2015).

Ascochyrella Tassi, *Bulletin Labor. Orto Bot. de R. Univ. Siena* 5: 6, 27 (1902)

= *ASCOCHYTA* Lib., Pl. crypt. Arduenna, fasc. (Liège) 1(Praef.): 8 (1830) *fide* Kirk et al. (2008), Index Fungorum (2019)

Ascochyites Teterevn.-Babajan & Tasl., Mikol. Fitopatol. 7(3): 180 (1973) **nom. inval.** Art. 38 *fide* Sutton (1977)

ASCOCHYTOPSIS Henn., Bot. Jb. 38: 117 (1905)/ *A. vignae* Henn./ five species/
Ascomycota genera *incertae sedis*

Conidiomata: stromatic, ostiolate. Conidiogenous cells: enteroblastic, phialidic, doliiform to ampulliform. Conidia: straight or falcate, aseptate, hyaline.

Typification details: saprobes, pathogenic, worldwide, known only from coelomycetous morph.

Notes: Gene sequences are unavailable, thus taxonomic placement is uncertain.

Refs.: Sutton (1977, 1980), Kirk et al. (2008, 2013), Wijayawardene et al. (2017a, b, 2018).

ASCOCHYTULINA Petr., Annls mycol. 20(5/6): 342 (1922)/ *A. deflectens* (P. Karst.) Petr./ three species/
Ascomycota genera *incertae sedis*

Conidiomata: pycnidial, ostiolate. Conidiogenous cells: enteroblastic, phialidic, doliiform to ampulliform. Conidia: ellipsoid, or cylindrical to oblong, 1-septate, pale green to pale brown.

Typification details: saprobes, worldwide, known only from coelomycetous morph.

Notes: Sutton (1977) regarded this genus as a synonym of *Pseudodiplodia*. However, Sutton (1980) recognized *Ascochytulina* as a distinct genus.

Refs.: Sutton (1980), Kirk et al. (2008, 2013), Wijayawardene et al. (2017a, b, 2018).

ASCODICHAENA Butin, Trans. Br. mycol. Soc. 69(2): 249 (1977) (= **Polymorphum** Chevall., J. Phys. Chim. Hist. nat. Arts 94: 32 (1822)) / two species/
A. rugosa Butin/
Ascodichaenaceae, *Helotiales*, *Leotiomycetes*

Notes: Kirk et al. (2008) reported that *Ascodichaena* has *Polymorphum* asexual morph. Johnston et al. (2014) regarded *Polymorphum* as a synonym of *Ascodichaena* (Art. 59.1).

Ascoxyta Lib., Pl. crypt. Arduenna, fasc. (Liège) 1(Praef.): 8 (1830) **nom dub.** *fide* Kirk et al. (2008)

Notes: Sutton (1977) mentioned that *Ascoxyta* is an 'alternative spelling of *Ascochyta*'.

ASPILAIMA Bat. & H. Maia, Publicações Inst. Micol. Recife 338: 5 (1961)/ *A. platoniae* Bat. & H. Maia/ one species/
Ascomycota genera *incertae sedis*

Conidiomata: pycnothyrial, ostiolate, radiate. Conidiophores: data inadequate. Conidiogenous cells: data inadequate. Conidia: with or without transversal hyaline band, brown.

Typification details: On leaves of *Platonia insignis* Mart., Brazil, IMUR 19358, lacks DNA, known only from coelomycetous morph.

Notes: This genus needs generic revision based on morphomolecular analysis.

Refs.: Batista and Maia (1961), Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018).

ASTERINELLA Theiss., Anns mycol. 10(2): 160 (1912)/ ca. 39 species/ *A. puiggarii* (Speg.) Theiss./ *Asterinaceae*, *Asterinales*, *Dothideomycetes*

Notes: Kirk et al. (2008) reported *Asteromella*-like asexual morph from *Asterinella*.

ASTERINOTHYRIELLA Bat. & Cif., Atti Ist. bot. Univ. Lab. crittog. Pavia, Ser. 5 16: 85 (1959)/ *A. landolphiae* Bat. & Cif./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnothyrial, ostiolate. Conidiophores: cylindrical. Conidiogenous cells: data inadequate. Conidia: cylindrical, septate, hyaline.

Typification details: On leaves of *Landolphia florida*, Uganda, Herb. Mycologist. Dep. Agr. Uganda no 3447, lacks DNA, known only from coelomycetous morph.

Notes: The genus was not revisited since its introduction. Generic revision is essential.

Refs.: Batista and Ciferri (1959), Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018).

ASTERINOTHYRIUM Bat., Cif. & H. Maia, in Batista & Ciferri, Mycopath. Mycol. appl. 11(1-2): 27 (1959)/ *A. singulatum* Bat. & H. Maia/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnothyrial. Conidiogenous cells: data inadequate. Conidia: bacillary to cylindrical, hyaline.

Typification details: saprobes, Africa, South Africa, known only from coelomycetous morph

Notes: DNA sequences are unavailable.

Refs.: Sutton (1980), Kirk et al. (2008, 2013), Wijayawardene et al. (2017a, b, 2018).

ASTEROCONIUM Syd. & P. Syd., Anns mycol. 1(1): 36 (1903)/ two species/ *A. saccardoii* Syd. & P. Syd./ *Ascomycota* genera *incertae sedis*

Conidiomata: acervuli. Conidiogenous cells: holoblastic, monoblastic or sympodial, cylindrical. Conidia: expanding in the upper part of conidia and forming 3 stout, obtuse, rounded or tapered, short projections at approximately the same level, hyaline.

Typification details: saprobes, South America, India, known only from coelomycetous morph.

Notes: Gene sequences are unavailable, thus taxonomic placement is uncertain.

Refs.: Sutton (1980), Kirk et al. (2008, 2013), Wijayawardene et al. (2017a, b, 2018).

ASTERODOTHIS Theiss., Anns mycol. 10(2): 179 (1912) (= *Asterostromina* Bat. & A.F. Vital, in Batista, Vital & Maia, Revta Biol., Lisb. 1: 116 (1957) / one species/ *A. solaris* (Kalchbr. & Cooke) Theiss./ *Dothideomycetes* genera *incertae sedis*

Notes: Kirk et al. (2008) reported that *Asterostromina* is the asexual morph of *Asterodothis*. Hence, Hongsanan et al. (2014) listed *Asterostromina* as a synonym of *Asterodothis*.

ASTEROGLOBULUS Brackel, Herzogia 24(1): 69 (2011)/ two species/ type: *A. giselae* Brackel/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: enteroblastic. Conidia: tetrahedral to stellate, base rounded, or pointed, or slightly truncate, hyaline.

Typification details: lichenicolous, Europe, known only from coelomycetous morph

Notes: Gene sequences are unavailable, thus taxonomic placement is uncertain.

Refs.: Brackel (2011), Wijayawardene et al. (2017a, b, 2018)

ASTEROMA DC., in de Candolle & Lamarck, Fl. franç., Edn 3 (Paris) 5/6: 162 (1815)/ *A. padi* DC. ex Fr./ 15 species/ *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*
 Conidiomata: acervuli. Conidiogenous cells: enteroblastic, phialidic, ampulliform to lageniform. Conidia: cylindrical to fusiform, hyaline.

Typification details: saprobes, worldwide, some species have been linked with *Gnomoniella* (Sutton 1980).

Notes: The author citations of the genus are inconsistent in publications i.e. *Asteroma* DC. ex Fr. (Sutton 1977), *Asteroma* DC. ex St. Amans (Sutton 1980), while Kirk et al. (2008) listed as *Asteroma* DC. However, Kirk et al. (2013) did not list the genus in the prejudice list of fungi. Further, the type of the genus, *A. padi* DC. ex Fr. (Sutton 1977, 1980) is listed as *A. padi* DC. in Index Fungorum (2019). The entry for the genus in Wijayawardene et al. (2017a) was based on Index Fungorum (2019), which accepts *A. phyteumatis* DC. (current name: *Montagnellina stellaris* (Pers.) Theiss. & Syd. 1915) as the type. We follow Kirk et al. (2008) for author citations of generic name while accepting Sutton's (1977, 1980) conclusion for the type of the genus.

Refs.: Sutton (1977, 1980), Aa and Vanev (2002), Kirk et al. (2008, 2013), Wijayawardene et al. (2017a, b, 2018).

ASTEROMELLA Pass. & Thüm., in Thümen, Mycoth. Univ., cent. 17: no. 1689 (1880)/ *A. ovata* Thüm./ c. 265 species/ *Dothideomycetes* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: enteroblastic, phialidic. Conidia: hyaline, aseptate, cylindrical to oval.

Typification details: saprobes, worldwide.

Notes: Sutton (1980) stated that some species have been linked with *Mycosphaerella*.

Refs.: Sutton (1977, 1980), Kirk et al. (2008, 2013), Wijayawardene et al. (2017a, b, 2018).

?**ASTEROMELLOPSIS** H.E. Hess & E. Müll., Ber. schweiz. bot. Ges. 61: 18 (1951)/ *A. insculpta* H.E. Hess & E. Müll./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: enterothallic. Conidia: hyaline, aseptate, cylindrical

Typification details: Saprobes, Switzerland.

Notes: Sutton (1980) mentioned that this genus is spermatial stage of *Dothidea insculpta* Wallr. Hence, it is doubtful whether it is a distinct genus.

Refs.: Sutton (1977, 1980), Kirk et al. (2008, 2013), Wijayawardene et al. (2017a, 2018).

ASTEROMIDIUM Speg., Anal. Soc. cient. argent. 26(1): 66 (1888)/ *A. imperspicuum* Speg./ three species/ *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*

Conidiomata: acervuli. Conidiogenous cells: holoblastic. Conidia: hyaline, 3-septate, cylindrical to fusiform.

Typification details: saprobes, South America, known only from coelomycetous morph.

Notes: Quaedvlieg et al. (2013) and Videira et al. (2017) revisited the genus and accepted that it belongs in *Mycosphaerellaceae*. However, Quaedvlieg et al. (2013) stressed the necessity of recollecting the fungi.

Refs.: Sutton (1977, 1980), Kirk et al. (2008, 2013), Quaedvlieg et al. (2013), Videira et al. (2017), Wijayawardene et al. (2017a, 2018).

ASTERONECTRIOIDEA Cant., Bull. trimest. Soc. mycol. Fr. 64(3-4): 178 (1949) [1948]/ *A. heveicola* Cant./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: hyaline

Typification details: saprobes, Africa.

Notes: Sutton (1977) accepted this genus but Sutton (1980) did not include it in his monograph. However, Kirk et al. (2008, 2013) accepted the genus. Taxonomic revision is essential as it has not been revisited since its introduction.

Refs.: Sutton (1977), Kirk et al. (2008, 2013), Wijayawardene et al. (2017a).

Asteropsis Gonz. Frag., Trab. Mus. Nac. Cienc. Nat., Ser. Bot. 12: 50 (1917) **nom illegit. fide** Art. 53.1; Index Fungorum (2019)

Notes: Sutton (1977) stated that the genus is a synonym of *Coniothyrium*.

ASTEROS CUTULA Petr., Sydowia 2(1-6): 59 (1948)/ *A. sydowii* Petr./ one species/
Ascomycota genera *incertae sedis*

Conidiomata: pycnothyrial. Conidiogenous cells: data inadequate. Conidia: brown, ellipsoidal

Typification details: saprobes, South America.

Notes: Sutton (1977, 1980) did not list this genus but Kirk et al. (2008, 2013) accepted it. Generic revision is essential as it has not been revisited since its introduction.

Refs.: Kirk et al. (2008, 2013), Wijayawardene et al. (2017a, b, 2018).

ASTEROSPORIUM Kunze, Flora, Regensburg 1: 225 (1819)/ *A. asterospermum* (Pers.) Hughes/ seven species/*Asterosporiaceae*, *Diaporthales*, *Sordariomycetes*

Conidiomata: acervuli. Conidiogenous cells: holoblastic. Conidia: terminal, transversely distoseptate, consisting of four arms, with reduced lumina, brown.

Typification details: saprobes, temperate, known only from coelomycetous morph.

Notes: Sutton (1980), Tanaka et al. (2010) and Wijayawardene et al. (2016) revisited the genus. Senanayake et al. (2017) introduced *Asterosporiaceae* to accommodate *Asterosporium sensu stricto* in *Diaporthales*.

Refs.: Sutton (1977, 1980), Kirk et al. (2008, 2013), Tanaka et al. (2010), Maharachchikumbura et al. (2015, 2016), Senanayake et al. (2017), Wijayawardene et al. (2017a, b).

ASTEROSTOMULA Theiss., Annl. mycol. 14(3/4): 270 (1916)/ 13 species/*A. loranthi* Theiss./ *Ascomycota* genera *incertae sedis*

Conidiomata: acervuli. Conidiogenous cells: holoblastic. Conidia: pigmented, ellipsoidal.

Typification details: saprobes, temperate, known only from coelomycetous morph.

Notes: Sutton (1977, 1980) did not list the genus, but Kirk et al. (2008, 2013) accepted it. Hosagoudar (2012) introduced a new species from India. The type of the genus has not been revisited since its introduction, thus needs further revision.

Index Fungorum (2019) lists 16 epithets but Species Fungorum (2019) accepted only 13 species.

Refs.: Kirk et al. (2008, 2013), Hosagoudar (2012), Wijayawardene et al. (2017a, b, 2018).

Astragoxyphium Bat., Nascim. & Cif., in Batista & Ciferri, Quad. Lab. crittogam., Pavia 31: 45 (1963)

= **LEPTOXYPHIUM** Speg., Physis, Rev. Soc. Arg. Cienc. Nat. 4(no. 17): 294 (1918) *fide* Sutton (1977), Index Fungorum (2019)

ATROCALYX A. Hashim. & Kaz. Tanaka, Persoonia 39: 59 (2017)/ six species/*A. acutispora* A. Hashim. & Kaz. Tanaka/*Lophiotremataceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: holoblastic. Conidia: ellipsoidal, hyaline, aseptate.

Typification details: Saprobic, Thailand, with coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Refs.: Hashimoto et al. (2017), De Silva et al. (2018), Jaklitsch et al. (2018b).

Auerswaldiopsis Henn., Hedwigia 43(2): 143 (1904)

= *PATOUILLARDIELLA* Speg., Boln Acad. nac. Cienc. Córdoba 11(4): 620 (1889) *fide* Sutton (1977), Index Fungorum (2019)

AURANTIOSACCULUS Dyko & B. Sutton, in Dyko, Sutton & Roquebert, Mycologia 71(5): 922 (1979)/ 4 species/ *A. eucalypti* (Cooke & Masee) Dyko & B. Sutton/ *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*

Conidiomata: eustromatic. Conidiophores: subcylindrical, septate. Conidiogenous cells: hyaline. Conidia: hyaline, aseptate.

Typification details: Saprobes/ pathogens, cosmopolitan.

Notes: Cultures and DNA sequences are available.

Ref.: Dyko et al. (1979), Crous et al. (2012b), Jiang et al. (2019).

AURAPEX Gryzenh. & M.J. Wingf., Mycologia 98(1): 112 (2006)/ 1 species/ *A. penicillata* Gryzenh. & M.J. Wingf./ *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*

Conidiomata: pyriformia. Conidiophores: cylindrical or flask-shaped. Conidiogenous cells: phialidic. Conidia: hyaline, obtuse, aseptate.

Typification details: Saprobes/ pathogens, cosmopolitan.

Notes: Cultures and DNA sequences are available.

Ref.: Gryzenhout et al. (2006).

AURATIOPYCNIDIELLA Crous & Summerell, Persoonia 28: 69 (2012)/ 1 species/ *A. tristaniopsisidis* Crous & Summerell/ *Auratiopycnidiellaceae*, *Diaporthales*, *Sordariomycetes*

Conidiomata: pycnidial. Paraphyses: hyaline, subcylindrical, branched or not. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: proliferate percurrently. Conidia: ellipsoid, smooth, solitary, medianly 1-septate, brown, wavy germ tubes.

Typification details: Pathogens, Australia.

Notes: Cultures and DNA sequences are available.

Ref.: Crous et al. (2012b).

AUROSPHAERIA Sun J. Lee, Strobel, Eisenman, Geary, P.N. Vargas & S.A. Strobel, Mycotaxon 107: 466 (2009)/ *A. flaviradians* Sun J. Lee, Strobel, Eisenman, Geary, P.N. Vargas & S.A. Strobel/ one species/ *Pleosporales* genera *incertae sedis*, *Dothideomycetes*

Conidiomata: pycnidial. Conidiogenous cells: enteroblastic, phialidic. Conidia: globose, hyaline.

Typification details: saprobes, South America, known only from coelomycetous morph.

Refs: Lee et al. (2009), Wijayawardene et al. (2017a, b, 2018).

AUSTROPLEOSPORA R.G. Shivas & L. Morin, Fungal Diversity 40(1): 70 (2010)/ three species/ *A. osteospermi* R.G. Shivas & L. Morin/ *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: annellidic. Conidia: cylindrical to narrowly ellipsoidal, initially hyaline and aseptate, becoming yellowish brown, mostly transversely 3-septate.

Typification details: Saprobic, Australia, South Africa, with coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Refs.: Morin et al. (2010).

AVETTAEA Petr. & Syd., Beih. Reprium nov. Spec. Regni veg. 42(1): 299 (1927) [1926]/ *A. philippinensis* Petr. & Syd./ three species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial to stromatic, occasionally ostiolate. Conidiogenous cells: holoblastic. Conidia: globose, oblong to pyriform, truncate to obtuse base, aseptate, golden brown to dark brown, with or without enclosed in mucilaginous sheath.

Typification details: saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: Wijayawardene et al. (2016) re-visited the genus and provided morphological descriptions. Gene sequences are lacking, thus taxonomic placement is uncertain.

Refs.: Sutton (1977, 1980), Sivanesan and Sutton (1985), Abbas and Sutton (1988), Kirk et al. (2008, 2013), Wijayawardene et al. (2016, 2017a, b, 2018).

BACHMANNIOMYCES D. Hawksw., Bull. Br. Mus. nat. Hist., Bot. 9(1): 10 (1981)/ *B. uncialicola* (Zopf) D. Hawksw./ eight species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: holoblastic. Conidia: lens shaped to pyriform, hyaline, aseptate.

Typification details: lichenicolous, cosmopolitan, known only from coelomycetous morph.

Notes: Hawksworth (1981) introduced this lichenicolous genus which has Phoma-like morphologies. Subsequent studies by Etayo and Sancho (2008) and Etayo (2010) introduced two more species, thus genus comprises three species. Gene sequences are lacking, thus taxonomic placement is uncertain.

Refs.: Hawksworth (1981), Etayo and Sancho (2008), Etayo (2010), Kirk et al. (2008, 2013), Wijayawardene et al. (2016, 2017a, b, 2018), Diederich et al. (2018).

BACILLOPELTIS Bat., in Batista, Costa & Vital, Anais Soc. Biol. Pernambuco 15(2): 400 (1957)/ *B. paypayrolae* Bat./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: data inadequate. Conidia: bacillary, hyaline.

Typification details: On living leaves of *Paypayrola blanchetiana*, Brazil, IMUFPe 5934, lacks DNA data, known only from coelomycetous morph.

Notes: Gene sequences are unavailable.

Refs.: Sutton (1980), Kirk et al. (2008, 2013), Wijayawardene et al. (2017a, b, 2018).

Bactropycnis Höhn., Hedwigia 62: 65 (1920)

= **COLEOPHOMA** Höhn., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1 116: 637 (1907) *fide* Sutton (1977)

Notes: Sutton (1977) mentioned that the holotype of the type of *Bactropycnis* is identical with *Coleophoma cylindrospora* (Desm.) Höhn. Hence, *Bactropycnis* was regarded as a synonym of *Coleophoma*.

Baeumleria Petr. & Syd., Beih. Reprum nov. Spec. Regni veg. 42(1): 268 (1927) [1926]
= *CONIELLA* Höhn., Ber. dt. bot. Ges. 36(7): 316 (1918)

Notes: Sutton (1977) mentioned that the holotype is not available at the herbarium. Further, Sutton (1977) stated that the placement of *Baeumleria* under *Coniella* by Clements and Shear (1931) might be a mistake. However, Alvarez et al. (2016) also listed *Baeumleria* as a synonym of *Coniella*.

Bakerophoma Died., Annls mycol. 14(1/2): 62 (1916) **nom. dub.** fide Sutton (1977), Kirk et al. (2008)

BANKSIOPHOMA Crous, Persoonia 38: 255 (2017)/ one species/ *B. australiensis* Crous/
Phaeosphaeriaceae, Pleosporales, Dothideomycetes

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: proliferating percurrently at apex. Conidia: hyaline, aseptate, ellipsoid to globose or subglobose.

Typification details: Saprobic, Australia, known only from coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Refs.: Crous et al. (2017).

BAMBUSICOLA D.Q. Dai & K.D. Hyde, Cryptog. Mycol. 33(3): 367 (2012)/ *B. massarinia*
D.Q. Dai & K.D. Hyde/ twelve species/ *Bambusicolaceae, Pleosporales, Dothideomycetes*

Conidiomata: pycnothyrial. Conidiogenous cells: holoblastic, annellidic. Conidia: pale brown to dark brown, 1–3-septate, cylindrical, straight or slightly curved.

Typification details: Saprobes, Asia.

Notes: Dai et al. (2012) introduced this genus which is known from sexual morph and coelomycetous morph.

Refs. Dai et al. (2012, 2017), Wijayawardene et al. (2016).

Barbarosporina Ҷирulis, Jelgavas Lauksaimniec. Akad. Raksti 1: 506 (1942)

Notes: Index Fungorum (2019) stated that the type of the genus (*B. rhytismatis* Ҷирulis) was invalidly published (Art. 39.1 (Melbourne)).

Barklayella Sacc., Syll. fung. (Abellini) 10: 475 (1892) **nom illegit.** fide Index Fungorum (2019)

= *NEOBARCLAYA* Kuntze, Revis. gen. pl. (Leipzig) 3(2): CLXXVII (1898)

Notes: Sutton (1968, 1977, 1980) regarded *Barklayella* Sacc. and *Neobarclaya* Kuntze as synonyms of *Polynema*. However, Nag Raj (1978, 1993) maintained *Neobarclaya* as a distinct genus while listing *Barklayella* as a synonym of *Neobarclaya*. Index Fungorum (2019) also listed *Neobarclaya* as a current name of *Barklayella*.

BARNETTELLA D. Rao & P. Rag. Rao, Mycopath. Mycol. appl. 22: 56 (1964)/ *B. speciosa*
D. Rao & P. Rag. Rao/ three species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: holothallic. Conidia: formed in long, unbranched, basipetal chains, muriform, globose, dark brown.

Typification details: saprobes, Asia, known only from coelomycetous morph.

Notes: Rao and Rao (1964) described the conidiomata as acervuli but Sutton (1980) mentioned the conidiomata as ‘stromatic’, while Nag Raj and DiCosmo (1981) noted them as ‘acervuli’. Wijayawardene et al. (2016) re-visited the genus and provided

morphological descriptions. As gene sequences lack, its taxonomic placement is uncertain.

Refs.: Sutton (1977, 1980), Nag Raj and DiCosmo (1981), Kirk et al. (2008, 2013), Wijayawardene et al. (2016, 2017a, b, 2018).

BARRMAELIA Rappaz, Mycol. helv. 7(1): 130 (1995)/ 8 species/ *B. rhamnicola* Rappaz/ *Barrmaeliaceae*, *Xylariales*, *Sordariomycetes*

Typification details: Saproobes, cosmopolitan, with coelomycetous morph

Notes: Kirk et al. (2008) reported that this genus has *Libertella*-like asexual morphs

BARRIOPSIS A.J.L. Phillips, A. Alves & Crous, in Phillips, Alves, Pennycook, Johnston, Ramaley, Akulov & Crous, *Persoonia* 21: 39 (2008)/ five species/ *B. fusca* (N.E. Stevens) A.J.L. Phillips, A. Alves & Crous/ *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*

Conidiomata: pycnidial or stromatic. Paraphyses: present or absent. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: holoblastic to phialidic. Conidia: oval or cylindrical, initially hyaline, pale brown to brown, 0–3-septate, with longitudinal striations at maturity.

Typification details: Saprobic, cosmopolitan, known only from coelomycetous morph.

Notes: Cultures and NA sequences are available.

Refs.: Phillips et al. (2008, 2013), Abdollahzadeh et al. (2009), Doilom et al. (2014), Wijayawardene et al. (2016)

BARTALINIA Tassi, Bulletin Labor. Orto Bot. de R. Univ. Siena 3: 4 (1900)/ 21 species/ *B. robillardoides* Tassi/ *Sporocadaceae*, *Amphisphaeriales*, *Sordariomycetes*

Conidiomata: pycnidial. Conidiogenous cells: holoblastic. Conidia: Subcylindrical, 4-septate, slightly constricted at the septa, smooth-walled, basal cell with truncate base, obconic, hyaline, bearing unbranched single appendage; 3 median cells sub cylindrical, hyaline to pale brown; apical cell conical, almost hyaline, bearing appendage with 3 branches.

Typification details: Saprobes, worldwide, known only from coelomycetous morph.

Notes: Morgan-Jones et al. (1972) stated that conidiogenesis of *Bartalinia* is annellidic, while Sutton (1980) stated that the genus shows ‘holoblastic, annellidic conidiogenesis’. Von Arx (1981) regarded *Bartalinia* under *Seimatosporium* Corda, but this redispotion was questioned and rejected by Nag Raj (1993). Furthermore, Nag Raj (1993) stated conidiogenesis as holoblastic but mentioned the annellations as well. Crous et al. (2014a) designated the lectotype and epitype of the type species. Senanayake et al. (2015) introduced *Bartaliniaceae* to accommodate *Bartalinia*. However, Jaklitsch et al. (2016) reduced *Bartaliniaceae* under *Sporocadaceae*.

Index Fungorum (2019) lists 25 epithets but Speceis Fungorum (2019) accepts only 21 species.

Refs.: Sutton (1977, 1980), Nag Raj (1993), Kirk et al. (2008, 2013), Crous et al. (2014a), Wijayawardene et al. (2016, 2017a, b, 2018).

Bartaliniopsis S.S. Singh, Proc. Natl. Inst. Sci. India, B, Biol. Sci. 42(4): 395 (1974) [1972] = **DOLIOMYCES** Steyaert, Darwiniana 12(2): 169 (1961) *vide* Sutton (1977, 1980)

Notes: Sutton (1977, 1980) regarded *Bartaliniopsis* as a synonym of *Doliomyces* based on the morphological similarity of the type of *Bartaliniopsis* (*B. saksenaensis* S.S. Singh) with *Doliomyces mysorensis* Nag Raj and Kendrick. However, Nag Raj (1993) also

followed Sutton (1977, 1980) but introduced *Doliomyces saksenaensis* (S.S. Singh) Nag Raj based on *Bartaliniopsis saksenaensis*.

Basiascella Bubák, Annln K. K. naturh. Hofmus. Wien 28(1-2): 216 (1914)

= **PIGGOTIA** Berk. & Broome, Ann. Mag. nat. Hist., Ser. 2 7: 95 (1851) *fide* Sutton (1977, 1980)

Notes: Sutton (1977) mentioned that *Basiascella gallarum*, the type of *Basiascella* was also introduced from *Ulmus campestris* and has conidia with distinct truncate base which is similar to *Piggotia*. Hence, Sutton (1977) treated *Basiascella* as a synonym of *Piggotia*.

Basilocula Bubák, Anns. mycol. 12(2): 210 (1914)

= **PHACIDIUM** Fr., Observ. mycol. (Havniae) 1: 167 (1815)

Notes: Sutton (1977) compared the type of *Basilocula*, *B. lauricola* Bubák with *Ceuthospora* Grev. and regarded the conidial dimensions are close to *Ceuthospora lauri*. Crous et al. (2014b) showed that *Phacidium* and *Ceuthospora* are congeneric, thus the younger typified name (*Ceuthospora*) was treated as a synonym of the older typified name (*Phacidium*).

Basipilus Subram., Proc. Natl. Inst. Sci. India, B, Biol. Sci. 27: 243 (1961)

= **SEIMATOSPORIUM** Corda, in Sturm, Deutschl. Fl., 3 Abt. (Pilze Deutschl.) 3(13): 79 (1833)

Notes: Sutton (1963) treated *Basipilus* as a synonym of *Cryptostictis* Fuckel which was also regarded as a synonym of *Seimatosporium* Corda (Shoemaker 1964; Sutton 1964a, 1980; Nag Raj 1993).

BATISTINA Peres, Publicações Inst. Micol. Recife 317: 6 (1961)/ *B. splendida* Peres/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnothyrial. Conidiogenous cells: data inadequate. Conidia: hyaline, 1-septate.

Typification details: On leaves of *Compositae*, Brazil, IMUR 22607, lacks DNA data, known only from coelomycetous morph.

Notes: Gene sequences are unavailable.

Refs.: Sutton (1980), Kirk et al. (2008, 2013), Wijayawardene et al. (2017a, b, 2018),

BECCOPYCNIDIUM F. Stevens, Anns. mycol. 28(5/6): 369 (1930)/ *B. palmicola* F. Stevens/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: data inadequate. Conidia: hyaline, filiform, septate.

Typification details: Saprobes, South America, known only from coelomycetous morph.

Notes: Sutton (1977) accepted the genus, but Sutton (1980) did not include it in his monograph. The original protologue lacks description of conidiogenous cells and illustrations (Stevens 1930). Kirk et al. (2008, 2013), Wijayawardene et al. (2012, 2017a, b, 2018) accepted the genus, but generic revision is essential.

Refs.: Kirk et al. (2008, 2013), Wijayawardene et al. (2017a, b, 2018).

Belaina Bat. & Peres, Brotéria, N.S. 14: 50 (1961)

= **POLYNEMA** Lév., Anns. Sci. Nat., Bot., sér. 3 5: 274 (1846) *fide* Nag Raj (1993)

Notes: Sutton (1977, 1980) accepted *Belaina* as a distinct genus but Nag Raj and Kendrick (1978) regarded *Belaina* as a synonym of *Polynema*. Subsequent publications by Nag Raj (1993) and Kirk et al. (2008) also agreed with Nag Raj and Kendrick (1978).

Belainopsis Bat. & H. Maia, Revta Biol., Lisb. 5(1-2): 84 (1965)

= **POLYNEMA** Lév., Anns Sci. Nat., Bot., sér. 3 5: 274 (1846) *fide* Sutton (1977), Nag Raj (1993)

Notes: Sutton (1977) regarded this genus as the synonym of *Belaina* Bat. & Peres which was subsequently listed as a synonym of *Polynema* (Nag Raj and Kendrick 1978; Nag Raj 1993). Furthermore, Sutton (1977) mentioned that the only difference between *Belainopsis malpighiacearum* Bat. & H. Maia (the type species of *Belainopsis*) and *Belaina asclepiadis* Bat. & Peres (the type species of *Belaina*) is that the former has 1-septate main axis.

BELLULICAUDA B. Sutton, Can. J. Bot. 45(8): 1254 (1967)/ *B. dialii* (Syd.) B. Sutton/ two species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: holoblastic, phialidic. Conidia: clavate to ellipsoid, guttulate when immature, occasionally guttulate at maturity, pale brown, with or without the remains of the conidiogenous cell attached.

Typification details: Saprobies, cosmopolitan, known only from coelomycetous morph.

Notes: Sutton (1977) accepted the genus and Sutton (1980) re-visited the type species. Later, Nag Raj (1993) and Pereira et al. (2005) also provided detailed taxonomic notes and illustrations. Wijayawardene et al. (2016) introduced the second species, *B. sanguisorbae* Wijayaw. et al.

Refs.: Kirk et al. (2008, 2013), Wijayawardene et al. (2016, 2017a, b, 2018).

Benekea Bat. & J.L. Bezerra, Publicações Inst. Micol. Recife 299: 5 (1960)

= **GEASTRUMIA** Bat., in Batista, Farr & Bezerra, Saccardo 1: 71 (1960)

Benjaminia S. Ahmad, Biologia, Lahore 13(1): 21 (1967) **nom. illegit.** *fide* Index Fungorum (2019)

= **PYCNOMORELETIA** Rulamort, Bull. Soc. bot. Centre-Ouest, Nouv. sér. 21: 512 (1990)

Biatoridina Schczedr., Botanicheskii Zhurnal 49: 1315 (1964)

= **EPITHYRIUM** (Sacc.) Trotter, in Saccardo, Syll. fung. (Abellini) 25: 249 (1931)

Notes: Sutton (1977) regarded *Biatoridina* as a synonym of *Epithyrium* since the type of the former (*B. astrtri* Schczedr.) morphologically resembles the type of the later (*E. resinae* (Sacc. & Berl.) Trotter).

BIATRIOSPORA K.D. Hyde & Borse, Mycotaxon 26: 263 (1986)/ six species/ *B. marina* K.D. Hyde & Borse/ *Biatriosporaceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: phialidic. Conidia: ellipsoidal, subhyaline, brown in mass, aseptate.

Typification details: Saprobies, cosmopolitan, with coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Ref.: Hongsanan et al. (2020).

BIMERIS Petr., Sydowia 3(1-6): 251 (1949)/ *B. aperta* Petr./ two species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: data inadequate. Conidia: ellipsoid, hyaline.

Typification details: Saprobies, South America, known only from coelomycetous morph.

Notes: The genus was accepted in Sutton (1977), Kirk et al. (2008, 2013) and Wijayawardene et al. (2012, 2017a, b, 2018). Generic revision is essential since it was not re-visited since it was introduced.

Refs.: Sutton (1977), Kirk et al. (2008, 2013), Wijayawardene et al. (2012, 2017a, b, 2018).

BISBYOPELTIS Bat. & A.F. Vital, in Batista, Costa & Vital, Anais Soc. Biol. Pernambuco 15(2): 402 (1957)/ *B. phoebes* Bat. & A.F. Vital/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiophores: simple or branched. Conidiogenous cells: data inadequate. Conidia: filiform, septate, hyaline.

Typification details: On leaves of *Phoebes tonduzii*, Greece, University of Illinois Herbarium 6653.

Notes: Lacks DNA sequence data thus taxonomic placement is uncertain. Only known from coelomycetous morph.

Refs.: Batista et al. (1957), Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018).

Bizzozeriella Speg. [as 'Bizozzeriella'], Anal. Soc. cient. argent. 26(1): 73 (1888)

Notes: Spegazzini (1888) mentioned that *Aschersonia* Mont. resembles *Bizzozeriella*. Sutton (1977) listed the genus in his checklist with brief history but Sutton (1980) did not include it in his monograph. Kirk et al. (2008) listed but Kirk et al. (2013) did not include it.

Blastophoma Kleb., Phytopath. Z. 6(3): 273 (1933)

= **SCLEROPHOMA** Höhn., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1 118: 1234 [78 repr.] (1909) *fide* Sutton (1977)

Notes: Sutton (1977) regarded *Blastophoma* as a synonym of *Sclerophoma* based on 'the structure of conidiomata and the ampulliform phialidic conidiogenous cells'.

BLASTACERVULUS H.J. Swart, Trans. Br. mycol. Soc. 90(2): 289 (1988)/ two species/ *B. eucalypti* H.J. Swart/ *Thyridulaceae*, *Dothideomycetes* genera *incertae sedis*

Conidiomata: acervuli. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: holoblastic. Conidia: globose to elliptical, bright brown or pale to medium brown, aseptate, forming branched chains of acropetal conidia.

Typification details: pathogen/ saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Refs.: Swart (1988), Cheewangkoon et al. (2009), Wijayawardene et al. (2016), Giraldo et al. (2017).

Blennorella Kirschst., Hedwigia 81: 201 (1944)

= **COLLETOTRICHUM** Corda, in Sturm, Deutschl. Fl., 3 Abt. (Pilze Deutschl.) 3(12): 41 (1831)

Notes: Sutton (1977) compared the morphology of *Blennorella* with *Colletotrichum* and regarded the former as a synonym of the later. Subsequent publications by Sutton (1980), Nag Raj (1993) and Kirk et al. (2008) also agreed.

Blennoria Moug. & Fr., in Fries, Syst. orb. veg. (Lundae) 1: 366 (1825)

Notes: The status of the genus is not clear. Index Fungorum (2019) listed the type species as a synonym of *Ceuthospora buxi* (Fr.) Petr. However, Sutton (1980) provided the description.

?**BLENNORIOPSIS** Petr., *Annls mycol.* 17(2/6): 92 (1920) [1919]

Notes: Sutton (1977) listed this genus in his checklist without any note, but did not include in Sutton (1980). Kirk et al. (2008) listed *Blennoriopsis* as a hyphomycetous genus with solitary life mode, but Siefert et al. (2011) did not include it in their monograph of hyphomycetes. Thus, we conclude that it is essential to re-collect and do morpho-molecular analysis to establish generic boundaries.

BLEPTOSPORIUM Steyaert, *Darwiniana* 12: 171 (1961)/ *B. pleurochaetum* (Speg.) B. Sutton/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic to pycnidial. Conidiogenous cells: holoblastic. Conidia: fusiform, distoseptate, invested in mucus, smooth-walled; apical cell flattened, bearing unbranched, attenuated, single appendage; medium cells dark brown; basal cell hyaline to almost hyaline.

Typification details: Saprobes, South America, known only from coelomycetous morph.

Notes: Sutton (1977, 1980), Nag Raj (1993) accepted *B. pleurochaetum* (Speg.) B. Sutton as the type species, but Wijayawardene et al. (2016, 2017a) and Index Fungorum (2019) erroneously listed *B. montteae* Speg. ex Steyaert as the type species. Nag Raj (1977, 1993) stated *Bleptosporium* has an *Amphisphaeria* sexual morph (*A. argentinensis* Nag Raj) based on close association of both species.

Refs.: Sutton (1977), Kirk et al. (2008, 2013), Wijayawardene et al. (2012, 2016, 2017a, b, 2018).

BOEREMIA Aveskamp, Gruyter & Verkley, *Stud. Mycol.* 65: 36 (2010)/ 22 species/ *B. exigua* (Desm.) Aveskamp, Gruyter & Verkley/ *Didymellaceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: phialidic. Conidia: variable in shape, hyaline, mainly aseptate, but regularly 1(–2)-septate conidia may be found.

Typification details: Pathogens/ saprobes, worldwide, known only from coelomycetous morph

Notes: Cultures and DNA sequences are available.

Refs.: Aveskamp et al. (2010).

Bostrychia Fr., *K. svenska Vetensk-Akad. Handl.*, ser. 3 40: 117 (1819) *nom. illegit* Art. 53.1 = **CYTOSPORA** Ehrenb., *Sylv. mycol. berol.* (Berlin): 28 (1818)

Notes: Sutton (1977, 1980), Kirk et al. (2008) and Index Fungorum (2019) regarded *Bostrychia* as a synonym of *Cytospora*.

Bothrodiscus Shear, *Bull. Torrey bot. Club* 34(6): 312 (1907)

= **ASCOCALYX** Naumov, *Bolêz. Rast.* 14: 138 (1926) *fide* Art. 59.1; Johnston et al. (2014)

Notes: see under *Ascocalyx* Naumov.

Botryella Syd. & P. Syd., *Annls mycol.* 14(1/2): 95 (1916)

= **SPHAERELLOPSIS** Cooke, *Grevillea* 12(no. 61): 23 (1883) *fide* Sutton (1977)

Botryocrea Petr., Sydowia 3(1-6): 140 (1949)

= **FUSARIUM** Link, Mag. Gesell. naturf. Freunde, Berlin 3(1-2): 10 (1809) *vide* Samuels et al. (1991)

Notes: Sutton (1977) listed this genus as coelomycetous, but Sutton (1980), while illustrating the type species, stated that ‘This distinctive genus with characteristic *Fusarium* conidia is so far monotypic’. Samuels et al. (1991) treated *Botryocrea* as a synonym of *Fusarium* thus transferred the type of *Botryocrea* (*B. sclerotoides* (Höhn.) Petr.) to *Fusarium* as *F. sclerotoides* (Höhn.) Samuels & Rossman. However, Seifert et al. (2011) did not list *Botryocrea* as a synonym of *Fusarium*.

Botryodiplodia Sacc., Syll. fung. (Abellini) 3: 377 (1884) **nom. dub.** *vide* Kirk et al. (2008)

BOTRYODIPLODINA Dias & Sousa da Câmara, Agron. lusit. 16: 13 (1954)/ *B. mori* Dias & Sousa da Câmara/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: pigmented, ellipsoid.

Typification details: Saprobes, Europe, known only from coelomycetous morph.

Notes: Gene sequence data is unavailable, thus taxonomic placement is uncertain.

Refs.: Kirk et al. (2008, 2013), Wijayawardene et al. (2012, 2017a, b).

Botryogene Syd. & P. Syd., Anns mycol. 15(3/4): 259 (1917) **nom. dub.** *vide* Sutton (1977), Kirk et al. (2008)

BOTRYOHYPOXYLON Samuels & J.D. Rogers, Mycotaxon 25(2): 631 (1986) (= *Iledon* Samuels & J.D. Rogers, Mycotaxon 25(2): 633 (1986))/ one species/ *B. amazonense* Samuels & J.D. Rogers/ *Xylariales* genera *incertae sedis*, *Sordariomycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: phialidic. Macroconidia: ellipsoidal, septate, intercalary cells hyaline, terminal cells transparent brown. Microconidia: hyaline, unicellular.

Typification details: Saprobes, USA, with coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Refs.: Samuels and Rogers (1986), Wijayawardene et al. (2014b).

Botryophoma (P. Karst.) Höhn., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1 125(1-2): 72 (1916)

= **DOTHIORELLA** Sacc., Michelia 2(no. 6): 5 (1880)

Notes: Sutton (1977) and Kirk et al. (2008) accepted *Botryophoma* as a synonym of *Sclerodothiorella* Died. which became a synonym of *Dothiorella* Sacc. (Index Fungorum 2019).

BOTRYOSPHAERIA Ces. & De Not., Comm. Soc. crittog. Ital. 1(fasc. 4): 211 (1863) (= *Fusicoccum* Corda 1829; = *Dichomera* Cooke 1878 *vide* Wijayawardene et al. (2014, 2016), Rossman et al. (2015b), Art. 59; ten species; *B. dothidea* (Moug.) Ces. & De Not.; *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*

Conidiomata: stromatic to pycnidial, ostiolate. Conidiogenous cells: holoblastic to annellidic. Conidia: dichomera-like, pyriform or cylindrical, muriform, often variable and irregular in shape, brown, truncate base, globose, or aseptate continuous or constricted at the septa; fusicoccum-like: fusiform, hyaline, aseptate. Ascospores: multiloculate, ostiolate. Asci: 8-spored, bitunicate, fssitunicate, clavate to cylindroclavate. Ascospores: irregularly

biseriate in the ascus, hyaline, sometimes becoming pale brown with age, thin walled, ovoid, fusoid, fusoid-ellipsoid, usually widest in the middle.

Typification details: Pathogens, saprobes, worldwide, with *Fusicoccum*-like and *Dichomera*-like coelomycetous morphs.

Notes: Phillips et al. (2013) reported *Botryosphaeria* species with coelomycetous asexual morphs. Wijayawardene et al. (2014b, 2016) proposed to adopt *Botryosphaeria* over *Fusicoccum* and *Dichomera*.

Index Fungorum (2019) lists 253 epithets but Dissanayake et al. (2016) accepted only 10 species.

Refs: Lumbsch and Huhndorf (2010), Liu et al. (2012), Abdollahzadeh et al. (2009), Hyde et al. (2013), Phillips et al. (2013), Slippers et al. (2013), Yan et al. (2013), Wijayawardene et al. (2014b, 2016), Ariyawansa et al. (2016), Dissanayake et al. (2016).

Botryosphaerostroma Petr., Hedwigia 62: 302 (1921)

= *Botryodiplodia* Sacc., Syll. fung. (Abellini) 3: 377 (1884)

Notes: *Botryodiplodia* has been listed as **nom. dub.** in Kirk et al. (2008).

Botryosphaerostroma Petr. & Syd., Beih. Reprium nov. Spec. Regni veg. 42(1): 126 (1927) [1926] **nom illegit.** *fide* Index Fungorum (2019)

Botryosphaeris Clem. & Shear, Gen. fung., Edn 2 (Minneapolis): 361 (1931)

= *SPHAEROPSIS* Sacc., Michelia 2(no. 6): 105 (1880)

Notes: Sutton (1977) regarded this genus as a synonym of *Botryodiplodia* Sacc. However, Kirk et al. (2008) and Index Fungorum (2019) mentioned that *Botryosphaeris* is a synonym of *Sphaeropsis*.

BRENCKLEA Petr., Annls mycol. 21(3/4): 326 (1923)/ *B. sisyrinchii* (Ellis & Everh.) Petr./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial, ostiolate. Conidiogenous cells: holoblastic to annellidic. Conidia: fusiform to naviculate, septate, almost hyaline to pale brown, bearing attenuated, broad, cellular, filiform, long apical appendage, with short, cylindrical, hyaline micro conidia.

Typification details: saprobes, USA, known only from coelomycetous morph.

Notes: Sutton (1968, 1977, 1980) regarded *Brencklea* as a synonym of *Scolecosporella*. However, Nag Raj (1993) reinstated *Brencklea* and accepted it as a distinct genus. Subsequent study by Wijayawardene et al. (2016) also agreed with Nag Raj (1993).

BROOMELLA Sacc., Syll. fung. (Abellini) 2: 557 (1883)/ 2 species/ *B. vitalbae* (Berk. & Broome) Sacc. / *Sporocadaceae*, *Xylariales*, *Sordariomycetes*

Conidiomata: stromatic. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: cylindrical, phialidic. Conidia: fusiform to aciculate, with acute ends, straight or slightly curved, 3-septate, pale brown or brown, or 2–5 appendages at apex and a single appendage at the base

Typification details: Pathogens/ saprobes, cosmopolitan, with asexual coelomycetous morph (see Li et al. 2015)

Notes: Cultures and DNA sequences are available.

Refs.: Li et al. (2015), Senanayake et al. (2015), Wijayawardene et al. (2016)

BRIANCOPPINSIA Diederich, Ertz, Lawrey & van den Boom, Fungal Diversity 52(1): 7 (2012)/ one species/ *B. cytospora* (Vouaux) Diederich, Ertz, Lawrey & van den Boom/ *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: enteroblastic. Conidia: elongate, ellipsoid, aseptate, hyaline.

Typification details: Lichenicolous, cosmopolitan, known only from coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Refs.: Diederich et al. (2012).

Brunchorstia Erikss., Botan. Centralbl. 47: 298 (1891)

= **GREMMENIELLA** M. Morelet, Bull. Soc. Sci. nat. Arch. Toulon et du Var 183: 9 (1969) *fide* Johnston et al. (2014)

Notes: Johnston et al. (2014) adopted *Gremmeniella* M. Morelet over *Brunchorstia* (Art. 59.1).

BRUNNEOSPHAERELLA Crous, Stud. Mycol. 64: 31 (2009)/ four species/ *B. protearum* (Syd. & P. Syd.) Crous/ *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: holoblastic. Conidia: pale brown to medium brown, thick-walled on maturity, ellipsoidal to globose.

Typification details: Pathogens, cosmopolitan, known only from coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Refs.: Crous et al. (2009a), Marin-Felix et al. (2019).

BRYCEKENDRICKIA Nag Raj, Can. J. Bot. 51(7): 1337 (1973)/ *B. indica* Nag Raj/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial, stromatic. Conidiogenous cells: holoblastic. Conidia: naviculate, slightly curved, hyaline, with appendage at each end.

Typification details: saprobes, Asia, known only from coelomycetous morph.

Notes: Nag Raj (1973) introduced this genus and Sutton (1977, 1980) and Nag Raj (1993) accepted it as a distinct genus. Gene sequences and cultures are lacking, thus taxonomic placement is uncertain.

Refs.: Nag Raj (1973, 1993), Wijayawardene et al. (2012, 2017a, b, 2018).

Byssocystis Riess, Hedwigia 1(5): 23 (1853)

= **AMPELOMYCES** Ces. ex Schltdl., Bot. Ztg. 10: 303 (1852) *fide* Sutton (1977, 1980)

Notes: Sutton (1977, 1980) regarded *Byssocystis* as a synonym of *Ampelomyces*. Kirk et al. (2008) and Index Fungorum (2019) followed this synonymy as in Sutton (1977, 1980).

CADUCIROSTRUM Punith. & Spooner, Kew Bull. 66(2): 311 (2011)/ *C. foliicola* Punith. & Spooner/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiophores: septate. Conidiogenous cells: phialidic. Conidia: Hyaline, cylindrical.

Typification details: saprobes, Europe, known only from coelomycetous morph.

Refs.: Punithalingam and Spooner (2011).

Caeruleoconidia Zhurb. & Diederich, in Zhurbenko, Frisch, Ohmura & Thor, Herzogia 28: 764 (2015) *nom. inval.* *fide* Art. 401.1; Index Fungorum (2019)

CAERULEOCONIDIA Zhurb. & Pino-Bodas, *Opuscula Philolichenum*: 200 (2017)/ *C. ochrolechia* Zhurb. & Pino-Bodas/ two species/ *Ascomycota* genera *incertae sedis*
 Conidiomata: pycnidial to sporodochial. Conidiophores: hyaline to bluish green. Conidiogenous cells: holoblastic. Conidia bluish green, K⁺ becoming greener, mainly subglobose, 0-1-septate (Zhurbenko and Pino-Bodas 2017).

Typification details: Lichenicolous, South America, known only from coelomycetous morph.

Notes: Zhurbenko et al. (2015) introduced *Caeruleoconidia* Zhurb. & Diederich 2015, but invalidly published (Art. 40.1) thus Zhurbenko and Pino-Bodas (2017) validated the genus. However, the genus was reported with pycnidial to sporodochial conidiomata with the latter being a typical conidiomatal type of hyphomycetous taxa.

CAINIA Arx & E. Müll., *Acta bot. neerl.* 4(1): 111 (1955)/ 6 species/ *C. graminis* (Niessl) Arx & E. Müll./ *Cainiaceae*, *Xylariomycetidae* family *incertae sedis*, *Sordariomycetes*

Conidiomata: pycnidia. Conidiophores: hyaline, denticulate. Conidiogenous cells: 1–3 phialides, filiform. Conidia: elongate-fusiform to filiform, 0-1-septate, hyaline.

Typification details: Saprobes, cosmopolitan, with asexual coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Refs.: Senanayake et al. (2015).

CALLISTOSPORA Petr., *Sydowia* 9(1-6): 571 (1955)/ *C. gaubae* Petr./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial, stromatic. Conidiogenous cells: holoblastic. Conidia: broadly ellipsoidal to elongate-fusiform, with several distosepta, occasionally with one longitudinal or oblique septum, brown to dark brown, with mucilaginous appendage at each end, with hyaline, unicellular, ovoid to ellipsoidal micro conidia.

Typification details: saprobes, Australia, known only from coelomycetous morph.

Notes: Sutton (1977) listed the genus in his checklist but did not include it in his monograph (Sutton 1980). However, subsequent studies by von Arx and Constantinescu (1983), Nag Raj (1989, 1993) and Wijayawardene et al. (2016) accepted *Callistospora* as a distinct genus. Gene sequence data are lacking, thus taxonomic placement is uncertain.

Refs.: Arx and Constantinescu (1983), Nag Raj (1989, 1993), Kirk et al. (2008, 2013), Wijayawardene et al. (2012, 2017a, b, 2016).

Callosisperma Preuss, *Linnaea* 26: 721 (1855) [1853] **nom. dub.** *fide* Sutton (1977), Kirk et al. (2008)

Calogloeum Syd., in Sydow & Petrak, *Annls mycol.* 22(3/6): 401 (1924)

= **FUSAMEN** (Sacc.) P. Karst., *Revue mycol.*, Toulouse 12(no. 47): 129 (1890)

Notes: von Arx (1957a) regarded *Calogloeum* as a synonym of *Fusamen*. This synonymy was accepted by Sutton (1977).

Calopactis Syd. & P. Syd., *Annls mycol.* 10(1): 82 (1912)

= **ENDOTHIA** Fr., *Summa veg. Scand.*, Sectio Post. (Stockholm): 385 (1849)

Notes: See under *Endothia* Fr.

CALOPHOMA Qian Chen & L. Cai, *Stud. Mycol.* 82: 191 (2015)/ eight species/ *C. clematidina* (Thüm.) Q. Chen & L. Cai/ *Didymellaceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: Pycnidial. Conidiophores: Reduced to conidiogenous cells. Conidiogenous cells: Phialidic. Conidia: Variable in size and shape, hyaline or becoming slightly brown, aseptate.

Typification details: Pathogens, cosmopolitan, known only from coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Refs.: Chen et al. (2015).

CAMAROGLOBULUS Speer, Bull. trimest. Soc. Mycol. Fr. 102: 100 (1986)

Notes: The type of *Camaroglobulus*, *C. resinae* Speer was introduced as the asexual morph of *Mytilinidion resinae* Speer (Speer 1986). However, neither *C. resinae* nor *M. resinae* have DNA sequences to confirm their placements in *Mytilinidion s. str.* (in *Mytilinidiaceae*, *Mytilinidiales*). Thus, we suggest to use the name *Camaroglobulus* pending further molecular work.

CAMAROGRAPHIUM Bubák, Ber. dt. bot. Ges. 34: 306 (1916)/ *C. stephensii* (Berk. & Broome) Bubák/ seven species/ *Pleosporales* genera *incertae sedis*, *Dothideomycetes*

Conidiomata: pycnidial, ostiolate. Conidiogenous cells: enteroblastic, phialidic. Conidia ellipsoid or irregular in shape, globose, distoseptate, with up to 5 transverse septa, numerous longitudinal or oblique septa, pale brown.

Typification details: saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: Sutton (1977, 1980) accepted the genus with only three species. Verkley et al. (2005) and Crous et al. (2011a) introduced *C. koreanum* Verkley et al. (with micro conidia) and *C. carpini* Mel'nik et al., respectively. Wijayawardene et al. (2016) revisited the genus and introduced new species, *C. clematidis* Wijayaw. et al.

Index Fungorum (2019) lists nine epithets but Species Fungorum (2019) accepts only seven species.

Refs.: Sutton (1980), Verkley et al. (2005), Kirk et al. (2008, 2013), Crous et al. (2011a), Wijayawardene et al. (2016, 2017a, b, 2018).

CAMAROPYCNIS E.K. Cash, Mycologia 37(3): 314 (1945)/ *C. libocedri* E.K. Cash/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic, ostiolate. Conidiogenous cells: enteroblastic, phialidic. Conidia cylindrical, hyaline, aseptate.

Typification details: saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: Sutton (1977, 1980) accepted the genus as monotypic. Kirk et al. (2008, 2013) and Wijayawardene et al. (2016, 2017a, b, 2018) accepted the genus. Morphological and phylogenetic studies have not been carried out since Sutton (1980), thus, generic revision is essential.

Refs.: Sutton (1980), Kirk et al. (2008, 2013), Wijayawardene et al. (2016, 2017a, b, 2018).

CAMAROSPORELLUM Tassi, Bulletin Labor. Orto Bot. de R. Univ. Siena 5: 62 (1902)/ three species/ *C. nervisequum* (Tassi) Tassi/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial, ostiolate. Conidiogenous cells: holoblastic. Conidia: ellipsoid or obvoid, distoseptate, muriform, brown to dark chocolate brown.

Typification details: saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: Sutton and Pollack (1974) designated the lectotype and introduced the third species. Sutton (1977, 1980), van Warmelo and Sutton (1981), Kirk et al. (2008, 2013) and Wijayawardene et al. (2016, 2017a, b, 2018) accepted the genus. Phylogenetic studies have not been carried out, thus, generic revision is essential.

Index Fungorum (2019) lists four epithets but Species Fungorum (2019) accepts only three species.

Refs.: Sutton and Pollack (1974), Sutton (1977, 1980), van Warmelo and Sutton (1981), Kirk et al. (2008, 2013), Wijayawardene et al. (2016, 2017a, b, 2018).

CAMAROSPORIOIDES W.J. Li & K.D. Hyde, Fungal Diversity: 80: 83 (2016)/ one species/ *C. phragmitis* W.J. Li & K.D. Hyde/ *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: Pycnidial. Conidiophores: Reduced to conidiogenous cells. Conidiogenous cells: Holoblastic. Conidia: Pale brown to brown, ellipsoidal to oval, with primary transverse septa, with a longitudinal septum.

Typification details: Saprobies, cosmopolitan, known only from coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Refs.: Hyde et al. (2016).

CAMAROSPORIOPSIS Abbas, B. Sutton & Ghaffar, *Pakist. J. Bot.* 32(2): 239 (2000)/ *C. capparidis* (S. Ahmad) Abbas, B. Sutton & Ghaffar/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial, ostiolate. Conidiophores: absent. Conidiogenous cells: enterogenous proliferation. Conidia: lobose to oblong or triangular, or irregular in shape, muriform, brown to dark chocolate brown, enclosed in thick mucilaginous sheath.

Typification details: Saprobies, Asia, known only from coelomycetous morph.

Notes: Abbas et al. (2000) introduced *Camarosporiopsis* which is morphologically similar to *Camarosporium*. However, *C. capparidis* produces a mucilaginous sheath (Abbas et al. 2000), thus, is morphologically distinct from *Camarosporium*. DNA sequences are not available, thus, its phylogenetic placement is doubtful.

CAMAROSPORIUM Schulzer, *Verh. Zool.-Bot. Ges. Wien* 20: 649 (1870)/ *C. quaternatum* (Hazsl.) Schulzer/ more than 100 species/ *Camarosporaceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: pycnidial, ostiolate. Conidiogenous cells: holoblastic. Conidia: ellipsoid or obvoid, distoseptate, muriform, brown to dark chocolate brown.

Typification details: saprobies, cosmopolitan, reported with sexual morph and coelomycetous morph

Notes: camarosporium-like taxa are highly polyphyletic, thus, the species number in Index Fungorum (2019) is doubtful.

Refs.: Sutton (1977, 1980), van Warmelo and Sutton (1981), Kirk et al. (2008, 2013), Wijayawardene et al. (2014a, 2016, 2017a, b, 2018), Wanasinghe et al. (2017).

CAMAROSPOROMYCES Crous, *IMA Fungus* 8(1): 141 (2017)/ one species/ *C. flavigenus* (Constant. & Aa) Crous/ *Camarosporiaceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: phialidic with periclinal thickening. Conidia: hyaline, aseptate, subcylindrical.

Typification details: From fresh water, Romania, known only from coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Ref.: Crous and Groenewald (2017).

CAMAROSPORULA Petr., Sydowia 8(1-6): 99 (1954) (= *Anthracostroma* Petr. 1954 *vide* Rossman et al. 2015b)/ *C. persooniae* (Henn.) Petr./ one species/ *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*

Conidiomata: acervuli. Conidiogenous cells: holoblastic, cylindrical to doliiform. Conidia: cylindrical, clavate, obclavate or irregular, muriform, distoseptate, medium to dark brown. Ascstromata: subcuticular, uni-to multi-locular. Asci: stipitate, obovoid, 8-spored. Ascospores: fusoid-ellipsoid, hyaline, with one medium septum.

Typification details: saprobes, cosmopolitan, sexual morph formerly known in *Anthracostroma* Petr.

Notes: Sutton (1977) accepted the genus and Sutton (1980) re-described and illustrated the type species and accepted *Anthracostroma persooniae* as the sexual morph. Crous et al. (2011b) confirmed this link in their phylogenetic study. Hence, Wijayawardene et al. (2014b) accepted sexual typified name over asexual typified name. However, Rossman et al. (2015b) disagreed with Wijayawardene et al. (2014b) and suggested to adopt *Camarosporula* over *Anthracostroma* as the former has been reported frequently (Farr and Rossman 2019) and as it was recently used in literature (Crous et al. 2011b).

Refs.: Crous et al. (2011), Wijayawardene et al. (2012, 2014b, 2016b, 2017a, b), Kirk et al. (2013), Rossman et al. (2015b).

Camarosporulum Tassi, Bulletin Labor. Orto Bot. de R. Univ. Siena 5: 63 (1902)

= **CAMAROSPORIUM** Schulzer, Verh. zool.-bot. Ges. Wien 20: 649 (1870)

Notes: Sutton (1977, 1980) regarded *Camarosporulum* as a synonym of *Camarosporium*. However, Kirk et al. (2008, 2013) listed *Camarosporula* as a valid genus. Re-collection and molecular based taxonomic analyses are essential to understand the generic boundaries.

CAPITOROSTRUM Bat., in Batista & Maia, Revta Biol., Lisb. 1(2): 140 (1957)/ *C. asteridiellae* Bat./ two species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiophores: data inadequate. Conidiogenous cells: data inadequate. Conidia: ellipsoids or oblongs, brown.

Typification details: On fungi *Asteridiella fraseriana*, Australia, University of Sydney 24, lacks DNA sequence data, known only from coelomycetous morph.

Notes: Parasitic fungus.

Refs.: Batista and Maia (1957), Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018).

CAPNODIASTRUM Speg., Anal. Soc. cient. argent. 22(4): 192 (1886)/ eight species/ *C. guaraniticum* Speg./ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial, ostiolate. Conidiogenous cells: holoblastic. Conidia: obvoid, 1-septate, pale brown.

Typification details: saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: Sutton (1977) listed the genus in his checklist and Sutton (1980) briefly summarized the history of the genus with an illustration of the type species. Morphology and generic boundaries have not been revised since Sutton (1980), but Wijayawardene et al. (2016) accepted it as a dematiaceous coelomycete. *Capnodiastrum* was treated as a genus in *Englerulaceae* and the asexual morph of *Englerula* by Wijayawardene et al. (2012) and Dai et al. (2014). However, Wijayawardene et al. (2017a, b, 2018) listed the genus as in *Ascomycota* genera *incertae sedis* as it is lacking DNA sequences.

Index Fungorum (2019) lists 14 epithets but Species Fungorum (2019) accepts only eight species.

CAPNODIUM Mont. 1849 (= *Polychaeton* (Pers.) Lév. 1846; = *Fumagospora* G. Arnaud 1911 *vide* Chomnunti et al. 2011; Hyde et al. 2013; Wijayawardene et al. 2014c)/ *C. salicinum* Mont./ c. 15 species/ *Capnodiaceae*, *Capnodiales*, *Dothideomycetes*

Conidiomata: pycnidial, ostiolate. Conidiogenous cells: holoblastic. Conidia: hyaline, aseptate, one cell. Ascomata: globose to ellipsoidal, short stalked or sessile, ostiolate at maturity. Asci: 8-spored, bitunicate, clavate, ovoid or saccate. Ascospores: brown, oblong or ovoid and some reniform, transverse septate with zero or more vertical septa.

Typification details: sooty moulds, worldwide, with sexual and asexual morphs.

Notes: Chomnunti et al. (2011) adopted younger sexual typified name (*Capnodium*) over older asexual typified name (*Polychaeton*). This adoption was accepted in subsequent publications by Wijayawardene et al. (2014b, 2017a, b, 2018) and Rossman et al. (2015b).

Index Fungorum (2019) lists 141 epithets but Kirk et al. (2008) accepted c. 15 species.

Refs: Chomnunti et al. (2011), Kirk et al. (2008, 2013), Hyde et al. (2013), Wijayawardene et al. (2014b, 2017a, b, 2018), Rossman et al. (2015b).

Capnognoniella Bat. & Cif., Quad. Lab. crittogam., Pavia 31: 51 (1963) *nom. conf. fide* Kirk et al. (2008)

Notes: Batista and Ciferri (1963) introduced *Capnognoniella* to accommodate the conidial stage of *Capnogonium polymorphum* Bat. & Peres (dual nomenclature; Saccardo 1904) which is now listed as a synonym of *Brooksia* Hansf. (Sutton 1977; Kirk et al. 2008; Index Fungorum 2019).

CARNEGIEISPORIA Etayo & F. Berger, Opuscula Philolichenum 7: 17 (2009)/ *C. rimeliae* Etayo & F. Berger/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: acervuli. Conidiogenous cells: holoblastic. Conidia: hyaline to subhyaline, aseptate, elliptical.

Typification details: On thallus of *Parmotrema reticulatum*, Azores, known only from coelomycetous morph.

Refs: Etayo and Berger (2009).

CARYOPHYLLOSEPTORIA Verkley, Quaedvl. & Crous, Stud. Mycol. 75: 233 (2013)/ four species/ *C. lychnidis* (Desm.) Verkley, Quaedvl. & Crous/ *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: holoblastic. Conidia: cylindrical, curved or flexuous, multiseptate, hyaline.

Typification details: Pathogens, ?epiphytic, Austria, The Netherlands, known only from coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Ref.: Verkley et al. (2013).

CATENOPHORA Luttr., Mycologia 32(4): 535 (1940)/ *C. pruni* Luttr./ three species/*Ascomycota* genera *incertae sedis*

Conidiomata: acervuli. Conidiogenous cells: holoblastic. Conidia: hyaline to subhyaline, aseptate, elliptical.

Typification details: South America, saprobes, known only form coelomycetous morph.

Notes: Sutton (1980) illustrated the type species and accepted two species. Nag Raj and Kendrick (1988) introduced the third species. All three species are lacking DNA sequence data, thus, taxonomic position is uncertain.

CATENOPHOROPSIS Nag Raj & W.B. Kendr., Can. J. Bot. 66(5): 898 (1988)/ *C. eucalypticola* Nag Raj & W.B. Kendr./ one species/*Ascomycota* genera *incertae sedis*
 Conidiomata: acervuli. Conidiogenous cells: holoblastic. Conidia: hyaline, aseptate, fusiform to naviculate, with an apical and a basal appendage.

Typification details: Australia, saprobes, known only from coelomycetous morph.

Notes: Nag Raj and Kendrick (1988) introduced this monotypic genus. Later, Nag Raj (1993) re-visited the genus. The genus is lacking DNA sequences, thus, taxonomic position is uncertain.

CATENULOXYPHIUM Bat., Nascim. & Cif., in Batista & Ciferri, Quad. Lab. crittogam., Pavia 31: 52 (1963)/ *C. fimbriatum* Bat., Nascim. & Cif./ four species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiophores: data inadequate. Conidiogenous Cells: data inadequate. Conidia: ellipsoidal or oblong, brown.

Typification details: On fungi *Asteridiella fraseriana*, Australia, University of Sydney 24, lacks DNA, known only from coelomycetous morph.

Notes: Parasitic fungus.

Catinula Lév., Anns Sci. Nat., Bot., sér. 3 9: 247 (1848)

= **LEMALIS** Fr., Syst. orb. veg. (Lundae) 1: 93 (1825) *fide* Species Fungorum (2019)

Catosphaeropsis Tehon, Mycologia 31(5): 542 (1939)

= **SPHAEROPSIS** Sacc., Michelia 2(no. 6): 105 (1880) *fide* Sutton (1980)

Notes: Sutton (1980) listed *Catosphaeropsis* under *Sphaeropsis*.

Caudophoma B.V. Patil & Thirum., Sydowia 20: 36 (1968) [1966]

= **PHYLLOSTICTA** Pers., Traité champ. (Paris): 55, 147 (1818) *fide* Punithalingam (1974), Sutton (1977)

Notes: *Caudophoma* was regarded as synonym of *Phyllosticta* Pers. (Van der Aa 1973; Punithalingam 1974; Sutton 1977).

CAUDOSPORA Starbäck, Bih. K. svenska VetenskAkad. Handl., Afd. 3 15(no. 2): 11 (1889)/ 2 species/ *C. taleola* (Fr.) Starbäck / *Sydowiellaceae*, *Diaporthales*, *Sordariomycetes*

Notes: Kirk et al. (2008) stated that this genus was reported with *Phomopsis*-like asexual morphs. Wijayawardene et al. (2020) accepted *Caudospora* in *Sydowiellaceae*

Caudosporella Höhn., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1 123: 135 (1914)

= **HARKNESSIA** Cooke, in Cooke & Harkness, Grevillea 9(no. 51): 85 (1881) *fide* Sutton (1977)

Notes: Sutton (1971) regarded *Caudosporella* as a synonym of *Harknessia* as both share close morphologies, thus, subsequent studies by Sutton (1977, 1980), Nag Raj and DiCosmo (1981), Nag Raj (1993) and Crous et al. (2012a) accepted this synonymy.

Celluloporium Peck, Bot. Gaz. 4(6): 171 (1879) *nom. dub.* *fide* Sutton (1977)

Notes: Sutton (1977) mentioned that the type material of the type species is not available at NYS, ILL or ILLS, thus, treated as doubtful genus.

CELOPORHTE Nakab., Gryzenh., Jol. Roux & M.J. Wingf., Stud. Mycol. 55: 261 (2006)/ 9 species/ *C. dispersa* Nakab., Gryzenh., Jol. Roux & M.J. Wingf./ *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*

Conidiomata: globose to pyriform. Conidiophores: branched at base, septate. Conidiogenous cells: blastic. Conidia: hyaline, aseptate.

Typification details: Pathogens/ saprobes, cosmopolitan, with asexual coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Refs.: Nakabonge et al. (2006), Ali et al. (2018).

CENOCOCCUM Moug. & Fr., Syst. mycol. (Lundae) 3(1): 65 (1829)/ five species/ *C. geophilum* Fr./ *Gloniaceae*, *Gloniales*, *Dothideomycetes*

Notes: Kirk et al. (2008, 2013) accept this genus but Sutton (1980) did not list it in his monograph.

CERATOPHOMA Höhn., Hedwigia 59(5): 276 (1917)/ *C. rostrata* (Fuckel) Höhn./ one species/ *Ascomycota* genera *incertae sedis*

Notes: The status of this genus is doubtful. Sutton (1977) listed the name without any notes, but Sutton (1980) did not include it in his monograph. Kirk et al. (2008, 2013) accepted the genus in their dictionary and checklist, respectively. However, Species Fungorum (2019) listed the type species of *Ceratophoma* (*C. rostrata* (Fuckel) Höhn.) as a synonym of *Sphaeronaema rostratum* Fuckel.

Ceratopycnidium Maubl., Bull. Soc. mycol. Fr. 23(3): 148 (1907)

= **BYSSOLOMA** Trevis., Spighe Paglie: 6 (1853) *fide* Lücking et al. (2002)

Notes: Sutton (1977) accepted *Ceratopycnidium* as a valid genus. Lücking et al. (2002) regarded the type of *Ceratopycnidium*, *C. citricola* Maubl. as a synonym of *Byssoloma leuckingii* Sérus. This synonymy was accepted in Kirk et al. (2008).

CERATOPYCNIS Höhn., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1 124: 86 (1915)/ *C. clematidis* Höhn./ four species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: enteroblastic, phialidic. Conidia: pale brown to dark brown, 3-septate, cylindrical.

Typification details: Saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: Sutton (1977) accepted the genus and Sutton (1980) illustrated the type species. Wijayawardene et al. (2016) introduced *C. pseudoclematidis* Wijayaw. et al., but all the species are lacking DNA sequence data. Hence, the taxonomic placement is uncertain.

Ceratopycnium Clem. & Shear, Gen. fung., Edn 2 (Minneapolis): 363 (1931)

= **BYSSOLOMA** Trevis., Spighe Paglie: 6 (1853)

Notes: Sutton (1977) regarded *Ceratopycnium* as a synonym of *Ceratopycnidium* which was later listed as a synonym of *Byssoloma* (Lücking et al. 2002).

Cesatia Rabenh., Klotzschii Herb. Viv. Mycol., Edn Nov. Cent. 15: no. 1443 (1850) *nom. illegit. fide* Index Fungorum (2019)

= **TRULLULA** Ces., Bot. Ztg. 10: 287 (1852)

Notes: Saccardo (1884) reduced *Cesatia* under *Trullula*. Nevertheless, the genus is the latter homonym of *Cesatia* Endl. 1838 (Umbelliferae) (Höhnel 1915), thus, treated as *nom. illegit.* (Index Fungorum 2019).

Ceuthodiplospora Died., *Annls mycol.* 10(2): 149 (1912)

= **PROSTHEMIUM** Kunze, *Mykologische Hefte* (Leipzig) 1: 17 (1817)

Notes: Index Fungorum (2019) listed this genus as a synonym of *Pleomassaria* Speg. However, *Pleomassaria* has been regarded as a synonym of *Prosthemium* Kunze (Art. 59.1; Wijayawardene et al. 2014b).

CEUTHOSIRA Petr., *Annls mycol.* 22(3/6): 265 (1924)/ *C. aesculicarpa* Petr./ one species/
Ascomycota genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate, ellipsoidal.

Typification details: Saprobes, Europe, known only from coelomycetous morph.

Notes: Sutton (1977) accepted the genus but Sutton (1980) did not include it in his monograph. Nag Raj (1978) regarded *Ceuthosira* as a synonym of *Coleophoma*. However, Kirk et al. (2008, 2013) accepted it as a valid genus. It is essential to re-visit the genus to confirm its validity.

Ceuthospora Fr., *Syst. orb. veg. (Lundae)* 1: 119 (1825) **nom. rejic.** *fide* Index Fungorum (2019)

Ceuthospora Grev., *Scott. crypt. fl. (Edinburgh)* 5: pl. 253-254 (1826)

= **PHACIDIUM** Fr., *Observ. mycol. (Havniae)* 1: 167 (1815)

Notes: See under *Basilocula* Bubák and *Phacidium*.

CEUTHOSPORELLA Petr. & Syd., *Annls mycol.* 21(5/6): 371 (1923)/ *C. acerina* Petr. & Syd./ one species/
Ascomycota genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate, ellipsoidal.

Typification details: Saprobes, Europe, known only from coelomycetous morph.

Notes: Sutton (1977) accepted the genus with notes on history of the genus. Kirk et al. (2008, 2013) and Wijayawardene et al. (2012, 2017a, b, 2018) also accepted the genus.

Ceuthosporella Höhn., *Mitt. bot. Inst. tech. Hochsch. Wien* 6: 116 (1929)

= **HELHONIA** B. Sutton, *The Coelomycetes* (Kew): 600 (1980)

Notes: See under *Helhonia*.

Chaetalysis Peyronel, *Bull. Soc. mycol. Fr.* 38(3): 141 (1922)

= **PYCNOPEZIZA** W.L. White & Whetzel, *Mycologia* 30(2): 187 (1938)

Notes: Sutton (1977) regarded the type of *Chaetalysis* (*C. myrioblephara* Peyronel), as a synonym of *Acarosporium sympodiale* Bubák & Vleugel ex Bubák. Thus, Sutton (1977) treated *Chaetalysis* as a synonym of *Acarosporium* Bubák & Vleugel ex Bubák. However, *Acarosporium* is a synonym of *Pycnopeziza* W.L. White & Whetzel (Art. 59.1; Johnston et al. 2014).

CHAETASBOLISIA Speg., *Physis, Rev. Soc. Arg. Cienc. Nat.* 4(no. 17): 293 (1918)/ seven species/
C. erysiphoides (Griffon & Maubl.) Griffon & Maubl./ *Didymellaceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: pycnidia, ostiolate. Conidiogenous cells: Enteroblastic, phialidic. Conidia: Hyaline, aseptate, oval.

Typification details: Saprobes, worldwide, known only from coelomycetous morph.

Notes: Batista and Ciferri (1963) redescribed the type species. Sutton (1977, 1980) accepted the genus. Sutton (1980) mentioned that the genus comprises seven species but they were not revised. De Gruyter et al. (2009) included *C. erysiphoides* in their phylogenetic analysis and confirmed its placement in *Didymellaceae*.

Index Fungorum (2019) listed 10 epithets but *Chaetasbolisia raphiae* Verpl. & R. Broecke and *C. falcata* var. *falcata* V.A.M. Mill. & Bonar have not been accepted in Species Fungorum (2019). Furthermore, *C. falcata* var. *minuta* Bat., H. Maia & Cif. as been regarded as a synonym of *C. falcata* (Species Fungorum 2019).

Chaetobasidiella Höhn., Ber. dt. bot. Ges. 36(7): 317 (1918) **nom. dub.** fide Sutton (1977), Kirk et al. (2008)

Chaetobasis Clem. & Shear, Gen. fung., Edn 2 (Minneapolis): 383 (1931)
= ***Chaetobasidiella*** Höhn., Ber. dt. bot. Ges. 36(7): 317 (1918)

Notes: Sutton (1977) stated that *Chaetobasis* Clem. & Shear 'is a superfluous *nomen novum* for *Chaetobasidiella* Höhn'. However, *Chaetobasidiella* Höhn. is also treated as *nom. dub.* (Kirk et al. 2008).

CHAETOCONIS Clem., Gen. fung. (Minneapolis): 125 (1909)/ *C. polygoni* (Ellis & Everh.) Clem./ two species/ *Diaporthaceae*, *Diaporthales*, *Sordariomycetes*

Conidiomata: pycnidial, ostiolate. Conidiogenous cells: enteroblastic, phialidic. Conidia: hyaline, 2-septate, obclavate, with an apical appendage.

Typification details: Saprobes, USA, Russia, known only from coelomycetous morph.

Notes: Sutton (1977, 1980) accepted the genus and treated *Amphorula* Grove. as a synonym. This synonymy was accepted in Nag Raj (1993) who re-visited the type species and introduced the second species. Maharachchikumbura et al. (2015, 2016) and Senanayake et al. (2017) accepted the genus as a member in *Diaporthales* genera *incertae sedis* and *Diaporthaceae*, respectively.

CHAETOCYTOSTROMA Petr., Annls mycol. 17(2/6): 91 (1920) [1919]/ *C. arundinacea* Petr./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate, ellipsoidal.

Typification details: Saprobes, Europe, known only from coelomycetous morph.

Notes: Sutton (1977) accepted the genus, but Sutton (1980) did not include it in his monograph. However, Kirk et al. (2008, 2013), and Wijayawardene et al. (2012, 2017a, b, 2018) listed the genus in their checklists and dictionaries. DNA sequence data is lacking, thus, taxonomic placement is uncertain. Generic revision is essential.

CHAETODIPLIS Clem., in Clements & Shear, Gen. fung., Edn 2 (Minneapolis): 183, 364 (1931)/ *C. hirta* (Sacc.) Clem./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: Pycnidial. Conidiogenous cells: Data inadequate. Conidia Brown, aseptate, ellipsoidal.

Typification details: Saprobes, Europe, known only from coelomycetous morph.

Notes: Sutton (1977) listed the genus in his checklist but did not include it in his monograph (Sutton 1980). Kirk et al. (2008, 2013), and Wijayawardene et al. (2012, 2017a, b, 2018) listed the genus in their checklists and dictionaries. DNA sequences are lacking, thus, taxonomic placement is uncertain. Generic revision is essential.

CHAETODIPLODIA P. Karst., Hedwigia 23(4): 62 (1884)/ c. six species/ *C. caulina* P. Karst./ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial, ostiolate. Conidiogenous cells: enteroblastic, phialidic. Conidia: Brown, 1-septate, cylindrical to ellipsoid.

Typification details: Saprobes, Europe, known only from coelomycetous morph.

Notes: Sutton (1980) provided illustration of the type species. van Van der Aa and van Kesteren (1979) treated *C. caulina* P. Karst., the type species of *Chaetodiplodia* as a synonym of *Ascochyta caulina* (P. Karst.) Aa & Kesteren. This synonymy was followed by Species Fungorum (2019). However, De Gruyter et al. (2012) treated *Ascochyta caulina* and *Chaetodiplodia caulina* P. Karst. as a synonym of *Pleospora calvescens* (Fr.) Tul. & C. Tul. (strains CBS 343.78 and CBS 246.79).

Neocamarosporium calvescens (Fr. ex Desm.) Ariyaw. & K.D. Hyde was based on the strains, *Pleospora calvescens* CBS 343.78 and CBS 246.79. These strains were previously treated as *Ascochyta caulina* according to De Gruyter et al. (2012). De Gruyter et al. (2012) mentioned the collection date as June 1978, thus, we assume that CBS 343.78 strain was used to introduce *C. caulina* by van der Aa and van Kesteren in 1979. *Ascochyta caulina* was introduced by van der Aa and van Kesteren (1979) and this was based on *Chaetodiplodia caulina* P. Karst., the type species of *Chaetodiplodia*. So, the type species of *Chaetodiplodia*/ or *Chaetodiplodia s. str.* could be treated as a synonym of *Neocamarosporium calvescens*.

Index Fungorum (2019) listed 25 epithets but only six species are accepted in Species Fungorum (2019). *Chaetodiplodia caulina* P. Karst. and *C. grisea* Petch are treated as synonyms of *Ascochyta caulina* (P. Karst.) Aa & Kesteren and *Lasiodiplodia theobromae* (Pat.) Griffon & Maubl, respectively (Species Fungorum 2019).

CHAETODIPLODINA Speg., Anal. Mus. nac. B. Aires, Ser. 3 13: 368 (1911)/ *C. graminicola* Speg./ two species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial, ostiolate. Conidiogenous cells: holoblastic. Conidia: hyaline, 1-septate, clavate, straight.

Typification details: Saprobes, Europe, known only from coelomycetous morph.

Notes: Sutton (1977, 1980) accepted *Chaetodiplodina* as a valid genus. Further, Sutton (1980) illustrated the type species. However, Sutton (1980) mentioned that the genus has hyaline conidia, but Kirk et al. (2008) mentioned it as pigmented. Wijayawardene et al. (2012, 2017a, b, 2018) accepted the genus in *Ascomycota* genera *incertae sedis* as it is lacking DNA sequence data.

Chaetodiscula Bubák & Kabát, Hedwigia 50: 44 (1910)

= **HYMENOPSIS** Sacc., Syll. fung. (Abellini) 4: 744 (1886)

Notes: Sutton (1977) mentioned that type of *Chaetodiscula*, *C. hysteriiforme* Bubák & Kabát is congeneric with *Hymenopsis trochiloides* (Sacc.) Sacc., the type species of *Hymenopsis*. Hence, *Chaetodiscula* was regarded as a synonym of *Hymenopsis* (Sutton 1977, 1980).

Chaetomelasmia Danilova, Bot. Mater. Otd. Sporov. Rast. Bot. Inst. Komarova Akad. Nauk S.S.S.R. 7(1/12): 139 (1951)

= **DIACHORA** Jul. Müll., Jb. wiss. Bot. 25: 623 (1893)

Notes: See under *Diachora* Jul. Müll.

CHAETOMELLA Fuckel, Jb. nassau. Ver. Naturk. 23-24: 401 (1870) [1869-70] (= *Zoellneria* Velen., Monogr. Discom. Bohem. (Prague): 298 (1934)/ *C. oblonga* Fuckel/ c. 30 species/ *Chaetomellaceae*, *Helotiales*, *Leotiomycetes*)

Conidiomata: pycnidial, ostiolate. Conidiogenous cells: enteroblastic, polyphialidic. Conidia: hyaline, aseptate, cymbiform to allantoid.

Typification details: Saprobes, worldwide, with coelomycetous morph

Notes: Sutton (1977, 1980) regarded *Volutellospora* Mathur & Thirum and *Harikrishnaella* Singh & Sarbhoy as synonyms of *Chaetomella*. Following Art. 59.1, Johnston et al. (2014) proposed to adopt *Chaetomella* over *Zoellneria* since former name is the older, frequently cited name. Baral (2015) introduced *Chaetomellaceae* in *Helotiales* to accommodate *Chaetomella sensu stricto*.

Index Fungorum (2019) lists about 60 species epithets but only about 30 epithets have been accepted as most of the species were transferred to *Amerosporium* (Species Fungorum 2019). However, Kirk et al. (2008) accepted only 5 species.

Chaetonaemosphaera Schwarzman, Flora Sporovykh Rasteniĭ Kazakhstana [Cryptogamic Flora of Kazakhstan] (Alma-Ata) 2: 204 (1968)

= **CERATOCYSTIS** Ellis & Halst., New Jersey Agric. Coll. Exp. Sta. Bull. 76: 14 (1890)

Notes: Sutton (1977) stated that the herbarium material is unavailable and ‘the pycnidia are strongly reminiscent of ascocarps in *Ceratocystis* Ellis & Halst. and *Ophiostoma* Syd. and the conidia often resemble ascospores of these two genera’.

Chaetopatella I. Hino & Katum., J. Jap. Bot. 33: 258 (1958)

= **PSEUDOLACHNEA** Ranoj., Annls mycol. 8(3): 393 (1910)

Notes: Sutton (1977) regarded *Chaetopatella* as a synonym of *Pseudolachnea* based on the morphology.

CHAETOPHIOPHOMA Speg., Anal. Mus. nac. B. Aires, Ser. 3 13: 388 (1911)/ *C. trematis* Speg./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: enteroblastic, phialidic. Conidia: hyaline, aseptate, falcate.

Typification details: Saprobes, worldwide, known only from coelomycetous morph.

Notes: Sutton (1977) accepted the genus and Sutton (1980) illustrated the type species. Subsequent checklists and dictionaries also accepted the genus (Kirk et al. 2008, 2013; Wijayawardene et al. 2012, 2017a, b, 2018). DNA sequence data is lacking, thus, taxonomic placement is uncertain.

CHAETOPHOMA Cooke, Grevillea 7(no. 41): 25 (1878)/ *C. quercifolia* Cooke/ c. 30 species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: enteroblastic, phialidic. Conidia: hyaline, aseptate, falcate.

Typification details: Saprobes, worldwide, known only from coelomycetous morph

Notes: Sutton (1977) accepted the genus and Sutton (1980) illustrated the type species. Further, Sutton (1980) mentioned that the genus needs revision as the described species have not been revised based on current morphological characters. Subsequent checklists and dictionaries also accepted the genus (Kirk et al. 2008, 2013; Wijayawardene et al. 2012, 2017a, b, 2018). DNA sequence data is lacking, thus, taxonomic placement is uncertain.

Index Fungorum (2019) lists 75 epithets but Species Fungorum (2019) accepts only 12 species. Kirk et al. (2008) accepted 30 species. The correct number of species is uncertain.

Chaetophomella Speg., Physis, Rev. Soc. Arg. Cienc. Nat. 4(no. 17): 291 (1918) **nom. conf.**
fide Sutton (1977), Kirk et al. (2008)

CHAETOPLEA (Sacc.) Clem., Gen. fung., Edn 2 (Minneapolis): 275 (1931) (= **Parahendersonia** A.W. Ramaley, Aliso 14(2): 152 (1995)/ ca. 20 species/ *C. calvescens* (Fr.) Clem./ *Leptosphaeriaceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: holoblastic, phialidic. Conidia: oblong to ellipsoidal, brown, 1-septate.

Typification details: Saprobes, worldwide, with coelomycetous morph.

Notes: Younger asexual typified name is suppressed under older sexual typified names i.e. *Parahendersonia* and *Chaetoplea*, resectively.

Refs.: Phookamsak et al. (2014), Wijayawardene et al. (2016).

Chaetopyrena Pass., in de Notaris, Erb. critt. Ital., Ser. 2, fasc.: no. 1088 (1881)

Notes: Sutton (1977) listed this genus without any notes, but Sutton (1980) did not include it in his monograph. Kirk et al. (2008) listed the genus, but did not mention whether it is coelomycetous or hyphomycetous. Moreover, Kirk et al. (2013) listed *Chaetopyrena* in the prejudice list.

CHAETOSCLEROPHOMA Petr., Anns mycol. 22(1/2): 178 (1924)/ *C. coluteae* Petr./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate, ellipsoidal.

Typification details: Saprobes, North America, known only from coelomycetous morph.

Notes: Sutton (1977) accepted the genus but did not include it later (Sutton 1980). However, Kirk et al. (2008, 2013) and Wijayawardene et al. (2017) listed the genus. Taxonomic revision is essential.

Index Fungorum (2019) lists two species, but Kirk et al. (2008) accepted only one species.

CHAETOSEPTORIA Tehon, Mycologia 29(4): 444 (1937)/ *C. vignae* Tehon/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial, ostiolate. Conidiogenous cells: data inadequate. Conidia: hyaline, 3-septate, filiform.

Typification details: Pathogens, North America, known only from coelomycetous morph.

Notes: Sutton (1964a) compared *Aristastoma* with *Chaetoseptoria* and described the type species of the later. However, Sutton (1980) did not include *Chaetoseptoria* in his monograph. The genus was accepted in subsequent publications (Kirk et al. 2008, 2013; Wijayawardene et al. 2017a, b, 2018).

Index Fungorum (2019) lists three epithets, but Kirk et al. (2008) accepted only the type species.

Chaetospermella Naumov, Mater. Mikol. Fitopat. Ross. 8(2): 142 (1929)

= **CHAETOSPERMUM** Sacc., Syll. fung. (Abellini) 10: 706 (1892)

Notes: The characters used to differentiate *Chaetospermella* from *Chaetospermum* were not accepted by Sutton (1977); thus, he treated the former name as a synonym of the latter. This synonymy was accepted in Kirk et al. (2008).

Chaetospermella Chardón & Toro, Monograph Univ. Puerto Rico, Series B 2: 227 (1934)
nom. illegit.

= *SPERMOCHAETELLA* Cif., Sydowia 8(1-6): 245 (1954) *fide* Kirk et al. (2008)

CHAETOSPERMUM Sacc., Syll. fung. (Abellini) 10: 706 (1892)/ seven species/ *C. chaetosporum* (Pat.) A.L. Sm. & Ramsb./ *Sebacinales* genera *incertae sedis*, *Agaricomycetes*

Conidiomata: pycnidial, stromatic. Conidiogenous cells: holoblastic. Conidia: broadly ellipsoidal to cylindrical, aseptate, hyaline; with narrow and attenuated appendages
Typification details: Saprobies, worldwide, known only from coelomycetous morph.

Notes: Sutton (1977) listed the synonyms for the genus (*Entomopatella* Petr. 1934, *Ciliospora* Zimm. 1902 and *Chaetospermella* Naumov 1929), but these were not confirmed based on morphology or molecular phylogeny (Sutton 1980; Crous et al. 2014a). Nag Raj (1993) provided comprehensive background to the genus. Crous et al. (2014a) and Tangthirasunun et al. (2014) provided phylogenetic evidence for the genus by showing the affinity in *Sebacinales* genera *incertae sedis*, *Agaricomycetes*. Crous et al. (2014a) designated the neotype and ex-neotype *C. chaetosporum*.

Index Fungorum (2019) lists 13 epithets but only 12 species have been accepted by Species Fungorum (2019). However, Kirk et al. (2008) accepted only five species.

Refs.: Rajeshkumar et al. (2010), Crous et al. (2014a).

CHAETOSPHAERONEMA Moesz, Bot. Közl. 14: 152 (1915) / *C. hispidulum* (Corda) Moesz/ five species / *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: pycnidial, ostiolate. Conidiogenous cells: enteroblastic, phialidic. Conidia: hyaline, 1-septate, straight or slightly curved.

Typification details: Endophytes, saprobies, worldwide, known only from coelomycetous morph.

Notes: Sutton (1977, 1980) accepted the genus and provided a comprehensive background. De Gruyter et al. (2010) showed that *C. coonsii* (Boerema & Loer.) Gruyter et al. belongs in *Phaeosphaeriaceae*. Quaedvlieg et al. (2013) and Hyde et al. (2016) also accepted that *Chaetosphaeronema* be accommodated in *Phaeosphaeriaceae*.

Index Fungorum (2019) lists 12 epithets but only five species are accepted in Species Fungorum (2019).

Chaetosphaeropsis Curzi & Barbaini, Atti Ist. bot. R. Univ. Pavia, 3 Sér. 3(3): 180 (1927)

= *MICROSPHAEROPSIS* Syd. & P. Syd., Anns mycol. 14(5): 369 (1916)

Notes: Clements and Shear (1931) regarded *Chaetosphaeropsis* as a synonym of *Coniothyriopsis* Speg. which is reduced under *Microsphaeropsis* (Sutton 1980; Index Fungorum 2019). However, Sutton (1977) stated that ‘from illustration of *Chaetosphaeropsis truncata* it seems most unlikely that this species is congeneric with *Microsphaeropsis olivaceum*, the type species’.

Chaetospora Faurel & Schotter, Revue Mycol., Paris 30(3): 149 (1965) [1964] **nom. illegit.** *fide* Index Fungorum (2019)

= *NEOCHAETOSPORA* B. Sutton & Sankaran, Mycol. Res. 95(6): 768 (1991)

CHAETOSTICTA Petr. & Syd., Anns mycol. 23(3/6): 270 (1925)/ four species/ *C. perforata* (Ellis & Everh.) Petr. & Syd./ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial, ostiolate. Conidiogenous cells: enteroblastic, monophialidic. Conidia: hyaline, 0 to several septa, cylindrical.

Typification details: Saprobies, cosmopolitan, known only from coelomycetous morph.

Notes: Sutton (1977, 1980) accepted the genus as valid based on comprehensive revision by Crane (1971). However, Sutton (1980) contradicted Crane (1971) as the former observed aseptate conidia, while the latter described the type species with 1–3-septate conidia. Matsushima (2003) introduced a fourth species from Japan. DNA sequence data is lacking, thus, taxonomic position is uncertain.

Ref.: Matsushima (2003).

Chaetostroma Corda, in Sturm, *Deutschl. Fl.*, 3 Abt. (Pilze Deutschl.) 2: 123 (1829) **nom. dub.** *fide* Kirk et al. (2008)

Notes: Sutton (1977) listed the genus in his checklist of coelomycetes and mentioned that its status is doubtful. Kirk et al. (2008) treated the genus as *nom. conf.* and *nom. dub.* However, Kirk et al. (2008) and Seifert et al. (2011) treated the genus as hyphomycetous.

Chaetothyriolum Speg., *Boln Acad. nac. Cienc. Córdoba* 23(3-4): 522 (1919) [1918] **nom. dub.** *fide* Sutton (1977), Kirk et al. (2008)

Chaetozythia P. Karst., *Meddn Soc. Fauna Flora fenn.* 16: 41 (1888) **nom. dub.** *fide* Sutton (1977), Kirk et al. (2008)

CHEILARIA Lib., *Pl. crypt. Arduenna, fasc. (Liège)* 1(Praef.): 8 (1830)/ *C. agrostidis* Lib./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: acervuli. Conidiogenous cells: enteroblastic, phialidic. Conidia: hyaline, falcate, fusiform, 0-3-septate.

Typification details: Saprobes, cosmopolitan, known only from coelomycetous morph

Notes: Gibson and Sutton (1976) illustrated the genus and later the genus was accepted and revisited by Sutton (1977, 1980). Kirk et al. (2008, 2013) and Wijayawardene et al. (2012, 2017a, b, 2018) accepted the genus. DNA sequence data is lacking, thus, taxonomic placement is uncertain.

Cheilariopsis Petr., *Sydowia* 13(1-6): 63 (1959)

= **APOMELASMIA** Grove, *British Stem- and Leaf-Fungi (Coelomycetes)* (Cambridge) 2: 188 (1937)

Notes: The type species of both genera are based on the same species, thus, Grove (1937) regarded *Cheilariopsis* as a synonym of *Apomelasmia*. Sutton (1977) accepted this synonymy.

Cheiroconium Höhn., *Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1* 119: 664 [48 repr.] (1910)

= **SIROTHECIUM** P. Karst., *Meddn Soc. Fauna Flora fenn.* 14: 105 (1887) *fide* Sutton (1985)

CHEIROSPORA Moug. & Fr., *Syst. orb. veg. (Lundae)* 1: 365 (1825)/ *C. botryospora* (Mont.) Berk. & Broome/ ?five species/*Helotiales* genera *incertae sedis*, *Leotiomycetes*

Conidiomata: acervuli. Conidiophores: cylindrical, straight or slightly curved. Conidiogenous cells: holoblastic, polyblastic. Conidia: Brown, up to 6 central cells each with several short lateral acropetal branches which may in turn branch similarly to form a globose to cylindrical mass of small, thick-walled, aseptate, spherical cells, each complex conidium enclosed in a gelatinous sheath.

Typification details: Saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: The genus was re-visited based on morphology and phylogeny (Sutton 1980; Crous et al. 2015c; Wijayawardene et al. 2016). Crous et al. (2015c) reported *Phialophora*-like synasexual morph in culture.

Index Fungorum (2019) lists nine epithets but Species Fungorum (2019) accepts only five species.

CHIANGRAIOMYCES Senan. & K.D. Hyde, *Stud. Mycol.* 86: 249 (2017)/ one species/ *C. bauhiniae* Senan. & K.D. Hyde/ *Diaporthaceae*, *Diaporthales*, *Sordariomycetes*

Conidiomata: pycnidial. Conidiophores: branched, septate. Conidiogenous cells: phialidic. Alpha conidia: aseptate, ovate to ellipsoidal, hyaline. Beta conidia: Fusiform to hooked, aseptate, hyaline.

Typification details: Saprobes, cosmopolitan, with asexual coelomycetous morph

Notes: Cultures and DNA sequences are available.

Refs.: Senanayake et al. (2017).

CHIASTOSPORA Riess, in Fresenius, *Beitr. Mykol.* 2: 43 (1852)/ *C. parasitica* Riess/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: acervuli. Conidiophores: hyaline, irregularly branched, septate. Conidiogenous cells: polyblastic. Conidia: hyaline, septate, consisting of main axis with 2 apical and 2 basal corniform projections.

Typification details: Hyperparasitic, Europe, known only from coelomycetous morph.

Notes: Sutton (1977) stated that this genus has distinct morphology among other coelomycetous genera. The type species was not re-visited since it was introduced, thus, taxonomic revision is essential.

CHLOROCIBORIA Seaver ex C.S. Ramamurthi, Korf & L.R. Batra, *Mycologia* 49(6): 857 (1958) [1957] (= *Dothiorina* Höhn., *Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1* 120: 464 (1911))/ 23 species/ *C. aeruginosa* (Oeder) Seaver ex C.S. Ramamurthi, Korf & L.R. Batra/ *Chlorociboriaceae*, *Helotiales*, *Leotiomycetes*

Conidiomata: eustromatic. Conidiophores: repeatedly branched, septate. Conidiogenous cells: enteroblastic, phialidic. Conidia: hyaline, with light green contents, aseptate, biguttulate, straight, cylindrical.

Typification details: Saprobes, worldwide, with coelomycetous morph

Notes: Johnston et al. (2014) regarded *Dothiorina* as a synonym of *Chlorociboria* (Art. 59.1).

Refs.: Sutton (1980), Johnston et al. (2014).

Chlorocyphella Speg., *Anal. Mus. nac. B. Aires, Ser. 2* 12: 219 (1909)

= **PYRENOTRICHUM** Mont., *Annls Sci. Nat., Bot., sér. 2* 20: 376 (1843)

Notes: Sutton (1977) regarded *Chlorocyphella* as a synonym of *Pyrenotrichum*.

Chondroplea Kleb., *Phytopath. Z.* 6: 291 (1933)

= **DISCOSPORIUM** Höhn., *Z. Gärungsphysiol.* 5: 196 (1915)

Notes: Sutton (1977) regarded *Chondroplea* as a synonym of *Discosporium*.

Chondropodiella Höhn., *Hedwigia* 59(5): 281 (1917)

= **GODRONIA** Moug. & Lév., in Mougeot, *Consid. Vég. Vosges*: 355 (1846)

Notes: See under *Godronia*.

Chondropodiola Petr. & Cif., *Annls mycol.* 30(3/4): 268 (1932) **nom dub.** *fide* Sutton (1977)

Chondropodium Höhn., *Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1* 125(1-2): 45 (1916)

= **CORNICULARIELLA** P. Karst., *Hedwigia* 23(4): 57 (1884) *fide* Kirk et al. (2008), *Index Fungorum* (2019)

Chondrostroma Syd., *Annls mycol.* 38(5/6): 470 (1940) **nom illegit.** *fide* *Index Fungorum* (2019) (Art. 53.1)

= **PHACIDIOPYCNIS** Potebnia, *Z. PflKrankh. PflSchutz* 22: 143 (1912)

Notes: Sutton (1977) treated *Chondrostroma* as a later synonym of *Phacidiopycnis*.

Chromocytospora Speg., *Anal. Mus. nac. B. Aires, Ser. 3* 13: 392 (1911)

= **DIAPORTHE** Nitschke, *Pyrenomyc. Germ.* 2: 240 (1870) (= **Phomopsis** (Sacc.) Bubák, *Öst. bot. Z.* 55: 78 (1905))

Notes: Sutton (1977) mentioned that *Chromocytospora* was based on beta conidia of *Phomopsis* (current name: *Diaporthe* *fide* Art. 59.1; Rossman et al. 2015a).

Chrysalidopsis Steyaert, *Darwiniana* 12(2): 171 (1961)

= **TRUNCATELLA** Steyaert, *Bull. Jard. bot. État Brux.* 19: 293 (1949)

Notes: Nag Raj (1993) regarded *Chrysalidopsis* as a synonym of *Truncatella*.

CHRYSOCRYPTA Crous & Summerell, *Persoonia* 28: 165 (2012)/ 1 species/ *C. corymbiae* Crous & Summerell/ *Erythrogloeaceae, Diaporthales, Sordariomycetes*

Conidiomata: eustromatic. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: holoblastic. Macroconidia: broadly ellipsoid to obovoid, hyaline. Microconidia: hyaline, fusoid-ellipsoid, base truncate.

Typification details: Pathogenic, Australia, only coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Refs.: Crous et al. (2012b).

CHRYSOFOLIA Crous & M.J. Wingf., *Persoonia* 34: 207 (2015)/ 2 species/ *C. colombiana* Crous, Rodas & M.J. Wingf./ *Cryphonectriaceae, Diaporthales, Sordariomycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: apical percurrent proliferations. Paraphyses: hyaline, smooth, cylindrical, septate. Conidia: hyaline, smooth, guttulate, ellipsoid, straight to allantoid, base with flattened hilum.

Typification details: Saprobies, Colombia, only coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Refs.: Crous et al. (2015b), Suwannarach et al. (2016).

Chrysogloeum Petr., *Sydowia* 12(1-6): 254 (1959) [1958]

= **BLASDALEA** Sacc. & P. Syd., *Syll. fung. (Abellini)* 16: 634 (1902) *fide* Art. 59.1

Notes: See under *Blasdalea*.

CHRYSOPORTHE Gryzenh. & M.J. Wingf., Stud. Mycol. 50(1): 129 (2004)/ 8 species/ *C. cubensis* (Bruner) Gryzenh. & M.J. Wingf./ *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*

Conidiomata: pyriform to pulvinate. Conidiophores: branched irregularly at the base or above into cylindrical cells, separated by septa or not. Conidiogenous cells: phialidic. Conidia: Hyaline, non-septate, oblong.

Typification details: Pathogens, Colombia, with coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Refs.: Gryzenhout et al. (2004), Chungu et al. (2010).

Cicinnobella Henn., Hedwigia 43(6): 386 (1904)
= **PERISPORIOPSIS** Henn., Hedwigia 43(2): 83 (1904)

Notes: Sutton (1977) mentioned that *Cicinnobella* was based on immature sexual fungus, possibly belonging to *Perisporina* Henn. which is regarded as *Perisporiopsis* Henn. (Species Fungorum 2019).

Cicinobolus Ehrenb., Bot. Ztg. 11: 16 (1853)
= **AMPELOMYCES** Ces. ex Schltdl., Bot. Ztg. 10: 303 (1852)

Notes: Sutton (1977, 1980) reduced *Cicinobolus* to *Ampelomyces* based on the morphology and its hyperparasitic life mode.

?**CIFERRIA** Gonz. Frag., in Fragoso & Ciferri, Boln Real Soc. Españ. Hist. Nat., Biologica 25: 363 (1925)/ one species/ *C. coccothrinacis* Gonz. Frag./ *Ascomycota* genera *incertae sedis*

Notes: *Ciferria* was listed in Sutton (1977) but was not included in Sutton (1980). Kirk et al. (2008) did not recognize the genus as coelomycetous. Hence, taxonomic revision is essential to clarify its generic boundaries.

Ciferriella Petr., Anns mycol. 28(5/6): 409 (1930)
= **PSEUDOCERCOSPORA** Speg., Anal. Mus. nac. B. Aires, Ser. 3 13: 437 (1911)

Notes: Sutton (1977, 1980) accepted *Ciferriella* as a coelomycetous genus. However, Nag Raj (1984) regarded *Ciferriella* as hyphomycetous. Species Fungorum (2019) listed the genus under *Pseudocercospora*.

CIFERRINA Petr., in Petrak & Ciferri, Anns mycol. 30(3/4): 272 (1932)/ one species/ *C. pulchella* Petr./ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate, filiform.

Typification details: Saprobes, West Indies, known only from coelomycetous morph.

Notes: *Ciferrina* was listed in Sutton (1977), but was not included in Sutton (1980). Kirk et al. (2008, 2013) recognized the genus as a valid genus. However, taxonomic revision is essential.

CIFERRIOXYPHIUM Bat. & H. Maia, in Batista & Ciferri, Quad. Lab. crittogam., Pavia 31: 65 (1963)/ *C. giganteum* Bat. & H. Maia/ three species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiophores: data inadequate. Conidiogenous cells: data inadequate. Conidia: ellipsoids or oblongs, brown.

Typification details: On fungi *Asteridiella fraseriana*, Australia, University of Sydney 24, lacks DNA, known only from coelomycetous morph.

Notes: Parasitic fungus.

Refs.: Batista et al. (1957), Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018).

CILIOCHORA Höhn., Ber. dt. bot. Ges. 37: 159 (1919)/ *C. longiseta* (Racib.) Höhn./ three species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic, pycnidial. Conidiogenous cells: holoblastic to enteroblastic. Conidia: fusiform to ellipsoidal, hyaline to almost hyaline, with branched or unbranched apical appendage

Typification details: Saprobes, Asia, Europe, known only from coelomycetous morph.

Notes: The genus *Ciliochora* was accepted as a valid genus in Sutton (1977) and Nag Raj (1993). Nag Raj (1993) illustrated the type species and introduced the second species. Sutton et al. (1996) introduced the third species, but all the species lack DNA sequence data. Hence, taxonomic position is uncertain.

CILIOCHORELLA Syd., in Sydow & Mitter, Anns mycol. 33(1/2): 62 (1935)/ *C. mangiferae* Syd./ seven species/ *Sporocadaceae*, *Amphisphaeriales*, *Sordariomycetes*

Conidiomata: stromatic, pycnidial, ostiolate. Conidiogenous cells: enteroblastic, phialidic. Conidia: 3-septate, two median cells pale brown, straight or slightly curved, cylindrical, with an eccentric, short, cellular, basal appendage, the apex with one ± straight and one lateral cellular, unbranched appendage.

Typification details: Saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: Morphology of the genus was discussed in several major taxonomic papers (Sutton 1980, Nag Raj 1993, Allegrucci et al. 2011, Tangthirasunun et al. 2015). Phylogenetic analyses showed that *Ciliochorella* clusters within *Sporocadaceae* (Senanayake et al. 2015, Wijayawardene et al. 2016, Hyde et al. 2016).

Index Fungorum (2019) lists eight epithets but Species Fungorum (2019) accepts only seven species since *Ciliochorella splendida* Nag Raj & R.F. Castañeda is invalid (Art. 40.4).

CILIOPHORA Petr., Anns mycol. 27(1/2): 71 (1929)/ *C. cryptica* Petr./ two species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: hyaline, broad fusiform, aseptate, with single apical appendage.

Typification details: Saprobes, Central America, known only from coelomycetous morph.

Notes: Sutton (1977) included *Ciliophora* in his checklist, but did not include it in Sutton (1980). However, Nag Raj (1993) re-visited the genus and provided illustration and description of the type species. DNA sequences data is lacking, thus, taxonomic placement is uncertain (Wijayawardene et al. 2017a, b, 2018).

CILIOPHORELLA Petr., Anns mycol. 38(2/4): 373 (1940)/ *C. insignis* Petr./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: data inadequate. Conidia: ellipsoidal or fusiform, hyaline, aseptate.

Typification details: Saprobes, Austria, known only from coelomycetous morph.

Notes: The genus was listed in Sutton (1977) but none of the major subsequent taxonomic publications included it (Sutton 1980, Nag Raj 1993). Kirk et al. (2008, 2013).

Wijayawardene et al. (2012, 2017a, b, 2018) listed *Ciliophorella* as a valid genus. DNA sequence data is lacking, thus, taxonomic position is uncertain.
Index Fungorum (2019) lists two epithets but Kirk et al. (2008) accepted only one species.

Ciliosira Syd., Anns mycol. 40(3/4): 212 (1942)

= **ACAROSPORIUM** Bubák & Vleugel ex Bubák, Ber. dt. bot. Ges. 29: 384 (1911)

Notes: Petrak (1960) regarded *Ciliosira* as a latter synonym of *Acarosporium*. Sutton (1977, 1980) accepted this synonymy.

Ciliospora Zimm., Centbl. Bakt. ParasitKde, Abt. I 8: 217 (1902)

= **CHAETOSPERMUM** Sacc., Syll. fung. (Abellini) 10: 706 (1892)

Notes: Petch (1943) observed that *Ciliospora* was not different from *Chaetospermum*, thus, suggested to reduce the former under the latter. Sutton (1980) also agreed with the adoption.

CILIOSPORELLA Petr., Anns mycol. 25(3/4): 217 (1927)/ *C. selenospora* Petr./ two species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiophores: hyaline, branched, septate. Conidiogenous cells: enteroblastic, phialidic. Conidia: fusiform or slightly falcate, hyaline, aseptate, with apical unbranched appendage.

Typification details: Saprobes or pathogens, Austria, Australia, known only from coelomycetous morph

Notes: Sutton (1980) and Nag Raj (1993) re-visited the genus. Yuan and Mohammed (1997) introduced the second species, thus, the genus comprises two species. DNA sequence data is lacking, thus, taxonomic placement is uncertain.

Circinastrum Clem., Gen. fung. (Minneapolis): 124 (1909)

= **WEINMANNODORA** Fr., Summa veg. Scand., Sectio Post. (Stockholm): 409 (1849)

Notes: Sutton (1977) regarded *Circinastrum* as an unnecessary name for *Weinmannodora*. Thus, the former was reduced under the latter.

CIRROSPORIUM S. Hughes, N.Z. Jl Bot. 18(3): 329 (1980)/ one species/ *C. novae-zelandiae* S. Hughes/ *Cirrosporiaceae*, *Xylobotryales*, *Xylobotryomycetes*

Conidiomata: pycnidial. Conidiogenous hyphae: branched, deeply staining. Conidia: glabrous, columnar cirrus, borne in chains, straight, fragile, 3-septate, darker at the septa, central cells dark brown to almost opaque, end cells smaller, pale brown to subhyaline.

Typification details: Saprobes, New Zealand, only coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Refs.: Hughes (1980), Réblová and Seifert (2012), Wijayawardene et al. (2016), Voglmayr et al. (2019).

Cladochaete Sacc., Anns mycol. 10(3): 318 (1912) **nom. illegit fide** Art. 53.1; Index Fungorum (2019)

= **CHAETOMIUM** Kunze, Mykologische Hefte (Leipzig) 1: 15 (1817)

Notes: Sutton (1980) regarded *Cladochaete* as a synonym of *Chaetomium*.

CLASTEROPYCNIS Bat. & Cavalc., in Batista & Ciferri, Quad. Lab. crittogam., Pavia 31: 69 (1963)/ *C. coumae* Bat. & Cavalc./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiophores: data inadequate. Conidiogenous cells: data inadequate. Conidia: Ellipsoids or oblongs, brown.

Typification details: On fungi *Asteridiella fraseriana*, Australia, University of Sydney 24, lacks DNA data, known only from coelomycetous morph.

Notes: Parasitic fungus.

Refs.: Batista et al. (1957), Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018).

Clavularia P. Karst., Meddn Soc. Fauna Flora fenn. 9: 67 (1882) **nom. illegit. fide** Index Fungorum (2019)

Notes: See under *Cornucopiella* Höhn.

CLEISTOCYSTIS Sousa da Câmara, Bol. Acad. Ci. Lisboa 3: 325 (1931)

Conidiomata: pycnidial. Conidiogenous cells: data inadequate. Conidia: hyaline, ellipsoidal

Typification details: Saprobies or pathogens, Portugal, known only from coelomycetous morph.

Refs.: Kirk et al. (2008, 2013).

CLEISTOPHOMA Petr. & Syd., Beih. Reprint nov. Spec. Regni veg. 42(1): 294 (1927) [1926]/ *C. suberis* (Prill. & Delacr.) Petr. & Syd./ two species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: enteroblastic, phialidic. Conidia: fusiform, ellipsoidal, hyaline, aseptate.

Typification details: Saprobies, North America, Europe, known only from coelomycetous morph.

Notes: Clements and Shear (1931) regarded *Cleistophoma* under *Phomopsis*, but Sutton (1977, 1980) disagreed with this synonymy. Kirk et al. (2008, 2013) and Wijayawardene et al. (2012, 2017a, b, 2018) accepted *Cleistophoma* as a valid genus but generic revision and establishing generic boundaries based on fresh collections is essential.

Index Fungorum (2019) lists four epithets but Species Fungorum (2019) and Kirk et al. (2008) accepted only two species.

Clinterium Fr., Summa veg. Scand., Sectio Post. (Stockholm): 418 (1849)

= **GODRONIA** Moug. & Lév., in Mougeot, Consid. Vég. Vosges: 355 (1846)

Notes: The genus *Clinterium* was accepted as a synonym of *Topospora* by Sutton (1977). However, *Topospora* is now a synonym of *Godronia* (Art. 59.1; Johnston et al. 2014).

Cliostomum Fr., Syst. orb. veg. (Lundae) 1: 116 (1825)

Notes: This genus was listed in Sutton (1977), but it was widely accepted as a lichen with sexual morph mycobiont in Ramalinaceae (Kirk et al. 2008, Lumbsch and Huhndorf 2010, Lücking et al. 2017).

Clisosporium Fr., Novit. fl. svec. 5(cont.): 80 (1819) **nom rejic. fide** Sutton (1977)

= **CONIOTHYRIUM** Corda, Icon. fung. (Prague) 4: 38 (1840)

Notes: *Clisosporium* was reduced to *Coniothyrium* by Sutton (1977, 1980) and subsequently followed by Kirk et al. (2008).

CLOHESYOMYCES K.D. Hyde, Aust. Syst. Bot. 6(2): 170 (1993)/ one species/ *C. aquaticus* K.D. Hyde/ *Lindgomycetaceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: cylindrical to subcylindrical, phialidic. Conidia: hyaline, ellipsoidal, 0–1-septate, guttulate, surrounded by an irregular mucilaginous sheath

Typification details: Saprobes, Australia, China (Yunnan), Thailand, known only from coelomycetous morph

Notes: Cultures and DNA sequences are available.

Refs.: Zhang et al. (2012).

CLYPEOCHORELLA Petr., *Annls mycol.* 21(3/4): 236 (1923)/ one species/ *C. orientalis* (Sacc. & Penz.) Petr./ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate. Typification details: Saprobes, Europe, known only from coelomycetous morph

Notes: The genus *Clypeochorella* was listed in Sutton (1977) but was not included in Sutton (1980). Subsequent checklist and dictionaries accepted the genus (Kirk et al. 2008, 2013; Wijayawardene et al. 2012, 2017a, b, 2018) but generic revision is essential based on morpho-molecular analyses.

Index Fungorum (2019) lists two epithets and Species Fungorum (2019) accepted it but Kirk et al. (2008) accepted only one species.

Clypeodiplodina F. Stevens, *Mycologia* 19(5): 235 (1927)

= **ASCOCHYTULINA** Petr., *Annls mycol.* 20(5/6): 342 (1922)

Notes: Clements and Shear (1931) regarded *Clypeodiplodina* as a synonym of *Ascochytulina*, but Sutton (1977) mentioned that ‘the thick-walled, dark brown pycnidia lacking ostioles, and large, distinctly truncate conidia suggest that this disposition is erroneous’. However, Kirk et al. (2008) and Index Fungorum (2019) followed the synonymy presented in Clements and Shear (1931).

CLYPEOPATELLA Petr., *Bot. Arch.* 43: 96 (1942) [1941]/ *C. cylindrospora* Petr./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate. Typification details: Saprobes, Rhodes (Greece), known only from coelomycetous morph.

Notes: The genus *Clypeopatella* was listed in Sutton (1977) but was not included in Sutton (1980). Kirk et al. (2008, 2013) and Wijayawardene et al. (2012, 2017a, b, 2018) accepted the genus but generic revision is essential based on morpho-molecular analyses.

Index Fungorum (2019) lists two epithets and Species Fungorum (2019) accepted it but Kirk et al. (2008) accepted only one species.

CLYPEOPHIALOPHORA Bat. & Peres, *Publicações Inst. Micol. Recife* 358: 8 (1962)/ *C. erythroxyli* Bat. & Peres/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnothryal. Conidiophores: reduced to conidiogenous cells. Conidiogenous Cells: enteroblastic, phialidic. Conidia: Subfusoid, hyaline.

Typification details: On leaves of *Erythroxyton tortuosum*, Brazil, IMUR 22661, lacks DNA, known only from coelomycetous morph.

Notes: Sequence data is unavailable.

Refs.: Batista and Peres (1962), Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018).

CLYPEOPYCNIS Petr., *Annls mycol.* 23(1/2): 76 (1925)/ *C. aeruginascens* Petr./ three species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial, ostiolate. Conidiophores: hyaline, branched irregularly, septate. Conidiogenous cells: enteroblastic, phialidic. Conidia: hyaline, 1-septate or aseptate, straight, fusiform

Typification details: Saprobes, worldwide, known only from coelomycetous morph.

Notes: Sutton (1977) accepted the genus. Sutton (1980) and Sutton and Pascoe (1989) revisited the genus by illustrating and describing the type species and introducing new species, respectively. DNA sequence data is unavailable, thus, taxonomic placement is uncertain.

CLYPEOSEPTORIA F. Stevens & P.A. Young, Bulletin of the Bernice P. Bishop Museum, Honolulu, Hawaii 19: 141 (1925)/ *C. rockii* F. Stevens & P.A. Young/ three species/*Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate, fusiform.

Typification details: Saprobes, Brazil, Hawaii, known only from coelomycetous morph.

Notes: The genus *Clypeoseptoria* was accepted as a synonym of *Cytostagonospora* Bubák by Clements and Shear (1931) but Sutton (1977) disagreed with this synonymy. However, the genus was not included in Sutton (1980). Kirk et al. (2008, 2013) and Wijayawardene et al. (2012, 2017a, b, 2018) accepted the genus but generic revision is essential based on morpho-molecular analysis.

Coccobolus Wallr., Fl. crypt. Germ. (Norimbergae) 2: 752 (1833)

= ?**PHACIDIUM** Fr., Observ. mycol. (Havniae) 1: 167 (1815)

Notes: Synonymizing the genus *Coccobolus* under *Ceuthospora* (current name: *Phacidium*) by Rabenhorst (1844) was questioned by Sutton (1977). Nevertheless, Sutton (1980) did not include the genus in his monograph.

COCCOGLOEUM Petr., Sydowia 9(1-6): 588 (1955)/ *C. microsporium* Petr./ one species/*Ascomycota* genera *incertae sedis*

Conidiomata: acervuli. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate, ellipsoidal.

Typification details: Saprobes, Austria, known only from coelomycetous morph.

Notes: *Coccogloeum* was listed in Sutton (1977), but was not included in Sutton (1980). Kirk et al. (2008, 2013) and Wijayawardene et al. (2012, 2017a, b, 2018) accepted the genus, but generic revision is essential based on morpho-molecular analysis.

COELODICTYOSPORIUM Thambug. & K.D. Hyde, Fungal Diversity: 74: 218 (2015)/ three species/ *C. pseudodictyosporium* (Qing Tian, Camporesi & K.D. Hyde) Thambug. & K.D. Hyde/ *Lophiostomataceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: holoblastic. Conidia: digitate, medium brown, complanate, dictyosporous, regularly consisting of 6–8 rows of cells, each row comprising 5–7 cells.

Typification details: Saprobes, Italy, with coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Refs.: Thambugala et al. (2015), Wijayawardene et al. (2016).

Coleonaema Höhn., Mitt. bot. Inst. tech. Hochsch. Wien 1(3): 95 (1924)

= **DOTHIOIRA** Fr., Summa veg. Scand., Sectio Post. (Stockholm): 418 (1849)

Notes: Sutton (1977, 1980) treated *Coleonaema* as a synonym of *Coleophoma* by following Petrak and Sydow (1927), who transferred *Coleonaema oleae* to *Coleophoma*

as *C. oleae*. However, Duan et al. (2007) reinstated *Coleonaema* and *Coleophoma oleae* based on conidiomatal development. Crous and Groenewald (2017) reduced *Coleonaema* under *Dothiora*.

COLEOPHOMA Höhn., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1 116: 637 (1907)/ *C. crateriformis* (Durieu & Mont.) Höhn./ 31 species/ *Dermateaceae*, *Helotiales*, *Leotiomycetes*

Conidiomata: pycnidial, ostiolate. Paraphyses: hyaline, septate at the base. Conidiophores: pale brown at the base, hyaline above, branched, septate. Conidiogenous cells: phialidic. Conidia: hyaline, aseptate, cylindrical. Ascomata: apothecial, sessile to subsessile. Asci: inoperculate, clavate to cylindrical-clavate, hyaline to pale brown, 8-spored. Ascospores: inequilateral, fusoid to ellipsoid, aseptate, hyaline, guttulate. Paraphyses: numerous, cylindrical, slender, septate, hyaline to pale brown.

Typification details: Saprobes, pathogens, endophytes, worldwide, known from both coelomycetous morph and sexual morph.

Notes: The genus *Coleophoma* was morphologically re-visited by Sutton (1980). Crous and Groenewald (2016) provided comprehensive morphological and phylogenetic study of the genus and reported the sexual morph of the genus.

Index Fungorum (2019) lists 43 epithets but only 31 species are accepted in Species Fungorum (2019) as other species have been transferred to other genera or are invalid.

Refs.: Aa and Vanev (2002), Crous et al. (2011a), Crous and Groenewald (2016).

COLEOSEPTORIA Petr., Annls mycol. 38(2/4): 225 (1940)/ *C. ephedrae* (Auersw.) Petr./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate, clavate to falcate.

Typification details: Saprobes, Europe, known only from coelomycetous morph.

Notes: Sutton (1977) included this genus in his checklist but did not list it in Sutton (1980). However, the genus was accepted in other checklists and dictionaries (Kirk et al. 2008, 2013; Wijayawardene et al. 2012, 2017a, b, 2018). It is essential to revisit the genus.

Collacystis Kunze, Güntz Leich. Neug. 1: 212 (1827) **nom dub.** fide Sutton (1977), Kirk et al. (2008)

COLLEMOPSISIDIUM Nyl., Flora, Regensburg 64: 6 (1881)/ 27 species/ *C. iocarpum* (Nyl.) Nyl./ *Xanthopyreniaceae*, *Collemopsidiales*, *Dothideomycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: phialidic. Conidia: bacilliform to ellipsoid hyaline.

Typification details: Lichenized and lichenicolous, cosmopolitan, with coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Refs.: Pérez-Ortega et al. (2016).

COLLETOGLOEUM Petr., Sydowia 7(5-6): 368 (1953)/ *C. sissoo* (Syd.) B. Sutton/ c. 15 species/ *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*

Conidiomata: acervuli. Conidiophores: cylindrical or slightly irregular, sparsely branched, mostly at the base, hyaline or very pale brown, septate. Conidiogenous cells: holoblastic to annellidic. Conidia: straight, curved or irregular, pale brown, multi septate.

Typification details: Saprobes, Europe, known only from coelomycetous morph.

Notes: The genus *Colletogloeum* was accepted in Sutton (1977, 1980) and other subsequent publications which are based on morphology (Sutton and Mehrotra 1982, Sutton and Swart 1986, Sivanesan 1987, Morgan-Jones and Phelps 1995, Braun and Scheuer 2007, Zhao and Zhao 2012). Crous et al. (2009b) stated that ‘*Colletogloeum* (1953) has hitherto been a somewhat confused genus, including many species that appear to belong to *Teratosphaeria*. However, the ITS sequence from DNA extracted from a specimen representative of the type species, *C. sissou* (IMI 119162) clearly revealed *Colletogloeum* to be allied to the *Pseudocercospora* (1910) complex, clustering in the *Mycosphaerellaceae*’. Wijayawardene et al. (2016) also agreed with Crous et al. (2009b) and showed that *Colletogloeum* resided in *Mycosphaerellaceae* in their phylogenetic analysis.

Refs.: Crous et al. (2009b), Wijayawardene et al. (2014b, 2017a, 2018).

Colletogloeopsis Crous & M.J. Wingf., Can. J. Bot. 75(4): 668 (1997)
= **TERATOSPHERIA** Syd. & P. Syd., Anns mycol. 10(1): 39 (1912) *fide* Crous et al. (2009a, b), Wijayawardene et al. (2014b), Rossman et al. (2015b)

Colletostroma Petr., Sydowia 7(5-6): 346 (1953)
= **COLLETOTRICHUM** Corda, Deutschl. Fl., 3 Abt. (Pilze Deutschl.) 3(12): 41 (1831)
Notes: von Arx (1957b) regarded that *C. baumgartneri* Petr., the type species of *Colletostroma* resembles *Colletotrichum gloeosporioides* (Penz.) Penz. & Sacc. Hence *Colletostroma* was reduced under *Colletotrichum*.

Colletotrichella Höhn., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1 125(1-2): 99 (1916)
= **KABATIA** Bubák, Öst. bot. Z. 54: 28 (1904)
Notes: Sutton (1977) treated *Colletotrichella* as a synonym of *Kabatia* based on the similarities of fructification, conidiogenesis and the host of both genera.

Colletotrichopsis Bubák, Öst. bot. Z. 54(5): 184 (1904)
= **COLLETOTRICHUM** Corda, Deutschl. Fl., 3 Abt. (Pilze Deutschl.) 3(12): 41 (1831)
Notes: von Arx (1957b) regarded that *C. pyri* (F. Noack) Bubák, the type of *Colletotrichopsis* is morphologically identical with *Colletotrichum gloeosporioides* (Penz.) Penz. & Sacc. Hence, *Colletotrichopsis* was treated as a synonym of *Colletotrichum*.

COLLETOTRICHUM Corda, in Sturm, Deutschl. Fl., 3 Abt. (Pilze Deutschl.) 3(12): 41 (1831)/ *C. lineola* Corda/ more than 800 species/ *Glomerellaceae*, *Glomerellales*, *Sordariomycetes*
Notes: Jayawardena et al. (2016a, b, c, d) provided comprehensive background of the genus. Thus, we do not provide here the recent taxonomy of the genus.

Collonaemella Höhn., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1 124: 82 (1915)
= **CORNICULARIELLA** P. Karst., Hedwigia 23(4): 57 (1884)
Notes: Clements and Shear (1931) regarded *Collonaemella* as a synonym of *Cornularia* Sacc. However, *Cornularia* is a synonym of *Corniculariella* (Sutton 1977).

Collonema Grove, J. Bot., Lond. 24: 136 (1886) **nom dub.** *fide* Sutton (1977), Kirk et al. (2008)

COLLOPHORINA Damm & Crous, Fungal Diversity: 86: 111 (2017)/ seven species/ *C. rubra* (Damm & Crous) Damm & Crous/ *Typanidaceae*, *Leotiales*, *Leotiomyces*

Conidiomata: pseudopycnidial. Conidiophores: branched, septate, filiform. Conidiogenous cells: enteroblastic. Conidia: hyaline, aseptate, cylindrical to ellipsoidal.

Typification details: Endophytes, saprobes, plant pathogens, Balears, Pacific Northwest regions (USA), South Africa, Germany, Iran, known only from coelomycetous morph.

Notes: *Collophora* Damm & Crous 2010 is illegitimate (Index Fungorum 2019), being a later homonym of the plant genus *Collophora* Mart. 1830. Hence, Wijayawardene et al. (2017a) introduced *Collophorina* nom. nov. to replace *Collophora*.

Ref.: Wijayawardene et al. (2017a).

COLLOSTROMA Petr., Sydowia 1(1-3): 104 (1947)/ one species/ *C. gelatinosum* Petr./ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate, cylindrical

Typification details: Saprobes, Europe, known only from coelomycetous morph.

Notes: Sutton (1977) included *Collostroma* in his checklist, but did not include it in Sutton (1980). However, the genus was accepted in subsequent checklists and dictionaries.

Refs.: Kirk et al. 2008, 2013, Wijayawardene et al. 2012, 2017a, b, 2018. Generic revision is essential.

Colpomella Höhn., in Weese, Mitt. bot. Inst. tech. Hochsch. Wien 3(2): 16 (1926) **nom. dub.** *fide* Sutton (1977), Kirk et al. (2008)

COMA Nag Raj & W.B. Kendr., Can. J. Bot. 50: 614 (1972) (= *Ascocoma* H.J. Swart, Trans. Br. mycol. Soc. 87: 606 (1987)/ *C. circularis* (Cooke & Masee) Nag Raj & W.B. Kendr./ one species/ *Phacidiales* genera *incertae sedis*, *Leotiomyces*

Conidiomata: stromatic, acervuli. Conidiophores: mostly reduced to conidiogenous cells, when present sparsely septate, unbranched, cylindrical, hyaline, smooth, invested in mucus. Conidiogenous cells: holoblastic, cylindrical to doliiform, discrete. Conidia: cylindrical, 1-septate, lower cell 3–4 times long as the upper cell, pale brown, bearing a single, tubular, unbranched, flexuous basal appendage; lower cell with 1–3 lateral appendages. Ascomata: subcuticular, multilocular. Asci: clavate to cylindrical, unitunicate, 8-spored. Ascospores: fusiform, hyaline.

Typification details: Saprobes, Australia, known from both coelomycetous and sexual morph.

Notes: Comprehensive generic revision of *Coma* was carried out by Nag Raj and Kendrick (1972), Sutton (1974), Swart (1986), Nag Raj (1993) and Wijayawardene et al. (2016). Johnston et al. (2014) proposed to adopt *Coma* over *Ascocoma* and subsequent publications followed this proposal (Wijayawardene et al. 2016, 2017a, b, 2018).

COMATOSPORA Piroz. & Shoemaker, Can. J. Bot. 49: 539 (1971)/ *C. suttonii* Piroz. & Shoemaker/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: holoblastic, annellidic. Conidia: hyaline, 1-septate, ellipsoid to ovoid, with gelatinous apical appendages (up to 8).

Typification details: Saprobes, Europe, known only from coelomycetous morph.

Notes: The genus *Comatospora* was re-visited in Sutton (1980) and Nag Raj (1993). The genus was accepted as valid in subsequent checklists and dictionaries (Kirk et al. 2008, 2013, Wijayawardene et al. 2012, 2017a, b, 2018). Generic revision is essential.

Combodia Fr., Summa veg. Scand., Sectio Post. (Stockholm): 422 (1849)

= *LASIODIPLODIA* Ellis & Everh., Bot. Gaz. 21: 92 (1896)

Notes: Sutton (1977) adopted *Lasiodiplodia* over *Combodia* based on the morphological similarities between these two genera.

COMOCEPHALUM Syd., Anns mycol. 37(4/5): 411 (1939)/ *C. vismiae* Syd/ one species/
Ascomycota genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: data inadequate. Conidia: brown, muriform, ellipsoid

Typification details: Saprobes, South America, known only from coelomycetous morph.

Notes: Sutton (1977) listed *Collostroma* in his checklist without any notes, but did not include it in Sutton (1980). The genus was accepted in subsequent checklists and dictionaries (Kirk et al. 2008, 2013, Wijayawardene et al. 2012, 2017a, b, 2018). Generic revision is essential.

Confertopeltis Tehon, Mycologia 25(4): 251 (1933) **nom. dub.** *fide* Sutton (1977), Kirk et al. (2008)

Conidiocarpus Woron., Key to fungi (fungi imperfecti) 2: 743 (1917)

= *PHRAGMOCAPNIAS* Theiss. & Syd., Anns mycol. 15(6): 480 (1918) [1917] *fide* Art. 59.1, Wijayawardene et al. (2014b), Rossman et al. (2015b)

Conidioxyphium Bat. & Cif., Quad. Lab. crittogam., Pavia 31: 72 (1963)

= *PHRAGMOCAPNIAS* Theiss. & Syd., Anns mycol. 15(6): 480 (1918) [1917]

Notes: Index Fungorum (2019) listed this genus as a synonym of *Conidiocarpus*. However, the latter is now a synonym of *Phragmocapnias* (Wijayawardene et al. 2014b, Rossman et al. 2015b).

CONIELLA Höhn., Ber. dt. bot. Ges. 36(7): 316 (1918) (= *Pilidiella* Petr. & Syd., Beih. Reprint nov. Spec. Regni veg. 42(1): 462 (1927) [1926]; = *Schizoparme* Shear, Mycologia 15(3): 120 (1923)/ *C. fragariae* (Oudem.) B. Sutton/ 59 species/
Schizoparmaceae, *Diaporthales*, *Sordariomycetes*

Conidiomata: pycnidial, ostiolate. Conidiophores: mostly reduced to conidiogenous cells, occasionally septate and branched at base, invested in mucus. Conidiogenous cells: cylindrical, subcylindrical, obclavate or lageniform, proliferating percurrently. Conidia: ellipsoidal, globose, napiform, fusiform or naviculate, olivaceous brown to brown, sometimes with a longitudinal germ-slit, with or without a mucoid appendage extending from apex to base on one side. Sometime produce spermatia. Ascomata: globose, papillate, with central periphysate ostiole. Asci: clavate to subcylindrical, with distinct apical ring. Ascospores: ellipsoid, aseptate, hyaline, at times becoming pale brown at maturity, with or without mucoid caps.

Typification details: Saprobes, pathogens, worldwide, with coelomycetous and sexual morph.

Notes: Sutton (1977, 1980) and Nag Raj (1993) comprehensively revisited the genus based on morphology and treated *Pilidiella* as a synonym of *Coniella*. However, Van Niekerk et al. (2004) accepted *Coniella*, *Pilidiella* and *Schizoparme* (a sexual morph) as

distinct genera in *Diaporthales* and this finding was followed by subsequent publications (Rossman et al. 2007, Kirk et al. 2008, Miranda et al. 2012, Wijayawardene et al. 2012, 2016, 2017a, b, 2018). Nevertheless, Alvarez et al. (2016) proposed to reduce both *Pilidiella* and *Schizoparme* under *Coniella* which formed a monophyletic clade in *Schizoparmaceae*, *Diaporthales*.

Index Fungorum (2019) lists 62 epithets but Species Fungorum (2019) accepts only 59 species.

Refs.: Marin-Felix et al. (2017), Chethana et al. (2017), Senanayake et al. (2017), Raudabaugh et al. (2018)

Coniothyriella Speg., Anal. Mus. nac. B. Aires, Ser. 3 13: 360 (1911)

= **CONIOTHYRINA** Syd. & P. Syd., Anns mycol. 10(2): 233 (1912)

Notes: Sutton (1977) mentioned that this genus is a later homonym of *Coniothyriella* Speg. 1889. Kirk et al. (2008) and Index Fungorum (2019) treated this genus as a synonym of *Coniothyria* Syd. & P. Syd.

Coniothyriella Speg., Boln Acad. nac. Cienc. Córdoba 11(4): 605 (1889) **nom conf. fide** Petrak and Sydow (1927), Kirk et al. (2008)

CONIOTHYRINA Syd. & P. Syd., Anns mycol. 10(2): 233 (1912)/ *C. agaves* (Durieu & Mont.) Petr. & Syd./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: data inadequate. Conidia: brown, aseptate, ellipsoidal

Typification details: Saprobes, sub-tropical, known only from coelomycetous morph.

Notes: The genus *Coniothyria* was included in Sutton (1977) but not by Sutton (1980). Nevertheless, the genus was accepted in subsequent checklists and dictionaries (Kirk et al. 2008, 2013, Wijayawardene et al. 2012, 2017a, b, 2018). Generic revision is essential. Index Fungorum (2019) lists four epithets but Species Fungorum (2019) accepts only two species. However, Kirk et al. (2008) accepted only one species.

Coniothyrinula Petr., Anns mycol. 21(1/2): 2 (1923)

= **CONIOTHYRIUM** Corda, Icon. fung. (Prague) 4: 38 (1840)

Notes: Clements and Shear (1931) treated *Coniothyrinula* as a synonym of *Coniothyrium*. This synonymy was accepted in Sutton (1977), Kirk et al. (2008) and Index Fungorum (2019).

Coniothyriopsiella Bender, Mycologia 24(4): 410 (1932)

= **CYCLOTHYRIUM** Petr., Anns mycol. 21(1/2): 5 (1923)

Notes: Sutton (1977) regarded *Coniothyriopsiella* as a synonym of *Cyclothyrium*. This synonymy was followed by Sutton (1980) and Kirk et al. (2008).

Coniothyriopsis Speg., Anal. Mus. nac. B. Aires, Ser. 3 13: 361 (1911)

= **MICROSPHAEROPSIS** Syd. & P. Syd., Anns mycol. 14(5): 369 (1916)

Notes: Sutton (1980) concluded that *Coniothyriopsis* Speg. is a synonym of *Microsphaeropsis*.

Coniothyriopsis Petr., Anns mycol. 21(1/2): 5 (1923) **nom. illegit. fide** Index Fungorum (2019)

= **CYCLOTHYRIUM** Petr., Anns mycol. 21(1/2): 5 (1923)

Notes: Sutton (1977) regarded *Coniothyriopsis* Petr. as a synonym of *Cyclothyrium*.

Coniothyris Clem., Gen. fung. (Minneapolis): 133 (1909)

= **CONIOTHYRINA** Syd. & P. Syd., Anns mycol. 10(2): 233 (1912)

Notes: Sutton (1977) stated that ‘this is a superfluous *nomen novum* for *Coniothyriella* Speg. 1889 non Speg. 1911’. *Coniothyriella* Speg. 1889 is currently treated as a synonym of *Coniothyria* Syd. & P. Syd. (Kirk et al. 2008; Index Fungorum 2019). However, Sutton (1980) mentioned the genus ‘*Coniothyris*’ with two different author citation i.e. *Coniothyris* Clem. & Shear (= *Coniothyriella* Speg, nom. confus.; on page 332) and *Coniothyris* Clem. (under *Colletotrichum* Corda. on page 523). Neither Sutton (1977) nor Kirk et al. (2008) give the author citation as Clem. & Shear, thus, the genus should be attributed to Clements alone.

CONIOTHYRIUM Corda, Icon. fung. (Prague) 4: 38 (1840)/ *C. palmarum* Corda/ c. 50 species/ *Coniothyriaceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: pycnidial, ostiolate. Conidiogenous cells: holoblastic, annellidic. Conidia: brown, 0-1-septate, cylindrical, spherical, elliptical or broadly clavate.

Typification details: Saprobies, sub-tropical, known only from coelomycetous morph.

Notes: Sutton (1971) stated that most of the species named as ‘*Coniothyrium*’ are not congeneric with *C. palmarum*, the type of *Coniothyrium* and related to *Microsphaeropsis*. Sutton (1977, 1980), De Gruyter et al. (2012), Crous et al. (2013), Hyde et al. (2013) and Wijayawardene et al. (2016) re-visited the genus based on morphology and/or phylogeny. Furthermore, *Coniothyriaceae* was reinstated in de Gruyter et al. (2012) and accepted by Hyde et al. (2013) and Wijayawardene et al. (2014b, 2016, 2017a, b, 2018).

Index Fungorum (2019) lists 897 epithets but Kirk et al. (2008) accepted only 44 species.

CONIOZYMA Crous, CBS Diversity Ser. (Utrecht) 7: 97 (2008)/ one species/ *C. leucospermi* (Crous & Denman) Crous/ *Incertae sedis*, *Dothideales*, *Dothideomycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: proliferating enteroblastically and percurrently. Conidia: hyaline to dark red-brown, aseptate, ellipsoidal to globose.

Typification details: Pathogens, South Africa, known only from coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Ref.: Marinowitz et al. (2008).

Conostoma Bat. & J.L. Bezerra, Riv. Patol. veg., Pavia, sér. 4 1(1-2): 42 (1965) **nom illegit.**
fide Index Fungorum (2019)

= **CONOSTOMATIUM** Doweld, Index Fungorum 30: 1 (2013)

Notes: See under *Conostomatium* Doweld.

CONOSTOMATIUM Doweld, Index Fungorum 30: 1 (2013)

Notes: Doweld (2013) introduced *Conostomatium* Doweld to replace *Conostoma* which is *nom. illegit.* (Art. 53.1).

CONOSTROMA Moesz, Bot. Közl. 19: 44 (1921)/ *C. didymum* (Fautrey & Roum.) Moesz/ four species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiophores: hyaline, branched at the base and along their length, septate. Conidiogenous cells: holoblastic. Conidia: hyaline, aseptate, cylindrical.

Typification details: Saprobies, Europe, known only from coelomycetous morph.

Notes: The type of *Conostroma*, *C. didymum* has been treated as the asexual morph of *Colpoma quercinum* (Pers.) Wallr. (Sutton 1980).

Refs.: Sutton (1980).

COPHINFORMA Doilom, Jian K. Liu & K.D. Hyde, *Fungal Diversity* 57(1): 174 (2012)/ two species/ *C. atrovirens* (Mehl & Slippers) A. Alves & A.J.L. Phillips/ *Botryosphaeriaceae, Botryosphaeriales, Dothideomycetes*

Conidiomata: globose to subglobose. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: enteroblastic. Conidia: hyaline, thin-walled, smooth, aseptate, fusiform.

Typification details: Pathogens/ saprobes, cosmopolitan, with coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Ref.: Phillips et al. (2013).

Copranophilus Speg., *Anal. Mus. nac. B. Aires, Ser. 3* 12: 410 (1909)

= **PYXIDIOPHORA** Bref. & Tavel, in Brefeld, *Unters. Gesammtgeb. Mykol. (Liepzig)* 10: 189 (1891)

Notes: Sutton (1977) listed this genus, which was originally described with acervuli conidiomata. However, Sutton (1980) did not include the genus in his monograph. Kirk et al. (2008) treated *Copranophilus* as a synonym of *Pyxidiophora* based on Lundqvist (1980).

CORALLOCYTOSTROMA Y.N. Yu & Z.Y. Zhang, *Acta microbiol. sin.* 20(3): 232 (1980)/ *C. oryzae* Y.N. Yu & Z.Y. Zhang/ two species/ *Clavicipitaceae, Hypocreales, Sordariomycetes*

Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: ellipsoid, hyaline.

Typification details: Saprobes/ pathogens, China, known from only coelomycetous morph.

Ref.: Shivas et al. (1997).

Corallomorpha Opiz, *Lotos* 6: 106 (1856) **nom dub. fide** Sutton (1977)

CORETHROSTROMA Kleb., *Phytopath. Z.* 6(3): 299 (1933)/ *C. laricis* Kleb./ one species/ *Ascomycota genera incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate, ellipsoidal.

Typification details: Saprobes, Europe, known only from coelomycetous morph.

Notes: *Corethrostroma* was included in Sutton (1977) but Sutton (1980) did not include it in his monograph. Nevertheless, the genus was accepted in subsequent checklists and dictionaries (Kirk et al. 2008, 2013, Wijayawardene et al. 2012, 2017a, b, 2018). Generic revision is essential.

CORNICULARIELLA P. Karst., *Hedwigia* 23(4): 57 (1884)/ *C. abietis* P. Karst./ nine species/ *Dermateaceae, Helotiales, Leotiomycetes*

Conidiomata: stromatic, ostiolate. Conidiophores: hyaline, repeatedly branched irregularly, septate. Conidiogenous cells: enteroblastic, phialidic. Conidia: hyaline, aseptate, straight or markedly curved and falcate.

Typification details: Saprobes, worldwide, known only from coelomycetous morph.

Notes: The history of the genus was summarized by Sutton (1977), while Di Cosmo (1978) accepted seven species and provided a taxonomic key. Sutton (1977) stated that the type species is lacking herbarium material and, thus, treated the genus as *nom. dub.*

Sutton (1980) provided an illustration of *Corniculariella spina* and mentioned *Durandiella fraxini* (Schwein.) Seaver as the sexual morph. Oliveira et al. (2014) introduced *Corniculariella brasiliensis* R.J.V. Oliveira et al. with DNA sequences; thus, positioned the genus in *Dermateaceae*.

CORNUCOPIELLA Höhn., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1 124: 118 (1915)/ *C. mirabilis* Höhn./ two species/ *Ascomycota* genera *incertae sedis*

Conidiomata: tubular, superficial, cylindrical. Conidiophores: hyaline, branched at the base and above, associate with septa, long, filiform. Conidiogenous cells: enteroblastic, phialidic. Conidia: hyaline, aseptate, ellipsoidal.

Typification details: Saprobes, Europe, known only from coelomycetous morph.

Notes: Sutton (1977, 1980) accepted the genus in coelomycetes, although it has conidiomata which are morphologically similar to hyphomycetes. However, Sutton (1980), Seifert (1985), Sutton and Pascoe (1987) re-visited the genus and compared it with other morphologically similar genera. Moreover, Seifert (1985) reduced *Cornucopiella*, (which was treated as a hyphomycetes) under *Cornucopiella*.

Cornularia Sacc., Syll. fung. (Abellini) 3: 598 (1884) **nom dub.** fide Sutton (1977)

Notes: Sutton (1977) mentioned that *Cornularia* is superfluous name for *Corniculariella*.

CORNUTISPORIA Piroz., Mycologia 65(4): 763 (1973)/ nine species/ *C. limaciformis* Piroz./ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiophores: hyaline, branched irregularly, septate. Conidiogenous cells: polyblastic. Conidia: hyaline, aseptate, cylindrical or long cuneiform.

Typification details: Lichenicolous, saprobes, worldwide, known only from coelomycetous morph.

Notes: *Cornutispora* was accepted and re-visited as a saprobic and lichenicolous genus (Sutton 1980, Nag Raj 1993, Etayo and Diederich 1995, Punithalingam 2003, Etayo 2010, Flakus and Kukwa 2012).

Coronium Bonord., Abh. naturforsch. Ges. Halle 8: 132 (1864) **nom dub.** fide Sutton (1977), Kirk et al. (2008)

Coryneopsis Grove, J. Bot., Lond. 70: 33 (1933) [1932]

= **SEIMATOSPORIUM** Corda, in Sturm, Deutschl. Fl., 3 Abt. (Pilze Deutschl.) 3(13): 79 (1833)

Notes: Sutton (1975) listed *Coryneopsis* as a synonym of *Seimatosporium*.

CORYNEUM Nees, Syst. Pilze (Würzburg): 34 (1816) [1816-17] (= *Pseudovalsa* Ces. & De Not., Comm. Soc. crittog. Ital. 1(fasc. 4): 206 [1863] fide Rossman et al. 2015a)/ *C. umbonatum* Nees/ 28 species/ *Pseudovalsaceae*, *Diaporthales*, *Sordariomycetes*

Conidiomata: acervuli. Conidiophores: cylindrical, hyaline, septate, branched at the base. Conidiogenous cells: holoblastic, annellidic. Conidia: median cells brown, basal cells hyaline, narrow to broadly fusiform, straight or curved, transversely distoseptate. Stromata: solitary, erumpent, comprising pseudoparenchymatous cells. Ascomata: perithecial, immersed, aggregated, globose to subglobose. Asci: 8-spored, unitunicate, ellipsoid to cylindrical. Ascospores: overlapping uniseriate to biseriate, initially hyaline, brown at maturity, ellipsoid, fusoid or elongate, one to several septate, often distoseptate, end cells light brown or hyaline, straight or curved.

Typification details: Saprobes, worldwide, known from both coelomycetous and sexual morph.

Notes: Sutton (1975) monographed the genus and accepted only 19 species, though it has more than 200 species epithets. Subsequently, Sutton (1980, 1986) and Wijayawardene et al. (2016) re-visited the genus based on morphology. Rossman et al. (2015a) proposed to adopt *Pseudovalsa* over *Coryneum* and this synonymy was accepted in Wijayawardene et al. (2017a, b, 2018).

Index Fungorum (2019) lists 236 epithets but Kirk et al. (2008) accepted only 21 species. Seven species have been introduced since Kirk et al. (2008); thus, we conclude that the genus comprises 28 species.

COSTANETOA Bat. & J.L. Bezerra, Quad. Lab. crittogam., Pavia 31: 75 (1963)/ *C. caryotae*

Bat. & J.L. Bezerra/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial, ostiolate. Conidiophores: absent. Conidiogenous Cells: data inadequate. Conidia: bacilar, hyaline.

Typification details: On leaves of *Ocnocarpus distichus*, Brazil, IMUR 26046, lacks DNA, known only from coelomycetous morph.

Notes: DNA sequence data is unavailable, thus, taxonomic placement is uncertain. Needs generic revision.

Refs.: Batista and Ciferri (1963), Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018).

CRASSIMASSARINA A. Hashim. & Kaz. Tanaka, Persoonia 39: 61 (2017)/ one species/ *C.*

macrospora A. Hashim. & Kaz. Tanaka/ *Lophiotremataceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: globose to subglobose, pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: holoblastic. Conidia: cylindrical with rounded ends, hyaline, multi-septate.

Typification details: Saprobes, Japan, with coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Ref.: Hashimoto et al. (2017).

Creodiplodina Petr., Sydowia 10(1-6): 316 (1957) [1956]/ *C. fusispora* Petr./ one species/*Ascomycota* genera *incertae sedis*

Notes: Kirk et al. (2008) accepted this genus as hyphomycetous.

CREONECTE Petr., Sydowia 3(1-6): 256 (1949)/ *C. biparasitica* Petr./ one species/*Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate, filiform.

Typification details: Saprobes, South America, known only from coelomycetous morph.

Notes: The genus *Creonecte* was listed in Sutton (1977) as a valid genus and this was subsequently followed in checklists and dictionary (Kirk et al. 2008, Wijayawardene et al. 2012, 2017a, b, 2018). However, the genus has not been revised taxonomically since its inception.

CREOSEPTORIA Petr., Beih. Botan. Centralbl., Abt. B 57: 432 (1937)/ *C. watzlii* Petr./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate.

Typification details: Saprobes, Caucasus, known only from coelomycetous morph.

Notes: Sutton (1977) listed *Creoseptoria* as a valid genus and this was followed by subsequent checklists and dictionary (Kirk et al. 2008, Wijayawardene et al. 2012, 2017a, b, 2018).

CREOSPHERIA Theiss., Beih. bot. Zbl., Abt. 2 27: 396 (1910)/ 3 species/ *C. sassafras* (Schwein.) Y.M. Ju, F. San Martín & J.D. Rogers/ *Lopadostomataceae*, *Xylariales*, *Sordariomycetes*

Notes: Kirk et al. (2008) stated that this genus produces *Libertella*-like asexual morphs.

Refs.: Senanayake et al. (2015).

Creothyrium Petr., Annls mycol. 23(1/2): 79 (1925)

= **CYLINDROCOLLA** Bonord., Handb. Allgem. Mykol. (Stuttgart): 149 (1851)

Notes: Based on morphology of the type species, Sutton (1977) reduced *Creothyrium* under *Cylindrocolla*.

CRINITOSPORA B. Sutton & Alcorn, Trans. Br. Mycol. Soc. 84(3): 437 (1985)/ *C. pulchra* B. Sutton & Alcorn/ one species/ *Stilbosporaceae*, *Diaporthales*, *Sordariomycetes*

Conidiomata: stromatic. Conidiophores: unbranched, septate at only the base, hyaline. Conidiogenous cells: proliferating several times percurrently at apex. Conidia: ellipsoidal with an obtuse apex and broad truncate base, euseptate, hyaline

Typification details: Saprobes, Australia, Thailand, known from only coelomycetous morph.

Ref.: Sutton and Alcorn (1985), Crous et al. (2014a)

CRUCELLISPORIOPSIS Nag Raj, Can. J. Bot. 60(12): 2601 (1983) [1982]/ three species/ *C. gelatinosa* Nag Raj/ *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*

Conidiomata: stromatic. Conidiophores: septate, branched. Conidiogenous cells: proliferating inconspicuous percurrently at apex. Conidia: tetra-radiate, main axis cylindrical, 0–1-septate, cells unequal, base narrow, truncate with marginal frill, hyaline, with tubular, unbranched central appendage, arms 3(–4), at different apical loci on main axis, separated by septa, attenuated, septate, hyaline.

Typification details: Saprobes, Japan, known only from coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Ref.: Nag Raj (1983) [1982], Crous et al. (2014d).

CRUCELLISPORIUM M.L. Farr, Nova Hedwigia 15: 264 (1968)/ *C. selaginellae* M.L. Farr/ three species/ *Helotiales* genera *incertae sedis*, *Leotiomyces*

Conidiomata: stromatic, acervuli. Conidiophores: short, branched or unbranched, 0-2-septates. Conidiogenous cells: holoblastic. Conidia: hyaline, tetra-radiate, 0-1-septate

Typification details: Saprobes, cosmopolitan, known only from coelomycetous morph

Notes: Nag Raj (1974) and Nag Raj and Kendrick (1978) re-visited the genus based on studying type material and introducing new species, respectively. However, Sutton (1977, 1980) regarded *Crucellisporium* as a synonym of *Belaina* Bat. & Peres. Nag Raj (1993) disagreed with this synonymy and accepted the genus with two species. Marincowitz et al. (2010) introduced the third species with DNA sequence data which showed that *Crucellisporium* clusters within *Helotiales*.

CRUMENULOPSIS J.W. Groves, Can. J. Bot. 47: 48 (1969) (= *Digitosporium* Gremmen, Acta bot. neerl. 2(2): 233 (1953)/ four species/ *C. sororia* (P. Karst.) J.W. Groves/ *Helotiaceae*, *Helotiales*, *Leotiomyces*

Sexual morph: *Crumenulopsis* J.W. Groves. Conidiomata: stromatic. Conidiophores: pale brown, irregularly branched, septate. Conidiogenous cells: holoblastic. Conidia: pale brown, branches of unequal length, 1-5 septate.

Typification details: Saprobies, Europe, the coelomycetous morph was previously known as *Digitosporium*

Notes: van Vloten and Gremmen (1953) introduced *Digitosporium* with *D. piniphilum* as the type species. *Digitosporium piniphilum* was treated as the conidial morph of *Crumenula sororia* Karst. (current name: *Crumenulopsis sororia* (P. Karst.) J.W. Groves *vide* Groves 1969). The coelomycetous morph, *Digitosporium*, was accepted in Sutton (1977, 1980). Johnston et al. (2014) proposed to adopt *Crumenulopsis* over *Digitosporium* and this was accepted by Wijayawardene et al. (2016).

Index Fungorum (2019) lists six species but Species Fungorum (2019) accepts only four species.

Ref.: Sutton (1980).

CRYPHONECTRIA (Sacc.) Sacc. & D. Sacc., Syll. fung. (Abellini) 17: 783 (1905)/ 14 species/ *C. parasitica* D. Sacc./ *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*

Notes: Senanayake et al. (2017) reported coelomycetous asexual morph from *C. parasitica* (Murrill) M.E. Barr.

CRYPTOCEUTHOSPORA Petr., Anns mycol. 19(1/2): 57 (1921)/ *C. moravica* Petr./ two species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate

Typification details: Saprobies, Europe, known only from coelomycetous morph

Notes: Sutton (1977) listed the genus in his checklist but did not include it in Sutton (1980). Kirk et al. (2008, 2013) and Wijayawardene et al. (2012, 2017a, b, 2018) accepted the genus, but generic revision based on fresh collections is essential.

CRYPTOCLINE Petr., Anns mycol. 22(3/6): 402 (1924)/ 17 species/ *C. effusa* Petr./ *Ascomycota* genera *incertae sedis*

Conidiomata: acervuli. Conidiogenous cells: enteroblastic, phialidic. Conidia: hyaline to very pale brown, aseptate, cylindrical to doliiform or ellipsoid

Typification details: Pathogens, saprobies, worldwide, known only from coelomycetous morph

Notes: Morgan-Jones (1973) and Sutton (1977, 1980) re-visited the genus based on morphological studies. *Cryptocline taxicola* (All.) Petr. was reported as a pathogen of several woody plants (Vujanovic and St-Arnaud 2001, Pehl and Wulf 2002, Bukvayova 2007). However, the genus lacks DNA sequence data, thus, taxonomic placement is uncertain.

Index Fungorum (2019) lists 21 epithets but Species Fungorum (2019) accepts only 17 species. Kirk et al. (2008) accepted only 15 species.

CRYPTOCLYPEUS A. Hashim. & Kaz. Tanaka, Persoonia 39: 63 (2017)/ two species/ *C. ryukyuensis* A. Hashim. & Kaz. Tanaka/ *Lophiotremataceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: phialidic. Conidia: cylindrical with slightly angular ends, hyaline, 1-septate.

Typification details: Saprobies, Japan, with coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Ref.: Hashimoto et al. (2017).

Cryptogene Syd., *Annls mycol.* 37(3): 240 (1939)

= *ASCOCHYTOPSIS* Henn., *Bot. Jb.* 38: 117 (1905)

Notes: Sutton (1977) regarded *Cryptogene* as a synonym of *Ascochytopsis* based on morphology and host.

Cryptogenella Syd., *Annls mycol.* 37(3): 241 (1939)

= *ASCOCHYTOPSIS* Henn., *Bot. Jb.* 38: 117 (1905)

Notes: Sutton (1977) treated *Cryptogenella* as a synonym of *Ascochytopsis* based on host.

Cryptomela Sacc., *Syll. fung. (Abellini)* 3: 760 (1884)

= *CRYPTOSPORIUM* Kunze, in Kunze & Schmidt, *Mykologische Hefte (Leipzig)* 1: 1 (1817)

Notes: Sutton (1977) stated that this genus is a synonym of *Cryptosporium*.

CRYPTOMYCELLA Höhn., *Mitt. bot. Inst. tech. Hochsch. Wien* 2(3): 48 (1925)/ *C. pteridis*

(Kalchbr.) Höhn./ two species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic, ostiolate. Conidiophores: hyaline, 1-2 septate, rarely branched, smooth, cylindrical. Conidiogenous cells: enteroblastic, phialidic. Conidia: Hyaline, aseptate, fusiform.

Typification details: Saprobes, Europe, known only from coelomycetous morph

Notes: Sutton (1980) illustrated the type species and mentioned that *Cryptomycina pteridis* (Rebent. ex Fr.) Höhn. is the sexual morph of the type species. DNA sequence data is lacking, thus, taxonomic placement is uncertain.

Index Fungorum (2019) lists three epithets but Species Fungorum (2019) accepts only two species.

Cryptophaeella Höhn., *Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1* 126(4-5): 360 (1917)

= *MICROSPHAEROPSIS* Syd. & P. Syd., *Annls mycol.* 14(5): 369 (1916)

Notes: Sutton (1977) provided a brief history of the genus and concluded it was a synonym of *Microsphaeropsis*.

Cryptorhynchella Höhn., *Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1* 124: 88 (1915)

= *SPHAEROGRAPHIUM* Sacc., *Syll. fung. (Abellini)* 3: 596 (1884) *vide* Sutton (1977, 1980)

CRYPTOSPORELLA Sacc., *Michelia* 1(no. 1): 30 (1877) (= *Disculina* Höhn., *Sber. Akad.*

Wiss. Wien, Math.-naturw. Kl., Abt. 1 125(1-2): 104 (1916))/ ca. 26 species/ *C. hypodermia*

(Fr.) Sacc./ *Gnomoniaceae, Diaporthales, Sordariomycetes*

Conidiomata: pycnidial. Conidiogenous cells: enteroblastic. Conidia: fusiform to lunate, hyaline.

Typification details: Saprobes, worldwide, with coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Refs.: Tian et al. (2018).

CRYPTOSPORIUM Kunze, Mykologische Hefte (Leipzig) 1: 1 (1817)/ c. 25 species/ *C. atrum* Kunze/ *Ascomycota* genera *incertae sedis*

Notes: Sutton (1977) treated this name as a synonym of *Cryptosporium* Kunze 1832 but neither name was included in Sutton (1980). However, Kirk et al. (2008) and Index Fungorum (2019) accepted *Cryptosporium* Kunze 1817 as the valid name. Taxonomic revision is essential.

Index Fungorum (2019) lists 124 epithets but most of the species have been transferred to other genera (Species Fungorum 2019). Kirk et al. (2008) accepted only 25 species. No new species have been introduced since 2008, thus, we follow Kirk et al. (2008).

Cryptostictella Grove, J. Bot., Lond. 50: 52 (1912)

= **DISCOSIA** Lib. ex Durieu & Mont., Fl. d'Algérie, Cryptog. 1: 587 (1849) [1846-49]

Notes: The type of *Cryptostictella*, *C. bractearum* Grove resembles *Discosia artocreas* (Tode) Fr. 1849, the type of *Discosia*. Thus, Sutton (1977) regarded *Cryptostictella* as a synonym of *Discosia*.

Cryptostictis Fuckel, Fungi rhenani exsic.: no. 1838 (1866)

= **SEIMATOSPORIUM** Corda, in Sturm, Deutschl. Fl., 3 Abt. (Pilze Deutschl.) 3(13): 79 (1833)

Notes: Based on morphology of the type of *Cryptostictis*, *C. hysteroioides* Fuckel, Sutton (1964a, 1975a, 1977, 1980) regarded *Cryptostictis* as a synonym of *Seimatosporium*.

CUCURBITARIA Gray, Nat. Arr. Brit. Pl. (London) 1: 519 (1821)/ c. 37 species/ *C. berberidis* (Pers.) Gray/ *Cucurbitariaceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: enteroblastic, phialidic. Conidia: hyaline, aseptate, oblong to ellipsoid.

Typification details: Widespread, known from both sexual morph and coelomycetous morph

Notes: Doilom et al. (2013) accepted the genus with coelomycetous morph. There are 275 epithets listed in Index Fungorum (2019), but Kirk et al. (2008) accepted only 36 species. Jaklitsch et al. (2018a) introduced another species, thus, we regard the genus comprises 37 species.

Refs.: Doilom et al. (2013), Hyde et al. (2013), Jaklitsch et al. (2018a).

Cucurbitariopsis C. Massal., Mém. Accad. Agricolt. Arti Commerc. Verona, Ser. 3 65: 133 (1889)

= **HETEROPATELLA** Fuckel, Jb. Nassau. Ver. Naturk. 27-28: 54 (1874) [1873-74]

Notes: Sutton (1977) tentatively placed *Cucurbitariopsis* as a synonym of *Heteropatella*.

Cyanochyta Höhn., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1 124: 92 (1915)

Notes: Sutton (1977) mentioned that this genus is 'possibly an effete *Gibberella*'.

CYANODERMELLA O.E. Erikss., Op. bot. 60: 155 (1981)/ two species/ *C. viridula* (Berk. & M.A. Curtis) O.E. Erikss./ *Stictidaceae*, *Ostropales*, *Lecanoromycetes*

Conidiomata: pycnidial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: phialidic. Conidia: smooth walled, oval typically with blunt ends.

Typification details: Saprobies, cosmopolitan, with coelomycetous morph.

Notes: Cultures and DNA sequences are available.

Ref.: van Nieuwenhuijzen et al. (2016).

CYANOPATELLA Petr., Sydowia 3(1-6): 143 (1949)/ *C. iranica* Petr./ one species/
Ascomycota genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate.
Typification details: Saprobes, Iran, known only from coelomycetous morph.

Notes: Sutton (1977) listed *Cyanopatella* as a good genus, but did not include it in his monograph (Sutton 1980). However, subsequent checklists and dictionary listed it (Kirk et al. 2008, 2013, Wijayawardene et al. 2012, 2017a, 2018). Taxonomic knowledge is poor.

?**CYANOPHOMELLA** Höhn., Hedwigia 60: 156 (1918)/ *C. acervalis* (Sacc.) Höhn./ one species/
Ascomycota genera *incertae sedis*

Conidiomata: pycnidial. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate.
Typification details: Saprobes, Europe, known only from coelomycetous morph.

Notes: *Cyanophomella* was introduced to accommodate the asexual morph of *Gibberella acervalis* (Sutton 1977). However, *Gibberella* is linked with *Colletotrichum* and the later has only acervuli conidiomata (Sutton 1980). Sutton (1977) doubted that *Cyanophomella* is related to *Stagonostroma* Died. which is now a synonym of *Fusarium* Link (Lombard et al. 2015).

Cycloctospora Höhn., in Weese, Mitt. bot. Inst. tech. Hochsch. Wien 5: 17 (1928)

= **CYTOSPORA** Ehrenb., Sylv. mycol. berol. (Berlin): 28 (1818)

Notes: Defago (1944) regarded *Cycloctospora* as a synonym of *Cytospora*. This synonymy was accepted in Sutton (1977, 1980) and Kirk et al. (2008).

Cyclodomella P.N. Mathur, V.V. Bhatt & Thirum., Sydowia 13(1-6): 144 (1959)

= **CONIELLA** Höhn., Ber. dt. bot. Ges. 36(7): 316 (1918)

Notes: Petrak (1960) regarded that the type of *Cyclodomella*, *C. nigra* resembles *Coniella diplodiella*. Sutton (1969) treated this genus as a synonym of *Coniella*, and listed the type species as *Coniella fragariae*. However, Alvarez et al. (2016) showed that *Cyclodomella nigra* is morphologically and phylogenetically distinct from both *Coniella fragariae* and *C. diplodiella*, thus, introduced *Coniella nigra*.

CYCLODOMUS Höhn., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1 118: 1527 (1909)/ *C. umbellulariae* Höhn./ two species/
Ascomycota genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: enteroblastic, phialidic. Conidia: hyaline, aseptate, cylindrical.

Typification details: Saprobes, USA, known only from coelomycetous morph.

Notes: This is a well-established genus with only one known species (Sutton 1977, 1980). *Cyclodomus aequatoriensis* K.D. Hyde was linked with *Maculatifrones aequatoriensis* K.D. Hyde, the type of *Maculatifrones* K.D. Hyde (*Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*) by Hyde et al. (1996) based on close association on host. Hence, several authors placed *Cyclodomus* in *Phyllachoraceae* (Maharachchikumbura et al. 2016, Wijayawardene et al. 2018). However, the type species of *Cyclodomus* lacks DNA sequence data, thus, we prefer to maintain *Cyclodomus* as *Ascomycota* genera *incertae sedis*. Currently, *Cyclodomus aequatoriensis* is reduced under *Maculatifrones aequatoriensis* in Species Fungorum (2018).

Index Fungorum (2019) lists five epithets but Species Fungorum (2019) accepts only two species.

CYCLOMARSONINA Petr., Sydowia 18(1-6): 391 (1965) [1964]/ one species/ *C. cedrelae* (T.S. Ramakr. & K. Ramakr.) Petr./ one species/ *Ascomycota* genera *incertae sedis*
Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: hyaline, 1-septate, oblong, ellipsoid.

Typification details: Saprobes, Asia, known only from coelomycetous morph.

Notes: Petrak (1965) introduced this monotypic genus. Sutton (1977) included *Cyclomarsonina* in his checklist, but did not include it in Sutton (1980). The genus has not been re-visited since it was introduced; thus, taxonomic revision based on fresh collections is essential.

CYCLOPELTELLA Petr., Sydowia 7(5-6): 373 (1953)/ one species/ *C. orbicularis* Petr./ *Micropeltidaceae*, *Micropeltidales*, *Lecanoromycetes*

Conidiomata: pycnothyrial. Conidiophores: reduced to conidiogenous cells. Conidiogenous cells: data inadequate. Conidia: oblong to clavate, hyaline.

Typification details: Saprobes, Philippines, with coelomycetous morph.

Notes: Wijayawardene et al. (2016) listed *Cyclopeltis* Petr. as the adopted name over *Cyclopeltella* Petr. but the former is illegitimate (Art. 53.1). Thus, Rossman et al. (2015) suggested to use *Cyclopeltella*.

Ref.: Petrak (1953).

Cyclophomopsis Höhn., Hedwigia 62: 86 (1920)

= **PHOMOPSIS** (Sacc.) Bubák, Öst. bot. Z. 55: 78 (1905)

Notes: Sutton (1977) regarded this genus as a synonym of *Phomopsis*.

CYCLOTHYRIELLA Jaklitsch & Voglmayr, Stud. Mycol. 85: 41 (2016)/ *C. rubronotata* (Berk. & Broome) Jaklitsch & Voglmayr/ one species/ *Cyclothyriellaceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: pycnidial. Conidiogenous cells: phialidic. Conidia: hyaline at immaturity, dark brown in maturity, cylindrical, oblong to ellipsoid, aseptate. Asci: cylindrical, bitunicate, fissitunicate. Ascospores: narrowly ellipsoid or oblong with narrowly or broadly rounded ends and second cell sometimes slightly widened, 3 thick and dark septa, straight or slightly curved, yellowish brown at immaturity, turning dark chocolate to blackish brown at maturity.

Typification details: Europe, known from sexual morph and coelomycetous morph.

Notes: See under *Cyclothyrium*.

Ref.: Jaklitsch and Voglmayr (2016).

CYCLOTHYRIUM Petr., Anns mycol. 21(1/2): 5 (1923)/ *C. ulmigenum* (Berk.) Petr./ two species/ *Pleosporales* genera *incertae sedis*, *Dothideomycetes*

Conidiomata: stromatic. Conidiophores: hyaline, branched at the base, septate. Conidiogenous cells: enteroblastic, phialidic. Conidia: pale brown, aseptate, short cylindrical.

Typification details: Saprobes, worldwide, known only from coelomycetous morph.

Notes: The genus was introduced with *C. ulmigenum* (Berk.) Petr. as the type species, but Sutton (1977) lectotypified the genus with *C. juglandis* (Schumach.) B. Sutton. *Cyclothyrium juglandis* (sexual morph: *Thyridaria rubronotata* (Berk. & Br.) Sacc. *vide* Sutton 1980) was accepted as the lectotype by subsequent studies (Sutton 1980, De Gruyter et al. 2012, Wijayawardene et al. 2016). However, Jaklitsch and Voglmayr (2016) provided comprehensive background (see Jaklitsch and Voglmayr for more details) about nomenclatural disagreements on adopting *Cyclothyrium juglandis* over

Thyridaria rubronotata. Hence, Jaklitsch and Voglmayr (2016) introduced *Cyclothyriella* Jaklitsch & Voglmayr to accommodate *Thyridaria rubronotata*. Index Fungorum (2019) lists four epithets but two have been transferred to other genera (Species Fungorum 2019).

Cylindrodochium Bonord., Handb. Allgem. mykol. (Stuttgart): 132 (1851)

= **PYRENOPEZIZA** Fuckel, Jb. nassau. Ver. Naturk. 23-24: 293 (1870) [1869-70]

Notes: The name *Cylindrodochium* was superfluous, which was based on *Cylindrosporium concentricum* Grev. Thus, Sutton (1977) treated *Cylindrodochium* as an obligate generic synonym of *Cylindrosporium* Grev. which is a synonym of *Pyrenopeziza* Fuckel (Art. 59.1, Johnston et al. 2014).

CYLINDROGLOEUM Petr., Anns mycol. 39(4/6): 276 (1941)/ one species/ *C. arcticum* Petr./ *Ascomycota* genera *incertae sedis*

Conidiomata: acervuli. Conidiophores: 1-2 septate, branched mainly at the base, hyaline. Conidiogenous cells: enteroblastic, phialidic. Conidia: hyaline, 0-1-septate, cylindrical or fusiform.

Typification details: Saprobes, Europe, known only from coelomycetous morph.

Notes: Sutton (1977, 1980) accepted the genus with two species, but *Cylindrogloeum trillii* (Ellis & Everh.) Arx was subsequently transferred to *Asteroma* as *A. trillii* (Ellis & Everh.) Rulamort (Rulamort et al. 1986). Hence the genus is monotypic and lacking DNA sequence data.

Cylindrosporella Höhn., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1 125(1-2): 96 (1916)

= **ASTEROMA** DC., in de Candolle & Lamarck, Fl. franç., Edn 3 (Paris) 5/6: 162 (1815)

Notes: Sutton (1980) showed that the type of *Cylindrosporella*, *C. carpini* (Lib.) Höhn. is congeneric with *Asteroma*, thus, transferred it to the latter genus as *A. carpini*. Sutton (1980) also regarded *Cylindrosporella* as a synonym of *Asteroma*.

Cylindrosporium Grev., Scott. crypt. fl. (Edinburgh) 1: pl. 27 (1822)

= **PYRENOPEZIZA** Fuckel, Jb. nassau. Ver. Naturk. 23-24: 293 (1870) [1869-70]

Notes: See under *Cylindrodochium*.

CYLINDROXYPHIUM Bat. & Cif., Quad. Lab. crittogam., Pavia 31: 77 (1963)/ one species/ *C. virginianum* Bat. & Cif./ *Ascomycota* genera *incertae sedis*

Conidiomata: pycnidial, ostiolate. Conidiophores: absent. Conidiogenous cells: data inadequate. Conidia: bacilar, hyaline.

Typification details: On leaves of *Ocnocarpus distichus*, Brazil, IMUR 26046, lacks DNA, known only from coelomycetous morph.

Notes: DNA sequence data is unavailable.

Refs.: Batista and Ciferri (1963), Hyde et al. (2011), Kirk et al. (2013), Wijayawardene et al. (2012, 2017a, b, 2018).

Cymbothyrium Petr., Sydowia 1(1-3): 148 (1947)

= **HARKNESSIA** Cooke, Grevillea 9(no. 51): 85 (1881)

Notes: Nag Raj and DiCosmo (1981, 1984) treated *Cymbothyrium* as a synonym of *Harknessia* based on morphology. This synonymy was followed by Nag Raj (1993), Crous et al. (2012a) and Wijayawardene et al. (2016). However, Crous et al. (2012a) emphasized the necessity of re-collection of fresh specimens to prove the synonymy based on phylogeny.

Cyphellopynis Tehon & G.L. Stout, Mycologia 21(4): 189 (1929)

= **PHOMOPSIS** (Sacc.) Bubák, Öst. bot. Z. 55: 78 (1905)

Notes: The type species of *Cyphellopynis*, *C. pastinacae* Tehon & G.L. Stout is the later synonym of *Phomopsis diachenii* Sacc. (Sutton 1964b)

Cystotrichiopsis Abbas, B. Sutton & Ghaffar, Pakist. J. Bot. 33(4): 365 (2001) **nom. inval.**

CYSTOTRICHA Berk. & Broome, Ann. Mag. nat. Hist., Ser. 2 5: 457 (1850)/ *C. striola* Berk. & Broome/ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: flattened or oval to elongated. Conidiophores: pale brown, irregularly branched, obscurely septate. Conidiogenous cells: holoblastic. Conidia: hyaline, 1-septate, cylindrical to ellipsoidal.

Typification details: Saprobes, Europe, known only from coelomycetous morph.

Notes: Sutton (1980) accepted and re-visited this monotypic genus. Further, Sutton (1980) mentioned that *Durella compressa* (Pers. ex Fr.) Tul. is the sexual morph of *Cystotricha striola*.

Cytodiplospora Oudem., Hedwigia 33: 19 (1894)

= **SIROCOCCUS** Preuss, Linnaea 26: 716 (1855) [1853]

Notes: Meyer et al. (2017) showed that *Cytodiplospora castaneae* (current name: *Diplodina castaneae*) grouped in *Sirococcus sensu stricto*.

CYTODISCULA Petr., Annl. mycol. 29(1/2): 125 (1931)/ *C. carnea* Petr./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate, ellipsoidal.

Typification details: Saprobes, Portugal, known only from coelomycetous morph.

Notes: Sutton (1977) accepted this genus but did not include it in his monograph (Sutton 1980). However, Kirk et al. (2008, 2013) and Wijayawardene et al. (2012, 2017a, b, 2018) accepted it as a valid genus. DNA sequence data is lacking, thus, taxonomic placement is uncertain.

CYTOGLOEUM Petr., Annl. mycol. 23(1/2): 77 (1925)/ *C. tiliae* Petr./ one species/ *Ascomycota* genera *incertae sedis*

Conidiomata: acervuli. Conidiogenous cells: data inadequate. Conidia: hyaline, aseptate, ellipsoidal.

Typification details: Saprobes, Europe, known only from coelomycetous morph.

Notes: The genus was accepted in Sutton (1977), but not included in Sutton (1980). Kirk et al. (2008, 2013) and Wijayawardene et al. (2012, 2017a, b, 2018) accepted it as a valid genus. DNA sequence data is lacking, thus, taxonomic placement is uncertain.

CYTONAEMA Höhn., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1 123: 131 (1914)/ *C. spinella* (Kalchbr.) Höhn./ three species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic, ostiolate. Conidiophores: hyaline, septate, branched at the base and frequently above, cylindrical. Conidiogenous cells: enteroblastic, phialidic. Conidia: hyaline, aseptate, straight or allantoid.

Typification details: Saprobes, Europe, known only from coelomycetous morph.

Notes: Sutton (1977, 1980) accepted this genus. Marincowitz et al. (2010) introduced *C. proteae* Marinc. et al., thus, genus comprises three species. However, all species lack DNA sequence data, thus, their taxonomic placement is uncertain.

Cytophoma Höhn., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1 123: 133 (1914)

= **CYTOSPORA** Ehrenb., Sylv. mycol. berol. (Berlin): 28 (1818)

Notes: The type species of *Cytophoma*, *C. pruinosa* (Fr.) Höhn. is the asexual morph of *Valsa cypri* (Tul.) Tul. & C. Tul. (as *V. pruinosa* (Fr.) Défago in Sutton 1977). *Cytospora* is the well-established asexual morph of *Valsa*; thus, the name should be known as *Cytospora pruinosa* (Fr.) Sacc. (Saccardo 1879; Sutton 1977).

CYTOPLACOSPHERA Petr., Anns mycol. 17(2/6): 79 (1920) [1919]/ *C. rimosa* Petr./ two species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic to pycnidial, ostiolate. Conidiogenous cells: enteroblastic, phialidic. Conidia: hyaline, 1-3-septate, straight or bent.

Typification details: Saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: The genus *Cytoplacosphaeria* was accepted in Sutton (1977, 1980) and by other authors (Sarma and Hyde 2000, Punithalingam and Spooner 2002, Bucher et al. 2004). Poon and Hyde (1998) introduced *C. phragmiticola* Poon & K.D. Hyde. Both species lack DNA sequence data, thus, taxonomic placement is uncertain.

CYTOPLEA Bizz. & Sacc., in Bizzozero, Atti Inst. Veneto Sci. lett., ed Arti, Sér. 6 3: 307 (1885)/ *C. arundinacea* (Sacc.) Petr. & Syd./ five species/ *Roussoellaceae*, *Pleosporales*, *Dothideomycetes*

Conidiomata: stromatic to pycnidial, ostiolate. Conidiogenous cells: enteroblastic, phialidic. Conidia: brown, aseptate, oval to ellipsoid.

Typification details: Saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: The genus *Cytoplea* was accepted in *Roussoellaceae* by several authors (Liu et al. 2014, Wijayawardene et al. 2014b, 2017a, b, 2018). However, the deposition in *Roussoellaceae* and linking with sexual morph (*Roussoella*) was not based on the type species (i.e. *Roussoella hysterioides* (Ces.) Höhn. has *C. hysterioides* K.D. Hyde asexual morph *vide* Hyde 1996). Hence, Liu et al. (2014) suggested to synonymise *Cytoplea* under *Roussoella*. However, Wijayawardene et al. (2014b) did not agree with this synonymy as both *Roussoella hysterioides* and *Cytoplea hysterioides* are not the type species of the respective genera.

Index Fungorum (2019) lists 33 epithets but some species have been transferred to other genera (Species Fungorum 2019). Kirk et al. (2008) accepted only five species. *Cytoplea*-like taxa are polyphyletic, thus, it is essential to rely on molecular data to accommodate them in a narrow generic concept, i.e. *Cytoplea s. str.*

CYTOSPHERA Died., Sydow & Butler, Anns mycol. 14(3/4): 205 (1916)/ two species/ *C. mangiferae* Died./ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic, ostiolate. Conidiophores: sometimes present, 1-2 septate, hyaline, smooth, sparingly branched. Conidiogenous cells and conidia: macroconidia: holoblastic, cylindrical, hyaline; microconidia: Enteroblastic, phialidic, hyaline, aseptate, ellipsoid to cylindrical.

Typification details: Saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: Sutton (1980) illustrated the type species and briefly discussed the background of the genus. The genus comprises two species, but both lack DNA sequence data.

CYTOSPORA Ehrenb., Sylv. mycol. berol. (Berlin): 28 (1818) (= *Valsa* Fr., Syst. orb. veg. (Lundae) 1: 107 (1825) *vide* Rossman et al. 2015a)/ *C. chrysosperma* (Pers.) Fr./ c. 192 species/ *Valsaceae*, *Diaporthales*, *Sordariomycetes*

Conidiomata: stromatic, ostiolate. Conidiophores: septate, hyaline, smooth, branched. Conidiogenous cells: enteroblastic, phialidic. Conidia: hyaline, aseptate, subcylindrical, elongate-allantoid.

Typification details: Saprobes, pathogens, cosmopolitan, known only from both asexual and sexual morph.

Notes: Sutton (1977, 1980) accepted *Cytospora* Ehrenb. ex Fr. 1823 as the correct name while treating *Cytospora* Ehrenb. 1818 as a synonym. However, subsequent publications accepted *Cytospora* Ehrenb. 1818 as the correct name (Kirk et al. 2008, 2013). Rossman et al. (2015a) proposed to adopt *Cytospora* against *Valsa* as the former is older, widely used name. Norphanphoun et al. (2017) documented the genus based on morpho-molecular analysis. Index Fungorum (2019) lists 647 epithets but the phylogenetic affinities with the type species are unknown. Kirk et al. (2008) accepted about 110 species and 82 species have been introduced since 2008. Hence, we accept about 192 species within the genus.

CYTOSPORELLA Sacc., Syll. fung. (Abellini) 3: 251 (1884)/ *C. sycina* (Sacc.) Sacc./ 14 species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiophores: septate, hyaline, branched. Conidiogenous cells: enteroblastic, phialidic. Conidia: Hyaline, aseptate, ellipsoidal.

Typification details: Saprobes, cosmopolitan, known only from coelomycetous morph

Notes: The genus *Cytospora* was introduced to accommodate *Cytospora*-like taxa which are 'with ovoid rather than allantoid conidia. However, the stromata are of quite different structure and the conidiophores are not branched in the same manner' (Sutton 1980). DNA sequence data is lacking, thus, taxonomic placement is uncertain.

Index Fungorum (2019) lists 647 epithets but only 14 species are accepted in Species Fungorum (2019). Kirk et al. (2008) accepted 32 species.

CYTOSPORINA Sacc., Syll. fung. (Abellini) 3: 601 (1884) (= *Dumortieria* Westend., Bull. Acad. R. Sci. Belg., Cl. Sci., sér. 2 2(7): 572 (1857)/ *C. ludibunda* Sacc./ 22 species/ *Ascomycota* genera *incertae sedis*

Conidiomata: stromatic. Conidiogenous cells: holoblastic. Conidia: hyaline, 1-3-septate, ellipsoidal.

Typification details: Saprobes, cosmopolitan, known only from coelomycetous morph.

Notes: Sutton (1977) treated *Cytosporina* as a later synonym of *Dumortieria* Westend. 1857. However, *Dumortieria* is illegitimate (Art. 59.1); thus, we propose to reinstate *Cytosporina*. Species Fungorum (2019) accepted 22 species.

Cytosporium Sacc., Syll. fung. (Abellini) 3: 470 (1884)

= **CELLULOSPORIUM** Peck, Bot. Gaz. 4(6): 171 (1879)

Notes: Sutton (1977) treated *Cytosporium* as a superfluous name for *Cellulosporium* introduced by Saccardo (1884).

Cytosporopsis Höhn., Annl. mycol. 16(1/2): 124 (1918)

= **CYTOSPORA** Ehrenb., Sylv. mycol. berol. (Berlin): 28 (1818)

Notes: Sutton (1977) regarded the type species of *Cytosporopsis*, *C. umbrinus* (Bonord.) Höhn. as congeneric with *Cytospora* s. str. Hence, *Cytosporopsis* was synonymized under *Cytospora*.

Cytostaganis Clem. & Shear, Gen. fung., Edn 2 (Minneapolis): 367 (1931)

= **CYTOSTAGONOSPORA** Bubák, Anns mycol. 14(3/4): 150 (1916)

Notes: Sutton (1977) and Index Fungorum (2019) treated *Cytostaganis* as a superfluous name for *Cytostagonospora* (Art. 52.1).

CYTOSTAGONOSPORA Bubák, Anns mycol. 14(3/4): 150 (1916)/ *C. photiniicola* Bubák/
two species/ *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*

Conidiomata: pycnidial, ostiolate. Conidiogenous cells: holoblastic. Conidia: hyaline, 0-2-septate, filiform, often curved

Typification details: Saprobes, cosmopolitan, known only from coelomycetous morph

Notes: *Cytostagonospora* was treated as a distinct genus in Sutton (1977, 1980) but von Arx (1983) treated it as a synonym of *Septoria*. Quaedvlieg et al. (2013) showed that *Cytostagonospora* resides in *Mycosphaerellaceae*, but distinct to *Septoria sensu stricto*.

Refs.: Quaedvlieg et al. (2013), Wijayawardene et al. (2014b, 2017a, b, 2018)

Cyotriplospora Bayl. Ell. & Chance, Trans. Br. Mycol. Soc. 7(1-2): 47 (1921)

= **STRASSERIA** Bres. & Sacc., in Strasser, Verh. zool.-bot. Ges. Wien 52: 436 (1902)
fide Guba (1961)

Cyttariella Palm, Anns mycol. 30(5/6): 418 (1932)

Notes: Sutton (1977) mentioned that the type material is unavailable.

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Statement on conflict of interest

The authors declare no competing interests.

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