

SUPPLEMENT TO THE LICHEN FLORA OF QUEENSLAND.

By JOHN SHIRLEY, D.Sc.

Read before the Royal Society of Queensland, May, 1912.

The Lichen Flora of Queensland was published in 1888-9. Parts I-III (b) appeared in Volumes V and VI, of the Proceedings of the Royal Society of Queensland, Part IV, with Index and Supplement, was printed by Messrs. Pole & Outridge, in 1889. Since that time, a period of twenty-three years, many additional lichens have been recorded from this State by Dr. Jean Muller, of Geneva; Dr. Chas. Knight, of New Zealand; Dr. James Stirton, of Glasgow; Rev. F. R. M. Wilson, and the author of this paper.

These additions have been described in various scientific journals of Europe and Australia, and many have been recorded by our Government Botanist in his Bulletins, or in Extracts from the Queensland Agricultural Journal, 1890-1912. In these the sections dealing with lichens were of my drafting.

As many Queensland lichens are recorded under incorrect names, and not infrequently under wrong genera, a revision is necessary, and as the Australian student cannot consult the whole of the works, a summary is required. This paper is an attempt to meet both these requirements.

The reference following the name of each species gives to the student the name of an Australian publication in which a description may be found, with the habitat of the type specimen, and a means of obtaining other information.

The classification is that of Dr. Jean Muller, of Geneva, who adopted the distinguishing title of Muller of Aargau, for which the abbreviation M.A. is used.

LICHENS.

COLLEMACEÆ, Mull. Arg. Enum. Lich. Gen., p. 18, and
Lich. Socot.

I. COLLEMEÆ, Körb., Par., p. 48.

1. *Obryzum*, Wallr. These are lichens parasitic on species of Collemeæ, and are now referred to Pyrenocarpeæ. Lich., Great Brit., ii., 264-5.
O. myriopus f. *isidiosum*, Wilson. s. *Coccocarpia pellita* v. *incisa*, M.A., Bot. Bull. viii., 97.
2. *Synechoblastus*, Trev.
S. nigrescens, Huds. s. *Collema nigrescens*, Huds., Lich. Fl. Q., p. 5.
S. glaucophthalmus, M.A. s. *C. leucocarpum*, Tayl., Lich. Fl. Q., p. 6.
S. microcarpus, M.A. s. *C. microcarpum*, M.A., Lich. Fl. Q., p. 6.
S. Gwytheri, Shirley. s. *C. Gwytheri*, Stirton, Q.A.J., Nov., 1899.
3. *Physma*, Mass., Neag., p. 8.
P. byrsinum, M.A. s. *C. byrsinum*, Ach., Lich. Fl. Q., p. 5.
P. byrsinum v. *amphiurum*, M.A., Bot. Bull. iv., 23.
4. *Collema*, Ach. (pro p.)
C. hypolasium, Stirton, Q.A.J., Nov., 1899.
5. *Leptogium*, Fr. (pro p.)
L. bullatulum, M.A., Bot. Bull., iv., 23.
L. cærulum, Wils., Bot. Bull. ii., p. 28. = *Coccocarpia aurantiaca*, Bot. Bull., viii., p. 97.
L. Wilsoni, Shirley = *L. denticulatum*, Wils., a name already used by Nylander, Lich. Mey., 41. (See Bot. Bull. ii., 28.)
L. sphinctrinum, Nyl., Bot. Bull. ii., 28.
L. atro-viride, Wils., Bot. Bull. ii., 28.
L. phyllocarpum v. *isidiosum*, Nyl., Bot. Bull. iii., 20.
L. phyllocarpum v. *dædalum*, Nyl., Bot. Bull. v., 31.
L. tremelloides v. *azureum* (Ach.), Mnt., Bot. Bull. iii., 20.
L. tremelloides v. *isidiosa*, M.A., Bot. Bull. viii., 91.
L. chloromelum, Nyl., Bot. Bull. iii., 20.
L. hypotrachynum, M.A., Lich. Beit. xii., 12.

6. *Leptogiopsis*, M.A., L.B., 372.

L. carneolum (Wils.), Shirley, Bot. Bull. ii., 28.

1. MYRIANGIUM, Mnt. et Berk.

Now referred to Fungi. Lich. Fl., Great Brit., ii., 263.

II. EPICONIACEÆ, M.A., Enum. Lich. Gen., p. 18 ;
and Lich. Socot.

I. CALICIEÆ, Mull. Arg. Enum. Lich. Gen., p. 19.

1. *Trachylia*, Fries.

T. tricineta, Wils., Bot. Bull., ii., 31.

2. *Pyrgillus*, Nyl.

P. javanicus, Nyl. = *P. australiensis*, Wils., Bot. Bull., ii., 31, and *Calicium stenosporum*, Wils., Bot. Bull., ii., 29.

P. caliciisporus, Wils., Bot. Bull., ii., 31.

P. fallax, Wils., Bot. Bull., ii., 31.

3. *Acolium* (Fee), De Not.

A. buelliaceum, M.A., Bot. Bull., viii., 91.

4. *Calicium*, Ach.

C. trachelinum, Ach. = *C. glebosum* v. *glaucescens*, Wils.
= *C. glebosum* v. *concinnum*, Wils.,
and *C. hymenosporum*, Wils., Bot. Bull., ii., 30 ;
Bot. Bull., viii., 91.

C. trachelinum v. *queenslandiæ*, Wils., Bot., Bull., ii., 30.

C. glebosum, M.A., Bot. Bull., v., 31.

C. pachypus, M.A., Bot. Bull., iv., 23.

C. chlorosporum, Wils., Bot. Bull., ii., 29.

C. fulvo-fuscum, Wils., Bot. Bull., ii., 29.

C. atro-nitescens, Wils., Bot. Bull., ii., 30.

C. victoriæ, C.K., v. *albo-carneum*, Wils., Bot. Bull., ii., 30.

C. victoriæ, C.K., v. *jejunum*, Wils., Bot. Bull., ii., 30.

C. pretenue, Wils., Bot. Bull., ii., 30.

C. quercinum v. *lenticulare*, Ach., Q.A.J., Nov., 1899.

C. curtum, Borr., Lich. Fl. Q., p. 184.

III. LICHENACEÆ, Mull. Arg. Lich. Soc., and Enum.
Lich. Gen., p. 18.

I. SPHEROPHOREÆ, M.A., Lich. Miy., p. 120.

1. *Sphærophoron*, Pers.

S. australe, Laur., Bot. Bull., iii., 20.

II. TYLOPHOREÆ, Nyl., Prod. Lich. Nov. Gran., p. 430 as
TYLOPHOREI.

2. *Tylophoron*, Nyl., Prod. Lich. Nov. Gran., p. 430.

T. triloculare, M.A., Bot. Bull., viii., 92.

III. *CLADONIEÆ, M.A., Enum. Lich. Gen., p. 22.

3. *Stereocaulon*, Schreb.

S. proximum v. *nudatum*, M.A., Bot. Bull., iii., 21.

S. ramulosum v. *microcorpoides*, M.A., Bot. Bull., v., 31.

4. *Thysanothecium*, Berk et Mnt.

T. Hookeri, Berk et Mnt., Q.A.J., Nov., 1899.

5. *Cladonia*, Hffm.

s. *Phæocarpæ*.

C. fimbriata v. *antilopæa*, M.A., Bot. Bull., iii., 21 ;
viii., 92.

C. fimbriata v. *tenella*, M.A., Lich. Fl. Q., p. 184.

= *C. delicata*, Wilson, non. Flk.

C. fimbriata v. *chordalis*, Flk., Q.A.J., Nov., 1899.

C. fimbriata v. *radiata*, Fr. Lich. Fl. Q., p. 184.

C. cariosa, Flk. = *C. degenerans*, Fr., Q.A.J., Nov., 1899.

C. degenerans v. *pleolepis*, Flk., Bot. Bull., viii., 93.

C. elegantula, M.A. = *C. lepidula*, Kremp. of Lich. Fl. Q.,
p. 16.

C. furcata v. *foliolosa*, M.A., Bot. Bull., viii., 93.

C. ochrochlora v. *ceratodes*, Flk., Bot. Bull., iv., 23.

C. rangiformis v. *sorediophora*, Wain., Bot. Bull., iv., 23.

C. squamosula, M.A., Lich. Fl. Q., p. 184.

s. *Erythrocarpæ*.

C. macilenta v. *flabellulata*, M.A., Bot. Bull., viii., 93.

IV. THAMNOLIEÆ, Mull. Arg., Lich. Miy., p. 121.

6. *Thamnolia*, Sch.

T. vermicularis, Sw., Bot. Bull., v., 31.

*Given as an order of Lecideei in Lich. Flor. Great Brit. II, 2.

V. USNEÆ, Th. M. Fries., Gen. Heter, p. 50.

7. *Usnea*, Hoffm.

U. barbata v. *asperrima*, M.A.=*Eumitria Baileyi*, Stirton, B.B., iii., 21.

U. barbata v. *hirta*, Fr.=*U. florida* v. *articulata*, Stirton, B.B., iii., 21.

U. barbata v. *scabrida* (Tayl.), M.A., Bot. Bull., iii., 21.

U. barbata v. *strigosa*, Krph.=*U. florida* v. *strigosa*, Stirton, B.B., iii., 21.

U. sublurida, Stirton, Q.A.J., Nov., 1899.

VI. RAMALINEÆ, Th. M. Fries., Gen. Hetero., p. 50.

8. *Alectoria*, Ach.

A. australiensis, C.K., transferred to Fungi, having no gonidia. Bot. Bull., viii., 91.

9. *Ramalina*, Ach.

R. gracilis, Nyl.=*R. geniculata*, Hook. et Tayl. (none perforate part), Lich. Fl. Q., p. 196. *R. maculata*, M.A., *R. exiguella*, Stirt., *R. costata*, Mey. et Flot.

R. Ecklonii, Mnt.=*R. Yemensis*, Ach., Lich. Fl. Q., p. 196.

R. Ecklonii v. *tenuissima*, Mey. et Flot., Bot. Bull., viii., 93.

R. Ecklonii v. *membranacea* (Mnt.), Laur., Bot. Bull., iii., 22.

R. Ecklonii v. *ovalis*, Tayl., Q.A.J., Nov., 1899.

R. dendriscoides, Nyl., Bot. Bull., iii., 22.

R. dendriscoides v. *minor*, M.A., Bot. Bull., iii., 22.

R. farinacea v. *squarrosa*, M.A., Lich. Fl. Q., p. 185.

R. fraxinea v. *tæniæformis*, Ach., Lich. Fl. Q., p. 185.

R. inflata, Hook. et Tayl., Lich. Fl. Q., p. 185.

R. inflata v. *gracilis*, M.A., Lich. Fl. Q., p. 186.

R. inflata v. *olivacea*, M.A., Bot. Bull., viii., 93.

R. leiodea, Nyl., Bot. Bull., iii., 22.

10. *Platysma*, Hoffm.

P. eriophyllum, C.K.=*Erioderma Knightii*, Shirley.

VII. PELTIGEREÆ, M.A., Lich. Gen., p. 29.

11. *Peltigera*, Hoffm.

P. polydactyla v. *dissecta*, M.A., Bot. Bull., viii., 93.

12. *Nephromium*, Nyl.

N. tropicum, M.A., Lich. Beit., 559.

VIII. PARMELIÆ, Mull. Arg., Lich. Parag., p. 3; and Lich. Gen., p. 31.

13. *Stictina*, Nyl.

- S. argyracea* f. *isidiosa*, M.A., Bot. Bull., iv., 24.
S. punctillaris, M.A., Bot. Bull., iv., 24.
S. fragillima v. *linearis*, M.A., Lich. Fl. Q., p. 188.
S. fragillima v. *dissecta*, M.A. = *S. fragillissima*, Kremp.
S. intricata, Stirton (non Del.) = *S. crocata* v. *esorediata*, M.A., Bot. Bull., iii., 23; Bot. Bull., viii., 94.
S. intricata v. *Thouarsii*, Nyl. = *S. pustulosa*, Wilson.
S. cinnamomea, Rich. = *S. fragillima*, Nyl., Lich. Fl. Q., p. 196.
S. impressula, M.A., Lich. Fl. Q., p. 189.
S. impressula v. *sublævis*, M.A., Bot. Bull., iv., 24.
S. suborbicularis, M.A. = *S. subtomentella*, C.K., and *S. macrophylla*, of various authors. Bot. Bull., viii., 94.
S. quercizans, Ach. = *S. tomentella*, Leighton (non Ach.), Bot. Bull., viii., 94.
S. cyphellulata, M.A., Lich. Fl. Q., p. 189.
S. fuliginosa, Nyl., Bot. Bull., viii., 94.
S. brevipes, M.A. = *S. marginifera*, Tayl., Lich. Fl. Q., p. 55; Bot. Bull., viii., 94.
S. retigera, M.A. = *Lobaria retigera*, Ach., Lich. Beit., 74.

14. *Sticta*, Ach.

- S. pulmonacea*, M.A. = *Lobaria pulmonacea*, Ach., Lich. Fl. Q., p. 57.
S. variabilis v. *papyracea*, M.A., Bot. Bull., viii., 94.
S. demutabilis, Krph., Bot. Bull., iii., 23.
S. carpolomoides, Nyl., Bot. Bull., iii., 23.
S. dichotomoides, Nyl. = *S. stipitata*, Wils., and *S. camaræ*, M.A., Lich. Fl. Q., p. 196.
S. Sayeri, M.A., Lich. Fl. Q., p. 191.
S. Seemanni, Bab., Bot. Bull., viii., 94.
S. flix v. *myrioloba*, M.A., Bot. Bull., v., 31.
S. glaucescens, Krph., Bot. Bull., iii., 23.
S. aurata v. *microphylla*, M.A., Lich. Fl. Q., p. 190.
S. endochrysea v. *flavicans*, M.A. = *S. flavicans*, Hook. et Tayl., Bot. Bull., viii., 94.
S. Richardi, Hook., to be separated from *S. Billardieri*, Del., Lich. Fl. Q., p. 62; Lich. Beit., 566.

- S. sulphurea*, Schaer, Lich. Fl. Q., p. 190.
S. Karstenii, M.A., Lich. Fl. Q., p. 190.
S. Karstenii v. linearis, M.A., Lich. Fl. Q., p. 191.
S. impressa, Hook. et Tayl. = *S. physciospora*, Nyl.,
 and *S. Bornetii*, M.A., Bot. Bull., viii., 94.

15. *Riascolia*, De Not.

- R. erosa*, Eschw., Q.A.J., Nov., 1899.
R. Ravenelii, Tuck., Q.A.J., Nov., 1899.
R. patinifera, M.A., Lich. Fl. Q., p. 191.
R. hypoleuca, M.A. = *S. hypoleuca*, M.A., Lich. Fl. Q.,
 p. 192.

16. *Parmelia*, Ach.

- P. tinctorum*, Despr. = *P. euplecta*, Stirton, Lich. Fl. Q.,
 p. 36 ; and *P. prætervisa*, M.A., Bot. Bull., iii., 23.
P. cetrarioides, Del., Queens. Ag. Jour., Nov., 1899.
P. laceratula v. minor, Shirley, Bot. Bull., v., 32.
P. tenuirima, Tayl., Bot. Bull., viii., 95.
P. tenuirima v. corallina, M.A., Lich. Fl. Q., p. 186.
P. latissima v. ciliata, Nyl., Bot. Bull., iii., 23.
P. latissima, Fee. = *P. platycarpa*, Stirton, Lich. Fl. Q.,
 p. 39.
P. hypoxantha, Stirton, Q.A.J., Nov., 1899.
P. placorhodioides, Nyl., Q.A.J., Nov., 1899.
P. cetrata v. sorediifera, Wain., Bot. Bull., viii., 94.
P. corrugis v. sorediata, M.A., Bot. Bull., iii., 24.
P. perforata, Ach. = *P. reparata*, Stirton, Lich. Fl. Q., 40.
P. perforata v. ciliata, Nyl., Bot. Bull., iii., 24.
P. encausta, Ach., Q.A.J., Nov., 1899.
P. perlata v. ciliata, D.C., Bot. Bull., viii., 95.
P. perlata v. olivaria, Ach., Bot. Bull., iii., 24.
P. Hookeri, Tayl., Bot. Bull., viii., 95.
P. tiliacea v. affixa, Strn., Q.A.J., Nov., 1899.
P. tiliacea v. regulata, M.A., Bot. Bull., iv., 24.
 = *P. caperatula*, Stirton (non Nyl.), Bot.
 Bull. viii., 95.
P. tiliacea v. stenophylla, M.A., Lich. Fl. Q., p. 186.
P. tiliacea v. sulphurosa, Tuck., Bot. Bull., viii., 95.
P. meizospora, Nyl. = *P. tiliacea v. meizospora*, Nyl.,
 Bot. Bull., viii., 95.
P. pruinata, M.A., Lich. Fl. Q., p. 188.

- P. prætervisa*, M.A.=*P. tinctorum*, Despr., Bot. Bull., viii., 95.
- P. conspersa* f. *exasperata*, M.A., Lich. Fl. Q., p. 188.
- P. conspersa* v. *hypocleistoides*, M.A., Bot. Bull., iii., 24.
- P. adpressa*, Krph.=*P. amplexula*, Stirton, Bot. Bull., viii., 95.
- P. rutidota* f. *sorediosa*, M.A., Bot. Bull., viii., 95.
- P. limbata* v. *endococcinea*, M.A., Lich. Fl. Q., p. 186.
- P. gracilis*, M.A., Lich. Fl. Q., p. 187.
- P. limbata*, Laur.=*P. insinuata*, Knight (non Nyl.), Bot. Bull., viii., 95; Lich. Fl. Q., p. 47.
- P. virens*, M.A., Lich. Fl. Q., p. 187.
- P. virens* v. *sorediata*, M.A., Lich. Fl. Q., p. 188.
- P. hypoxantha* v. *major*, M.A., Lich. Fl. Q., p. 187.
- P. hospitans*, M.A., Lich. Fl. Q., p. 188.
- P. eciliata*, Nyl., Bot. Bull., v., 32.
- P. physodes* v. *pulverata*, M.A., Bot. Bull., viii., 95.
- P. urceolata* v. *sorediifera*, M.A., Bot. Bull., v., 32.
- P. urceolata* v. *subcetrata*, M.A., Bot. Bull., v., 32.
17. *Theloschistes*, Norm. (*Pseudophyscia*, Lich. Beit., 1503).
T. chrysophthalma v. *leucoblephara*, M.A.=*T. velifer*, Wils., Lich. Fl. Q., p. 193, as *Physcia*.
T. flavicans v. *croceus* (Ach.), Nyl., Bot. Bull., iii., 24, as *Physcia*.
18. *Anaptychia*, Körb., Fl. 1861, p. 32.
A. barbifera, Nyl.=*P. barbifera*, Nyl., Lich. Fl. Q., p. 71.
A. comosa, Trev.=*P. comosa* v. *alata*, Wils, and *Theloschistes comosa* v. *alata*, Shirley, Bot. Bull., ii., 32.; Bot. Bull., v., 32; Bot. Bull., viii., 95-6.
A. leucomelæna, Trev.=*P. leucomela*, Lich. Fl. Q., p. 70, Bot. Bull., viii., 95-6.
A. speciosa v. *hypoleuca* f. *sorediifera*, M.A., Bot. Bull., viii., 95-6.
A. speciosa v. *sorediosa*, M.A., Bot. Bull., viii., 95-6.
A. obesa v. *caesio-crocata*, Tuck., Lich. Fl. Q., p. 71, as *Physcia*.
19. *Physcia*, Fr. (pro. p.)
P. picta v. *isidiophora*, Nyl., Bot. Bull., iii., 24.
P. picta v. *sorediata*, M.A., Bot. Bull., iv., 24.

IX. PYXINEÆ, M.A., Lich. Parag., p. 6; Bot. Soc.,
p. 356.

20. *Pyxine*, Fr.

*P. endochrysin*a, Nyl., Bot. Bull., viii., 96.

*P. coco*es v. *endoxantha*, M.A., Bot. Bull., iii., 24.

P. meissneri v. *endoleuca*, M.A., Bot. Bull., viii., 96.

P. meissneri v. *sorediosa*, M.A., Bot. Bull., viii. 96.

X. PSOROMEÆ, Nyl., Syn. II., 21 (ex. *Gymnoderma*), and
M.A., Lich. N.Z., p. 41.

21. *Psoroma*, Fr.

P. pholidotum, M.A.=*Pannaria pholidota*, Nyl., Lich.
Fl. Q., p. 196.

P. sphinctrinum, Nyl.=*P. contortulum*, Wils.

*P. cæsi*um, M.A., Lich. Fl. Q., p. 193.

P. Karstenii, M.A., Lich. Fl. Q., p. 193.

XI. PANNARIEÆ, Körb., Syst., p. 105.

22. *Pannaria*, Del.

P. mariana=*P. pannosa*, Nyl.=*P. cervina*, Kremp.,
Lich. Fl. Q., p. 78; Lich. Beit., 243; Lich.
Beit, 1159; Lich. Fl. Q., p. 196.

P. elatior, Stirton, Q.A.J., Nov., 1899.

P. terrestris, Stirton, Q.A.J., Nov., 1899.

P. mariana f. *isidiosa*, M.A.=*P. pannosa* f. *isidioidea*,
M.A., Bot. Bull., viii., 96.

P. fulvescens, Mnt., Lich. Fl. Q., p. 193.

P. brisbanensis, C.K., Lich. Fl. Q., p. 194.

P. sordida, C.K., Lich. Fl. Q., p. 194.

23. *Heppia*, Nyl.

H. brisbanensis, Wilson. Bot. Bull., ii., 32.

24. *Erioderma*, Fee, Lich. Schenk. —

E. Knightii, Shirley=*Platysma eriophyllum*, C.K.,
Bot. Bull., viii., 96.

XII. PARMELIELLEÆ, M.A., Lich. Cath., p. 239.

25. *Parmeliella*, M.A., Enum. Lich. Gen., p. 36.

P. triptophylla, M.A.=*Pannaria triptophylla*, Ach.,
Lich. Fl. Q., p. 80.

P. nigro-cincta, M.A.=*Pannaria nigro-cincta*, Mnt.,
Lich. Fl. Q., p. 81.

XIII. COCCOCARPIÆ, M.A., Lich. Schenk.

26. *Coccocarpia*, Pers.*C. molybdæa*, Pers., Q.A.J., Nov., 1899.*C. pellita* v. *incisa*, M.A., Bot. Bull., viii., 97.*C. pellita* v. *isidiophylla*, M.A., Bot. Bull., iv., 24.*C. pellita* v. *smaragdina*, M.A. = *C. smaragdina*, Pers., Bot. Bull., viii., 97.

XIV. PLACODIÆ, M.A., Enum. Lich. Gen., p. 37.

27. *Amphiloma*, Fr.*A. murorum*, M.A. = *Placodium murorum*, Korb. Lich., Fl. Q., p. 85.28. *Placodium*, D.C.*P. clavigerum*, Stirton, Q.A.J., Nov., 1899.*P. galactinum* v. *dispersum*, Pers., Bot. Bull., iii., 25.*P. glauco-lividum*, M.A., Bot. Bull., iv., 24.

XV. PSOREÆ, M.A., Lich. Parag., p. 8.

29. *Phyllopsora*, M.A.*P. breviscula*, M.A. = *Psora parvifolia*, Tuck., Bot. Bull., iii., 25 ; and *P. foliata* v. *atro-virens*, C. K.*P. foliata*, Stirton, Lich. Fl. Q., p. 105, as *Lecidea*.30. *Psora*, M.A.*P. parvifolia*, M.A. = *Lecidea parvifolia*, Pers., Lich. Fl. Q., p. 106.*P. parvifolia* v. *fibrillifera*, Nyl., Bot. Bull., v., 33.*P. parvifolia* v. *subgranulosa*, M.A., Bot. Bull., viii., 97.*P. subhyalina*, Shirley = *Lecidea subhyalina*, Stirton, Lich. Fl. Q., p. 106.31. *Thalloidima*, M.A.*T. caeruleo-nigricans*, M.A. = *L. caeruleo-nigricans*, Lghtf., Bot. Bull., viii., 97.

XVI. LECANOREÆ, M.A., Lich. Socot., p. 359.

32. *Lecanora*, Ach.s. *Eulecanora*, M.A.*L. lacteola*, M.A., Bot. Bull., viii., 97.*L. subfusca* v. *cinereo-carnea*, Tuck., Bot. Bull., viii., 98.*L. subfusca* v. *conjungens*, M.A., Bot. Bull., xiii., 19.*L. subfusca* v. *compacta*, M.A., Bot. Bull., iii., 25.*L. subfusca* v. *allophana*, Ach., Bot. Bull., iii., 25.*L. subfusca* v. *distans*, Nyl., Bot. Bull., viii., 97.

- L. subfusca v. subgranulata*, Nyl., Bot. Bull., iv., 25.
L. subfusca v. testaceo-pallida, M.A., Bot. Bull., viii., 97.
L. subpurpurea, Strn., Q.A.J., Nov., 1899.
L. granifera, Ach. (non Krph.), Bot. Bull., iii., 25.
L. caesio-rubella, Ach., Bot. Bull., iii., 25.
L. interjecta, M.A., Bot. Bull., iv., 25 ; viii., 98.
L. connivens, M.A., Bot. Bull., iv., 25.
L. atra v. serialis, M.A., Bot. Bull., xiii., 19.
L. albellaria, M.A., Bot. Bull., xiii., 19.
L. flavido-fusca, M.A., Bot. Bull., xiii., 20.
L. Knightiana, M.A., Bot. Bull., xiii., 20.
L. melacarpella, M.A., Bot. Bull., xiii., 20.
L. rhodophthalma, M.A., Bot. Bull., v., 32.
 s. *Aspicilia*, M.A.
A. impressa, Kremp. = *Lecanora lævissima*, C.K., B.B., viii., 99.
A. melanommata, C.K. = *Lecanora melanommata*, C.K., L.F.Q., p. 91.
 s. *Ochrolechia*, Mass., for s. *Lecanorastrum*, L.F.Q., 94.
33. *Lecania*, Mass., Lich. Scand., p. 11.
 L. phæoplaca, Strn., Q.A.J., Nov., 1899.
 L. punicea, M.A. = *Lecanora punicea*, Ach., Lich. Fl. Q., p. 93.
34. *Callopisma*, De Not.
 C. cinnabarinum v. opacum, M.A., Bot. Bull., viii., 98.
 C. conjungens, M.A., Bot. Bull., viii., 98.
 C. rubens, M.A., Bot. Bull., iv., 25.
35. *Rinodina*, M.A.
 R. xanthomelana, M.A., Bot. Bull., iv., 25.
 R. diffractella, M.A., Bot. Bull., iv., 25.
 R. rhyppoderma (M.A.), Shirley, Bot. Bull., iv., 25 ; Lich. Brisb., 51.
 R. minutula, M.A., Bot. Bull., iii., 26.
36. *Pertusaria*, D.C.
 P. albinea, M.A., Bot. Bull., xiii., 22.
 P. amblygona, M.A., Bot. Bull., xiii., 21.
 P. commutata, M.A., Bot. Bull., viii., 98.
 P. confluens, M.A., Bot. Bull., xiii., 22.
 P. depressa v. octomera, M.A., Bot. Bull., viii., 98.
 P. elliptica, M.A., Bot. Bull., xiii., 21.

- P. globulifera*, Nyl., Bot. Bull., viii., 98.
P. irregularis, M.A., Bot. Bull., xiii., 22.
P. leucoxantha, M.A., Bot. Bull., xiii., 21.
P. lactea, Nyl.=*P. soorediata*, C.K., Bot. Bull., viii., 98.
P. leiocarpella, M.A., Bot. Bull., xiii., 21.
P. leioplaca v. gibbosa, M.A., Bot. Bull., v., 33.
P. leioplaca v. octospora, Nyl., Bot. Bull., v., 33.
P. leucostoma, M.A., Bot. Bull., xiii., 21.
P. macra, M.A., Bot. Bull., xiii., 22.
P. meridionalis v. xanthostoma, M.A., Bot. Bull., iii., 26.
P. multipuncta, Turner, Q.A.J., Nov., 1899.
P. persulphurata, M.A., Bot. Bull., iv., 25.
P. plicatula, M.A., Bot. Bull., xiii., 21.
P. rhodotropa, M.A., Bot. Bull., xiii., 20.
P. straminea, M.A., Bot. Bull., xiii., 22.
P. sulphurata, M.A., Bot. Bull., viii., 98.
P. subvaginata, Nyl., Bot. Bull., iii., 26.
P. subrigida, M.A., Bot. Bull., xiii., 21.
P. Wuljenii, D.C., Bot. Bull., iii., 27.

37. *Diploschistes*, Norm. (*Urceolaria*, Ach.)

- D. actinostomus*, Zahl=*Urceolaria actinostoma*, Schær.,
 Bot. Bull., iii., 26; and *Lecidea clausa*, C.K.,
 Lich. Fl. Q., p. 123.

XVII. GYALECTEÆ, M.A. Lich. Parag., p. 12.

38. *Gyalectidium*, M.A.

- G. phyllocharis*, M.A.=*L. phyllocharis*, Mnt., Lich.
 Fl. Q., p. 115; Bot. Bull., viii., 99.
G. filicinum, M.A., Bot. Bull., viii., 99.

XVIII. LECIDEÆ, M.A., Enum. Lich. Gen., p. 50.

39. *Lecidea*, Ach.

- s. *Eulecidea*.—Apothecia lecideine; spores, 8,
 simple; hypothecium coloured.
L. ferax, M.A., v. *geographica*, M.A. Bot. Bull., xiii.,
 23.
L. albo-cærulescens, Wulf.=*L. subnubila*, Stirton, Lich.
 Fl. Q., p. 108; Bot. Bull., viii., 99.
L. cinerascens, A.L.S.,=*L. speirea*, Ach., Lich. Fl. Gt.
 Brit., ii., 73.
 s. *Lecidella*.—Apothecia lecideine; spores 8,
 simple; hypothecium hyaline.

L. angolensis, M.A., Bot. Bull., iii., 27.

s. *L. ocellifera*, Nyl., Lich. Jap., p. 70.

L. nesophila, M.A., Bot. Bull., xiii., 23.

s. *Biatora*.—Apothecia biatorine, spores 8, simple.

L. aspidula v. *dispersa*, M.A., Bot. Bull., xiii., 22.

L. insulana, M.A., Bot. Bull., xiii., 22.

L. exigua, Chaub., Bot. Bull., iii., 27.

L. impressa, Krph., Bot. Bull., iii., 27; given as
Lecidella, Lich. Cost. Ric., ii., 18.

L. impressa v. *angulosa*, M.A., Bot. Bull., iv., 26.

L. leptoloma, M.A., Bot. Bull., iii., 27.

L. piperis, Spreng., Lich. Fl. Q., p. 194.

L. piperis v. *melanocarpa*, M.A., Bot. Bull., viii., 100.

s. *Biatorella*, M.A., Apothecia biatorine, spores
numerous, simple.

L. hæmatina, M.A., Bot. Bull., iv., 26.

40. *Patellaria*, M.A.

s. *Biatorina*.—Apothecia biatorine, spores small,
uniseptate.

P. melaclina, M.A., Bot. Bull., viii., 100.

s. *Psorothecium*.—Apothecia lecideine-biatorine;
spores large, uniseptate.

P. flavicans, M.A., Bot. Bull., iv., 26.

P. melanodermia, M.A., Bot. Bull., iv., 26.

P. Taitensis v. *epiglaucæ*, Nyl., Bot. Bull., v., 33.

s. *Catillaria*.—Apothecia lecideine-biatorine, finally
convex and immarginate, spores 8, uniseptate.

P. albo-flavicans, M.A., Bot. Bull., viii., 100.

s. *Bilimbia*.—Apothecia lecideine-biatorine; spores
3 to many-celled, finger or rod-shaped.

P. nodulosa, Shirley. s. *L. nodulosa*, Stirton Q.A.J.,
Nov., 1899.

P. sphæroides, Dicks., Bot. Bull., v., 33.

P. leucoblephara, Nyl., Lich. Fl. Q., p. 195.

P. triseptata, Hepp., Bot. Bull., iii., 27.

P. luteola v. *conspondens*, Nyl., Q.A.J., Nov., 1899.

P. vinicolor, Shirley. s. *L. vinicolor*, Stirton, Q.A.J.,
Nov., 1899.

s. *Bombyliospora*.—Apothecia lecideine-biatorine;
spores shaped and divided like a bee's body;
5 to many-septate.

- P. fusco-luteum*. M.A. = *L. fusco-lutea*, Dicks., L.F.Q., p. 115.
- P. domingensis* v. *ineaplicata*, M.A., Bot. Bull., iii., 28.
- P. vulpinum*, Tuck. = *L. domingensis* v. *gyrosa*, Stirton, Lich. Fl. Q., p. 117.
s. *Bacidia*.—Spores acicular, 3 to pluriseptate.
- P. intermixta*, M.A., Bot. Bull., viii., 100.
- P. millegrana*, M.A., Bot. Bull., viii., 100.
- P. millegrana* v. *fusco-nigrescens*, M.A., Bot. Bull., viii., 100.
- P. rhodocardia*, M.A., Bot. Bull., iv., 26.
- P. entodiaphana*, C.K., Bot. Bull., iii., 28.
s. *Scoliosporum*.—Spores blunt at one end and pointed at the other, 3 to pluriseptate.
- P. multiseptata*, Shirley, Bot. Bull., v., 33.
41. *Blastenia*, M.A.
B. ochroleuca, M.A., Bot. Bull., xiii., 23.
- 41(a) *Buellia*, De Not. Spores brown, bilocular.
B. rimulosa, M.A., Bot. Bull., viii., 101.
B. subareolata, M.A., Bot. Bull., viii., 100.
B. subarenaria, M.A., Bot. Bull., viii., 100.
B. lactea, Körb., Bot. Bull., iii., 29.
B. parasema v. *rugulosa*, Körb., Bot. Bull., iii., 28.
B. parasema v. *saprophila*, Körb., Bot. Bull., iii., 28.
B. parasema v. *vulgata*, Th. Fr., Bot. Bull., iii., 28.
B. tetrapla, M.A., Lich. Fl. Q., Shirley; Lich. War., p. 3.
B. tetrapla v. *nigro-cincta*, M.A., Bot. Bull., v., 33.
B. modesta, M.A., Bot. Bull., iii., 28.
B. amblygona, M.A., Bot. Bull., xiii., 23.
B. innata, M.A., Bot. Bull., iii., 29.
B. lauri-cassiæ, Fee., Bot. Bull., iii., 28.
B. macrosporoides, M.A., Bot. Bull., xiii., 23.
B. placomorpha, Stirton, Q.A.J., Nov., 1899.
B. sanguinolenta, Shirley = *L. sanguinolenta*, Stirton, Q.A.J., Nov., 1899.
B. glomerella, Shirley = *L. glomerella*, Stirton, Q.A.J., Nov., 1899.
42. *Heterothecium*, Flot. (pro. p. Mass.)
H. vulpina, Tuck. s. *L. domingensis* v. *gyrosa*, Stirton, Lich. Fl. Q., p. 117; Bot. Bull., viii., 101.

- H. vulpina* v. *corallinum*, M.A., Bot. Bull., iv., 27.
H. vulpina v. *glaucescens*, Nyl., Bot. Bull., v., 33.
H. fusco-luteum, M.A. s. *L. fusco-lutea*, Dicks., Lich. Fl. Q., p. 115; Bot. Bull., viii., 101.
H. pulchrum, M.A., Bot. Bull., iv., 27.
H. biferum, M.A., Bot. Bull., v., 34.

43. *Rhizocarpon*, M.A.

R. geographicum v. *cyclopicum*, Nyl.

S. *L. geographica* v. *cyclopica*, Nyl., Lich. Fl. Q., p. 123.

XIX. *COENOGONIEÆ, M.A., Lich. Parag., p. 18.

44. *Coenogonium*, Ehrenb.

C. confervoides, Nyl. s. *C. interpositum*, Nyl., Bot. Bull., viii., 101.

C. implexum, Nyl., Bot. Bull., iv., 27.

C. moniliforme, Tuck., Bot. Bull., iii., 29.

XX. BIATORINOPSIDÆ, Mull. Arg., Lich. Parag., p. 18.

45. *Biatorinopsis*, M.A.

B. planella, Nyl., Lich. Fl. Q., p. 196.

B. zonata, M.A., Bot. Bull., iv., 27.

XXI. THELOTREMEÆ, M.A., Graph., Fee., p. 5.

46. *Ocellularia*, M.A., L. B., 365.

O. annulosa, M.A., Bot. Bull., xiii., 24.

O. Baileyi, M.A., Bot. Bull., iv., 29.

O. cricota, Wils. s. *Phaeotrema cricotum*, M.A., Bot. Bull., ii., 32; viii., 102.

O. diffractella, M.A., Bot. Bull., iv., 29.

O. endomelæna, M.A., Bot. Bull., viii., 101.

O. goniosstoma, M.A., Bot. Bull., iv., 29.

O. jugalis, M.A., Bot. Bull., xiii., 24.

O. leucotylia, M.A., Bot. Bull., viii., 91.

O. pulchra, M.A., Bot. Bull., iv., 29.

O. phlyctioides, M.A., Bot. Bull., viii., 101.

O. platychlamys, M.A., Bot. Bull., xiii., 24.

O. xantholeuca, M.A., Bot. Bull., iv., 29.

O. zeorina, M.A., Bot. Bull., iv., 28.

47. *Phaeotrema*, M.A., Graph. Fee., p. 10.

P. cricota, M.A. s. *Ocellularia cricota*, Wilson, Bot. Bull., viii., 102.

*In Lich. Fl., Great Brit., II, 2, placed with Lecideæ.

48. *Thelotrema*, M.A., Graph. Fee, pp. 10-11.

T. albo-coronatum, C.K. s. *T. cupulare*, M.A., Bot. Bull., viii., 102.

T. argenteum, M.A., Bot. Bull., iv., 28.

T. bicuspidatum, M.A., Bot. Bull., iv., 28.

T. cyphelloides, M.A., Bot. Bull., xiii., 24.

T. endoxanthum, M.A., Bot. Bull., iv., 28.

T. inturgescens, M.A., Bot. Bull., viii., 102.

T. megalosporum, M.A., Bot. Bull., iv., 28.

T. microphthalmum, M.A., Bot. Bull., xiii., 24.

T. profundum, Shirley, Bot. Bull., xiii., 24.

T. rimulosum, M.A., Bot. Bull., iv., 28.

49. *Leptotrema*, M.A., Graph. Fee, p. 12.

L. æmulum, M.A., Bot. Bull., xiii., 25.

L. diffractum, M.A., Bot. Bull., iv., 27.

L. punctum, Nyl., Bot. Bull., viii., 102.

L. monosporum, C.K. s. *Thelotrema monosporum*, Shirley, Lich. Fl. Q., p. 131.

L. nitidulum, M.A., Bot. Bull., xiii., 25.

L. patulum, M.A., Bot. Bull., xiii., 25.

L. polycarpum, M.A., Bot. Bull., xiii., 25.

xxii. GRAPHIDEÆ, M.A., Graph. Fee, p. 13., and Bot. Soc., p. 372.

50. *Tremotylium*, M.A.

T. nitidulum, M.A., Bot. Bull., viii., 103.

51. *Platygrapha*, Nyl.

P. Shirleyana, M.A., Bot. Bull., xiii., 25.

52. *Opegrapha*, Nyl.

s. *Euopegrapha*, M.A., Lirellæ lecideine, always oblongate, not thalline-margined; peritheciium complete; gonidia chroolepoid.

O. grossulina, M.A., Bot. Bull., iii., 29.

O. prosodea, Ach., Bot. Bull., xiii., 26.

O. interveniens, M.A., Bot. Bull., iv., 30.

O. Bonplandi v. *abbreviata*, M.A., Bot. Bull., viii., 102.

s. *Lecanactis*, M.A. As in *Euopegrapha*, but lirellæ always when young orbicular, sub-lecideine, at length oblongate, no thalline margin, but often pulverulent; peritheciium complete; base incrassate; lips laterally emergent.

- O. varia* v. *diaphora*, Nyl., Bot. Bull., viii., 102.
O. vulgata v. *subsiderella*, Nyl., Bot. Bull., viii., 102.
O. lacteella, M.A., Bot. Bull., xiii., 26.
O. minutula, M.A., Bot. Bull., xiii., 26.

53. *Melaspilea*, M.A.

- s. *Holographa*, M.A. Perithecium complete, lips connivent; disk rimiform.
M. operaphoides, Nyl., Lich. Nov. Gran., p. 487, No. 92, as *Opegrapha*.
M. leucina, M.A. s. *O. leucina*, M.A., Lich. Fl. Q., p. 135.
s. *Hemigrapha*, M.A., Perithecium with base wanting; lips connivent; disk rimiform-angulate.
M. asteriscus, M.A., Bot. Bull., iii., 29.
s. *Eumelaspilea*, M.A. Perithecium at the base complete; lips rather small, at length distant or widely gaping; disk wide.
M. congregans, M.A., Bot. Bull., iv., 30.
M. intrusa, M.A. s. *Opegrapha intrusta*, Stirton, Lich. Fl. Q., p. 135.
M. congregantula, M.A., Bot. Bull., xiii., 26.
s. *Melaspileopsis*, M.A., Lich. Parag., p. 20.
M. stellaris, M.A., Bot. Bull., xiii., 26.

54. *Graphis* (Ach.), M.A.

- s. *Aulacographa*, M.A. Perithecium black, base complete; lips connivent; longitudinally sulcate; disk rimiform, black.
G. descissa, M.A., Bot. Bull., xiii., 27.
G. rimulosa v. *pulverulenta*, Nyl., Bot. Bull., iv., 30.
G. rimulosa v. *brachycarpa*, M.A., Bot. Bull., xiii., 27.
s. *Solenographa*, M.A. Perithecium black, complete, not at all sulcate; disk narrow, black, subrimiform.
G. emersa, M.A., Bot. Bull., viii., 103.
s. *Eugraphis*, M.A. Perithecium black, wanting beneath the lamina; lips connivent, not at all sulcate; disk narrow, commonly rimiform, subnigrous.
G. albissima, M.A., Bot. Bull., xiii., 27.
G. immersella, M.A., Bot. Bull., xiii., 27.

- G. Lineola*, Ach., Bot. Bull., viii., 103.
- G. scripta v. recta*, Nyl., Bot. Bull., iv., 31.
- s. *Aulacographa*, M.A. Perithecium black, wanting beneath the lamina about the middle part of the lirella; lips connivent, longitudinally sulcate; disk subrimiform and subnigrous.
- G. duplicata*, Ach., Bot. Bull., viii., 103.
- G. duplicata v. sublaevis*, M.A., Bot. Bull., viii., 103.
- G. vinosa*, M.A., Bot. Bull., xiii., 27.
- s. *Phanerographis*, M.A. Perithecium complete; disk at length opening widely, plane.
- G. semiaperta*, M.A., Bot. Bull., iv., 31.
- s. *Fissurina*, M.A. Perithecium pallid, more or less erumpent; disk pallid; spores 4-locular.
- G. albo-nitens*, M.A., Bot. Bull., iv., 30.
- G. insidiosa*, M.A., Bot. Bull., viii., 103.
- G. laevigata*, M.A., Bot. Bull., iv., 30.
- s. *Chlorographa*, M.A. Perithecium pallid; disk subplane, pallid; loculi of spores more than 4.
- G. Baileyana*, M.A., Bot. Bull., viii., 103.
- s. *Diplographis*, M.A. Lirellæ with lips closely connivent, longitudinally sulcate, not at all black; spores 2-4-locular.
- G. robustior*, M.A., Bot. Bull., iv., 31.
- s. *Mesographis*, M.A. Perithecium sulcate, above black, within coloured; epithecium rimiform.
- G. xanthospora*, M.A., Bot. Bull., xiii., 27.
55. *Phæographis*, M.A., L. B., 454, 531.
- s. *Anisothecium*, M.A., Perithecium black, base wanting; disk subrimiform, narrow.
- P. epimelæna*, M.A., Bot. Bull., xiii., 28. s. *Graphis malacodes*, Stirton, non. Nyl., Lich. Fl. Q., p. 143.
56. *Graphina*, M.A.
- s. *Solenographina*, M.A. Perithecium black, complete; lips not sulcate; disk rimiform, black.
- G. saxicola*, M.A. s. *G. olivaceo-lutea*, C.K., Lich. Fl. Q., p. 145.
- s. *Aulacographina*, M.A. Perithecium black, base incomplete, wanting beneath the lamina; lips longitudinally sulcate; disk rimiform, black.

G. sophistica v. *recta*, M.A., Bot. Bull., xiii., 28.

G. subvelata, Shirley. s. *Graphis subvelata*, Stirton, Q.A.J., Nov., 1899.

G. tenuirima, Shirley. Bot. Bull., v., 34.

s. *Platygrammina*, M.A. Perithecium fuscous or pallid, base wanting; disk widely aperient, subplane, pallid, clothed with a thin thalline vestment.

G. quassiaecola, M.A. s. *Graphina pyelodes*, Wils., Bot. Bull., ii., 32; viii., 103.

s. *Platygraphina*, M.A. Apothecia and disk thickly albido-thalline clothed; perithecium brown or pallid or almost indistinct, base complete, everywhere thin; disk broad, flat, pallid.

G. simulans, M.A., Bot. Bull., iii., 29.

s. *Medusulina*, M.A. Lirellæ gregariously crowded, not subsequently dispersed.

G. egenella, M.A., Bot. Bull., iv., 31.

57. (a) *Phæographina*, M.A.

s. *Eleutheroloma*, M.A. Perithecium wanting or hyaline under the lamina, elsewhere black or olivaceo-fuscous or evanescent; lips at length distant, thin; disk wide, subplane, nigro-fuscous.

P. caesio-pruinosa, M.A., Bot. Bull., iii., 20.

P. caesio v. *monospora*, M.A., Bot. Bull., xiii., 28.

s. *Homoloma*, M.A. Perithecium fusco-nigrous, not sulcate or thalline clothed; base complete, margins thick; disk black and narrow.

P. assimilis, Shirley, Lich. Fl. Q., p. 195.

s. *Chrooloma*, M.A. Lirellæ clothed with thalline stratum, wholly pallid, or golden or brown; margins thick, connivent, beneath the thallus profoundly longitudinally sulcate; disk narrow, pallid.

P. chrysentera, M.A., Bot. Bull., iv., 31.

P. contexta, M.A., Bot. Bull., iv., 32.

57. (b) *Helminthocarpon*, Fee.

H. Bailey anum, M.A., Bot. Bull., xiii., 29.

58. *Arthonia*, Ach.

A. albofarinosa, Stirton, Q.A.J., Nov., 1899.

A. amoena, M.A., Bot. Bull., xiii., 29.

A. gracilior, M.A., Bot. Bull., xiii., 29.

A. rubeella, M.A., Bot. Bull., xiii., 29.

A. subgyrosa, Nyl., Bot. Bull., iii., 30.

A. gregaria v. *adspersa*, Nyl., Bot. Bull., iii., 30.

A. gregaria v. *purpurea*, Esch., Bot. Bull., iv., 32.

A. leptospora, M.A., Bot. Bull., iv., 32.

59. *Arthothelium*, Mass.

A. cribrosa, Fee., Bot. Bull., iv., 32.

A. favulosa v. *depauperata*, M.A., Bot. Bull., iv., 32.

A. favulosa v. *intermedia*, M.A., Bot. Bull., iii., 30.

A. microsporum, M.A., Bot. Bull., xiii., 29.

A. polycarpum, M.A., Bot. Bull., xiii., 29.

A. puniceum, M.A., Bot. Bull., viii., 104.

60. *Mycoporellum*, M.A.

M. perexiguum, M.A., Bot. Bull., iv., 32.

61. *Asterotrema*, M.A.

A. punctuliforme, M.A., Bot. Bull., xiii., 30.

XXIII. GLYPHIDEÆ, M.A.

62. *Sarcographa*, Fee.

S. subtrichosa, M.A. s. *S. actincta*, Wils., Bot. Bull., viii., 104.

S. subtrichosa v. *pulverulenta*, Shirley. s. *S. actinota* f. *pulverulenta*, Wilson, Bot. Bull., ii., 33.

S. oculata, M.A., Bot. Bull., xiii., 30.

63. *Chiodecton*, Ach.

C. endoleucum, M.A., Bot. Bull., viii., 104.

C. hamatum, Nyl., Bot. Bull., xiii., 30.

C. sphærale, Ach. s. *C. stromaticum*, C.K., Lich. Fl. Q., p. 157.

C. virens, M.A., Bot. Bull., xiii., 30.

XXIII. (a) XYLOGRAPHIDEÆ, Th. M. Fries.

64. *Diplogramma*, M.A.

D. australiensis, M.A., Bot. Bull., iv., 33.

IV. PYRENOCARPEÆ, M.A., Consp. Syst. N.Z., p. 15.

I. DERMATOCARPEÆ, M.A., Pyreno. Cub., p. 377.

1. *Dermatocarpon*, Eschw. Syst., p. 21 (pro. p.)

D. miniatum, Th. M. Fries, Bot. Bull., x., 28.

II. STRIGULÆ, M.A., Pyr. Cub., p. 378.

2. *Strigula*, Fr.*S. Glaziovii*, M.A., Bot. Bull., iii., 61.*S. elegans v. eumorpha*, M.A., Bot. Bull., viii., 104.*S. elegans v. pertenius*, M.A., Bot. Bull., viii., 104.

III. PYRENULÆ, M.A., Pyr. Cub., p. 381.

Sub-tribe 1. *Astrotheliæ*, Trev., Syn. Gen. Tryp., p. 22.3. *Parmentaria*, Fee., Meth., p. 24.*P. astroidea*, M.A., Bot. Bull., viii., 104.*P. Baileyana*, M.A., Bot. Bull., x., p. 34.*P. grossa*, M.A., Bot. Bull., x., 35.*P. interlatens*, M.A., Bot. Bull., x., 35.*P. subastroidea*, M.A., Bot. Bull., x., 35.*P. subastroidea v. subsimplex*, M.A., Bot. Bull., x., 35.*P. toowoombensis*, M.A., Bot. Bull., x., 35.Sub-tribe 2. *Pleurotheliæ*, M.A., Pyr. Cub., p. 387.4. *Pleurothelium*, M.A., Pyr. Cub., 387.*P. australiense*, M.A., Bot. Bull., iv., 33.5. *Parathelium*, Nyl., Bot. Zeit., 1862, p. 279.*P. decumbens*, M.A., Bot. Bull., viii., 105.*P. fibrata*, Shirley. s. *Verrucarria fibrata*, Stirton, Q.A.J., Nov., 1899.6. *Pleurotrema*, M.A., Pyr. Cub., p. 388.*P. pyrenuloides*, M.A., Bot. Bull., x., 15.7. *Campylothelium*, M.A., Lich. Beit., 595.*C. defossum*, M.A., Bot. Bull., iii., 30, and iv., 33.*C. nitidum*, M.A., Bot. Bull., iii., 30, and iv., 33.Sub-tribe 3. *Trypetheliæ*, M.A., Pyr. Cub., 389.8. *Trypethelium*, Trev., Syn. Tryp., p. 19.*T. anomalum*, Ach., Bot. Bull., v., 34.*T. infuscatum*, M.A., Bot. Bull., x., 34.*T. tropicum v. nigratum*, M.A., Bot. Bull., x., 34.*T. virgineum*, M.A., Bot. Bull., x., 34.*T. eleuteriæ v. citrinum*, M.A., Bot. Bull., iii., 30.*T. oligocarpum*, M.A., Bot. Bull., iv., 33.9. *Bathelium*, Trev. Syn. Gen. Tryp., p. 21.*B. chrysocarpum*, M.A., Bot. Bull., iv., 34.10. *Bottaria*, Mass., Misc. Lich., p. 42.*B. umbilicata*, M.A. s. *Trypethelium umbilicatum*, C.K., Bot. Bull., x., 34.

11. *Melanotheca*, Fee., Ess. Sup., p. 70.
M. cruenta, M.A. s. *M. rubra*, C.K., Bot. Bull., x., 34.
M. oxyspora, M.A., Bot. Bull., x., 34.
M. subsimplex, M.A., Bot. Bull., iv., 34.
12. *Tomasellia*, Mass., Fl., 1856, p. 283.
T. aciculifera, M.A., Bot., Bull., iii., 31.
T. queenslandica, M.A., Bot. Bull., x., 34.
Sub-tribe 4. *Verrucariæ*, M.A., Pyr. Cub., 398.
13. *Porina*, M.A., Lich. Beit., 644.
P. africana, M.A. s. *P. limitata*, C.K., Bot. Bull., x., 30.
P. araucariæ, M.A., Bot. Bull., iv., 34.
P. bellendenica, M.A., Bot. Bull., iv., 34.
P. fulvula, M.A., Bot. Bull., xiii., 31.
P. glauca, M.A., Bot. Bull., x., 30.
P. internigrans, M.A., Bot. Bull., x., 30.
P. pallida, M.A., Bot. Bull., xiii., 31.
P. rudis, M.A., Bot. Bull., x., 30.
P. raphidospora, M.A. s. *Verrucaria raphispora*, C.K., Bot. Bull., x., 30.
P. tetraceræ, M.A., Bot. Bull., x., 30. s. *V. nana*, Stirton.
P. variegata, Fee., Bot. Bull., x., 30.
14. *Phylloporina*, M.A., Lich. Epiph., No. 50.
P. epiphylla, M.A., Bot. Bull., x., 30.
15. *Clathroporina*, M.A., Lich. Beit., 541.
C. desquamans, M.A., Bot. Bull., iv., 34.
C. desquamans v. *sorediifera*, M.A., Bot. Bull., viii., 105.
C. flavescens, M.A., Bot. Bull., iv., 34.
C. olivacea, M.A. s. *Porina enteroxantha*, C.K., Lich. Fl. Q., p. 171 ; Bot. Bull., viii., 105.
16. *Arthopyrenia*, M.A., Lich. Beit., 612.
A. atomaria, M.A., Bot. Bull., x., 29.
A. cinchonæ, M.A., Bot. Bull., viii., 105.
A. consobrina, M.A., Bot. Bull., x., 29.
A. extans, M.A., Bot. Bull., x., 29.
A. fallacior, M.A., Bot. Bull., x., 29.
A. limitans, M.A., Bot. Bull., x., 29.
A. oculata, M.A., Bot. Bull., x., 29.
A. suboculata, M.A., Bot. Bull., xiii., 31.

17. *Polyblastia*, M.A., Lich. Beit., 490.
 - P. geminella*, M.A., Bot. Bull., x., 31.
 - P. gregantula*, M.A., Bot. Bull., x., 30.
 - P. nudata*, M.A., Bot. Bull., viii., 105.
18. *Pyrenula*, Fee., Ess. Suppl., p. 76.
 - P. adacta*, Fee., Bot. Bull., iii., 31.
 - P. adacta v. cinerascens*, M.A., Bot. Bull., x., 33.
 - P. bicuspidata*, M.A. s. *V. subvariolosa*, C.K., Bot. Bull., viii., 106.
 - P. Bonplandicæ*, Fee., Bot. Bull., x., 32.
 - P. indusiata*, M.A., Bot. Bull., x., 32.
 - P. Kunthii*, Fee., Bot. Bull., viii., 106.
 - P. mastophora* (Nyl.), M.A., Bot. Bull., iii., 31.
 - P. mastophorizans*, M.A., Bot. Bull., x., 33.
 - P. marginata*, Trev., Bot. Bull., viii., 106.
 - P. mamillana*, Trev., Bot. Bull., iii., 31.
 - P. melaleuca*, M.A., Bot. Bull., iv., 34.
 - P. microcarpoides*, M.A., Bot. Bull., x., 32.
 - P. nigro-cincta*, M.A., Bot. Bull., iv., 34.
 - P. nitida*, Ach., Bot. Bull., viii., 106.
 - P. nitidans*, M.A., Bot. Bull., iv., 34.
 - P. oxyspora*, M.A., Bot. Bull., x., 32.
 - P. pinguis*, Fee., Bot. Bull., viii., 106.
 - P. pinguis v. emergens*, M.A. s. *V. punctella v. exstans*, Nyl., Bot. Bull., x., 33.
 - P. porinoides*, Ach., Bot. Bull., x., 33.
 - P. subcongruens*, M.A., Bot. Bull., x., 32.
 - P. sexocularis*, M.A. s. *V. subvariolosa*, C.K., B.B., x., 33.
 - P. velatoir*, M.A., Bot. Bull., x., 32.
 - P. Warmingii*, M.A., Bot. Bull., iii., 31. s. *V. tropica*, Stirton.
19. *Anthracothecium*, Mass., Esam. Comp., p. 49.
 - A. aurantium*, M.A., Bot. Bull., x., 33.
 - A. amphitropum*, M.A., Bot. Bull., iii., 31.
 - A. confine*, M.A., Bot. Bull., viii., 106.
 - A. denudatum*, M.A., Bot. Bull., x., 33.
 - A. denudatum v. ochrotropum*, M.A., Bot. Bull., x., 33.
 - A. Doleschalii*, Mass. s. *Trypethelium planum*, C.K., Bot. Bull., viii., 106.
 - A. oculatum*, M.A., Bot. Bull., iv., 35.
 - A. oligosporum*, M.A., Bot. Bull., x., 33.

A. pyrenuloides, M.A., Bot. Bull., iii., 32.

A. Thwaitesii, M.A., Bot. Bull., iii., 31.

20. *Microthelia*, Körb., Syst., p. 372.

M. alba, M.A., Bot. Bull., x., 31.

M. brisbanensis, M.A., Bot. Bull., x., 31.

M. maculiformis, M.A., Bot. Bull., iii., 32.

M. obovata, M.A. s. *Pyrenula obovata*, Shirley, Lich.
Fl. Q., p. 176.

M. queenslandiæ, M.A., Bot. Bull., x., 31.

M. Shirleyana, M.A., Bot. Bull., x., 31.

M. subgregans, M.A., Bot. Bull., x., 31.



Shirley, John. 1913. "Supplement to the Lichen Flora of Queensland." *The Proceedings of the Royal Society of Queensland* 24, 23-46.

<https://doi.org/10.5962/p.351390>.

View This Item Online: <https://www.biodiversitylibrary.org/item/49366>

DOI: <https://doi.org/10.5962/p.351390>

Permalink: <https://www.biodiversitylibrary.org/partpdf/351390>

Holding Institution

American Museum of Natural History Library

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

Rights: <https://www.biodiversitylibrary.org/permissions/>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.