

p. 219 c. ic. — Effusum, velutinum, fusco-olivaceum, in foliis maculas ochraceo-fulvas incolens, in caulibus fructibusque ulcera plus minus lata efficiens; hyphis fertilibus erectis, simplicibus, septatis, 100-200  $\approx$  5-6, dilute olivaceis; conidiis hyphis concoloribus, elongato-ovatis, continuis, 10  $\approx$  3,5-5 vel uniseptatis, 20-25  $\approx$  5-6.

*Hab.* in foliis, caulibus fructibusque Cucumeris Melonis, quem maxime vexat, in Gallia.

2. **Scolecotrichum atriellum** Cooke et Mass. XVI, p. 3. — Cæspitulis 7478 effusis, confluentibus, atris; hyphis erectis, simplicibus, breviter septatis, fuscis, sursum pallidioribus; conidiis acrogenis, ellipticis, uniseptatis, non constrictis, atro-brunneis, 25  $\approx$  12.

*Hab.* in ramis Passifloræ sp., Brisbane Australiæ (BAILEY).

3. **Scolecotrichum Bonordenii** Sacc. Syll. IV, p. 348, Brun. Misc. Myc. II, p. 48. — Sec. cl. Brunaud l. c.: conidia sunt 16-18  $\approx$  6-8 et species nascitur quoque in pag. præsertim super. foliorum Althææ roseæ, Saintes Galliæ.

4. **Scolecotrichum Iridis** Fautr. et Roum. Rev. Myc. 1891, p. 82. — 7479 Hyphis fasciculatis, olivaceis, pellucidis, simplicibus, rectis, obtusis, 50-60  $\approx$  8-10, in maculis oblongis; conidiis glandem cupulatam imitantibus, basi incrassatis, pleurogenis, hyalinis, papillosis, 1-septatis constrictisque, 40-42  $\approx$  20-22.

*Hab.* in foliis vivis Iridis germanicæ cultæ Noidan, Côte-d'Or Galliæ. — «An *Heterosporium* immaturum?».

5. **Scolecotrichum phomoides** Cooke et Mass. Grev. XVI, p. 79. — 7480 Amphigenum; cæspitulis minutis, nigris, suborbicularibus, punctiformibus; hyphis erectis, simplicibus, gracilibus, basi fasciculatis, breviter septatis, pallide olivaceis; conidiis 1-septatis, ellipsoideis, hyalinis, 6  $\approx$  2-3.

*Hab.* in foliis emortuis Ophiopogonis japonici, Kew Britannicæ.

6. **Scolecotrichum Roumegueri** Cav. Fung. parass. V, n. 112. — Cæ- 7481 spitulis superficialibus, minutissimis, pulvereis, in maculis oblongis, superne nigricantibus, inferne albo-cinereis, fusco-zonatis, insidentibus; hyphis brevibus, aggregatis, supra basim valde inflatam abrupte curvatis septatisque, apice plerumque truncatis, fusco-olivaceis, 22-32  $\approx$  9-12 (14-15 ad basin); conidiis acrogenis, ovatis, dilute olivaceis, 1-septatis, levibus.

*Hab.* in foliis nunc viridibus Phragmitis communis, Toulouse Galliæ (C. ROUMEGUÈRE). — «Fere absque dubio *Napicladium arundinaceum* immaturum».

7. **Scolecotrichum maculicolum** E. et K. Journ. Myc. 1887, pag. 103. 7482

— Maculis amphigenis, anguste ellipsoideis, circ.  $5-8 \approx 2$ , sordide albis, atro-marginatis; hyphis hypophyllis, subundulatis, continuis v. prope basim evanide septatis, subfuliginosis, circ.  $40 \approx 4-5$  in cæspitulos seriatos aggregatis; conidiis acrogenis, granulosis, continuis, ovatis, ovato-ellipsoideis vel oblongis, subhyalinis,  $20-22 \approx 8-11$ .

*Hab.* in foliis subemortuis Phragmitis communis, Kansas Amer. bor. (W. A. KELLERMAN).

8. **Scolecotrichum uniseptatum** (B. et C.) Cooke Grevill., *Cladotri-* 7483

*chum uniseptatum* (B. et C.) Sacc. Syll. IV, p. 373. — Hyphæ atro-brunnæ, simplices v. raro breviter ramosæ, ad septa non incrassatæ; conidia oblonga, 1-septata, leniter constricta, utrinque rotundata, brunnea,  $10 \approx 5$ . — Nascitur quoque in ligno emortuo, Epping Forest Britannicæ.

**CLADOSPORIUM** Link — Sacc. Syll. IV, p. 350.1. *In Dicotyledoneis herbaceis.*1. **Cladosporium cucumerinum** Ell. et Arth. Bull. Agric. Stat. In- 7484

diana n. 19 (1889), pag. 9-10, cum ic. — Effusum, maculiforme, subvelutinum; cæspitulis griseo-fuscis, dein atro-virentibus et depressiones in fructu efficientibus, mycelio endogeno copioso filiformi; hyphis fertilibus cæspitosis, parce septatis, simplicibus, sursum denticulatis, pallidioribus; conidiis pleuro-acrogenis ovoideis, limoniformibus v. laxe fusoides, plerumque continuis, olivaceis,  $10-13 \approx 3-4$ .

*Hab.* in fructibus Cucumeris sativi, quos destruit vel deformat, Geneva N. J. Amer. bor.

2. **Cladosporium Pisi** Cug. et Macch. Not. ins. e parass. 1890, p. 16, 7485

t. V. — Cæspitulis fuscis, minutissimis in pustulis ex epicarpio deformato exortis insidentibus; hyphis elongatis, ramosis, flexuosis, crebrè septatis, brunneis; hyphis fertilibus, pallide fuliginosis; conidiis terminalibus, ovatis, subhyalinis, sæpius 1-septatis, constrictis, 2-guttatis,  $4,5-5,5 \approx 4-4,5$ , lateralibus ellipsoideis, continuis, hyalinis,  $7-9 \approx 3,5-4,5$ .

*Hab.* in leguminibus vivis Pisi sativi, quæ arescunt, Vaciglio pr. Modena Ital. bor.

3. **Cladosporium subnodosum** Cooke in Rav. Amer. Ex. 294 et Grev. 7486

XVII, p. 17. — Epiphyllum; cæspitulis orbicularibus, circ. 1 mm. diam. atro-olivaceis, compactis; hyphis flexuosis, crassiusculis, fuscis, septatis, ad septa nodulosis, ad apicem hyalino-attenuatis; conidiis

ellipticis, utrinque rotundatis, 1-3-septatis, olivaceis, minutissime granulato-asperatis, 15-20  $\approx$  9-10.

*Hab.* in foliis Spinaciæ, Carolina austr. Amer. bor. — Verosimiliter *Heterosporium*.

4. **Cladosporium pelliculosum** Berk. et Curt. in Herb., Grev. XVII, 7487 pag. 67.

*Hab.* in foliis Polygoni punctati, Lobeliæ etc., Carolina austr. — Vix differt a *C. effuso* B. et C.

5. **Cladosporium obtectum** Rabh. Unio Itin. XXXVI, Grev. XVII, 7488 p. 66. — Epiphyllum, tenue effusum; hyphis repentibus, demum assurgentibus, tenuibus, flexuosis, septatis, fuscis; conidiis ellipticis, cylindræis v. clavulatis, uniseptatis, utrinque subattenuatis, pallide fuscis, 12-16  $\approx$  5-6.

*Hab.* in foliis Artemisiæ maritimæ, Alghero (Doct. MARCUCCI).

6. **Cladosporium pilicolum** Rich. Cat. Champ. Marn. n. 2003. — Hyphis fasciculatis, brunneis, ramosis; conidiis cylindræis, 1-3-septatis, concoloribus. 7489

*Hab.* in caulibus siccis Galii Molluginis, Soulanges, Marne Galliæ. — «Ubi occurrant pili in *G. Mollugine* nescio».

7. **Cladosporium Lycopersici** Plowr. Fung. Dis. Tomat. p. 3, f. 5. — Hyphis cæspitosis, septatis, sursum ambitu irregularibus, e macula nigra oriundis; mycelio compacto; conidiis copiosis, cylindræis, nigris, 1-3-septatis, utrinque subacuminatis, 10-30  $\approx$  8-10. 7490

*Hab.* in fructibus Solani Lycopersici prope King's Lynn Britannicæ.

8. **Cladosporium Heliotropii** Erikss. in Bot. Centr. 1891, n. 36, p. 299. — Cæspitulis epiphyllis, orbicularibus, atris; hyphis floccosis, longissimis, 80-150  $\approx$  4-6, simplicibus vel ramulosis, septatis, olivaceis; conidiis ellipsoideis, continuis vel 1-septatis, 7-9  $\approx$  4-5, olivaceis. 7491

*Hab.* in foliis Heliotropii peruviani in Scandinavia.

9. **Cladosporium Chætomium** Cooke Grev. XVII, p. 66. — Cæspitulis minutis, in foliis viventibus, erumpentibus, atris, perithecia *Chætomii* æmulantibus; hyphis densissime congestis, flexuosis, simplicibus, septatis, fuscis; conidiis uni-dein triseptatis, cylindricis, obtusis, 30-40  $\approx$  7, pallide fuscis. 7492

*Hab.* in foliis Euphorbiæ, New Jersey Amer. bor. (ELLIS).

10. **Cladosporium profusum** Rabenh. in Cooke Black Moulds t. XXV, f. 12. — Sacc. Syll. IV, p. 371. — Hyphis fasciculatis, nodulosis, 7493

septatis, fuscis, sursum pallidioribus, erectis, 6-7  $\mu$ . crassis; conidiis apice hypharum v. nodulis insertis, ovoideis, magnitudine variis, continuis, uni-biseptatis, guttuligeris, 18-24  $\approx$  5, pallidis.

*Hab.* in vegetabilibus putridis in Germania. — «Affine, ut videtur, *C. herbarum*».

II. In Dicotyledoneis lignosis.

11. **Cladosporium microsporum** Rabh. Unio Itin. XLII, Grev. XVII, 7494 p. 66. — Hypophyllum; cæspitulis erumpentibus, gregariis, minutissimis, atris; hyphis?; conidiis?

*Hab.* in foliis Nerii Oleandri, Gonnos-Fanadiga Sardiniae (Doct. MARCUCCI).

12. **Cladosporium Gleditschiæ** Cooke in Rav. Amer. Ex. 297, Grev. XVII, p. 66. — Carpogenum, effusum, olivaceum; hyphis repentibus, assurgentibus, tenuibus, flexuosis, septatis, fuscis; conidiis arcte ellipticis, demum elongatis, 1-3-septatis, vix constrictis, succineis, 12-20  $\approx$  4.

*Hab.* in leguminibus Gleditschiæ, Carolina austr. Amer. bor.

13. **Cladosporium Heuglinianum** Thüm. Rev. Myc. 1879, pag. 11. — 7496 Maculis amphigenis, sparsis, plus minus orbiculatis, magnitudine variis, nitido-atris, subeffusis, velutinis; hyphis subrectis, subulato-rigidis, simplicibus, septatis, 6 mm. cr., longis, dilute fuscis; conidiis 1-septatis, cylindrico-subellipticis, utrinque subacutis, non constrictis, 12-20  $\approx$  6-8; hyphis concoloribus.

*Hab.* in foliis subvivis languidisve Buddleiaë polystachyæ pr. Nakfa ad Mare Rubrum (Th. de HEUGLIN).

14. **Cladosporium subcompactum** Roum. et Karst. Rev. Myc. 1890, 7497 p. 80. — Cæspitulis superficialibus, tomentosis, compactis, suborbicularibus, atris, 4-5  $\mu$ . lat.; hyphis dense aggregatis et intricatis, ramosis, articulatis, fuligineo-hyalinis v. dilute fuligineo-olivaceis, 3-6  $\mu$ . cr.; conidiis ovoideis v. ellipsoideis, 1-septatis, ad septum non constrictis, ex hyalino fuligineo-fuscis, impellucidis v. semipellucidis, 20-28  $\approx$  12-16.

*Hab.* ad ramos Sterculiæ fœtidæ et Terminaliæ in Ceylon. — Conidia diu hyalina primitusque sæpe irregulariter globulosa.

15. **Cladosporium diaphanum** Thuem. M. U. n. 1868. — Cæspitibus 7498 hypophyllis, tenuibus, laxis postremo subcrassis, late effusis, pulveraceis, sordide olivaceis, inquinantibus; hyphis fasciculatis, longis, parce ramosis, æqualibus, septatis, apice obtusis, fuscis, dia-

phanis, 6  $\mu$ . crassis; conidiis aut subglobois, 4  $\approx$  3 aut ellipsoideis et utrinque subacutatis, 7  $\approx$  4 aut elliptico-cylindræis uniseptatisve, 17  $\approx$  6, dilute fuscidulis, eximie diaphanis.

*Hab.* ad folia emortua prostratave Photiniæ, Lyon Galliæ.

16. **Cladosporium condylonema** Passer. in Briosi e Cavara Funghi Parasiti n. 79, F. N. IV, p. 15. — Amphigenum; hyphis fasciculatis, sparsis, septulatis, flexuosis, tuberculoso-nodosis, fuscidulis, 60-180  $\approx$  5; conidiis ellipsoideis v. ovatis, medio septatis, olivaceis, 12-20  $\approx$  6-10.

*Hab.* in foliis Pruni domesticæ, quam vexat, Parma Italiæ borealis.

17. **Cladosporium Zizyphi** Karst. et Roum. Rev. Myc. 1890, p. 78. 7500  
Hypophyllum, maculiforme; hyphis ramosis, articulatis, flexuosis, olivaceis (sub lente), breviusculis, 6-9  $\mu$ . cr.; conidiis ovoideo-vel oblongato-elongatis, utrinque obtusis, rectis v. varie curvatis, subinde irregularibus, 1-3-septatis, ad septa non vel vix constrictis, olivaceis, 35-45  $\approx$  11.

*Hab.* in foliis languidis Zizyphi cujusdam ad Sontag, Tonkin.

18. **Cladosporium juglandinum** Cooke Græv. XVI, pag. 80. — Hypophyllum; cæspitulis parvis, sparsis, fuligineis; hyphis septatis, nodulosis, flexuosulis, basi atro-brunneis, sursum pallidioribus, sæpius continuis; conidiis acrogenis, fusoideis, 1-septatis, pellucidis, 35  $\approx$  9.

*Hab.* in foliis Juglandis, Highgate Britannicæ.

19. **Cladosporium lethiferum** Peck 50 Rep. p. 64. — Maculis atro-brunneis, irregularibus, magnis, totum folium sæpe ambientibus; cæspitulis epiphyllis, subeffusis, olivaceo-viridibus; hyphis brevissimis, fere obsoletis; conidiis oblongo-piriformibus, 1-2-septatis, ad septa leviter constrictis, 20-30  $\approx$  7,5.

*Hab.* in foliis vivis, quæ enecat, Populi tremuloidis, Keene Amer. bor.

20. **Cladosporium brevipes** Peck 40 Rep. p. 64. — Maculis suborbicularibus, cinereis; cæspitulis minutis, compactis; hyphis dense brevibus, 25-37,5  $\mu$ . long., atro-olivaceis, coacervatis subnigris, amphigenis, septatis; conidiis acrogenis, ellipsoideis, 12,5-15  $\approx$  7,5-11,5.

*Hab.* in foliis vivis Quercus albæ, Menands Amer. bor.

III. In Monocotyledoneis, Acotyledoneis etc.

21. **Cladosporium Phœnicis** Fautr. Rev. Myc. 1891, p. 133. — Cæspitulis sparsis, lineariter seriatis, sparsis oblongis v. ovoideis, sub-

strato piceo insidentibus; hyphis rectis, nodulosis, subinde furcatis, pallide olivaceis; conidiis concoloribus, cylindræo-rotundatis, subapiculatis, 1-3-septatis, subverruculosis, 20-25  $\times$  8-10.

*Hab.* in foliis exsiccatis Phœnicis tenuis cultæ, Toulouse Galliæ (G. MACHADE).

22. **Cladosporium dracænatum** Thuem. M. U. n. 1869. — Maculis amphigenis, dilatatis, distinctis, gregariis, fusco-olivaceis; cæspitulis præcipue epiphyllis, medio olivaceis, detergendis evanidis; hyphis brevibus, continuis, subramosis, interdum septatis, fasciculatis, tenuibus, pallide cinereis; conidiis variis aut globosis v. ovato-globosis, 6  $\times$  4 aut ovoideis, 8-12  $\times$  4 aut ovato-clavatis septatisve, 14-18  $\times$  6, utrinque rotundatis, dilute griseis.

*Hab.* ad folia viva Dracænæ Cooperi, Aiken Carolinæ australis Amer. bor.

23. **Cladosporium Orchidearum** Cooke et Mass. Grev. XVI, p. 80. — Cæspitulis erumpentibus, parvis, præcipue e stromate oriundis, olivaceis; hyphis brevibus, parce ramosis, septatis, subgracilibus, flexuosis; conidiis ellipsoideis, 1-septatis, pallide olivaceis, 17-18  $\times$  5-6.

*Hab.* in foliis Orchidearum, Kew Britannia.

24. **Cladosporium velutinum** Ell. et Tracy Journ. Myc. 1890, p. 76. — Olivaceo-brunneum, maculiforme, 0,5-1 cm. lat. vel confluenso amplius, velutinum; hyphis erectis, simplicibus, septatis, subundulatis, pallide brunneis, 50-75  $\times$  4-5; conidiis terminalibus, 8-20  $\times$  4-5, subhyalinis, 1-3-septatis, ellipsoideis, oblongis vel subcylindræis.

*Hab.* in foliis Phalaridis canariensis, quæ leviter torquentur et incrassantur, Starkville Miss. Amer. bor.

25. **Cladosporium Hordei** Pass. in Brun. Fragm. Mycol. 1884-85, p. 32. — Cæspitulis olivaceis; hyphis fasciculatis, subincrassatis, saturatius olivaceis, simplicibus, articulatis, apice tortuoso-torulosis; conidiis ellipsoideis, 1-(2?-)septatis, 20-25  $\times$  8-10.

*Hab.* ad folia languida Hordei distichi, Saintes Galliæ.

26. **Cladosporium epibryum** Cooke et Mass. Grev. XVII, p. 76. — Cæspitulis minutissimis, atris; hyphis simplicibus, brevibus, flexuosis, septatis, olivaceis, superne pallidioribus; conidiis ellipticis, utrinque rotundatis, uniseptatis, medio constrictis, pallide fuscis, hyalinis, 18-20  $\times$  10-12.

*Hab.* in capsulis Muscorum, Amer. bor. (E. G. BRITTON).

27. **Cladosporium Aphidis** Thum. — Syll. IV, p. 369 — var. **Muscæ**

Br. et Har. Rev. Myc. 1890, pag. 132. — Hyphis rectis, ramosis, fasciculatis, aliis continuis, aliis septatis, dilute fuligineis, diaphanis, 5-7  $\mu$ . diam.; conidiis numerosis, ovoideis vel ovato-oblongis, basi v. utrinque apiculatis; hyphis concoloribus v. paullo pallidioribus, continuis, 6-8  $\approx$  4-5 vel 1-septatis, 10-12  $\approx$  6, vel 2-septatis, 20-22  $\approx$  7-8.

*Hab.* in cadavere Muscæ cujusdam, Méry-sur-Seine Galliæ (P. HARIOT).

28. **Cladosporium cæspiticium** Rabenh. Fl. Eur. n. 579, Bot. Zeit. 1863, 7511  
p. 230 (absque diagnosi). Loc. cit. forma conidiophora et f. stylosporea adesse declaratur.

**DIPLOCOCCIUM** Grove — Sacc. Syll. IV, p. 374.

1. **Diplococcium Libertianum** (Roum.) Sacc., *Monilia* Roum. Rev. Myc. 7512  
1884, p. 107. — Hyphis late effusis, olivaceo-nigris, erectis, summo apice subinflatis ibique catenulas conidiorum emittentibus; conidiis ovoideis, initio hyalinis, dein fumosis, 1-septatis.

*Hab.* in caule putri Brassicæ oleracæ rubræ cultæ pr. Malmedy in Arduennis (Reliq. LIBERTIANÆ).

*Sect.* 3. **Phragmosporæ** SACC.

*Subsect.* 1. **Micronemeæ** SACC.

*Trib.* 1. **Clasterosporiæ** SACC.

**CLASTEROSPORIUM** Schw. — Sacc. Syll. IV, p. 382.

1. **Clasterosporium caulicolum** (Corda) Sacc. Syll. IV, p. 393, *Bactrodesmium caulicola* Grove in litteris. — Conidia sessilia, erecta, dense compacta, cylindrica, utrinque vix attenuata, 6-12-septata, dilute olivacea, pellucida, 60-100  $\approx$  8-10.
2. **Clasterosporium tripartitum** Rich. Cat. Champ. Marn. n. 2019. 7513  
— Cæspitulis nigris, velutinis, mycelio anastomosanti insidentibus, e conidiis ternatim fasciculatis, brunneo-pallidis, fusoides, apice attenuatis, basi crassioribus, 10-15-septatis, efformatis.

*Hab.* in caulium emortuorum basi Genistæ scopariæ, Sermaize, Marne Galliæ.

3. **Clasterosporium cornigerum** Ell. et Ev. Proc. Acad. Phil. 1891, 7514  
p. 91. — Cæspitulis applanatis, 1-2 mm. diam.; hyphis sterilibus repentibus, septatis; hyphis fertilibus, 70-100  $\approx$  8-10; conidiis ob-

longo-clavatis, 5-7-septatis, brunneis, 70-100  $\approx$  12-15, supra primitus rotundatis, dein truncatis, loculo terminali lateraliter germi-  
nante.

*Hab.* in cortice Carpini emortui, London Canada Amer. bor. (DEARNESS).

4. **Clasterosporium dothideoides** Ell. et Ev. Proc. Acad. Phil. 1891, 7515  
p. 87. — Cæspitulis per corticis rimas erumpentibus, 0,5 mm. lat.,  
compactis, nigris, dothideoides; hyphis fertilibus, simplicibus vel  
imperfecte ramosis, 20-30  $\approx$  5-7.

*Hab.* in ramis emortuis Shepherdiaæ argenteæ et Artemisiaæ canæ, in valle Teton, Montana Amer. bor. (F. W. ANDERSON).

5. **Clasterosporium Ligustri** Rich. Cat. Champ. Marn. n. 2018. — Cæ- 7516  
spitulis griseolis, parum perspicuis, e conidiis pallide brunneis, fu-  
soideo-cylindræis, 7-septatis, rectis, brevissime stipitatis, effor-  
matis.

*Hab.* ad ramulos Ligustri vulgaris, St.-Amand Galliaæ.

6. **Clasterosporium cæspitosum** Ell. et Ever. Journ. Mycol. 1889, 7517  
p. 70. — Cæspitulis laxis, plus minus confertis, nigris, tomentosus  
v. subeffusus; hyphis prostratis, nullis; conidiis fusoideo-cylindra-  
ceis, 10-20-septatis, 100-120  $\approx$  12-15, apice subattenuato, distincte  
rotundato, deorsum in basim stipitiforem abrupte contractis sub-  
opacis, rectis, ad septa (mediis exceptis) non constrictis.

*Hab.* in ligno Aceris, Newfield, New Jersey Amer. bor.

7. **Clasterosporium herculeum** Ellis N. A. fig. 542. — Hyphis copio- 7518  
sis, subfasciculatis, septatis, fuligineis, 5-6  $\mu$ . cr.; conidiis (in meo  
exempl. fere destructis), ut videtur, fusoideis, curvulis, 60  $\approx$  10, pau-  
ciseptatis, fuligineis, utrinque pallidioribus.

*Hab.* in ramis Betulae? et in Hypoxylo vetusto, West Chester Pa. Amer. bor. (HAINES et EVERHART).

8. **Clasterosporium punctiforme** (Corda) Sacc. Syll. IV, pag. 387 — 7519  
var. **fennicum** Karst. Symb. XX, pag. 98. — Cæspitulis dispersis,  
pulvinatis, sat compactis, brunneis; conidiis oblongatis, rectis, cur-  
vis v. flexuosis, utrinque obtusis, 1-3-rarissime 5-septatis, vix con-  
strictis, dilute olivaceo-fuligineis et diaphanis (sub lente), 13-24  $\approx$   
5-6, loculis 1-guttulatis.

*Hab.* in ligno sicco putri Sipilä pr. Tammela Fenniaæ.

9. **Clasterosporium typhicolum** Fautrey in Rev. Myc. 1890, p. 125. 7520  
— Hyphis brevissimis v. nullis; conidiis hyalinis, 3-septatis, co-  
nico-truncatis, 24-26  $\approx$  8, supra latioribus.



*Hab.* in omnibus partibus *Typhæ angustifoliæ* pr. Saulien, Côte-d'Or Galliæ (F. FAUTREY).

10. **Clasterosporium sarcopodioides** (Corda) Sacc. Syll. IV, p. 385. 7521

— \* **Cl. arundinaceum** Karst. Symb. XIX, p. 92. — Effusum, fusco v. griseo-olivaceum, stromate tenuissimo; conidiis cylindræis rectis, utrinque obtusis, aut uno apice attenuatis, fuliginæis et diaphanis (sub. micr.), 10-18-septatis, non constrictis, 106-150  $\approx$  11-12.

*Hab.* in culmis *Phragmitis aridis* pr. Mustiala Fenniæ.

**FUSARIELLA** Sacc. Syll. IV, p. 395.

1. **Fusariella cladosporioides** Karst. Hedw. 1891, p. 248. — Cæspi- 7522

tulis effusis, minutis, hypophyllis griseo-olivaceis; hyphis brevissimis, ramosis, articulatis; conidiis bacillaribus, apicem versus attenuatis, curvatis, raro rectis, vulgo pauciseptatis, fumoso-hyalinis v. hyalinis (sub lente), 50-100  $\approx$  4-6.

*Hab.* in foliis *Myrti*, quæ enecat, Helsingfors Fenniæ (ONNI KARSTEN).

**CRYPTOCORYNEUM** Fuck. — Sacc. Syll. IV, p. 395.

1. **Cryptocoryneum scopiforme** Bomm. Rouss. Sacc. sp. nov. — Cæ- 7523

spitulis orbicularibus vel suborbicularibus, nigris, 90-225  $\mu$ . lat.; conidiis cylindræis, fuliginæis, 5-septatis, ad septa constrictis, 21-22  $\approx$  3,5, supra cellulam basilarem senis usque denis, parvulam scopam imitantibus.

*Hab.* ad culmos *Ammophilæ arenariæ*, Knocke Belgii et pr. La Haye Hollandiæ.

**CERATOPHORUM** Sacc. Syll. IV, p. 395.

1. **Ceratophorum ulmicolum** E. et K. Journ. Myc. 1887, p. 127. — 7524

Maculis amphigenis, suborbicularibus, sordide brunneis, centro minuto albis, 0,5-1 cm. diam., subconfluentibus, cæspitulis e conidiis efformatis, amphigenis, sparsis, non confluentibus; conidiis sessilibus, ventricoso-fusoideis, basi subhyalinis et subobtusis, supra in rostrum hyalinum, incurvum productis, inflatis, atro-olivaceis, 5-7-septatis, 60-100  $\approx$  11-14.

*Hab.* in foliis vivis *Ulmi fulvæ*, Manhattan, Kansas Amer. bor. (KELLERMAN et SWINGLE).

2. **Ceratophorum subulatum** Cooke et Ellis. Grev. XVII, p. 67, *Cla-* 7525

*sterosporium subulatum* Cooke et Ellis in Rev. F. Amer. n. 612, —

Effusum, atrum; hyphis repentibus, ramosis, parcis, septatis; conidiis majusculis, rectis, obclavatis, 5-7-septatis, nucleatis, fuliginis, apice in cuspidem longam, hyalinam, continuam desinentibus, 70-100  $\approx$  15, cum cuspidem 180  $\mu$ . long.

*Hab.* in cortice Liquidambaris et Castaneæ, Carolina austr. et New Jersey Amer. bor.

*Trib.* 2. Septonemeæ Sacc.

**SEPTONEMA** Corda — Sacc. Syll. IV, p. 397.

1. **Septonema Hormiscium** Sacc. Syll. IV, pag. 397 — var. **padinum** 7526  
Karst. Symb. XX, p. 98. — Cæspitulis tenuibus, effusis, atro-fuliginis; conidiis fusoides-elongatis vel cylindraces vel clavulatis, rectis vel curvulis, 3-8-septatis, fuliginis, 50  $\approx$  7-9, hyphopodiis articulatis, superne dilute fuliginis, conidia imitantibus, inferne hyalinis.

*Hab.* ad corticem Pruni Padi in horto Mustiala Fennicæ.

2. **Septonema Mollerianum** Roum. F. Gall. n. 4087, *S. multiplex* Bk. 7527  
et Curt. N. Ann. Fung. 520 pr. p. — Conidiis in catenulas subramosas, breves confertis, quadrangularibus, regularibus, 2-3 (raro 1-)septatis.

*Hab.* ad folia dejecta Eucalypti Globuli pr. Coimbra Lusitanicæ (DE MOLLER).

3. **Septonema exile** Karst. Symb. XX, pag. 98. — Effusum, tenue, 7528  
atrum, mycelio vix ullo; conidiis oblongatis, elongatis vel cylindraces utrinque rotundato-truncatis, rectis v. curvulis, solito inæqualibus, 1-6-septatis, non constrictis, fuliginis, demum impellucidis, in catenulas erectas rigidas, 120-140  $\mu$ . long. digestis, 21-75  $\approx$  11-13.

*Hab.* in cortice adhuc vivo Betulæ pr. Abo Fennicæ. — Inter *S. rude* et *S. atrum* medium.

4. **Septonema nitidum** Karst. Symb. Myc. Fenn. XXVIII, p. 44. — 7529  
Catenulis conidiorum solitariis vel fasciculatis, simplicibus, atris, nitidis, 100-125  $\mu$ . long.; conidiis cylindraces, 1-3-septatis, ad septa non constrictis, fuscis (sub micr.), 20-40  $\approx$  12-15; hyphopodiis conidia imitantibus v. nullis.

*Hab.* in cortice Alni ad Mustiala Fennicæ.

5. **Septonema griseo-fulvum** Ell. et Ev. Proc. Acad. Phil. 1891, p. 92. 7530  
Subcompactum, flavido-avellaneum, ambiens, 2 cm. vel ultr. lat.; hyphis intertextis, ramosis, primo hyalinis, septatis, demum in co-

nidia mutatis; conidiis 1-septatis, ad septum sæpius constrictis, 6-9  $\approx$  2,5-3, flavido-brunneis.

*Hab.* in ramis emortuis decorticatis Populi tremuloidis, Sand Coulee Cascade Co. Ma. Amer. bor. (F. W. ANDERSON).

6. **Septonema episphæricum** Peck 44 Rep. p. 27. — Cæspitulis confluentibus, nigro-brunneis; hyphis catenisque conidiorum sæpe dense fasciculatis, 120-150  $\mu$ . long.; conidiis variabilibus, oblongis v. cylindræis, 1-3-septatis, 12-30  $\approx$  5-7, coloratis v. subhyalinis.

*Hab.* in Diatrype Stigmatæ sterili, Morehouseville Amer. bor. — Affine ut videtur *Sept. bisporoidi*.

*Trib. 3. Helminthosporiæ* SACC.

**HELMINTHOSPORIUM** Link — Sacc. Syll. IV, p. 402.

I. *In Dicotyledoneis lignosis.*

1. **Helminthosporium parvum** Grove in Journ. of Bot. 1886. p. 203, tab. 267, fig. — Parce gregarium, fusco-atrum; hyphis erectis, septatis, dilute fuscis, gracilibus, strictis, basi interdum subincrassatis, 80-90  $\approx$  3-4, apice in conidium unicum (rarissime bina) evadentibus; conidiis oblongis, tridymis, apice obtuse rotundatis, basi subtruncatis, loculo apicali subquadrato et basali cuneato, luteolis, centrali rotundo, crassiori (inflato), brunneo, 12-15  $\approx$  5-6.

*Hab.* in ligno quercino, Sutton Coldfield prope Birmingham Britanniae, cum *H. hormiscioides*. Loculus apicalis subinde brunneus, basalis nunquam. *H. coryneoidi* affine.

2. **Helminthosporium reticulatum** Cooke Fung. Brit. I, 360, Grev. XVII, p. 68. — Reticulato-effusum, maculas irregulares efformantibus; hyphis fasciculatis, flexuosis, tenuibus, septatis, fuscis, ad apicem hyalinis; conidiis subfusiformibus, utrinque obtusis, triseptatis, constrictis, fuscis, 22  $\approx$  7.

*Hab.* in foliis Fraxini, Thirsk, Yorkshire Britanniae. — Habitus quasi *Asteromatis*.

3. **Helminthosporium resinaceum** Cooke Grev. XVII, p. 68. — Effusum, indeterminatum, atrum, opacum; hyphis simplicibus vel furcatis, septatis, constrictis, crassiusculis, fuliginæis; conidiis subfusiformibus, majusculis, 7-septatis, quandoque leniter curvulis, 70  $\approx$  10-12, olivaceo-fuscis.

*Hab.* in resinea pinea, Shere Britanniae.

4. **Helminthosporium acroleucum** Sacc. Bomm. et Rouss. Fl. myc. Belg. II, p. 51. — Effusum, nigrum, velutinum; hyphis brunneis, bre-

vissimis, erectis, passim subnodulosis, pluriseptatis, leviter tortuosis, 60-72  $\approx$  5; conidiis solitariis apicalibus, olivaceis, pellucidis, anguste clavatis, basi longe attenuatis 5-28-septatis, apice truncatis, verticillatâ hyalinâ deciduâ terminatis, 40-160  $\approx$  5-7, sæpius 63-66  $\approx$  5.

*Hab.* in ramis decorticatis Sambuci nigræ et Syringæ vulgaris, Groenendael Belgii.

5. **Helminthosporium (?) Cerasorum** (Thüm.) Berl. et Vogl. Add. Syll. 7536

n. 3628, *Septosporium Cerasorum* Thüm. in Cæster. Landwirth. Wochenbl. 1884, p. 259 et Thüm. et Boll. Contr. Funghi litt. Austr. III, p. 5. — Cæspitulis densissime gregariis, plus minus orbiculatim dispositis, griseo-fuscidulis, in macula suborbiculata, rufo-ochracea, applanata, disciformi, sat magna; conidiis magnis, rectis clavatis vel late fusoideis, brevi pedicellatis, basi angustatis, vertice dilatato-rotundatis, quadri-septemseptatis, succineo-luteis, diaphanis, magnitudine varia, 28-48  $\approx$  10-16; hyphis brevibus, nodulosis, dilutioribus, 8  $\mu$ . crassis suffultis.

*Hab.* in fructibus maturis, quos enecat, Cerasi dulci, S. Florian Goritiæ.

6. **Helminthosporium olivaceum** B. et Rav. North Am. Fung. 112. — 7537

Tenue, olivaceum; hyphis brevibus e mycelio repente oriundis, flexuosis, nodulosis; conidiis longissimis, lineari-clavatis, 10-12-septatis, singulatim v. binatim acrogenis.

*Hab.* in foliis Gleditschiæ in Carolina infer. Amer. borealis (RAVENEL).

7. **Helminthosporium subolivaceum** Ell. et Ev. Journ. Myc. 1888, 7538

p. 44. — Subcæspitosum, per corticem fissum erumpentibus; hyphis erectis, septatis, brunneis, æqualibus, 100-120  $\approx$  3-4; conidiis subellipsoides, acrogenis?, primo subhyalinis, dein brunneis et sæpius 3-septatis, ad septa vix constrictis, utrinque subacutis, basi persistenter pedicellatis, 30-40  $\approx$  10-14.

*Hab.* in cortice emortuo Aceris rubri, Clyde, N. Y. Amer. bor. (O. F. Cook).

8. **Helminthosporium subcuticulare** Ell. et Ev. Journ. Myc. 1888, 7539

pag. 114. — Primitus cæspitosum, dein interrupte confluens, cuticula secessa, demum liberum, nigrum; hyphis simplicibus, erectis, hyalinis, dein olivascentibus, 20-25  $\approx$  4-5; conidiis acrogenis, solitariis, olivaceis, oblongo-cylindræis, 2-septatis, 25-35  $\approx$  15-18.

*Hab.* in ramis emortuis Negundinis fraxinifolii, Sand Coulee, Montana Amer. bor.

9. **Helminthosporium paraguayense** Speg. Guar. I, p. 165. — Epiphyl- 7540

lum, laxè arachnoideo-velutinum, plagulas fuscas, effuso-orbiculares 2-4 mm. diam., efficiens, maculis nullis; hyphis sterilibus mucedineo-evanescentibus, repentibus parum perspicuis; fertilibus hinc inde penicillatim aggregatis, a basi liberis, erectis, 100-150  $\approx$  4, cylindraceis, septulatis, flexuosis vel geniculatis, olivaceis, apice obtuse rotundatis ac pallidioribus; conidiis fusoideis vel fusoideo-clavatis rectis v. vix curvulis superne acutatis, inferne subtruncatis, 3 septatis, 18-25  $\approx$  4, non v. vix constrictis, loculis duobus internis obscure olivaceis, duobus extimis pallidioribus, chlorinis.

*Hab.* ad folia viva Bignonix sp. cujusdam in silva subvirginea Caà-guazù Brasiliæ.

10. **Helminthosporium? bombycinum** Speg. F. Fueg. n. 447. — Pulvi- 7541  
nulis late effusis, crassiusculis, gossypinulo villosulis, superficialibus, olivaceis; hyphis cylindraceis, 5  $\mu$ . cr., simplicibus, flexuosis, dense intricatis, hinc inde parce noduloso-geniculatis, fuligineis; conidiis acro-pleurogenis, nodulis insidentibus, cylindraceis v. clavulatis, longitudine varia, 20-50  $\approx$  4-5, dense septulatis, ad septa non vel constrictis, loculis subcuboideis, levibus, catenulatis, atris.

*Hab.* ad ramulos vivos Pernettiæ mucronatæ in silvis pr. Agaia in Hoste island Fuegiæ. — Species habitu ac hypharum fabrica ad *Helminthosporium*, conidiis autem catenulatis ad *Dendryphium* accedens sed biogena; an huc *Antennaria scoriadea* Berk.

11. **Helminthosporium martinicense** Thüm. Rev. Myc. 1879, p. 10. — 7542  
Maculis amphigenis, atris, radiatim orbicularibus, effusis, nitidis, solitariis; hyphis rigidis, subulato-strictis, erectis, simplicibus, obscure fuscis, non septatis, sursum sensim angustatis, apice acutatis; conidiis fusoideis, rectis, utrinque acutis, 16-guttatis, continuis (an semper?), hyalinis, 35  $\approx$  7-8.

*Hab.* in foliis vivis Buxi citrifoliæ in insula Martinica (HAHN).

12. **Helminthosporium obliquum** Karst. Hedw. 1890, p. 272. — Effu- 7543  
sum, tenue, atrum; hyphis simplicibus, erectis, subflexuosis, articulatis, fuligineis (sub lente), 90-165  $\approx$  10-11 mm.; conidiis fusoideo-oblongatis, rectis vel subcurvulis, sursum leviter attenuatis, apice obliquo, basi subtruncatis usque ad 7-septatis ad septa non constrictis, dilute olivaceis pellucidisque (sub lente), 40-45  $\approx$  12-13.

*Hab.* in ligno putrescente Pini ad Mustiala Fenniæ. — *Helminthosporio septemseptato* proximum.

13. **Helminthosporium collabendum** Cooke Grev, XVII, p. 67. — Effu- 7544

sum, indeterminatum, atrum; hyphis flexuosis, septatis, hinc illinc breviter furcatis, fuscis; conidiis fusiformibus triseptatis (rarius quadriseptatis) aureo-fulvis, 60-70  $\approx$  12-14, episporio tenui, collabendo.

*Hab.* in cortice, Carolina austr.

14. **Helminthosporium minimum** Cooke Grev. XVII, p. 67. — Tenue, 7545  
effusum, velutinum, atrum; hyphis erectis, tenuibus, fuscis, vix 100  $\mu$ . long. excedentibus; conidiis fusiformibus, utrinque obtusis, triseptatis, hyalinis, 12-14  $\approx$  3-4, vix constrictis.

*Hab.* in ramis decorticatis Hereford Britannicæ.

15. **Helminthosporium armatum** (Lév.) Berl. et Sacc. *Oxysporium* 7546  
*armatum* Lév. in Ann. Sc. Nat. 1863, pag. 300. — Hyphis setiformibus, gregariis, nigris, erectis, rigidis, simplicibus, continuis; conidiis 2-4-ocularibus, levibus, acumine inani, lanceolatis, basi adfixis, apice liberis.

*Hab.* ad ligna vetusta, Villeta Alto del Trigo Novæ Granat. — «Nullis notis ab *Helminthosporiis* differre videtur».

16. **Helminthosporium guaraniticum** Speg. Guar. pag. 165. — Corti- 7547  
colum, laxè tenueque velutinum, plagulas majusculas, effusas, irregulares, olivaceas efficiens; hyphis cylindræis, erectis, longissimis crassiusculisque, 500-1000  $\approx$  10-11, densis, rectis vel vix flexuosulis, septulatis, deorsum atris, sursum sensim dilutioribus, apice vix v. non subinflatis ac truncatis; conidiis fusoido-clavatis vel hirundineis, majusculis, 11-13-septatis vel guttatis, 100-120  $\approx$  19-20, fuligineis, vertice rotundatis, basi truncatis.

*Hab.* ad ramulos dejectos emortuos pr. Carapeguá Brasilicæ.

## II. In Dicotyledoneis herbaceis.

17. **Helminthosporium Sarraceniæ** M. Mill. Bull. Torr. 1891, p. 214. 7548  
— Cæspitulis orbicularibus, atris, velutinis, subconfluentibus, totum folium obtegentibus; hyphis fertilibus erectis, fasciculatis, ventricosò-nodosis, 75-150  $\approx$  3,5-7,5 guttulatis, brunneis; conidiis e continuo 4-septatis, 7-15  $\approx$  3-8, levibus.

*Hab.* in foliis emortuis Sarraceniæ purpureæ, pr. Minneapolim Amer. bor.

18. **Helminthosporium Libertianum** Roum. Rev. Myc. 1883, pag. 107. 7549  
— Cæspitulis nigricantibus; hyphis copiosis, brevibus, flexuosis, furcatis; conidiis fusoides, olivaceo-fuscis, 11-13-septatis.

*Hab.* in caulibus siccis Brassicæ oleracæ rubræ cultæ in hortis Malmedy Arduennæ.

19. **Helminthosporium Matthiolæ** Thüm. et Boll. Contr. Funghi litt. 7550

Austr. III, p. 4. — Cæspitulis late effusis, sed tenuibus, laxis, atris; hyphis brevibus, erectis, nodulosis, septatis, pallide ochraceo-brunneis, irregulariter crassis; conidiis longe clavatis, basi in pedicellum longum attenuatis, apice rotundatis, sex-duodecim septatis, ad septa non constrictis, sordide fuscis,  $40 \approx 8-9$ , pedicello pallidiori, 10-14  $\mu$ . long.

*Hab.* in siliquis aridis adhuc stantibus Matthiolæ incanæ, Goritiæ.

20. **Helminthosporium Euphorbiacearum** Pat. Bull. Socc. Myc. 1891, 7551

pag. 182. — Cæspitulis erectis, minutis, gregariis, vermiculariiformibus, maculam cinerescens caulium obtegentibus; hyphis 5-10 fasciculatim connexis, rigidis, brunneis, septatis, cylindræis, sursum obtusis pellucidisque, 100-120  $\approx$  12-15; conidiis fuliginæis, prælongis, 120-160  $\approx$  22-25, rectis v. curvulis, fusoideis, inferne abrupte truncatis, superne regulariter attenuatis, levibus, transverse 5-10-septatis.

*Hab.* in cortice Euphorbiææ cujusdam cactoideæ, Panecillo reipubl. Æquatoris Amer. centr.

21. **Helminthosporium Balansæ** Speg. Guar. I, p. 165. — Maculis hy- 7552

pophyllis, effusis, indeterminatis, olivascentibus, sæpe totum folium ambientibus, acervulis in maculis laxè sparsis ex hyphis liberis rectis v. sæpe nodulosis v. geniculatis, 50-100  $\approx$  5, parce septatis, olivaceis compositis; conidiis cylindræis, utrinque obtusissime rotundatis, 1-3-septatis, 20-35  $\approx$  5, dilute olivaceis.

*Hab.* ad folia viva Evolvuli speciei cujusdam in silva Caaguazù Brasilæ.

## III. In Monocotyledoneis.

22. **Helminthosporium palmicolum** Pat. et Gaill. Bull. Soc. Myc. 1888, 7553

p. 124. — Maculis villosulis, brunneis; hyphis sterilibus fasciculatis, simplicibus, brunneis, septatis; conidiis fusoideis apice truncatis, stipitatis, 11-15-septatis, 60-80  $\approx$  12-15.

*Hab.* in petiolis putridis Palmarum, Atures Venezuela

23. **Helminthosporium spiculiferum** Ell. et Ev. in Journ. of Myc. 7554

1886, pag. 104. — Cæspitulis velutinis, maculis albis, obscure marginatis; hyphis fertilibus effusis, simplicibus, erectis, brunneis, subundulatis, continuis (vel obscure septatis?) 100  $\approx$  2,5-3; conidiis oblanceolatis, pallide brunneis, 5-9-septatis, in basim gracilem at-

tenuatis, sursum abruptius contractis, apice truncato, obscuriore, subinde ad unum vel nonnulla septa constrictis.

*Hab.* in foliis *Sabal*is Palmetto, Louisiana Amer. bor. (LANGLOIS).

24. **Helminthosporium Palmetto** Gerard Grev. XVII, p. 68. — Tenuissime in plagas orbiculares effusum, quandoque confluens; hyphis erectis, crassiusculis, septatis, fuscis; conidiis fusiformibus triseptatis, aureo-succineis,  $45 \approx 8$ . 7555

*Hab.* in foliis Palmetto, Louisiana Amer. bor.

25. **Helminthosporium avenaceum** Curtis Herb., Grev. XVII, p. 67. — Effusum, atrum, tenue velutium; hyphis erectis, crassiusculis, septatis, subopacis; conidiis cylindræis v. subfusoidæis, utrinque rotundatis, 4-5-septatis, pallide melleis  $75-85 \approx 15$ . 7556

*Hab.* in stramine avenaceo in Amer. bor.

26. **Helminthosporium gramineum** Rabh. Herb. Myc. 332, Grev. XVII, p. 67. — Tenuissime effusum; hyphis brevibus, subflexuosis, pallide fuscis; conidiis solitariis, elongato-cylindræis, 3-6-septatis. 7557

*Hab.* in foliis languidis *Hordei vulgaris*, Pappelsdorf Germaniæ. — *H. gracili* affine.

27. **Helminthosporium hadrotrichoides** Ell. et Ev. Journ. Myc. 1888, p. 44. — Maculis elongatis, albis, sæpius præsentibus, plerumque ephiphyllis; hyphis laxè cæspitosis, erectis, fumoso-brunneis, continuis v. 1-2-septatis,  $30-35 \approx 6-7$ , apice inflatis et  $8-12 \mu$ . diam.; conidiis clavato-obovatis v. clavato-cylindræis, flavido-brunneis. 7558

*Hab.* in foliis pro parte emortuis *Eragrostidis majoris*, Faulkland Del. Amer. bor. (A. COMMONS).

28. **Helminthosporium sigmoideum** Cav. Mat. Lomb. p. 15, t. I, f. 5. — Effusum, atrum; hyphis fertilibus subsparsis, erectis, rigidiusculis, hinc inde nodulosis, 3-10-septatis, simplicibus, olivaceis,  $100-150 \approx 5$ ; conidiis magnis falcato-sigmoideis, utrinque obtusis, 3-septatis, articulis mediis crassioribus, granulosis, dilute olivaceis, extimis hyalinis,  $55-65 \approx 11-14$ . 7559

*Hab.* in foliis, vaginis culmisque *Oryzæ sativæ* pr. Pavia Ital. bor. — Subaffine *H. hyalophæo*.

29. **Helminthosporium Sorokinianum** Sacc. in Zeitschr. f. Pflanzenkr. I, p. 238 (1891) et in Sorok. Ueb. einig. Krankh. etc. p. 15, f. 9. — Cæspitulis fulvescentibus, flocculosis; hyphis fertilibus, elongatis, flexuosis septatis, brunneis ex mycelio endogeno oriundis; conidiis acrogenis, ovato-fusoidæis, majusculis,  $80-100 \approx 30$ , rufo-brunneis, 5-10-septatis, passim lenissime constrictis, rectis curvulisve. 7560



*Hab.* in spicis *Tritici* et *Secalis* in reg. meridionali *Ussuriæ* *Rossiaë*. — Ab affini *H. tereti* differt hyphis longioribus conidiis fusoides et crassioribus.

30. **Helminthosporium foveolatum** Pat. Journ. bot. 1891, p. 321. — 7561

Membranaceum, nigrum, late effusum, e matrice discernibile, 0,5 mm. circ. cr., in superficie irregulariter foveolatum; hyphis erectis, septatis, cæspitosis, flavo-brunneis, 100-200  $\approx$  6-8; conidiis concoloribus, longe stipitatis, multiseptatis, rectis vel geniculatis, 40-70  $\approx$  7-9.

*Hab.* in caulibus siccis *Bambusæ*, Ke So Tonkin.

31. **Helminthosporium caaguazuense** Speg. Guar. I, p. 164. — Epi- 7562

phyllum, laxissime arachnoideo-effusum, tenuissimum, atrum; maculis nullis; hyphis sterilibus repentibus, longe remoteque ramoso-intricatis, parce septatis, subgracilibus, 4  $\mu$ . cr., olivaceis; hyphis fertilibus hinc inde sparse exsurgentibus, erectis, subflexuosulis, crassiusculis, 200-250  $\approx$  7-7,5, densiuscule septatis sæpeque subnodulosis, fuligineis, apice rotundatis, non vel vix attenuatis, dilutioribus; conidiis elongato-subfusoides, 50-60  $\approx$  8-9, rectis, 5-7-septatis, non constrictis, sursum attenuato-rotundatis, deorsum subcuneato-truncatis, fuligineis.

*Hab.* ad folia viva *Bambusaceæ* cujusdam in Pastoreo de Caá-guzú *Brasilæ*.

32. **Helminthosporium Bambusæ** Cooke Grev. XX, p. 91. — Cæspi- 7563

tulis compactis, convexis, atris, gregariis, plerumque sphaeræformibus; hyphis fasciculatis, erectis, teretibus, septatis, pallide fuscis v. subfuligineis; conidiis acrogenis, lanceolatis, superne acutis, 3-5-septatis, nec constrictis, pallide fuscis, 60-70  $\approx$  12, episporio tenui.

*Hab.* in *Bambusa spinosa* Assam. (MANN.)

33. **Helminthosporium tonkinense** Karst. et Roum. Rev. Myc. 1890, 7564

p. 78. — Effusum, crustaceum, atratum vel fusco-atrum; hyphis intricatis, flaccidis, flexuosis, subtorulosis, ramosis, articulatis, dilute fuligineo-olivaceis, 6-9  $\mu$ . cr.; conidiis fusoides-oblongatis vel elongatis, rectis v. leniter curvulis, 3-5 (vulgo) 4-septatis, ad septa non constrictis, olivaceo fuligineis, 78-67  $\approx$  13-17.

*Hab.* in inflorescentia *Sporoboli* tenacissimi in Ououbi Tonkin. — *H. Ravenelii* affine.

34. **Helminthosporium parasiticum** Sacc. et Berl. F. aliq. Guin. p. 4. — 7565

Hyphis simplicibus erectis, subsparsis, basi incrassatis, fuligineis, apice pallidiori guttuligero, denticulis truncatis sæpe armato attenuatoque, septatis 180-300  $\approx$  8; conidiis obclavatis, loculo extimo

valde attenuato, subhyalino, triseptatis, septis distinctissimis, loculis uniguttulatis, pallide ochraceo-lutescentibus, 36-42  $\approx$  10-12.

*Hab.* parasitans in stromate Diaporthes cujusdam in caule Musæ viventis, S. Thomé Afr. occid. (AD. FR. MOLLER). — *Helm. congestum* B. et C., Grev. XVII, p. 68 (ex Cuba). Ob specimina imperfecta, omnino dubium.

**BRACHYSPORIUM** Sacc. Syll. IV, p. 423.

1. **Brachysporium caliginosum** C. Mass. Contr. Myc. Ver. p. 117, t. IV, 7566 f. 30. — Cæspitulis atro-brunneis, subvelutinis, sæpe effuso-confluentibus; hyphis fertilibus densissime stipatis, subflexuosis, simplicibus, remotiuscule septatis, 100-170  $\approx$  5; conidiis concoloribus, caducis, acrogenis, polymorphis, plerumque elliptico-oblongis (junioribus subobovatis), 0-3-septatis, 9-20  $\approx$  5-7, episporio minutissime granulato.

*Hab.* in sarmentis siccis Vitis viniferæ, Tregnago in agro veronensis. — *B. oosporo* affine.

2. **Brachysporium serpens** Karst. et Har. Rev. Myc. 1890, n. 47. 7567 — Cæspitulis effusis, tomentosis, fuscis; hyphis longissimis, ramosis, articulatis, fuliginis pellucidisque (sub lente), 5-6  $\mu$ . cr., conidiis ellipsoideis, obtusis, 3-septatis, ad septa non constrictis, fuliginis sub lente, loculis ultimis hyalinis, 16-18  $\approx$  9-10.

*Hab.* supra ligna putrescentia Ville-sur-Terre depart. Aube Galliæ.

3. **Brachysporium Sarraceniæ** M. Mill. Bull. Torr. 1891, p. 214. — 7568 Cæspitulis ut in *Helminthosporio Sarraceniæ*; conidiis plerumque sphaericis, pluriseptatis, e loculis 8-12 compositis, obscure fuscis v. carbonaceis, 15-30  $\approx$  15-30, echinulatis.

*Hab.* in foliis emortuis Sarraceniæ purpureæ, Minneapolis Amer. bor.

4. **Brachysporium Crepini** (West.) Sacc. Syll. IV, p. 430 — Var. **minus** 7569 Cfr. Karst. et Har. Journ. Bot. 1890, p. 363. — Differt conidiis multo minoribus, 30-44  $\approx$  14, fuliginosis, hyphis 6-8  $\mu$ . cr.

*Hab.* ad frondem Ophioglossi, Mery-sur-Seine Galliæ.

**OPHIOTRICHUM** Fr. Summa p. 503, Sacc. Syll. IV, p. 761 (Etym. *ophis* serpens et *thrix* capillus). — Hyphæ repentes radiantes, atræ, septatæ. Conidia ovoideo-oblonga, 2-pluriseptata, fuliginea pleurogena. — Habitus *Meliolæ*, cujus forte st. conidicum sistit.

1. **Ophiotrichum Acalyphæ** Thüm. Rev. Myc. 1879, p. 10. — Maculis 7570

stellari-ramosis vel radiantibus, epiphyllis, orbiculatis, primo albidis, demum ochraceis, gregariis, postremo grumosis; hyphis externis dilute fuscis, internis hyalinis, magnis, longis, interdum septatis, apice acutatis; conidiis longe ellipsoideo-ovoideis, vertice subobtusatis, apice subacutis, 2-3-septatis, ad septa non constrictis, fusco-brunneis, 12 = 5.

*Hab.* ad folia *Acalyphæ levigatæ* in insula St. Domingo (C. KECK).

**CERCOSPORA** Fres. — Sacc. Syll. IV, p. 431.

1. *In Dicotyledoneis herbaceis.*

1. **Cercospora Calthæ** Cooke Grev. XVII, p. 65. — Maculis orbicularibus, epiphyllis, fuscis; hyphis brevibus, hyalinis; conidiis cylindræis, subattenuatis, septis vix distinctis, 30-35 = 2. 7571

*Hab.* in foliis languidis *Calthæ*, Forres Britann. bor.

2. **Cercospora Aquilegiæ** Kell. et Sw. Journ. Mycol. 1889, p. 74. — Maculis amphigenis, purpureo-brunneis, sparsis v. subinde confluentibus, 3-15 = 1,5-5 mm., irregulariter linearibus v. oblongis, interdum subquadrangularibus; cæspitulis minutis, ex hyphis 2-6, laxis compositis; hyphis fuscis, simplicibus, vix attenuatis, apice vulgo valide geniculato-dentatis, 50-145 = 4-6,5; conidiis paucis, hyalinis, flagellatis, basi obtusis, crassioribus, apice gracillimis et acuminatis, 140-310 = 4,5-6 (basi), apice 1,5-3  $\mu$ . cr. 7572

*Hab.* in foliis radicalibus *Aquilegiæ canadensis*, Manhattan, Kansas Amer. bor.

3. **Cercospora Menispermii** E. et Holw. Journ. Myc. 1888, p. 6. — Hypophylla; maculis parvis, indefinitis, atro-brunneis, demum orbicularibus, 2-5 mm. diam., subtus concavis et plus minus confluentibus, cæspitulis e basi subsphærica, tuberculari, circ. 35  $\mu$ . diam., exsurgentibus; hyphis subrectis, pallide brunneis, sæpius continuis, 75-80 = 4, supra geniculato-sinuatis; conidiis obclavatis, 40-60 = 5-7, pallide brunneis, guttatis, dein 3-5-septatis, sæpe multo brevioribus, obovatis v. oblongo-ellipsoideis, 1-3-septatis, 15-25 = 5-7. 7573

*Hab.* in foliis vivis *Menispermii canadensis*, Decorah, Iowa et Manhattan Kansas Amer. bor. (W. T. SWINGLE).

4. **Cercospora Nasturtii** Pass. — Syll. IV, p. 433 — var. **Sisymbrii** Bäuml. F. Schemn. I, p. 11. — Hyphis in cæspitulos collectis, 60-100 = 7, fuscis, sursum hyalinis et denticulatis; conidiis 100-120 = 3-6, clavatis, hyalinis. 7574

*Hab.* in foliis *Sisymbrii austriaci* pr. Schemniz Hungariæ.

5. **Cercospora Bizzozzeriana** Sacc. et Berl. F. Ven. nov. p. 20, t. XIV, 7575  
f. 23. — Maculis albidis, margine obscuriori angusto cinctis, orbicularibus v. confluendo difformibus, 0,3-0,5 cm. diam.; cæspitulis hypophyllis, parvis; hyphis fasciculatis, continuis, nodulosis, dilute fuligineis, sursum pallidioribus, 80-90  $\approx$  4-5; conidiis longe cylindræis apice rotundatis, crebre septatis, e nodulis oriundis rectis v. vix flexuosis, 120-126  $\approx$  5-7, hyalinis, subinde minoribus vix 50-60  $\mu$ . long.
- Hab.* in foliis vivis Lepidii latifolii, Padova Ital. bor. (BIZZOZERO).
6. **Cercospora Cruciferarum** E. et E. Journ. Mycol. 1837, p. 17. — 7576  
Maculis amphigenis, rotundis, albis, margine atro elevato cinctis, minutis, 1-2 mm. diam.; hyphis cæspitulosis, amphigenis fuscis, distincte septatis, subgeniculatis, apice subtruncatis et grosse denticulatis, 80-120  $\approx$  4-5; conidiis angustis, tenuiter multiseptatis, 100-150  $\approx$  4,5, hyalinis.
- Hab.* in foliis Raphani et Sisymbrii, Missouri et Delaware Amer. bor. (GALLOWAY et COMMONS).
7. **Cercospora Impatientis** Bäuml. F. Schemn. I, p. 11. — Maculis ro- 7577  
tundatis demum irregularibus, arescendo griseis vel albidis, fusco-cinctis; cæspitulis epiphyllis minutis brunneis; hyphis fasciculatis, nodulosis, ramulosis, continuis, 50-80  $\approx$  3-7, brunneis; conidiis elongatis, 30-50  $\approx$  5-8, dilute brunneis, 1-4-septatis.
- Hab.* in foliis vivis Impatientis Nolitangere, Beluj pr. Prencow Hungariæ.
8. **Cercospora Tropæoli** Atk. Cerc. Alab. p. 27. — Maculis amphi- 7578  
genis, dilutissime brunneis, supra margine angusto, elevato cinctis, suborbicularibus, 2-4 mm. lat.; hyphis epiphyllis, in quoque cæspitulo paucis, validis, brevibus, pallidissime fuligineis, 20-40  $\approx$  5, dentatis; conidiis hyalinis, basi validiusculis, supra abrupte longè attenuatis, multiseptatis, 50-150  $\approx$  3,5-4,5.
- Hab.* in foliis Tropæoli culti, Auburn, Alabama Amer. bor. (ATKINSON).
9. **Cercospora columbiensis** E. et E. Journ. Mycol. 1887, p. 15. — 7579  
Maculis amphigenis, minutis, 1 mm. diam., rotundis albis, atro-marginatis; hyphis solito epiphyllis, e tuberculo minuto cæspitosis, pallide brunneis, simplicibus, sursum subdentatis, 35-55  $\approx$  4-5, continuis; conidiis hyalinis, angustis, 4-5-septatis, 60-80  $\approx$  3.
- Hab.* in foliis Jonidii concoloris, Columbia Mo. Amer. bor. (GALLOWAY). — Affinis *C. tandilensi*, sed bene distincta.

10. **Cercospora li** Trail Trans. Crypt. Scot. 1889, p. 48. — Maculis 7580  
amphigenis, 2-5 mm. diam., sordidis, dein pallidis, indeterminatis,  
fusco-marginatis; hyphis sterilibus repentibus, ramosis, fertilibus  
erectis, continuis, sursum denticulatis, 30-40  $\times$  4-5; conidiis cylin-  
draceis, passim sursum tenuatis, rectis curvulisve, 20-60  $\times$  5-7, so-  
litariis (semper?), 3-6-septatis.

*Hab.* in foliis *Violæ palustris*, Dalmally et pr. Inveraray  
Scotiæ.

11. **Cercospora Violæ-silvaticæ** Oud. Microm. I, pag. 12. — Maculis 7581  
amphigenis suborbicularibus, aridis, pallescentibus; mycelio endo-  
phyllo, denso, fuligineo, ramosissimo, septato; hyphis fertilibus ere-  
ctis, cylindraceutis, subnodosis, fuscescentibus, brevibus, parce septa-  
tis; conidiis hyalinis cylindraceutis, 3-7-septatis, curvatis, apice ob-  
tusissimis, basi truncatis, 45-70  $\times$  4,5.

*Hab.* in foliis *Violæ silvaticæ*, Apeldoorn Nederlandiæ.

12. **Cercospora Violæ-tricoloris** Br. et Cav. Fung. Parass. n. 185. — 7582  
Maculis suborbicularibus, magnis, cinereis; hyphis e tuberculo pa-  
renchymatico subepidermico ortis, 60-100  $\mu$ . longis, cylindraceutis,  
flexuosis, denticulatis, septatis, olivaceis; conidiis clavulatis, pluri-  
septatis, dilute chlorinis, 100-200  $\times$  3-4.

*Hab.* in foliis *Violæ tricoloris* cultæ in horto bot. Pavia  
Ital. bor. — Ab affini *C. Violæ* differt hyphis multo longioribus,  
septatis e tuberculo subcutaneo oriundis.

13. **Cercospora Lini** E. et E. Journ. Myc. 1887, pag. 16. — Maculis 7583  
definitis nullis; cæspitulis effusis, folium ad flavum vergentibus;  
hyphis simplicibus, subolivaceis, continuis, cæspitulos parvos, den-  
sos, 35-40  $\mu$ . alt. efformantibus; conidiis gracilibus, 40-60  $\times$  2,5-3,  
guttulatis, fumoso-hyalinis, subcurvulis, sursum sensim attenuatis.

*Hab.* in foliis languidis *Lini virginiani*, Faulkland, Dela-  
ware Amer. bor. (A. COMMONS).

14. **Cercospora Brunkii** Ell. et Gall. Journ. Myc. 1890, p. 33. — Ma- 7584  
culis amphigenis, dilute brunneolis vel pallide lateritiis, orbicula-  
ribus vel ovalibus,  $\frac{3}{4}$ -2 $\frac{1}{4}$  mm. diam., margine angusto, subeleva-  
to, subobscuriore cinctis; hyphis amphigenis, pallide brunneis, 90-  
200  $\times$  3-5, subgeniculatis, 2-5-septatis, cæspitulos laxos, effusos ef-  
formantibus; conidiis clavato-cylindraceutis, hyalinis, 5-20-septatis,  
50-125  $\times$  3-4 (basi).

*Hab.* in foliis *Geranii* sp. cultæ, Brazos County, Texas Amer.  
bor. (Prof. T. L. BRUNK). — A *C. Geranii* hyphis obscurioribus,  
conidiis multiseptatis et majoribus diversa.

15. **Cercospora Geranii** Kell. et Sm. Journ. Mycol. 1889, p. 74. — 7585  
 Maculis amphigenis, brunneolis v. fuscis, ex ovato sublinearibus, sæpissime pallide rubro-cinctis, 2-8  $\approx$  1,5-4 mm.; cæspitulis amphigenis, crebre æqualiterque sparsis, minusculis, sæpius e stomatibus assurgentibus; hyphis brunneolis, 25-50  $\times$  3-4, simplicibus, basi parce septatis, apice sinuato-subdenticulatis; conidiis copiosis, hyalinis, cylindraceis vel clavatis, utrinque acutis, 1-5-septatis, non constrictis, 36-98  $\approx$  1,5-3.  
*Hab.* in foliis languidis *Geranii caroliniani*, St. George, Pottawatomie County Amer. bor.
16. **Cercospora Cleomes** Ell. et Halst. Journ. Myc. 1890, p. 34. — 7586  
 Maculis amphigenis, suborbicularibus, griseis anguste atro-marginatis, 2-4 mm. diam.; hyphis amphigenis, laxe cæspitosis, pallide brunneis, septatis, geniculatis, 75-100  $\approx$  3,5-4; conidiis angustis, hyalinis, multiseptatis, 75-100  $\times$  3-3,5.  
*Hab.* in foliis *Cleomes pungentis*, New Brunswick N. J. Amer. bor. — A *C. Capparidis* satis diversa.
17. **Cercospora lathyrina** Ell. et Ev. Proc. Acad. Phil. 1891, p. 91. — 7587  
 Maculis ferrugineo-brunneis, dein centro pallidioribus, subepiphyllis, subindefinite limitatis, 2-5 mm. diam.; hyphis epiphyllis, cæspitosis, brunneolis, sursum flexuosis, parce septatis, 75-100  $\approx$  4; conidiis angustis, hyalinis, tenuissime 1-3-septatis, 80-110  $\approx$  3.  
*Hab.* in foliis vivis *Lathyri latifolii* culti, Newfield N. J. Amer. bor.
18. **Cercospora Vignæ** E. et E. Journ. Myc. 1887, p. 19. — Maculis 7588  
 amphigenis, minutis, irregularibus, rufo-brunneis; cæspitulis effusis, fumoso-olivaceis, strata velutina formantibus; hyphis brevibus, 35-45  $\approx$  4-5, curvis, sursum patentibus et subdentatis, pallide brunneis, subcontinuis; conidiis angustis demum 3-5-septatis, 70-110  $\approx$  3, hyalinis, nucleatis.  
*Hab.* in foliis *Vignæ luteolæ*, Louisiana Amer. bor. (LANGLOIS). — Diversa a *C. canescente*, quacum sæpe nascitur in eodem folio.
19. **Cercospora Fabæ** Fautr. Rev. Myc. 1891, p. 13. — Maculis con- 7589  
 centrice zonatis, sæpe confluentibus, atro-purpureis, centro griseis; hyphis sterilibus reticulatim intertextis, fertilibus erectis, fasciculatis, epiphyllis, violaceis, dentatis, majoribus 60  $\times$  6; conidiis 7-9-septatis, sæpe uno apice attenuatis, 60-110  $\approx$  5-7.  
*Hab.* in foliis *Viciæ Fabæ* (minoris) Clamercy, Côte-d'Or Galliæ (F. FAUTREY),

20. **Cercospora Dolichi** Ell. et Ever. Journ. Mycol. 1889. p. 71. — 7590  
 Amphigena sed sæpius hypophylla; maculis rubidis; cæspitulis parvis, inæqualiter sparsis, basi tuberculari destitutis; hyphis olivaceis, 20-35  $\approx$  4-5, simplicibus vel supra subdenticulatis, continuis vel obscure 1-2-septatis; conidiis tenuiter obclavatis, hyalinis, 3-5- vel pluriseptatis, 50-100  $\approx$  3,5-4.  
*Hab.* in foliis Dolichi sinensis, Starkville, Missouri Amer. bor. (Prof. S. M. TRACY).
21. **Cercospora flagellifera** Atk. Cerc. Alab. p. 19. — Maculis amphigenis, suborbicularibus v. angulosis, 3-4 mm. lat. v. magnis et indefinite limitatis, superne atro-brunneis, inferne pallidioribus; hyphis amphigenis, compactiuscule fasciculatis v. effusis, rubenti-brunneis, apice flexuosis et dentatis aut cylindræis, 40-150  $\approx$  4-5; conidiis hyalinis, longissimis et gracilibus, multiseptatis, 70-250  $\approx$  2,5-3 (basi).  
*Hab.* in foliis Galactiæ pilosæ et Lespedezæ, Auburn, Alabama Amer. bor. (ATKINSON).
22. **Cercospora Daleæ** E. et K. Journ. Myc. 1888, p. 6. — Cæspitulis densis, sphæræiformibus et subseriatis aut elongatis et gregariis; hyphis simplicibus, brunneolis, rectis, supra subdenticulatis, 25-30  $\approx$  4-5; conidiis obclavato-cylindræis, brunneolis, 1-2-septatis, 30-40  $\approx$  3-4.  
*Hab.* in caulibus emortuis Daleæ laxifloræ, Kansas Amer. bor. (KELLERMAN et SWINGLE).
23. **Cercospora Medicaginis** Ell. et Ev. Proc. Acad. Phil. 1891, p. 91. 7593  
 — Maculis ferrugineo-brunneis, demum sordide brunneis, suborbicularibus et subindefinite limitatis, 3-5 mm. diam.; hyphis amphigenis sed superne crebrioribus, subhyalinis, dein flavido-brunneis, continuis, geniculatis, 35-45  $\approx$  4-5; conidiis cylindrico-fusoideis, 3-6-septatis, 40-60  $\approx$  3.  
*Hab.* in foliis Medicaginis denticulatæ, College Station Texas Amer. bor. (H. S. JENNINGS). — Cæspituli late dense effusi, stratum ferrugineo-brunneum formantes.
24. **Cercospora Davisii** Ell. et Ev. Proc. Acad. Phil. 1891, p. 20. — 7594  
 Maculis amphigenis, atro-brunneis, suborbicularibus, 0,2-0,5 cm. diam., margine subindefinitis; hyphis amphigenis, cæspitosis, pallide brunneis geniculatis, curvatis, subseptatis, 40-50  $\approx$  5; conidiis variabilibus, oblongo-cylindræis v. obclavatis, 20-80  $\approx$  4-5, multinucleatis, dein 5-6-pluriseptatis.  
*Hab.* in foliis Meliloti albæ, Racine Wis Amer. bor. — Differt a *C. Meliloti* Oud,

25. **Cercospora Meliloti** Oud. Contr. Flor. Myc. Pays-Bas XI, p. 51, 7595  
vix *Depazea Meliloti* Lasch, Syll. III, p. 63. — Maculis albidis, orbicularibus, ovatis v. oblongis, 2-4 mm. diam.; hyphis fertilibus e pseudostromate parenchymatico, subcutaneo, sphæroideo, atro orientibus, epidermidem fasciculatim perforantibus, brunneolis, septatis, 20-69 = 3-4, plus minusve flexuosis; conidiis bacillaribus v. obclavatis, uni- pluriseptatis, 23-65 = 2-3, hyalinis.

*Hab.* in foliis Meliloti officinalis prope Nymègue Hollandiæ. — Cfr. *Septoria Meliloti*, supra p. 362.

26. **Cercospora Solimani** Speg. Guar. I, p. 167. — Maculis amphigenis, fuscescenti-atris, suborbicularibus, 1-3 mm. diam., determinatis, rigido-coriaceis; acervulis centro macularum laxè insidentibus, subpenicillatis, 80-150 = 30-50, ex hyphis gracilibus elongatis, 70-150 = 3-3,5 olivaceis, remote septulatis, basi subcoalescentibus, superne liberis compositis; conidiis cylindræo- v. fusoidæo-clavulatis, 30-40 = 4, fumosis v. chlorinis, utrinque acutiuscule rotundatis, 3-5-septatis, non constrictis.

*Hab.* ad folia viva v. languida Leguminosæ cujusdam cultæ, Soliman pr. Caà-guazù Brasilæ.

27. **Cercospora Stylosanthis** Speg. Guar. I, p. 169 (1886). — Maculis fusco-rubiginosis, orbicularibus v. confluendo repando-irregularibus, majusculis, sæpius ramulos ac ochreas totas ambientibus, squamuloso-pustulosis; acervulis olivaceis, in maculis hinc inde densiuscule erumpentibus, compactiusculis, ex hyphis cylindræis, continuis, rectis vel vix flexuosulis, 35-50 = 5, apice truncatulis, rubiginosis, asperulo-rugulosis, efformatis; conidiis cylindræo-clavulatis, rectis vel vix flexuosis, 3-5-septatis, nubiosis, rubiginosis, utrinque obtusiusculis, 35-45 = 4-5, levibus.

*Hab.* ad caules vivos *Stylosanthis* cujusdam in silva Caà-guazù Brasilæ.

28. **Cercospora Commonsii** Sacc., *Cercospora Stylosanthis* E. et E. 7598  
Journ. Myc. 1887, p. 13, vix Speg. — Hypophylla; cæspitulis subconfluentibus, subolivaceis; hyphis dense cæspitosis, brevissimis, 15-20 = 4-5, simplicibus, sursum tenuatis, sæpius integris, pallide brunneis; conidiis obclavatis, angustis, 50-75 = 3, tenuiter 3-5-septatis, flavido-hyalinis.

*Hab.* in partibus emortuis brunneis indefinite limitatis foliorum *Stylosanthis elatioris*, Delaware Amer. bor. (COMMONS). — A præcedente videtur satis diversa.

29. **Cercospora Sedoidis** E. et E. Journ. Myc. 1888, p. 4. — Am- 7599



phigena; maculis indefinitis, inconspicuis, vix rubiginosis,  $\frac{1}{4}$ - $\frac{1}{2}$  cm. diam., supra distinctioribus et plus minus confluentibus; cæspitulis paucis, effusis, e folii stomatibus sæpius exsurgentibus; hyphis continuis, 15-20  $\approx$  2,5-3, subfuscis, supra subdenticulatis et subundulatis v. fere integris; conidiis gracilibus, obclavato-linearibus, flavido-hyalinis, 2-4-septatis, sæpius 40-55  $\approx$  2,5-4.

*Hab.* in foliis vivis *Penthoris sedoidis*, Manhattan, Kansas (W. T. SWINGLE) et Jowa (Doct. HALSTED) Amer. bor.

30. **Cercospora Apii** Fres. — Syll. IV, p. 442 — var. **Carotæ** Passer. Diagn. F. N. IV, p. 15. — Amphigena; maculis parvulis, in folii lobulis fuscis, dein expansis; hyphis brevibus, fasciculatis, rectis, septulatis, hyalinis; conidiis bacillaribus vel vix clavulatis, rectis, hyalinis, integris vel interdum endoplasmate diviso, spurie septatis, 30-65  $\approx$  3,5-4.

*Hab.* in foliis languidis et mox consumptis *Dauci Carotæ* in hortis, Parma Ital. bor.

31. **Cercospora Sii** Ell. et Ever. Journ. Mycol. 1889, p. 71. — Sæpius hypophylla; maculis in hypophyllo flavidis, in epiphylo nigris; cæspitulis densis, demum confluentibus 2-3 mm. lat.; hyphis laxè fasciculatis, fumosis v. olivaceo-hyalinis, 40-60  $\approx$  5, supra denticulatis et sinuatis, continuis v. parce septatis; conidiis acro-pleurogenis, oblongo-cylindræis, sæpius 1-septatis, vix curvulis, granulosis, 20-45  $\approx$  5-7.

*Hab.* in foliis *Sii cicutifolii*, Racine, Wisconsin Amer. bor. (Doct. J. J. DAVIS).

32. **Cercospora Polytæniæ** E. et E. Journ. Myc. 1887, p. 104. — Cæspitulis densis, sphæræformibus, maculis atris, 3-4 mm. lat., suborbicularibus vel ellipsoideis, centro sordide albis; conidiis hyalinis, granulosis, dein 1-3-septatis, 70-100  $\approx$  4-5.

*Hab.* in foliis *Polytæniæ Nuttallii*, Manhattan, Kansas Amer. bor. (W. T. SWINGLE).

33. **Cercospora Osmorrhizæ** Ell. et Ev. Proc. Acad. Phil. 1891, p. 89. — Maculis amphigenis, griseo-albis, 2-3 mm. diam., in areis emortuis indefinite limitatis sitis; hyphis laxè fasciculatis, 60-70  $\approx$  3, parce septatis, subolivaceis, sursum flexis denticulatisque in quoque fasciculo paucis; conidiis angustis, multiseptatis, hyalinis, 80-120  $\approx$  3-4.

*Hab.* in foliis *Osmorrhizæ longistylæ*, Newark Del. (COMMONS), Racine Wis. Amer. bor. (DAVIS).

34. **Cercospora Hydrocotyles** E. et E. Journ. Myc. 1887, p. 16. —

Maculis amphigenis, rubro-brunneis, 2-3 mm. definitis, supra convexis, subtus concavis; hyphis amphigenis, minute cæspitulosis, dense sparsis, pallide brunneis, brevibus, effusis, circ. 20  $\approx$  3, continuis, subintegris; conidiis subcylindræis, subhyalinis, 30-40  $\approx$  3, guttatis.

*Hab.* in foliis *Hydrocotyles interruptæ*, Luisiana Amer. bor. (LANGLOIS).

35. **Cercospora platyspora** E. et Holw. Journ. Myc. 1887, p. 16. — 7605

Maculis amphigenis, parvis, 1-2 mm. lat., irregularibus, venulis folii partim limitatis, lignicoloribus, brunneis; cæspitulis hypophyllis, nigris, laxis, creberrime sparsis sed non confluentibus; hyphis apice sæpe subuncinatis, plerumque lateraliter ramulosis, rubiginosis, continuis v. vix v. parce septatis, effusis, subundulatis, 50-70  $\approx$  5-6; conidiis subhyalinis, oblongis, granulosis, medio indistincte 1-septatis, utrinque obtusis, sæpius 35-40  $\approx$  6-7.

*Hab.* in foliis *Ziziiæ integerrimæ*, Racine, Wis. Amer. bor. (Doct. J. J. DAVIS).

36. **Cercospora Ziziiæ** E. et E. Journ. Myc. 1887, p. 16. — Maculis 7606

brunneis, dein centro griseis, subrotundis, 3-5 mm. lat.; hyphis fertilibus, erectis, fumoso-brunneis, subrectis, integris, cæspitosis, sæpius epiphyllis, 3-8 in quoque cæspitulo, 50-60  $\approx$  6-7; conidiis hyalinis, cylindræo-clavatis, multiseptatis, 100-130  $\approx$  4.

*Hab.* in foliis *Ziziiæ cordatæ*, West Chester, Pa, Amer. bor.

37. **Cercospora Gauræ** Kell. et Sw. Journ. Mycol. 1889, p. 75. — 7607

Maculis amphigenis, definitis, subolivaceis, indefinite rubido-cinctis, suborbicularibus, ovatis vel rotundato-angulosis, circ. 5-10 mm. diam.; cæspitulis sæpius epiphyllis, primo parvis, dein majoribus, 40-100  $\mu$ . diam.; hyphis dense gregariis, brevibus, simplicibus, continuis, subfuscis, apice subattenuatis, 15-30  $\approx$  2,5-4, sæpius 10-25  $\approx$  3-4, supra sæpe dentatis, subtus subinde incurvis v. valde dentatis; conidiis hyphis concoloribus, lineari-clavatis, 3-7-septatis, 40-108  $\approx$  2-4.

*Hab.* in foliis *Gauræ biennis*, Columbus, Kansas Amer. bor.

38. **Cercospora Jussiiæ** Atk. Cerc. Alab. p. 18. — Epiphylla; ma- 7608

culis albis, indefinite purpureo-cinctis; hyphis fasciculatis, rubentibus, septatis, apicem versus geniculatis dentatisque, 40-120  $\approx$  4-4,5; conidiis hyalinis, obclavatis, 3-10-septatis, 100-150  $\approx$  4.

*Hab.* in foliis *Jussiiæ leptocarpæ* et *J. decurrentis*, Auburn, Alabama Amer. bor.

39. **Cercospora Ludwigiiæ** Atk. Cerc. Alab. p. 26. — Maculis amphi- 7609

genis, subcircularibus, irregularibus, rubro-brunneis v. purpureis, subinde centro albidis, 1-3 mm. diam.; hyphis epiphyllis, dense fasciculatis, e basi tuberculari assurgentibus, brevibus, olivaceo-brunneis v. dilute fuligineis, rectis v. flexuosis, 20-30  $\approx$  4,5; conidiis gracilibus, teretibus, rectis v. curvis, subinde guttulatis, 3-10-septatis, vix coloratis, 25-100  $\approx$  2,5-3.

*Hab.* in foliis *Ludwigia alternifolia*, Auburn, Atkinson Amer. bor.

40. **Cercospora Mitracarpi** Speg. F. Puigg. n. 462. — Maculis inde- 7610  
terminatis, majusculis, sæpe totum folium ambientibus, superne pallescentibus, inferne fulvescentibus, sæpe obsoletis, sed fere semper ad epiphyllum concentrice rugosis; cæspitulis epiphyllis, erectulis, 80-130  $\approx$  28-30, sæpe totam maculam obtegentibus, e 5 v. 20 hyphis laxe subfasciculatis, base tantum conjunctis, apice obtusis, 3-7-septatis, levibus, pellucidis, olivaceis efformatis; conidiis e cylindraceo clavulatis, 30-40  $\approx$  9-14, apice obtuse rotundatis, basi attenuato-truncatis, 4-6-ocularibus, loculis sæpius nucleo majusculo cruciformi præditis, levibus, pellucidis, fuligineo-olivaceis.

*Hab.* ad folia viva *Mitracarpi* sp. in campis prope Apiahy Brasiliæ.

41. **Cercospora Prenanthis** E. et K. Journ. Myc. 1887, pag. 104. — 7611  
Amphigena; maculis nullis; cæspitulis punctiformibus, minutis, nigris, sparsis vel plus minus in areis folii venulis limitatis gregariis; hyphis continuis, 25-35  $\approx$  4, subolivaceis, simplicibus, integris; conidiis obclavato-cylindræis, guttulatis, granulosis, subhyalinis, 50-60  $\approx$  5-6.

*Hab.* in foliis vivis *Prenanthis asperæ*, Manhattan, Kansas Amer. bor. (W. T. SWINGLE).

42. **Cercospora Elephantopi** E. et E. Journ. Myc. 1887, pag. 15. — 7612  
Maculis indefinitis, sordide brunneis, atro-purpureo-marginatis, 2-4 mm. diam., infra obscurioribus; cæspitulis subeffusis, stratum velutinum fumoso-brunneum v. demum cæσιο-murinum formantibus; hyphis amphigenis, sed infra crebrioribus, brevibus, 25-35  $\approx$  3, continuis, fumoso-brunneis, simplicibus et subintegris; conidiis angustis, 75-100  $\approx$  3, multinucleatis, flavido-hyalinis, sursum sensim tenuatis.

*Hab.* in foliis *Elephantopi caroliniensis*, Delaware et Missouri Amer. bor. (COMMONS et GALLOWAY).

43. **Cercospora obesa** E. et E. Journ. Myc. 1888, p. 5. — Maculis 7613  
irregularibus, griseo-brunneis, 2-5 mm. diam., mox confluentibus,

infra tomento folii albo velatis; hyphis oblongo-cylindræis, simplicibus et continuis, hyalinis v. subhyalinis,  $45 \approx 6-7$ , subintegris, supra stratum latum cinereum formantibus; conidiis oblongo-obclavatis, utrinque obtusis, 1-septatis, passim 4-5-septatis, constrictulis,  $50-60 \approx 5-6$ .

*Hab.* in foliis Cnici, Manhattan, Kans. Amer. bor. (SWINGLE).

44. **Cercospora asterata** Atk. Cerc. Alab. p. 18. — Maculis amphigenis, circ. 6 mm. lat., folii margine sæpius insidentibus, sordide griseis, nigro-limitatis, extus rubenti-cinctis; hyphis amphigenis, fasciculatis, atro-rubro-brunneis, apice subhyalinis, septatis, geniculatis, subflexuosis, torulosis v. denticulatis, minute guttulatis,  $70-120 \approx 4,5$ ; conidiis hyalinis, subcylindræis, utrinque sensim attenuatis, septatis,  $30-50 \approx 3$ .

*Hab.* in foliis Asteris, Auburn, Alabama Amer. bor. (ATKINSON).

45. **Cercospora Perfoliati** Ell. et Ever. Journ. Mycol. 1889, pag. 71. — Hypophylla; hyphis decumbentibus, sursum adscendentibus,  $30-40 \approx 4-5$ , guttatis, continuis, brunneolis, supra subintegris et obtusis, in cæspitulos suborbiculares, brunneos effusis, non definite limitatis, demum confluentibus; conidiis elongatis, pallide tabacinis, guttatis, dein 1-septatis,  $20-35 \approx 5-6$ .

*Hab.* in foliis vivis Eupatorii perfoliati, Racine, Wisconsin Amer. bor. (Doct. J. J. DAVIS). — Pagina superior foliorum pustulis flavidis, demum atro-brunneis notata.

46. **Cercospora Ageratoidis** Ell. et Ever. Journ. Mycol. 1889, p. 71. — Hypophylla; cæspitulis effusis, olivaceis, velutinis, 1-3 mm. diam., subangulosis, folii venulis limitatis, demum confluentibus et fere tabacinis; hyphis in quoque cæspitulo 5-8, simplicibus, septatis, brunneis, supra subundulatis,  $50-90 \approx 4$ ; conidiis cylindræis v. lanceolatis,  $40-75 \approx 3,5-5$ , pallide olivaceis, 4-6-septatis.

*Hab.* in foliis vivis Eupatorii ageratoidis, Newfield, New Jersey Amer. bor. — *C. clavata* valde affinis.

47. **Cercospora tabacina** E. et E. Journ. Myc. 1886, p. 6. — Cæspitulis sæpius hypophyllis, tabacinis, folii venulis limitatis, subeffusis; hyphis brunneis, gracilibus, septatis, abrupte incurvis, supra ramulis 1-pluribus vix evolutis, sæpius donatis,  $100-150 \approx 4$ ; conidiis hyalino-brunneolis, nunc elongatis, 1-septatis,  $25 \approx 4-5$ , nunc obclavatis, 3-septatis,  $50-75 \approx 4-5$ .

*Hab.* in foliis Rudbeckiæ trilobæ, Ames Iowa Amer. bor. (Doct. B. D. HALSTED).

48. **Cercospora noveboracensis** E. et E. Journ. Myc. 1887, p. 14. — 7618  
 Hypophylla, effusa; maculis nullis; cæspitulis olivaceis; hyphis laxè fasciculatis, effusis, olivaceo-brunneis, supra plus minus undulatis et denticulatis, 1-5-septatis, 50-75  $\times$  4; conidiis oblongo-cylindræis, subolivaceis, 3-7-septatis, utrinque obtusis, 20-70  $\times$  3-4.  
*Hab.* in foliis *Vernoniæ noveboracensis*, Columbia, Mo. Amer. bor. (GALLOWAY).
49. **Cercospora pachypus** Ell. et Kell. Journ. Myc. 1887, p. 104. — 7619  
 Amphigena; maculis epiphyllis, indefinitis, flavidis, demum atro-brunneis; cæspitulis minutis, circ. 35  $\mu$ . cr.; hyphis 20-30  $\times$  6-8 v. primo basi 8-10  $\mu$ . cr., supra torulosis et dentatis, olivaceo-brunneis, continuis, 12-15 in quoque cæspitulo; conidiis oblongis v. subcylindræis, utrinque obtusis, 1-septatis, olivaceis, 25-70  $\times$  5-7, majoribus supra angustatis.  
*Hab.* in foliis *Helianthi lenticularis*, Manhattan, Kansas Amer. bor. (SWINGLE).
50. **Cercospora Helianthi** E. et E. Journ. Myc. 1887, p. 20. — Ma- 7620  
 culis nullis; hyphis hypophyllis, fasciculatis, olivaceo-brunneis, guttulatis, dein septatis, supra hamatis, 70-90  $\times$  5-6, cæspitulos laxos, olivaceos, indefinite limitatos efficientibus; conidiis obclavatis, olivaceis, guttulatis, dein 3-6-septatis, 70-110  $\times$  5-6.  
*Hab.* in foliis *Helianthi*, Columbia, Mo. Amer. bor. (Prof. S. M. TRACY).
51. **Cercospora anomala** Ell. et Halsted Journ. Mycol. 1888, p. 8. 7621  
 — Hyphis hypophyllis, fertilibus erectis, 30-50  $\times$  4-5, pallide olivaceis, e mycelio prostrato ex hyalino olivaceo, ramoso, septato oriundis; conidiis oblongo-cylindræis, fumoso-hyalinis, 20-40  $\times$  4-5.  
*Hab.* in foliis vivis *Actinomeris squarrosæ*, Ames Iowa Amer. bor. (HALSTED). — Format strata olivacea dein nigricantia et ad *Cladosporium* nutat.
52. **Cercospora Silphii** E. et E. Journ. Mycol. 1888, p. 3. — Macu- 7622  
 lis amphigenis, sed magis hypophyllis, angulosis, 2-3 mm. diam., albidis, elevatulo-marginatis; hyphis cæspitosis e tuberculo oriundis, pallide brunneis, continuis, sæpe torulosis sursum flexis denticulatisque 25-35  $\times$  4; conidiis angustis subhyalinis, nucleolatis, dein 4-6-septatis, 70-80  $\times$  3.  
*Hab.* in foliis dejectis *Silphii integrifolii*, Manhattan Kans. Amer. bor. (W. T. SWINGLE).
53. **Cercospora macroguttata** Atk. Cerc. Alab. p. 32. — Hypophyl- 7623  
 la; cæspitulis parvis, ovatis vel majoribus anguste oblongis oliva-

ceo-brunneis; hyphis longis, flexuosis, geniculatis, prope apicem parce dentatis, multiseptatis et ample multiguttulatis, dein atro-brunneis, olivaceo-tinctis, junioribus viridi-olivaceis, 100-250  $\approx$  5-6; conidiis subcylindræis, anguste tereti-fusoideis, dilute olivaceo-viridibus, 3-8-septatis, 10-80  $\approx$  4,5-5.

*Hab.* in foliis *Chrysopsidis graminifoliæ*, Auburn, Alabama Amer. bor. (ATKINSON).

54. **Cercospora Mikaniæ** Ell. et Ev. Proc. Acad. Phil. 1891, p. 90. — 7624

Hyphis septatis, brunneis, subæqualibus, fasciculatis, subcurvis, sursum sparse denticulatis, cæspitulis effusis, strata indefinita olivaceo-brunnea plus minus confluentia formantibus, sed folium non decolorantibus; conidiis oblongo-clavatis, 3-6-septatis, olivaceis, 40-85  $\times$  5-6.

*Hab.* in foliis *Mikaniæ scandentis*, Mississipi Amer. bor. (TRACY).

55. **Cercospora Senecionis** Ell. et Ev. Proc. Acad. Phil. 1891, p. 90. 7625

— Maculis amphigenis, suborbicularibus, 1-3 mm. diam., subconfluentibus, ferrugineo-brunneis, zona atro-purpurea cinctis, dein griseo-albis; hyphis fasciculatis, sparsis, erectis, brunneis, 3-4-septatis, subgeniculatis, 100-150  $\approx$  4-5; conidiis subcylindræis, multiseptatis, non constrictis, 90-120  $\approx$  5-6.

*Hab.* in foliis *Senecionis aurei*, Wilmington, Del. Amer. bor. (A. COMMONS).

56. **Cercospora Erechthitis** Atk. Cerc. Alab. pag. 34. — Hyphis epi- 7626

phyllis, fasciculatis, rubenti-brunneis, geniculatis, sæpius cylindræis, frequenter guttulatis, 50-240  $\approx$  4; conidiis hyalinis, septatis, guttulatis, 70-230  $\times$  3-4.

*Hab.* in foliis *Erechthitis hieraciifoliæ*, Auburn, Alabama Amer. bor.

57. **Cercospora æquatorialis** Winter in Hedwigia 1886, pag. 103. — 7627

Cæspitulis hypophyllis, densissime stipatis, maculas submagnas, angulato-irregulares, atro-fuscas, cinereo-pruinosas, usque 7 mm. longas formantibus; hyphis fasciculatis, erectis, interdum subramosis, torulosis, fuscis, remote septatis, usque 100  $\mu$ . longis, interdum valde elongatis, 4,5-6  $\mu$ . crassis; conidiis filiformi-subclavatis, i. e. e basi parum crassiori sursum longe attenuatis, hyalinis, parce remoteque septatis, usque 70  $\mu$ . longis, 1 $\frac{3}{4}$   $\mu$ . crassis.

*Hab.* in foliis vivis *Compositarum* in insula S. Thomé Africæ occid.

58. **Cercospora elongata** Peck 33 Rep. St. Mus. p. 29, t. I, f. 21-23. 7628

— Maculis irregularibus, angulosis, interveniis, sæpe confluentibus, sæpe arescentibus brunneis, griseo-brunneis v. cinereis; hyphis amphigenis, cæspitulosis, coloratis, subflexuosis, sæpe nodulosis; conidiis elongatis, obscure 3-pluriseptatis, attenuatis, hyalinis, 50-150  $\approx$  4-5.

*Hab.* in foliis vivis *Dipsaci silvestris*, New York Americæ borealis.

59. **Cercospora Heliotropii** E. et E. Journ. Mycol. 1888, pag. 5. — 7629

Amphigena; hyphis laxè fasciculatis, brevibus, 15-20  $\mu$ . long.; cæspitulis effusis, folium denique brunnescens reddentibus; conidiis oblongo-teretibus, 1-3-septatis, passim constrictis, 20-50  $\approx$  4-6, ex olivaceo subhyalinis.

*Hab.* in foliis *Heliotropii curassavici*, Albuquerque, New Mexico Amer. bor. (TRACY).

60. **Cercospora Lycopi** E. et E. Journ. Myc. 1887, p. 15. — Macu- 7630

lis amphigenis, indefinitis, sordide brunneis 3-4 mm. diam.; hyphis hypophyllis in cæspitulos minutos congestis, brevibus 15-25  $\mu$ . long., pallide brunneis, continuis, supra subdentatis; conidiis obclavatis, flavido-hyalinis, multinucleatis, 50-75  $\approx$  2,5-3.

*Hab.* in foliis vivis *Lycopi rubelli*, St. Gabriel La. Amer. bor. (LANGLOIS).

61. **Cercospora Scutellariæ** E. et E. Journ. Myc. 1888, pag. 54. — 7631

Amphigena; maculis angulosis, folii venulis limitatis, 2-4 mm. lat., subtus brunneis, supra saturatoribus, folium subpurpureum et flavum reddentibus; cæspitulis parvis, compactis; hyphis continuis, brunneis, simplicibus, rectis, 30-40  $\approx$  3; conidiis gracilibus, 70-90  $\approx$  3, multiguttatis, indistincte multiseptatis.

*Hab.* in foliis *Scutellariæ versicoloris*, Concordia, Montana Amer. bor. (Rev. C. H. DEMETRIO).

62. **Cercospora Hyptidis** Speg. F. Puigg. n. 460. — Maculis subare- 7632

scenscentibus, irregulariter expansis, sæpe confluentibus, 5-20 mm. diam., sordide fusco-fulvescentibus, subdeterminatis; cæspitulis sæpius epiphyllis, in centro macularum laxè aggregatis, erectis, 140-150  $\approx$  20, rigidulis, ex hyphis continuis, teretibus, 5  $\mu$ . cr., pellucido-olivascentibus, apice noduloso-incrassatulis ac liberis efformatis; conidiis acrogenis, vermiculari-clavulatis, 25-50  $\approx$  4-5, utrinque obtusiusculis, rectiusculis, 10-12-pseudoseptatis, primo hyalinis, dein fumosis.

*Hab.* ad folia viva *Hyptidis* sp. in dumetis prope Apiaby Brasiliæ. — Species inter *Isariopsis* et *Cercosporam* media.

63. **Cercospora Leonotidis** Cooke in Journ. Myc. 1887, p. 18. — Ma 7633

culis amphigenis, pallidis, rotundis, subindefinitis, 2-3 mm. diam., subtus sæpe convexis; hyphis amphigenis, sæpius hypophyllis, brevissimis, 10-15  $\mu$ . long., e basi tuberculari oriundis, subintegris, olivaceis vel brunneis; conidiis subhyalinis, lineari-obclavatis, circ. 3-septatis, 35-45  $\approx$  2,5-3,5.

*Hab.* in foliis vivis *Leonotidis nepetifoliæ*, Point à la Hache, Louisiana Amer. bor. (LANGLOIS).

64. **Cercospora Primulæ** Fautr. Rev. Myc. 1891, p. 13. — Amphige- 7634

na; maculis griseis, flavido-cinctis, dein ferrugineis; hyphis 40-50  $\approx$  3; conidiis cylindræis, obtusis, rotundatis, 8-9-septatis, 60-105  $\approx$  4.

*Hab.* in foliis *Primulæ elatioris*, Noidan, Côte-d'Or Galliæ (F. FAUTREY).

65. **Cercospora Lysimachiæ** Ell. et Halst. Journ. Myc. 1890, p. 34. 7635

Maculis nullis; cæspitulis effusis, amphigenis pagina inferiorem magis, superiorem minus dense obtegentibus et fere rubefacientibus; hyphis subundulatis, subintegris, rubro-brunneis, continuis 40-50  $\approx$  4; conidiis angustis, obclavatis, multinucleatis, demum septatis, rubiginoso-brunneis, 50-80  $\approx$  3.

*Hab.* in foliis *Lysimachiæ strictæ*, Jonesburgh N. J. Amer. bor. — Habitus quasi *C. Lythri*, sed satis diversa.

66. **Cercospora Lobeliæ** Kell. et Sw. Journ. Mycol. 1889, p. 75. — 7636

Maculis amphigenis, dilute griseolis vel pallide sordide flavidis, primo minutis, suborbicularibus, dein majoribus 3-8 mm. diam., ovatis vel suborbicularibus, sæpe angulosis, subinde irregularibus indefinite purpurascenti-cinctis; cæspitulis amphigenis, sparsis, e basi tuberculari oriundis; hyphis pallide fuliginis, supra pallidioribus, 50-135  $\approx$  5-7 (basi), apice 2,5-5  $\mu$ . cr., supra subgeniculato-sinuatis, vix distincte multiseptatis, ad septa non constrictis; conidiis sparsis, hyalinis, curvis v. rarius rectis, basi truncatis, apice subacutis, fere obscure multiseptatis, non constrictis, 55-175  $\approx$  3-4,5 (basi), apice 1-3  $\mu$ . diam.

*Hab.* in foliis *Lobeliæ syphiliticæ*, St. George, Pottawatomie County, Kansas Amer. bor.

67. **Cercospora Mimuli** E. et E. Journ. Myc. 1887, p. 18. — Maculis 7637

amphigenis rotundis, albidis, 1-2 mm. diam., purpureo-marginatis; cæspitulis dense sparsis; hyphis amphigenis, brevibus, 15-25  $\mu$ . long., continuis, pallide brunneis, crassiusculis, 4-5  $\mu$ . cr., supra integris vel subdenticulatis, e basi minuta oriundis; conidiis hya-



linis, parce septatis vel sæpius continuis et nucleatis, 40-60  $\times$  2,5-3.

*Hab.* in foliis Mimuli atrati, Columbia, Montana Amer. bor. (Prof. S. M. TRACY).

68. **Cercospora verbenicola** E. et E. Journ. of Myc. 1887, p. 19. — 7638

Maculis amphigenis, rubiginosis, indefinitis, 2-3 mm. diam.; hyphis amphigenis, sed plerumque hypophyllis, fasciculatis, in quoque cæspitulo paucis, rugulosis, 40  $\times$  4, subnodulosis, pallide brunneis, 1-2-septatis; conidiis hyalinis, nucleatis, 30-50  $\times$  2,5-3, subcylindraceis, sursum leviter tenuatis.

*Hab.* in foliis Verbenæ Xuthæ, Louisiana Amer. borealis (LANGLOIS).

69. **Cercospora papillosa** Atk. Cerc. Alab. p. 20. — Maculis orbicu 7639

laribus vel irregularibus, sordide albis, 2-5 mm. diam.; hyphis amphigenis, fasciculatis, subrectis, denticulato-papillatis, fuligineis, vix lateritio-tinctis, 50-70  $\times$  4,5-5; conidiis hyalinis, longis, basi validiusculis, supra vulgo subabrupte filiformi-attenuatis, multiseptatis, interdum septis parum perspicuis, 80-200  $\times$  4-4,5.

*Hab.* in foliis Verbenæ, Auburn, Alabama Americæ borealis (ATKINSON).

70. **Cercospora Lippiæ** E. et E. Journ. Myc. 1887, p. 20. — Maculis 7640

amphigenis, griseolis, rotundis, margine definito, elevato cinctis, 2-3 mm. diam.; hyphis amphigenis, e basi tuberculari fasciculatim oriundis, pallide brunneis, continuis, supra undulatis pallidioribusque, 35-50  $\times$  3-4; conidiis gracilibus, obclavatis, subhyalinis, guttatis, 70-100  $\times$  3.

*Hab.* in foliis Lippiæ nodifloræ, Louisiana Americæ bor. (LANGLOIS).

71. **Cercospora viridula** Ell. et Ever. Journ. Mycol. 1889, p. 70. — 7641

Maculis suborbiculis,  $\frac{1}{2}$ - $\frac{3}{4}$  cm., subindefinitis, supra sordide brunneis, subtus pallidioribus et virenti-brunneis; hyphis hypophyllis, 25-35  $\times$  4, pallide brunneis, continuis, e basi vix tuberculari minute fasciculato-exsurgentibus, dense sparsis; conidiis subcylindraceis, supra angustatis, subhyalinis, 6-8-septatis, 70-80  $\times$  4.

*Hab.* in foliis Ipomœæ purpureæ, Concordia, Montana Amer. bor. (Rev. C. H. DEMETRIO).

72. **Cercospora alabamensis** Atk. Cerc. Alab. p. 19. — Maculis am- 7642

phigenis, sordide albis, margine elevato, atro-purpureo vel nigro cinctis, 2-3 mm. lat.; cæspitulis laxis, numerosis; hyphis amphigenis, evanide septatis, dilute rubro-brunneis, subrectis, denticu-

latis vel anguloso-flexuosis, 50-100  $\approx$  4,5; conidiis longis, gracilibus, rectis vel curvis, hyalinis, conferte multiseptatis, teretibus, 70-250  $\approx$  3-4.

*Hab.* in foliis *Ipomœæ purpureæ*, Uniontown, Alabama Amer. bor. (ATKINSON).

73. **Cercospora Ipomœæ** Wint. Hedw. 1887, p. 34. — Maculis densiuscule sparsis, passim confluentibus, suborbicularibus, sæpius angulatis, centro griseis margine lato nigrescente cinctis, 2-4 mm. diam.; cæspitulis amphigenis, minutissimis, sparsis, fuscidulis; hyphis fasciculatis, sursum subdenticulatis, remote septatis, fuscidulis 120-130  $\approx$  5; conidiis filiformi-subclavatis, sursum longissime tenuatis, multiseptatis, hyalinis, 160-175  $\approx$  3-4.

*Hab.* ad folia viva *Ipomœæ lacunosæ* prope Peryville Mo. Amer. bor. (DEMETRIO).

74. **Cercospora elongata** Sorok. Rev. Myc. 1890, p. 54, f. 256-258. — Cæspitulis atro-virentibus, circinanti-erumpentibus; hyphis fasciculatis brevibus sursum acutatis continuis; conidiis filiformi-obclavatis, curvis, primo continuis, dein septatis, deorsum guttulatis.

*Hab.* in foliis *Convolvuli* sp., Kokan Asiæ centr.

75. **Cercospora Balansæ** Speg. Guar. I, p. 167. — Maculis hypophyllis, effusis, indeterminatis, olivascentibus, sæpe totum folium ambientibus; acervulis in maculis laxè sparsis, ex hyphis liberis rectis vel sæpe nodulosis vel geniculatis, 50-100  $\approx$  5, parce septatis, olivaceis compositis; conidiis cylindræis, utrinque obtusissime rotundatis, 1-3-septatis, 20-35  $\approx$  5, dilute olivaceis.

*Hab.* ad folia viva *Evolvuli* sp. cujusdam in silva Caá-guazú Brasilæ.

76. **Cercospora verbascicola** Ell. et Ev. Journ. Myc. 1888, p. 3. — Maculis amphigenis, rotundis, sordide brunneis, albicantibus, 2-4 mm. diam.; hyphis gracilibus, cylindræis, brunneis, septatis, supra fere integris, 75-175  $\approx$  3, cæspitulos sparsos efformantibus; conidiis subfiliformibus, hyalinis, remote septatis, 100-150  $\approx$  3, sæpius epiphyllis.

*Hab.* in foliis vivis *Verbasci Thapsi*, Delamare Amer. bor. (COMMONS).

77. **Cercospora gentianicola** Ell. et Ev. Journ. Myc. 1888, p. 2. — Cæspitulis hypophyllis, minutis, effusis; hyphis brunneolis, simplicibus, brevibus, 15-20  $\mu$ . long., e basi parva, tuberculari exsurgentibus; conidiis subcylindræis, supra subangustatis, hyalinis, guttatis, evanide 2-3-septatis, subcurvis, 40-60  $\approx$  3,5.

*Hab.* in foliis evanescentibus *Gentianæ crinitæ*, Faulkland, Delaware Amer. bor. (A. COMMONS).

78. **Cercospora Gentianæ** Peck 41 Rep. p. 80. — Maculis suborbicularibus, brunneis vel rufo-brunneis, passim confluentibus; hyphis amphigenis, brevibus, subflexuosis, dilute coloratis, 15-30  $\mu$ . long., e tuberculo minuto atro oriundis; conidiis hyphâ angustioribus tereti-acicularibus, 1-3-septatis, 30-60  $\mu$ . longis. 7648

*Hab.* in foliis vivis *Gentianæ linearis*, Number Four Adirondack Mount. Amer. bor.

79. **Cercospora Houstoniæ** Ell. et Ev. Proc. Acad. Phil. 1891, p. 89. 7649  
— Epiphylla; cæspitulis e tuberculo minuto oriundis, sparsis; hyphis continuis, brunneis, 20-30  $\approx$  3-4, parce denticulatis, subundulatis; conidiis subhyalinis, anguste fusoides, 30-40  $\approx$  3, granuloso-nucleolatis, demum 1-3-septatis.

*Hab.* in foliis inferioribus *Houstoniæ cœruleæ*, Wilmington Del. Amer. bor. (COMMONS).

80. **Cercospora Sabbatiæ** Ell. et Ev. Journ. Myc. 1888, p. 3. — Amphigena; maculis definitis nullis; cæspitulis sparsis, minutis, griseolis; hyphis cæspitosis, continuis, fumoso-brunneis, 35-45  $\approx$  5, basi tuberculari, parva insidentibus; conidiis obclavatis, subhyalinis, 3-6-septatis, 65-80  $\approx$  4. 7650

*Hab.* in foliis *Sabbatiæ angularis*, Faulkland Delaware Amer. bor.

81. **Cercospora Cucurbitæ** Ell. et Ev. Journ. Myc. 1888, pag. 3. — Maculis amphigenis, rotundis, subochraceis, mox tenuibus, albis, pellucidis, 1-4 mm. diam., margine subelevato cinctis; hyphis epiphyllis, cæspitulosis, olivaceo-brunneis, superne pallidioribus, 70-80  $\approx$  4, continuis, supra subgeniculatis, apice obtusis; conidiis lineari-clavatis, 100-120  $\approx$  3-4, hyalinis, primo granulosis et guttatis, demum septatis (multiseptatis?). 7651

*Hab.* in foliis *Cucurbitæ perennis*, Manhattan, Kansas Amer. bor. (W. T. SWINGLE).

82. **Cercospora cucurbitina** Speg. Guar. I, p. 166. — Maculis amphigenis minutis, 0,5-1,5 mm. diam. arescenti-albis, irregulariter orbicularibus, sæpe angulosis vel confluendo difformibus, eximie determinatis, non vel rarius zona fuscescenti parum perspicua cinctis; cæspitulis epiphyllis, rarius amphigenis, centro macularum insidentibus penicilliformibus, 150-180  $\approx$  40-50 fuscis, solitariis vel sparsis; hyphis inferne subcoalescentibus, apice liberis, simplicibus, erectis, densiuscule septulatis, gracilibus, 3-4  $\mu$ . cr., dilute oliva- 7652

ceis, rectis, apice rotundatis v. 2-3-catricosis; conidiis cylindraceo-ellipticis, utrinque obtusiuscule rotundatis, 3-5-septatis, non constrictis, 30-40  $\approx$  4, chlorinis.

*Hab.* ad folia viva *Cyclantheræ*? sp. in silva Caá-guazú Brasilæ.

83. **Cercospora diffusa** E. et E. Journ. Myc. 1888, p. 3. — Maculis 7653  
nullis; hyphis amphigenis, sed sæpius hypophyllis, simplicibus, brevibus, 30-40  $\approx$  4-5, continuis, olivaceis, sæpius torulosis, obtusis, dense fasciculatis late effusis v. punctiformi-cæspitosis, folium dilute flavidum efficientibus; conidiis subteretibus, ad apicem tenuatis, 50-80  $\approx$  4, passim usque 90-100, subolivaceis, demum 4-6-septatis.

*Hab.* in foliis *Physaleos lanceolatæ*, Manhattan, Kansas Amer. bor. (SWINGLE). — A *Cerc. Physalidis* satis diversa.

84. **Cercospora solanicola** Atk. Cerc. Alab. p. 21. — Maculis parvis 7654  
albis, atro-marginatis v. indefinitis; hyphis fasciculatis, olivaceo-brunneis, vix rubido-tinctis, rectis v. flexuosis vel apicem versus geniculatis, 3-5-septatis, 40-120  $\approx$  5; conidiis hyalinis, teretibus, obtusis, 10-30-septatis, 100-230  $\approx$  4,5.

*Hab.* in foliis *Solani tuberosi*, Auburn, Alabama Amer. bor. (ATKINSON).

85. **Cercospora atro-marginalis** Atk. Cerc. Alab. p. 27. — Maculis 7655  
amphigenis, orbicularibus, 4-6 mm., dilute brunneis vel sordide griseis, supra atro-cinctis; hyphis hypophyllis, e stromate fasciculatim oriundis, brevibus, flexuosis v. denticulatis, continuis, dilutissime fuligineis, 10-30  $\approx$  4-4,5; conidiis obclavatis v. cylindræis, 1-10-septatis, guttulatis, flavidis, 40-70  $\approx$  4-5.

*Hab.* in foliis *Solani nigri* (?), Auburn, Alabama Amer. bor. (ATKINSON).

86. **Cercospora rigospora** Atk. Cerc. Alab. p. 33. — Maculis indefi- 7656  
nitis vel nullis; hyphis hypophyllis, fasciculatis, divergentibus, in cæspitulos fuligineos, subinde parum distinctos gregariis v. in areas magnas effusis, subolivaceo-fuligineis, subflexuosis, denticulatis vel torulosis, longioribus evanide septatis et multiguttatis, 50-60  $\approx$  3,5-4; conidiis rectis v. curvis, subcylindræis, utrinque abrupte attenuatis v. teretibus, 3-10-septatis, multiguttulatis, dilute flavo-olivaceis, 50-70  $\approx$  3-4.

*Hab.* in foliis *Solani nigri* (?), Auburn, Alabama Amer. bor. (ATKINSON).

87. **Cercospora Asclepiadoræ** E. et K. Journ. Myc. 1888, pag. 6. — 7657

Amphigena; cæspitulis indefinite limitatis vel folii venulis partim limitatis, dense confertis, subnigris; hyphis simplicibus, atro-brunneis, brevibus, 15-25  $\mu$ . long.; conidiis sublanceolatis, brunneis, multiseptatis, 70-80  $\approx$  4-5.

*Hab.* in foliis dejectis *Asclepiadoræ sessilis*, Kansas Am. bor. (KELLERMAN et SWINGLE).

88. **Cercospora Serpentariæ** E. et E. Journ. Myc. 1887, pag. 13. — 7658

Maculis amphigenis, griseis, 1-1,5 mm. diam., margine angusto atro cinctis zonisque fuscis ipsisque atro-marginatis circumdatis, totis 3-4 mm. diam.; hyphis solito hypophyllis, cæspitulos sparsos fumosos formantibus, curvis, denticulatis, pallide brunneis, 50-75  $\approx$  4-5; conidiis fusoides, 1-3-septatis, 40-60  $\approx$  4-5 vel subacicularibus, elongatis, 75-80  $\mu$ . long., 3-5-septatis, fumoso vel flavido-hyalinis.

*Hab.* in foliis vivis *Aristolochiæ Serpentariæ*, Faulkland Del. Amer. bor. (COMMONS).

89. **Cercospora Oxybaphi** Ell. et Halsted Journ. Myc. 1888, p. 8. — 7659

Hyphis amphigenis, pallidis, brevibus, 25-30  $\approx$  3, tortuosis, parce septatis, sæpe ex stomatibus oriundis et cæspitulos minutos atros cum basi tuberculari formantibus; conidiis filiformi obclavatis, 3-4-septatis, hyalinis, 30-50  $\approx$  3.

*Hab.* in foliis vivis *Oxybaphi nyctaginei*, Jowa City Am. bor. (A. S. HITCHOCK). — Cæspituli hinc inde aggregati.

90. **Cercospora furfurella** Speg. F. Guar. II, n. 194. — Maculis nul- 7660

lis v. indeterminatis, vix pallescentibus; cæspitulis epiphyllis, densiuscule latissimeque aggregatis, vix perspicuis, plagulas ex albo cinerescens, furfurellas, latiusculas, irregulares efficientibus; hyphis 5-20 in quoque cæspitulo, cylindræis, rectis vel vix subarcuatis, continuis, apice obtuse acutatis ac 3-4-nodulosis, 40-60  $\approx$  5, pallide olivaceis; conidiis obclavulatis, basi subtruncato-rotundatis, sursum longe attenuatis, 1-5-septulatis, non constrictis, 50-120  $\approx$  4-5, rectis v. inæquilateralibus, hyalinis.

*Hab.* ad folia viva *Boerhaaviæ discoloris* in silvaticis pr. Guarapi Brasilæ. — Species pulchella inter *Cercosporam* et *Cercosporellam* nutans.

91. **Cercospora anthelmintica** Atk. Cerc. Alab. pag. 17. — Maculis 7661

parvis, amphigenis, 1-3 mm. lat., albis, margine elevato, atro cinctis; hyphis epiphyllis, fasciculatis, effusis, subflexuosis, subnodosis, profuse dentatis, septatis, fuligineis, vix subinde tinctis, 30-100  $\approx$  4-4,5; conidiis hyalinis, teretibus, 4-10-septatis, 25-100  $\approx$  4-4,5.

*Hab.* in foliis *Chenopodii ambrosioidis* var. *anthelmintici*, Auburn, Alabama Amer. bor. (DUGGAR).

92. **Cercospora Acnidæ** Ell. et Ev. Proc. Acad. Phil. 1891, p. 89. — 7662

Maculis amphigenis, suborbicularibus, 1-3 mm. diam., sordide albis, atro-marginatis; hyphis amphigenis, brunneolis, continuis sursum geniculatis denticulatisque, 35-50  $\times$  3,5-4,5; conidiis obclavatis, hyalinis, 3-5-septatis, 60-75  $\times$  3-3,5.

*Hab.* in foliis *Acnidæ cannabinæ*, Wilmington Del. Americæ borealis.

93. **Cercospora Betæ** (Rabenh.) Frank Krankh. d. Pflanz. pag. 601, 7663

*Fusarium* Rab. Fung. Eur. n. 69. — Maculis pallidis, minutis, copiosis, purpureo-marginatis; cæspitulis atris, minutis; hyphis brevibus e stomatibus non exeuntibus, sed per epidermidem erumpentibus; conidiis longissimis, filiformibus v. obclavatis, pluriseptatis, hyalinis.

*Hab.* in foliis *Betæ Cielæ* in Germania. — Teste Frank loc. cit. a *C. beticola* satis differt.

94. **Cercospora Alternantheræ** Ell. et Langl. Journ. Myc. 1890, p. 36. 7664

— Maculis rotundis, 1-2 mm. diam., sordide brunneis, centro albidis, margine brunneo; hyphis continuis, olivaceis, sursum truncatis, e basi tuberculari, 25  $\mu$ . diam.; conidiis obclavatis, hyalinis, 1-3-septatis, 65-80  $\times$  3.

*Hab.* in foliis *Alternantheræ achyranthæ*, St. Martinsville La. Amer. bor. (LANGLOIS).

95. **Cercospora brachiata** E. et E. Journ. Mycol. 1888, p. 5. — Ma- 7665

culis amphigenis, atro-brunneis, centro demum albicantibus, subindefinite limitatis, 3-5 mm. diam.; hyphis amphigenis, e basi tuberculari minuta cæspitulosis, pallide brunneis, rectis, cylindraceutis, tenuiter septatis, effusis, 100-200  $\times$  3,5-4; conidiis tenuibus, multi-septulatis, hyalinis, usque 200  $\times$  3-3,5.

*Hab.* in foliis *Amaranthi retroflexi*, Faulkland Del. Amer. bor. (COMMONS).

96. **Cercospora Comandræ** Ell. et Dearness. Proc. Acad. Phil. 1891, 7666

p. 90. — Maculis minutis, 1-2 mm. diam., rotundis, rufo-brunneis, definitis; hyphis brevibus, 12-20  $\times$  3-3,5, simplicibus, integris, rectis, obtusis ex basi tuberculosa cæspitulosis; conidiis tenuibus, obclavatis, 70-80  $\times$  3-3,5, nucleatis forteque tenuiter septatis, subrectis.

*Hab.* in foliis *Comandræ umbellatæ*, London Canada Am. bor. (DEARNESS).

97. **Cercospora Rhei** Grog. in Roum. F. Gall. n. 2775 (absque diagnosi). 7667

*Hab.* in foliis *Rhei officinalis* culti, Dreux Eure-et-Loir Galliæ (GALLET, FEUILLEAUBOIS).

98. **Cercospora pallida** (B. et C.) Cooke Grev. XVII, p. 21, *Cladosporium* B. et C. — Syll. IV, p. 361. — Teste Cooke loc. cit. est revera *Cercospora* nec *Cladosporium*

99. **Cercospora repens** E. et E. Journ. Myc. 1887, p. 14. — Maculis 7668  
irregularibus, indefinitis, supra purpureo-brunneis, subtus pallide rubro-brunneis; hyphis hypophyllis, prostratis, late effusis, gracilibus, 2,5-3  $\mu$ . cr., ramosis, brunneis; conidiis acrogenis, gracilibus, hyalinis, multiguttatis, 70-80  $\approx$  2,5-3.

*Hab.* in foliis vivis *Brachylospermi* («*Trachyspermi?*») difformis, St. Gabriel, Louisiana Amer. bor. (LANGLOIS).

II. In Dicotyledoneis lignosis.

100. **Cercospora Asiminæ** E. et K. Journ. Myc. 1887, p. 103. — Ma- 7669  
culis sparsis, parvis, sæpius 1-3 mm. lat., sterilibus, supra subindefinitis et purpureo-brunneis, subtus griseolis v. murinis; hyphis fertilibus vix cæspitosis, brevibus, brunneis, 12-15  $\approx$  6-7, supra rotundatis vel interdum copiose ramosis; conidiis subolivaceis, latis, lanceolatis, 5-7-septatis, 60-80  $\approx$  6-7.

*Hab.* in foliis vivis *Asiminæ trilobæ*, Mound City, Kansas Amer. bor. (W. A. KELLERMAN).

101. **Cercospora Negundinis** Ell. et Ev. Proc. Acad. Phil. 1891, p. 89. 7670  
— Maculis amphigenis, 0,2-0,5 cm., ferrugineo-brunneis, centro pallidioribus, subindefinitis, areolis minutis albis notatis; hyphis epiphyllis e basi tuberculari, cæspitosis, rectis, continuis, subhyalinis, sursum obtusis denticulatisque, 25-30  $\approx$  5-7; conidiis obclavatis, 2-4-septatis, hyalinis, 90-110  $\approx$  5-6.

*Hab.* in foliis *Negundinis fraxinifolii*, Lincoln Nebraska Amer. bor. (ROSCOE POUND). — Omnino diversa a *C. acerina*.

102. **Cercospora Vulpinæ** E. et K. Journ. Myc. 1887, p. 127. — Ma- 7671  
culis amphigenis, 1-2 mm. lat., subangulosis, plerumque folii venulis limitatis, supra atro-brunneis, subtus subpallidioribus; hyphis sæpius hypophyllis, fasciculatis, pallide brunneis, subfuliginis, continuis vel leniter 1-3-septatis, supra distincte dentatis et abrupte incurvis, 50-70  $\approx$  3-4; conidiis obclavatis, fumoso-hyalinis, guttatis, demum 2-3-septatis, incurvis, 45-60  $\approx$  3-4.

*Hab.* in foliis vivis *Vitis vulpinæ*, Manhattan, Kansas Amer. bor. (KELLERMAN et SWINGLE).

103. **Cercospora truncata** E. et E. Journ. Myc. 1887, p. 19. — Maculis amphigenis, sordide brunneis, supra saturatoribus, minutis, indefinitis, subconfluentibus; cæspitulis hypophyllis, strata subvelutina fumose olivacea demum grisea formantibus; hyphis fasciculatis e tuberculo minuto oriundis, cylindricis, simplicibus, subrectis apice obtusis, circulariter cicatricosis,  $50-90 \approx 4-5$ ; conidiis anguste obclavatis, hyalinis, 3-6-septatis, sursum sensim cuspidato-tenuatis,  $70-112 \approx 4$ . 7672

*Hab.* in foliis vivis *Vitis indivisæ*, Louisiana Amer. bor. (LANGLOIS). — Distinctissima a *C. viticola* et *C. canescenti* magis affinis.

104. **Cercospora infuscans** Ell. et Ev. Proc. Acad. Phil. 1891, p. 90. — Maculis brunneis, venulis folii limitatis, dein confluentibus et nigris, folium torquentibus demumque necantibus; hyphis hypophyllis, fasciculatis, erectis, leviter basi bulbosis, sursum subdentulatis, septatis, atris,  $70-85 \approx 4$ ; conidiis clavatis vel oblongo-clavatis, subolivaceis v. fumoso-fuscis,  $30-60 \approx 4-5$ , 3-septatis, passim constrictis. 7673

*Hab.* in foliis languidis *Rhois venenatæ*, Wilmington Del. Amer. bor. (COMMONS).

105. **Cercospora Bartholomæi** Ell. et Kell. Journ. Myc. 1889, p. 141. — Cæspitulis hypophyllis, inconspicuis, indeterminatis, fumosis, sparsis v. subconfluentibus; hyphis fasciculatis, rectis v. subundulatis, guttatis, continuis v. parce septatis, rubro-brunneis,  $20-40 \approx 4-6$ , subinde fere e basi ramosis, apice integris v. subdentatis; conidiis subhyalinis ex oblongo graciliter obclavatis,  $20-120 \approx 2,5-3$ , guttatis, brevioribus rectis, longioribus subcurvis. 7674

*Hab.* in foliis *Rhois Toxicodendri*, Rocks County, Kansas Amer. (E. BARTHOLOMEW).

106. **Cercospora Meliæ** E. et E. Journ. Myc. 1887, p. 16. — Maculis irregularibus, subconfluentibus vel sæpius gregariis, parvis, 2 mm. lat., sordide brunneolis v. albidis, supra saturatius marginatis, subtus indistinctis, indefinitis; cæspitulis amphigenis, in macularum centro confertis; hyphis subolivaceis v. fuligineo-hyalinis, e basi tuberculari oriundis, grossis, subrectis, supra fere truncatis et demum 3-5-septatis,  $30-40 \approx 4-5$ ; conidiis lineari-obclavatis, hyalinis,  $80-120 \approx 4-5$ , multiseptatis, 7675



- Hab.* in foliis vivis *Meliæ Azedarach*, Louisiana Amer. bor. (LANGLOIS).
107. **Cercospora leucosticta** E. et E. Journ. Myc. 1888, pag. 53. — 7676  
 Maculis minutis, 1-2 mm. diam. albis, sparsis; hyphis amphigenis, e basi tuberculari cæspitulosi, flavido-brunneis, continuis vel tenuiter 1-3-septatis, 40-50  $\times$  4-5, sursum subundulatis et gibberosis, apice obtuse minute 2-3-denticulato; conidiis obclavatis, 5-10-septatis, 60-80  $\times$  3,5-4,5, hyalinis.  
*Hab.* in foliis *Meliæ Azedarach*, St. Martinsville La. Amer. bor. (LANGLOIS).
108. **Cercospora Erythrinæ** E. et E. Journ. Myc. 1887, pag. 18. — 7677  
 Maculis amphigenis, parvis, 1 mm. lat., albis, margine rubiginoso cinctis, subtus rubiginosis; hyphis epiphyllis, fasciculatis, e basi tuberculari oriundis, supra geniculatis et hamatis, 30-50  $\times$  4-5; conidiis plerumque 35  $\times$  2,5, guttulatis, flavido-hyalinis, sursum valde attenuatis, nonnullis brevioribus crassioribusque, 25-30  $\times$  3 et 2-3-septatis.  
*Hab.* in foliis vivis *Erythrinæ Cristæ-galli*, Lafayette, Louisiana Amer. bor. (LANGLOIS), sociâ *Phyllostictâ* sporulis oblongo-ellipsoideis v. ovato-ellipsoideis, 6-8  $\times$  2,5-3 (*Ph. australis* Speg.?).
109. **Cercospora Kennedyaë** Cooke et Mass. Grev. XIX, pag. 90. — 7678  
 Epiphylla, maculis cinnamomeo-brunneis, irregularibus et confluentibus; cæspitulis sparsis, nigris, punctiformibus, *Venturiam* æmulantibus, erumpentibus; hyphis fasciculatis, simplicibus, flexuosis, subinde nodulosis, septatis, pallide olivaceis; conidiis cylindræis, leviter sursum attenuatis, 3-septatis, e hyalino olivaceis, 40  $\times$  3, hyphas subæquantibus.  
*Hab.* in foliis *Kennedyaë prostratæ*, Victoria Australiae (Mrs. MARTIN).
110. **Cercospora pinnulicola** Atk. Cerc. Alab. p. 32. — Diffusa, hy- 7679  
 pophylla, foliorum pinnulis supra sæpius pallidis, subtus sordidis insidens; cæspitulis laxè sparsis; hyphis rubenti-brunneis, septatis, minute guttulatis, irregulariter flexuosis, geniculatis et profuse denticulatis, 100-200  $\times$  4-5; conidiis obclavatis, hyalinis, multiseptatis et multiguttulatis, 50-150  $\times$  4-5.  
*Hab.* in foliis *Cassiæ nyctitantis*, Auburn, Alabama Amer. bor. (DUGY).
111. **Cercospora Coronillæ** C. Mass. Contr. Myc. Ver. pag. 132. — 7680  
 Cæspitulis minutis, sparsis v. subvelutino-effusis; hyphis fertilibus

molliusculis dense fasciculatis, erectis, tabacinis, multiseptatis, septis remotiusculis, subflexuosis et nonnihil subvaricosis, simplicibus vel subfurcatis, 100-170  $\approx$  6-8, apice subdenticulatis; conidiis subvermicularibus, rectis, 22-60  $\approx$  9-12, utrinque obtusis, deciduis, tabacinis.

*Hab.* in fructibus siccis *Coronillæ Emerti*, Tregnago prov. Verona.

112. **Cercospora Desmanthi** E. et K. Journ. Mycol. 1887, p. 14, *C. condensata* E. et K. var. *Desmanthi* E. et K. — Syll. IV, p. 462.

— Testibus auctoribus loc. cit. ut distincta species habenda est.

113. **Cercospora Chamæcristæ** E. et K. Journ. Myc. 1888, p. 7. — 7681

Maculis nullis; cæspitulis hypophyllis, effusis; hyphis laxè fasciculatis, crassis, pallide brunneis, parce septatis, 50-70  $\approx$  5-6, supra abrupte incurvis et subnodulosis; conidiis subcylindræis, fumoso-hyalinis, 1-3-septatis, subinde constrictis, 35-55  $\approx$  5-7.

*Hab.* in foliis et leguminibus *Cassiæ Chamæcristæ*, Manhattan, Kansas Amer. bor. (KELLERMAN et SWINGLE).

114. **Cercospora Tephrosiæ** Atk. Cerc. Alab. p. 12. — Maculis am- 7682

phigenis, parvis, angulosis vel suborbicularibus, 1-2 mm. diam., elevatis, nigro-brunneis; hyphis epiphyllis in cæspitulos confertos fasciculatis, rubentibus, flexuosis vel dentatis, 50-100  $\approx$  4,5-5; conidiis obclavatis, subhyalinis, dilute rubentibus, 5-8-septatis, sæpius rectis, 70-130  $\approx$  4-4,5.

*Hab.* in foliis *Tephrosiæ hispidatæ*, Auburn, Alabama Amer. bor. (ATKINSON).

115. **Cercospora Clitoriaæ** Atk. Cerc. Alab. p. 30. — Maculis angu- 7683

laribus, majusculis, 3-6 mm. lat., supra nigris vel subnigris, subtus brunneis; hyphis epiphyllis, fuligineis, brevibus, e stromate tuberculari parum prominulis, 5-10  $\mu$ . long.; conidiis longis, terebibus, vix coloratis, rectis, pluriseptatis, 50-70  $\approx$  3.

*Hab.* in foliis *Clitoriaæ marianæ*, Auburn, Alabama (ATKINSON).

116. **Cercospora latens** Ell. et Ev. Journ. Myc. 1888, p. 3. — Epi- 7684

phylla; maculis subindefinitis, atro-brunneis, subconfluentibus; hyphis valde obscuris, 10-15  $\approx$  3, continuis, subhyalinis, e basi tuberculari oriundis; conidiis gracilibus, obclavatis, granulosis, guttulatis, dein multiseptatis, 75-100  $\approx$  3.

*Hab.* in foliis *Psoraleæ argophyllæ*, Kansas Amer. bor. (W. T. SWINGLE).

117. **Cercospora Daviesiæ** Cooke et Mass. XVIII, p. 7. — Epiphyll- 7685

la; maculis fuscis, irregularibus, angulatis; hyphis fasciculatis, abbreviatis; conidiis cylindræis v. sursum attenuatis, obtusis, curvulis, arcuatis, 5-septatis, pallide fuscis,  $60 \approx 4$ .

*Hab.* in foliis *Daviesiæ latifoliæ*, Victoria Australiæ (MARTIN).

118. **Cercospora destructiva** Ravenel Journ. Myc. 1887, pag. 13. — 7686

Maculis amphigenis, brunneis, demum griseis vel albidis, 3-4 mm. diam., margine elevato obscuriore, passim late confluentibus; hyphis amphigenis, sed superne uberioribus, erumpentibus, in cæspitulos sphæriæformes, fumoso-olivaceos, 160-200  $\mu$ . diam. conjunctis, simplicibus, subdentatis, parce septatis, 30-45  $\approx$  3-4; conidiis oblongo-clavatis, 1-3-septatis, 20-40  $\approx$  3.

*Hab.* in foliis languidis *Evonymi japonicæ*, Aiken Carol. Amer. bor.

119. **Cercospora Deutziaæ** E. et E. Journ. Myc. 1888, p. 5. — Macu- 7687

lis amphigenis minutis, 1-2 mm. diam., supra albis elevato-marginatis, infra obscurioribus; hyphis in cæspitulos sparsos collectis, brunneis, septatis, plus minus curvis et subdenticulatis, 100  $\approx$  3; conidiis angustis hyalinis, multiseptatis, sursum curvis, longissimis, 250-300  $\approx$  3.

*Hab.* in foliis *Deutziaæ gracilis*, Faulkland Del. Amer. bor. (COMMONS).

120. **Cercospora Aristoteliæ** Cooke Grev. XIX, p. 4. — Hypophyl- 7688

la; maculis brunneis, suborbicularibus, roseo-cinctis; hyphis fasciculatis, brevibus; conidiis cylindræis, apice subattenuatis, 60-70  $\approx$  3-4, multi-nucleatis spurieque septulatis, hyalinis.

*Hab.* in foliis *Aristoteliæ racemosæ*, New Zealand (COLLENZO).

121. **Cercospora marginalis** Thüm. et Boll. Contr. Fung. litt. Austr. 7689

III, p. 5. — Cæspitulis hypophyllis, minutis, nigris, in foliorum margine, arescendo fusco-brunneo, fere regulari; hyphis brevibus, subrectis, ramulosis, septatis, griseo-fuscis; conidiis clavulatis, utrinque angustatis, apice rotundatis, tri- raro quadricellularibus, ad septa lenissime constrictulis, fuligineo-fuscidulis, 24  $\approx$  7, pedicello brevi.

*Hab.* ad folia viva *Ribis Grossulariæ*, Goritiæ.

122. **Cercospora magellanica** Speg. F. Fueg. n. 451. — Maculis ru- 7690

fescentibus, parvulis, 1-3 mm. diam., epiphyllis, subdeterminatis, sparsis; cæspitulis in maculis laxè gregariis vel hinc inde sparsis, minutis, olivaceis; hyphis cylindræis erectis e nodulo parenchymatico, minutissimo exsurgentibus, rectis vel flexuosis, apice ob-

tusulis, 1-3-septatis, non constrictis, 40-50  $\approx$  6, pallide olivaceis; conidiis acrogenis, obovatis vel piriformibus, utrinque obtusiusculis, 15-20  $\approx$  5-7, pallide fuligineis, levibus, medio 1-septatis, non vel vix constrictis.

*Hab.* ad folia languida Ribis magellanicae in Picton island Fuegiæ.

123. **Cercospora Mali** E. et E. Journ. Myc. 1888, p. 116. — Epiphyll- 7691  
la; maculis griseis, rotundis, 2-3 mm., diam., rubenti-marginatis; hyphis brevibus, brunneis, continuis, sursum gibboso-denticulatis, 15-20  $\approx$  2,5-3, dense cæspitosis; conidiis angustis, flavido-hyalinis, 4-5-septatis, 60-70  $\approx$  2-2,5.

*Hab.* in foliis vivis Piri Mali, St. Martinsville La. Amer. bor. (LANGLOIS). — Diversa a *C. Piri*.

124. **Cercospora prunicola** E. et E. Journ. Myc. 1887, pag. 17. — 7692  
Maculis amphigenis, subindefinitis, purpureo-brunneis, 2-3 mm. diam.; hyphis plerumque hypophyllis, brevibus, 10-15  $\mu$ . long., dilute coloratis, e tuberculo distincto oriundis; conidiis subhyalinis, nucleatis, dein 3-pluriseptatis, 30-45  $\approx$  2,5, cylindraceis.

*Hab.* in foliis Pruni americanæ, Point à la Hache La. Amer. bor. (LANGLOIS). — Conidiis minoribus et pallidioribus a *C. circumscissa* et *C. cerasella* distinguitur.

125. **Cercospora consobrina** E. et E. Journ. Myc. 1887, pag. 19. 7693  
— Maculis amphigenis, minutis, 2 mm. diam., ferrugineo-brunneis, demum bene definitis, purpureo-cinctis; hyphis epiphyllis, brevibus, 12-20  $\approx$  2,5-3, sursum subhyalinis denticulatisque, e basi minuta tuberculari cæspitulosus; conidiis exilibus, hyalinis, cylindraceis, 30-40  $\approx$  2,5, demum tenuiter 3-pluriseptatis.

*Hab.* in foliis vivis Persicæ vulgaris, Louisiana Am. bor. (LANGLOIS).

126. **Cercospora rubro-tincta** E. et E. Journ. Myc. 1887, p. 20. — 7694  
Maculis amphigenis, atro-rubris, margine dilutius rubro cinctis; cæspitulis laxis, olivaceis; hyphis amphigenis, brevibus, 12-15  $\mu$ . long., olivaceis, fasciculatis; conidiis lineari-subclavatis, guttatis, dilute fumosis, 35-50  $\approx$  2,5-3.

*Hab.* in foliis Persicæ vulgaris, Point à la Hache, Louisiana Amer. bor. (Rev. A. B. LANGLOIS).

127. **Cercospora myrticola** Speg. Guar. I, p. 167. — Maculis epi- 7695  
phyllis, majusculis, 3-5 mm. diam., fusco-atris, subindeterminatis, repando-angulosis, acervulis epiphyllis, laxe ac subseriate aggregatis, subhemisphæricis, 20-30  $\approx$  20-90, ex hyphis brevibus, conti-

nuis? gracilibus, 2-2,5  $\mu$ . cr., rectis v. subcurvulis, basi coalescentibus, obscure ac subopace olivaceis, sursum liberis et fumosis compositis; conidiis cylindræo-fusoideo-clavulatis, 20-75  $\approx$  2-2,5, sæpius 3-septatis vel multiguttulatis, utrinque obtuse rotundatis, chlorinis.

*Hab.* ad folia viva Myrtaceæ cujusdam in silva Caã-guazú Brasilæ.

128. **Cercospora epicoccoides** Cooke et Mass. Grev. XIX. p. 91. — 7696  
Epiphylla; maculis minutis vel confluentibus, purpureis; cæspitulis gregariis sphaeriæformibus, subcompactis, nigris, *Epicoccum* æmulantibus; hyphis brevissimis, simplicibus; conidiis profusis, fasciculatis, cylindræis, sursum leviter tenuatis, 3-5-septatis, 50  $\approx$  5, pallide olivaceis.

*Hab.* in foliis Eucalypti, Victoria Australiæ (Mrs. MARTIN).

129. **Cercospora Eucalypti** Cooke et Mass. XVIII, p. 7. — Maculis 7697  
subcircularibus v. confluentibus, pallidis, roseo-marginatis; hyphis abbreviatis; conidiis cylindricis, curvulis, utrinque obtusis, vix septatis, pallidis, 30-35  $\approx$  4.

*Hab.* in foliis evanescentibus Eucalypti, Oakleigh Australiæ (MARTIN).

130. **Cercospora erythrogena** Atk. Cerc. Alab. pag. 33. — Hypophyl- 7698  
la; maculis indefinitis, folium sæpius in rubrum vergentibus; hyphis sparsis, frequenter repentibus, sæpe ramosis, fusco-rubro-brunneis, flexuosis, denticulatis, 50-70  $\approx$  4-5; conidiis gracilibus, sæpius incurvis, majoribus teretibus, dilute olivaceo-brunneis multiseptatis, plerumque guttatis, 30-100  $\approx$  3,5-4.

*Hab.* in foliis *Rhexiæ marianæ* et *virginicæ*, Auburn, Alabama Amer. bor. (ATKINSON).

131. **Cercospora truncatella** Atk. Cerc. Alab. p. 12. — Maculis am- 7699  
phigenis, suborbicularibus, albidis, margine angusto, dilute brunneo cinctis, 2-4 mm. lat.; hyphis amphigenis fasciculatis, rubro-brunneis, septatis, geniculatis vel subrectis, 70-250  $\approx$  4,5; conidiis hyalinis, evanide septatis, e basi truncata apicem obtusum versus sensim attenuatis, raro basi rotundatis, 50-150  $\approx$  3,5-4.

*Hab.* in foliis *Passifloræ incarnatæ*, Auburn, Alabama Amer. bor. (ATKINSON).

132. **Cercospora atro-maculans** E. et E. Journ. of Myc. 1887, p. 17. 7700  
— Maculis amphigenis, nigris, subindefinitis, orbicularibus, 0,5-1 cm. diam., paucis, hyphis e tuberculo fasciculatis, amphigenis, brunneis, septatis, irregularibus, undulatis, sursum curvis denticu-

latisque,  $75 \approx 4$ ; conidiis obclavatis, subfuscis, granuloso-nucleatis,  $40-75 \approx 3-4$ .

*Hab.* in foliis *Araliæ spinosæ*, Natchitoches La. Amer. bor. (LANGLOIS).

133. **Cercospora coffeicola** B. et C. Journ. Myc. 1888, p. 5. — Ma- 7701  
culis amphigenis 2-3 mm, diam., centro albo v. pallido, margine rufo-brunneo; hyphis sæpius epiphyllis, e basi minuta tuberculari cæspitosis,  $50-75 \approx 4$ , bi-triseptatis, fuscis, passim elongatis,  $100-300 \mu$ . long., sursum nodulosis et denticulatis; conidiis (paucis observatis) hyalinis,  $75 \approx 3$ , bi-quadriseptatis.

*Hab.* in foliis vivis *Coffeæ arabicæ*, Guatemala Amer. centr. (SCRIBNER).

134. **Cercospora Diodiæ-virginianæ** Atk. Cerc. Alab. p. 26. — Ma- 7702  
culis amphigenis, brunneis v. sordide albis, supra indefinite marginatis, 2-5 mm. lat.; hyphis amphigenis, fasciculatis, in cæspitulos numerosos fasciculatis, fuligineis, subrectis, denticulatis,  $40-250 \approx 4-5$ ; conidiis hyalinis, basi validis, supra graciliter longeque attenuatis, multiseptatis,  $80-350 \approx 4$ .

*Hab.* in foliis *Diodiæ virginianæ*, Auburn, Alabama Amer. bor. (DUGGAR).

135. **Cercospora Cinchonæ** E. et E. Journ. Mycol. 1887, p. 17. — 7703  
Maculis amphigenis, definitis, supra nigricantibus, anguste elevato-marginatis, infra brunneo-nigris, 2-3 mm. diam.; hyphis epiphyllis in cæspitulos sparsos sphaeriæformes junctis, brevissimis; conidiis cylindræis flavido-hyalinis, subrectis, dein tenuiter 3-septatis,  $25-35 \approx 2,5$ .

*Hab.* in foliis vivis *Cinchonæ cultæ*, Lafayette La. Am. bor. (LANGLOIS).

136. **Cercospora Cephalanthi** Ell. et Kell. — Syll. IV, p. 467 — Sec. Ell. in Journ. Myc. 1888, p. 5, conidia matura  $35-50 \approx 4$ , olivaceo-brunnea, 5-7-septata. Nascitur quoque in Faulkland Amer. bor. (COMMONS).

137. **Cercospora Symphoricarpi** Ell. et Ever. Journ. Mycol. 1889, 7704  
p. 70. — Maculis intense rubiginosis, 1-2 mm. diam.; hyphis hypophyllis, fasciculatis,  $30-40 \approx 3$ , continuis, brunneolis, supra denticulatis; conidiis clavato-oblongis, 1-3-septatis,  $20-30 \approx 3$ .

*Hab.* in foliis *Symphoricarpi vulgaris*, Rooks County, Kansas Amer. bor. (E. BARTHOLOMEW).

138. **Cercospora catenospora** Atk. Cerc. Alab. p. 34. — Effusa vel 7705  
cæspitulosa; hyphis e foliorum stomatibus fasciculatim assurgenti-

bus, divergentibus, 20-75  $\approx$  5-6, septatis, subcylindræis, sæpe dentatis, olivaceo-flavidis, raro obscurioribus ad rubrum vergentibus; conidiis acro-pleurogenis, concatenatis, cylindræis, dein abrupte truncato-attenuatis vel solitariis et tunc teretibus, rarius subclavatis, dilute olivaceo-flavidis, sæpe guttulatis, 1-6-septatis, 20-100  $\approx$  4-5.

*Hab.* in foliis *Sambuci canadensis*, Auburn, Alabama Amer. bor. (ATKINSON).

139. **Cercospora lateritia** E. et Halst. Journ. myc. 1888, p. 7. — Ma- 7706  
culis epiphyllis, brunneolis, dein plus minus confluentibus, demum fere nigris; cæspitulis hypophyllis, definitis, pallide lateritiis, mox confluentibus; hyphis e folii stomatibus cæspitose effuseque exsurgentibus, plus minus intertextis, 50-70  $\approx$  8-10, ramosis, septatis; conidiis sæpius cylindræis et rectis, utrinque obtusis, 2-6-septatis, plerumque constrictis, rubro-brunneis, 50-100  $\approx$  6-8, longioribus supra attenuatis.

*Hab.* in foliis vivis *Sambuci pubentis*, Ames Iowa Amer. bor. (B. D: HALSTED).

140. **Cercospora Ceanothi** K. et Swingle Journ. Myc. 1888, p. 94. 7707  
— Maculis rubro-brunneis v. rufis, subcircularibus, subconfluentibus, copiosis, amphigenis, 1-5 mm. diam.; hyphis pallide brunneis, continuis vel raro septatis, simplicibus, sæpe guttatis, supra subnodosis, hypophyllis, subinde amphigenis, dense fasciculatis, 20-36  $\approx$  3-4,5, cæspitulos minutos, in macularum centro gregarios efficientibus; conidiis curvis v. rectis, anguste cylindræis v. utrinque leniter attenuatis et obtusis, 3-6-septatis, hyalinis, 45-90  $\approx$  2-4.

*Hab.* in foliis *Ceanothi ovati*, Manhattan, Kansas Amer. bor., interdum socio *Macrosporio* quodam.

141. **Cercospora texensis** Ell. et Galloway Journ. Myc. 1888, p. 116. 7708  
— Maculis amphigenis, minutis, 1-2 mm. diam., albidis, purpureo-marginatis; hyphis amphigenis, 5-20 laxè fasciculatis, effusis, brunneis continuis v. tenuiter 2-3-septatis, subæqualibus, subrectis, sursum denticulatis, subtruncatis, 35-50  $\approx$  4; conidiis obclavato-filiformibus, tenuiter septatis, 70-110  $\approx$  2,5.

*Hab.* in foliis *Fraxini viridis*, Brazos Co. Texas Am. bor. (LE BRUNK). — Subinde maculæ ampliores 0,5-1 cm. lat.

142. **Cercospora fraxinea** E. et E. Journ. Myc. 1888, p. 4. — Ma- 7709  
culis amphigenis, subtus distinctioribus, indefinitis vel venulis folii limitatis, sæpius confluentibus, subolivaceis; cæspitulis amphigenis, punctiformibus, dense confertis; hyphis conferte cæspitosis ef-

fusis, olivaceis, plus minus hamatis, 30-40  $\approx$  5-6, demum plus minus septatis; conidiis cylindræis v. demum supra subattenuatis, 1-3-septatis, subolivaceis, plerumque 25-35  $\approx$  5-7, nonnullis 50  $\mu$ . long. et tunc sursum magis attenuatis.

*Hab.* in foliis siccis Fraxini, Manhattan, Kansas Amer. bor. (W. T. SWINGLE). — *C. fraxinitalis* et *C. superfluæ* affinis.

143. **Cercospora fraxinitalis** E. et E. Journ. Myc. 1887, p. 20. — Ma- 7710  
culis amphigenis, atro-brunneis, suborbicularibus et subindefinitis, 3-4 mm. lat., non copiosis; hyphis amphigenis, dense fasciculatis, brevibus, 15-30  $\approx$  2,5-3, brunneolis, hamatis, cæspitulos numerosos, parvos, nigros, dense sparsos efformantibus; conidiis subhyalinis, cylindræis v. supra leniter attenuatis, guttulatis, 35-60  $\approx$  2,5-3.

*Hab.* in foliis vivis Fraxini, Bohemia, Plaquemines Co., Louisiana Amer. bor. (REV. A. B. LANGLOIS).

144. **Cercospora bignoniæcola** Speg. Guar. I, p. 170. — Maculis am- 7711  
phigenis, irregularibus, sæpius confluentibus, griseo-arescentibus, determinatis, per ætatem frustulatim deciduis ac a folio eroso-perforato secedentibus; acervulis in margine macularum sparsis, minutis, subimperspicuis, olivaceis, ex hyphis cylindræis, densiuscule septulatis, rectis, 80-160  $\approx$  7, apice non vel vix subincrassatis, fuliginæis compositis; conidiis fusoidæo-clavulatis, 40  $\approx$  7 apice acutiuscule obtusatis postice cuneato-subtruncatis, 3-5-septatis, chlorinis vel olivaceis.

*Hab.* ad folia viva Bignoniæ in silva subvirginea Caá-gua-zú Brasilæ.

145. **Cercospora leprosa** Speg. Guar. I, p. 167. — Maculis nullis v. 7712  
hypophyllis, pallescentibus effusis, indeterminatis; acervulis hinc inde glomerulatis, subvelutinis, olivaceis, ex hyphis liberis, basi tantum fasciculatis, erectis, rectis, flexuoso-geniculatis, ad genicula nodulosis, 1-3-septatis, 60-80  $\approx$  5-6, olivaceis compositis; conidiis elongato-subfusoidæis clavulatis, superne acutis, inferne obtusato-subtruncatis, 40-75  $\approx$  3,5-5, rectis v. leniter subfalcatis, 3-5-septatis, nubiosis, ex hyalino fumosis.

*Hab.* ad folia languida Tecomæ arboreæ cujusdam in silvis pr. Paraguari et Peribeby Brasilæ.

146. **Cercospora Langloisii** Sacc. *Cercospora pallida* E. et E. Journ. 7713  
Mycol. 1887, pag. 21, nec B. et C. — Maculis amphigenis, indefinitis, plus minus confluentibus, flavidis v. purpurascentibus, demum supra nigricantibus, infra brunneolis; hyphis fasciculatis, plerumque paucis in quoque fasciculo, brevibus, 15-20  $\approx$  3, pallide brun-



neis, subnodulosis, e tuberculo minuto oriundis; conidiis subcylindricis, subhyalinis, granulosis vel nucleatis, demum 3-5-septatis, 30-55  $\approx$  2-2,5.

*Hab.* in foliis *Tecomæ radicans*, Louisiana Amer. bor. (LANGLOIS). — Diversa a *C. sordida*.

147. **Cercospora duplicata** Ell. et Ever. Journ. Mycol. 1889, p. 70. 7714

— Maculis primitus purpurascens, dein sordide atro-brunneis, irregularibus, 4-6 cm. lat.; hyphis epiphyllis brevissimis, 8-10  $\mu$ . long., e basi tuberculari, 30-35  $\mu$ . lat. assurgentibus; conidiis acrogenis lineari-lanceolatis, subhyalinis, evanide 3-6-septatis, 30-60  $\approx$  2,5-3.

*Hab.* in foliis *Tecomæ radicans*, St. Martinsville, Louisiana Amer. bor. (LANGLOIS). — «An a præcedente rite diversa?»

148. **Cercospora Viticis** E. et E. Journ. Myc. 1887, p. 18. — Macu- 7715

lis amphigenis, cinereis, supra brunneis, margine elevato, saturiore cinctis, subtus pallidioribus, minus definitis, irregularibus vel suborbicularibus, 2-4 mm. diam.; cæspitulis epiphyllis, minutis, sparsis, nigris; hyphis brevibus, 10-15  $\approx$  3, brunneolis, supra plus minus incurvis et irregularibus, e basi tuberculari oriundis; conidiis subcylindræis, longioribus supra attenuatis, fumoso-hyalinis, 30-45  $\approx$  2,5, dein 3-septatis.

*Hab.* in foliis vivis *Viticis Agni-casti*, Lafayette, Louisiana Amer. bor. (LANGLOIS). — Socia adest *Pyrenochaeta minor*.

149. **Cercospora Kaki** E. et E. Journ. Mycol. 1887, p. 17. — Macu- 7716

lis amphigenis, irregularibus, 0,5-1 cm. diam., definitis, ferrugineo-brunneis, demum supra griseis centroque nigris, infra paullo dilutioribus et obsoletius limitatis; hyphis plerumque epiphyllis, subhyalinis, brevibus, 10-15  $\approx$  3, e basi tuberculari cæspitulosis; conidiis cylindræis, 40-60  $\approx$  3-4, flavido-hyalinis, nucleatis (an tandem septatis?).

*Hab.* in foliis vivis *Diospyri Kaki* cultæ Lafayette La. Am. bor. (LANGLOIS).

150. **Cercospora fuliginosa** E. et K. Journ. Myc. 1887, pag. 103. — 7717

Maculis amphigenis, 1-2 mm. lat., purpureo-nigris; hyphis hypophyllis, conferte fasciculato-cæspitosis, atro-olivaceis, 100-150  $\approx$  3, obscure septatis, supra undulatis abrupte incurvis et valde denticatis; conidiis obclavatis, 3-septatis, olivaceis, 35-40  $\approx$  4, subincurvis.

*Hab.* in foliis *Diospyri virginianæ*, Mound City, Kansas Amer. bor. (W. A. KELLERMAN).

151. **Cercospora atra** E. et E. Journ. Myc. 1888, p. 4. — Maculis 7718

amphigenis, nigris, subangulosis, 1-2 mm. diam.; cæspitulis minutis; hyphis hypophyllis, e basi tuberculari exsurgentibus, 40-75  $\approx$  3-4, continuis, atris, supra denticulatis et subgeniculatis; conidiis obclavatis, curvis, olivaceis, 2-3-septatis, 35-55  $\approx$  3.

*Hab.* in foliis vivis Diospyri virginianæ, Faulkland, Delaware Amer. bor. (A. COMMONS). — «An satis diversa a præcedente?»

152. **Cercospora Lycii** E. et Halst. Journ. Myc. 1888, p. 7. — Ma. 7719

culis amphigenis, flavido-brunneis, dein tenuibus, centro-albis, 2-4 mm. diam., disciformibus, margine elevato, definito cinctis; hyphis sæpius epiphyllis, flavido-brunneis, supra pallidioribus, septatis, 80-120  $\approx$  4, subrectis, supra plus minus denticulatis, cæspitulos rectos, e basi tuberculari exsurgentes efformantibus; conidiis gracilibus, 80-150  $\approx$  4, hyalinis, continuis v. vix 3-4- v. pluriseptatis.

*Hab.* in foliis Lycii vulgaris, Ames Iowa Amer. bor. (B. D. HALSTED).

153. **Cercospora Caricæ** Speg. Guar. I, p. 168. — Maculis amphi- 7720

genis, pallescentibus, subdeterminatis, minutis, 0,5-1 mm. diam.; acervulis hypophyllis, maculas totas occupantibus, centro excepto, circinatim v. concentrice dispositis, dense aggregatis, globosis, 50-70  $\mu$ . diam., obscure e fuligineo olivaceis, ex hyphis basi in sporodochium hyalinum, minute parenchymaticum coalitis, superne ex toto liberis ac unilocularibus, articulo elliptico v. fusoido-clavulato, 20-30  $\approx$  7-8, apice obtusato sæpeque subtruncato, ad angulos cicatricoso, pallide vinoso-chlorino donatis, compositis; conidiis ellipticis vel piriformibus, continuis, non vel 1-guttulatis vel medio 1-septatis, non constrictis, 10-20  $\approx$  7-10, episporio minute sæpe subimperspicue ruguloso-papilluloso donatis, pallide rubiginoso-olivaceis, in hyphis solitariis vel 2-3 acrogenis.

*Hab.* ad folia viva Caricæ Papayæ pr. Guarapí Brasilæ.

154. **Cercospora Vasconcellæ** Speg. Guar. I, 168. — Maculis nul- 7721

lis v. amphigenis, pallescentibus, parum manifestis, effusis, indeterminatis; acervulis hypophyllis, hinc inde densiuscule aggregatis, plagulas parvas 0,5-5 mm. diam., sparsas v. confluentes, irregulares, olivaceas, velutinas efficientibus, ex hyphis cylindræis, dense stipatis, sed non coalescentibus, breviusculis ac crassiusculis, 2-3-septatis, ad septa constrictis, 50-80  $\approx$  7-8, apice obtusissime rotundatis v. subtruncatis, articulis superis verruculoso-rugulosis, guttulis, olivaceis compositis; conidiis fusoides vel elliptico-clavulatis, 20-30  $\approx$  6-7, fere subpiriformibus, 3-4-septatis, loculo infero

sæpius longiore angustioreque, ad septa non vel vix constrictis, guttulatis, olivaceis, loculis centralibus obscurioribus.

*Hab.* ad folia viva Caricæ (*Vasconcellia*) quercifoliæ in silvis pr. Guarapî Brasiliæ.

155. **Cercospora Jatrophæ** Atk. Cerc. Alab. p. 32. — Maculis indefinitis, primo supra flavidis et infra sordide flavis, dein sordide griseis, indefinite flavo-cinctis; hyphis fasciculatis, amphigenis, e stromate flavido-brunneo assurgentibus, dilute flavido-brunneis, brevibus, subflexuosis, 10-20  $\approx$  3; conidiis longis, tenuibus, hyalinis v. subhyalinis, 5-12-septatis, 50-100  $\approx$  1,5-2.

*Hab.* in foliis *Jatrophæ stimulosæ*, Auburn, Alabama Am. bor. (ATKINSON).

156. **Cercospora Stillingiæ** E. et E. Journ. Myc. 1887, p. 20. — Maculis amphigenis, suborbicularibus, atro-brunneis, margine atro, angusto cinctis, 2-4 mm. lat.; cæspitulis dense sparsis; hyphis amphigenis sed plerumque epiphyllis, brevissimis, 10-15  $\mu$ . long., coloratis, e basi distincte tuberculari oriundis; conidiis cylindræis, subcurvis, guttis v. septis distinctis destitutis, 25-35  $\approx$  2,5-3.

*Hab.* in foliis *Stillingiæ sebiferæ*, Point à la Hache, Louisiana Amer. bor.

157. **Cercospora Malloiti** E. et E. in Journ. Myc. 1888, p. 114. — Maculis sordide albis, subangulosis, 1-4 mm. cr., deciduis; hyphis amphigenis, cæspitosis, 35  $\approx$  3-4, brunneolis, continuis, denticulatis, hamatis; conidiis gracilibus, 60-70  $\approx$  3, vix septatis, hyalinis.

*Hab.* in foliis *Malloiti japonici*, Starkville, Missouri Amer. bor. (TRACY).

158. **Cercospora Kalmiæ** Ell. et Ev. Proc. Acad. Phil. 1891, p. 88. — Maculis amphigenis orbicularibus atro-brunneis, 0,5 cm. diam. v. confluyendo amplioribus, concentricè zonatis, anguste flavido-marginatis; cæspitulis epiphyllis sphæriæformibus, sparsis, atris; hyphis e basi tuberculari 100  $\mu$ . diam., dense fasciculatis, fumoso-hyalinis, undulatis continuis v. tenuiter septatis, 70-80  $\approx$  3,5-4, leniter denticulatis; conidiis obclavatis, hyalinis, 3-5-septatis, leviter curvis.

*Hab.* in foliis vivis *Kalmiæ latifoliæ*, Newfield N. J. Amer. bor. — A *C. sparsa* omnino diversa.

159. **Cercospora guaranitica** Speg. Guar. I, p. 170. — Maculis minutis 0,5-1,5 mm. diam., amphigenis, intense et pulchre purpureis v. violaceis, hinc inde sparsis, indeterminatis, sæpius centro albo-arescentibus; acervulis hypophyllis, rarius amphigenis, paucis, oli-

vaceis, ex hyphis cylindræo-compressulis, ad quartum inferum subcoalescentibus denseque septulatis, cæterum liberis atque continuis, rectis v. vix flexuosis, 50-100  $\approx$  3-3,5, apice obtuse rotundatis chlorinis, compositis; conidiis cylindræo-elongatis vel vix subclavulatis 50-80  $\times$  4, utrinque obtusis continuis, pallidissime chlorinis.

*Hab.* ad folia viva Seguiæ guaraniticæ Speg. in dumetis pr. Caá-guazú Brasilæ.

160. **Cercospora salicina** E. et E. Journ. of Myc. 1887, p. 19. — 7727

Maculis amphigenis, nigricantibus, irregularibus, plus v. minus confluentibus v. dense sparsis; hyphis in cæspitulos minutos amphigenos fasciculatis, e subhyalino brunneis, brevibus, 12-20  $\approx$  3, integris v. sursum sparse denticulatis v. passim ramulosis; conidiis obclavatis, nucleatis, ex hyalino subfuscis, 25-40  $\approx$  2-2,5,

*Hab.* in foliis (quæ atro-inquinata videntur), Salicis nigræ Louisiana Am. bor. (LANGLOIS).

161. **Cercospora populina** E. et E. Journ. Myc. 1887, p. 20. — Ma. 7728

culis amphigenis, irregularibus, subconfluentibus, 2-5 mm. lat.; atro-brunneis, dein griseis vel albidis; hyphis dense fasciculatis, brevibus, 12-15  $\mu$ . lat., brunneolis, cæspitulos nigros, numerosos, dense sparsos formantibus; conidiis cylindræis, subcurvis, supra vix attenuatis, hyalinis, dein vix 1-3-septatis, 25-40  $\approx$  2,5-3.

*Hab.* in foliis Populi albæ et P. angulatæ, Point à la Hache, La. Amer. bor. (Rev. A. B. LANGLOIS). — *C. fraxiniti* valde affinis.

162. **Cercospora Halstedii** Ell. et Ev. Proc. Acad. Phil. 1891, p. 90. 7729

— Effusa, hypophylla, strata indefinita olivaceo-atra, 2-4 mm. diam., formans, sed folium non decolorans; hyphis erectis, brunneis, parce septatis, 100-150  $\approx$  5-7, undulatis vel crispis, sursum torulosis; conidiis obclavatis brunneis, 65-80  $\approx$  5-7, triseptatis, passim constrictis, parte septata conidium medium occupante.

*Hab.* in foliis vivis Caryæ tomentosæ, Cold Spring. N. Y. Amer. bor. (B. D. HALSTED).

163. **Cercospora Juglandis** Kell. et Sw. Journ. Mycol. 1889, p. 77. 7730

— Maculis amphigenis, brunneis,  $\frac{1}{4}$ -1 mm. diam., folii venulis limitatis, sæpe in areas brunneas v. cinereas 0,5-2 cm. diam., confluentibus; cæspitulis prominentibus, numerosissimis, hyphis e stomatibus emergentibus dense gregariis, fuscidulis, simplicibus vel raro 1-2-septatis, vix attenuatis, sæpius abrupte angustatis, dein truncato-rotundatis, 20-65  $\times$  3-6; conidiis copiosis, fuscidulis, sub-

clavatis vel cylindræis, dein fere abrupte truncatis, continuis vel sæpius 1-3-septatis, constrictis, plerumque valide incurvatis, 33-72  $\approx$  3-5.

*Hab* in foliis Juglandis nigræ, Manhattan, Kansas Americæ borealis.

164. **Cercospora Saururi** E. et E. Journ. Myc. 1887, p. 14. — Ma- 7731  
culis amphigenis, subnigris, suborbicularibus v. irregularibus, non bene limitatis, folii portione flavida cinctis,  $\frac{1}{2}$ - $\frac{3}{4}$  cm. lat.; hyphis amphigenis, cæspitulosis, pallide brunneis, parce septatis, subundulatis, fere rectis, 35-50  $\approx$  4; conidiis hyalinis, 3-5-septatis, subcurvis, 50-75  $\approx$  3.

*Hab.* in foliis vivis Saururi cernui, Louisiana Amer. bor. (LANGLOIS).

165. **Cercospora Penicillus** E. et E. Journ. Myc. 1888, p. 115. — 7732  
Cæspitulis hypophyllis, compactis, distinctis, parvis, nigris, in maculis latericiis sparsis, penicillatis; hyphis atro-olivaceis, supra pallidioribus, multiseptatis, 150-200  $\approx$  4-6, sursum plus minus curvatis; conidiis anguste obclavatis, hyalinis, guttulatis, dein 3-5-septatis, 50-75  $\approx$  3,5-5.

*Hab.* in foliis Myricæ ceriferæ, Newfield, N. Jersey Amer. bor., sociâ *Gnomoniâ Myricæ* Ell. et Ev., cujus forte statum conidicum sistit.

166. **Cercospora dispersa** E. et E. Journ. Myc. 1888, p. 115. — Hy- 7733  
phis effusis, solitariis v. 2-3-gregariis, olivaceo-brunneis, multiseptatis, circ. 150  $\approx$  4-5, subrectis, apice subdentatis, cæspitulos indefinitos, olivaceos, sparsos, hypophyllos efformantibus; conidiis supra gracilibus, fumoso-hyalinis, sæpius subcurvulis, 3-5-septatis, 80-110  $\approx$  3,5.

*Hab.* in foliis Myricæ ceriferæ, Newfield, New Jersey Amer. bor., sociâ *Cercosporâ Penicillo*.

167. **Cercospora platanicola** E. et E. Journ. Myc. 1887, p. 17. — 7734  
Maculis amphigenis, minutis, 1-3 mm. diam., sparsis, irregularibus, indefinitis, sordide atro-brunneis; hyphis amphigenis, e basi tuberculari sphæriæformi atra minute fasciculatis, brevibus, subferrugineis, parce denticulatis; conidiis anguste obclavatis, plerumque curvis, nucleatis, 30-40  $\approx$  2-2,5.

*Hab.* in foliis Platani occidentalis, Louisiana Amer. bor. (LANGLOIS), sociâ *Phyllostictâ platanellâ* Sacc.; maculis ut *Cercosporæ* sed latioribus; sporulis 4-5  $\approx$  2,5 hyalinis.

168. **Cercospora tuberculans** E. et E. Journ. Mycol. 1888, p. 115. 7735

— Hyphis tubercula rotunda circ. 1 mm. diam., sec. nervos primarios in folii pagina inferiore disposita, mox diffusa, intus pallida dense tegentibus, brevibus, 25-35  $\times$  4-5, continuis, erectis, olivaceis, simplicibus vel supra subdenticulatis; conidiis subolivaceis, fere cylindræis, 1-5-septatis, 30-75  $\approx$  4-5.

*Hab.* in foliis *Liquidambaris styracifluæ*, Starkville, Miss. Amer. bor. (prof. S. M. TRACY).

169. **Cercospora Sequojæ** E. et E. Journ. Myc. 1887. — Cæspitulis 7736 compactis olivaceis, *Sphærellam* æmulantibus; hyphis ferrugineo-brunneis, abrupte curvis, subnodulosis et denticulatis, parce septatis, 50-70  $\approx$  4-5; conidiis oblongis, dein clavatis ferrugineo-brunneis, 40-70  $\approx$  4-6, 3-5-septatis constrictisque.

*Hab.* in foliis languidis *Sequojæ giganteæ*, Germantown Nurseries Penn. Amer. bor. (T. MEEHAN). — Var. **Juniperi** E. et E. loc. cit. Differt cæspitulis saturatius coloratis, minoribus, conidiis 15-30  $\approx$  3, hyphisque quoque brevioribus In foliis *Juniperi virginianæ*, Kenosha Co. Wis. (DAVIS).

### III. In Monocotyledoneis.

170. **Cercospora palmicola** Speg. F. Guar. II, n. 195. — Maculis 7737 amphigenis, ellipticis, majusculis 1-2 cm. long. 3-8 mm. lat., determinatis, arescentibus, fusco-pallescentibus, undulatis, sæpe seriatim confluentibus; cæspitulis sæpius in centro macularum laxè aggregatis, minutis, penicillatis, olivaceis; hyphis 5-15-cæspitulosis, erectis, rectis v. flexuosulis, apice obtusis, 1-3-denticulato-nodulosis, continuis, 40-50  $\approx$  5-6, fumoso-olivaceis; conidiis sæpius acrogenis, obclavulatis, utrinque obtusiusculis, 5-7-pseudoseptatis vel 5-9-blastis, ad septa subconstrictulis, rectis, fumoso-olivaceis, 50-70  $\approx$  7-9.

*Hab.* ad folia languida *Cocoes australis* in silvis pr. Guarapì Brasilæ.

171. **Cercospora richardiæcola** Atk. Cerc. Alab. p. 19. — Maculis 7738 amphigenis, nigris, centro minuto, albo, lineisque concentricis donatis, suborbicularibus, 2-6 mm. lat.; hyphis epiphyllis, fasciculatis, primitus dilute fuligineis et rubido-tinctis, dein rubro-brunneis, plerumque rectis v. etiam apice e flexuoso denticulatis, 30-80  $\approx$  5; conidiis hyalinis, obclavatis, 4-10- vel ultra septatis, 50-100  $\approx$  3-4.

*Hab.* in foliis *Richardiæ africanæ*, Auburn Alabama Am. bor. (ATKINSON).

172. **Cercospora Amaryllidis** Ell. et Ev. Journ. Myc. 1887, p. 14. — 7739

Maculis indistinctis v. nullis; cæspitulis sæpius epiphyllis, griseo-lis, subelongatis, indefinitis irregulariter sparsis; hyphis densiusculis, 50-70  $\approx$  6-7, brunneis, parce septatis, supra subtruncatis et parce dentatis, subrectis; conidiis supra valde attenuatis et sæpe undulatis, hyalinis, 4-6-septatis, 60-80  $\approx$  4-5.

*Hab.* in foliis languidis *Amaryllidis* sp. cultæ, Louisiana Amer. bor. (LANGLOIS).

173. **Cercospora Thalix** Ell. et Langl. Journ. Myc. 1890. p. 36. — 7740

Hyphis amphigenis brevissimis, ovatis, 6-8  $\approx$  5, olivaceis, plerumque 6-15 e stomatibus foliis fasciculatim prodeuntibus; conidiis cylindræis olivaceis, 3-8-septatis, 50-100  $\approx$  6-8, utrinque obtuse rotundatis.

*Hab.* in foliis vivis et emortuis *Thalix dealbatæ*, St. Martinville La. Amer. bor. — Format strata elongata, 3-5 mm. long., 1,5-2 mm. lat., fere ardosiaca.

174. **Cercospora Majanthemi** Fuck. — Syll. IV, p. 477 — var. **Paridis** 7741  
Bäuml. F. Schemn. I, p. 11. — Hyphis 40-50  $\approx$  4; conidiis 30-36  $\approx$  4-5.

*Hab.* in foliis *Paridis quadrifoliæ* prope Schemnitz Hungariæ.

175. **Cercospora Pancratii** E. et E. Journ. of Myc. 1887, p. 15. — 7742

Maculis amphigenis, oblongis, 1-2 cm. long., 0,5-1 cm. lat., rubescentibus et plerumque anguste elevatulo-cinctis; cæspitulis amphigenis, sparsis, minutis; hyphis e basi sphaeriæformi oriundis, brevibus, 12-15  $\approx$  3, brunneis; conidiis angustis, subfuscis, sursum tenuatis, 40-50  $\approx$  3.

*Hab.* in foliis *Pancratii coronarii*, Louisiana Amer. bor. (LANGLOIS).

176. **Cercospora pachyspora** Ell. et Ev. Proc. Acad. Phil. 1891, 7743  
p. 88. — Maculis amphigenis, latis, 1-2 cm., cinereis, sæpe elongatis vel marginalibus, anguste atro-purpureo-marginatis; hyphis

dense cæspitosis, subhyalinis, continuis, undulatis, integris v. sparse denticulatis, 60-75  $\approx$  4-5, plumbeis; conidiis oblongis, 3-septatis, 60-80  $\approx$  8-10.

*Hab.* in foliis *Alismatis Plantaginis* et *Peltandræ virginicæ*, Wilmington Del. Amer. bor. (A. COMMONS).

177. **Cercospora nubilosa** E. et E. Journ. Myc. 1888, p. 115. — Ma- 7744

culis suborbicularibus,  $\frac{1}{4}$ -1 cm. diam., fumoso-brunneis, definite limitatis; cæspitulis hypophyllis minutis, punctiformibus; hyphis brevibus, 15-25  $\approx$  2, brunneolis, e basi subtuberculari assurgenti-

bus; conidiis cylindræis, 2-6-septatis, subhyalinis, utrinque obtusis, 40-90  $\approx$  3,5-5.

*Hab.* in foliis *Smilacis*, Cleveland, Ohio Amer. bor. (TRACY).

178. **Cercospora subsanguinea** E. et C. Journ. Myc. 1888, p. 4. — 7745

Maculis amphigenis, subellipticis, dilute ferrugineis, tenuibus, dein centro pallidioribus, 2-3 mm. diam., subdefinitis, sparsis vel subconfluentibus; cæspitulis hypophyllis, minutis, sparsis, pallide rubris; hyphis pallidis, rubentibus, 50-70  $\mu$ ., vulgo minus quam 3  $\mu$ . cr., supra imperfecte ramosis; conidiis subcylindræis, 20-30  $\approx$  3-4, guttatis, utrinque sæpius obtusis.

*Hab.* in foliis *Smilacinæ canadensis*, Columbia britann. Amer. bor. (Prof. JOHN MACOUN). — *C. cruentæ* subaffinis.

179. **Cercospora crinospora** Atk. Cerc. Alab. p. 26. — Hyphis fasci- 7746

culatis, 3-6 in quoque cæspitulo, undulatis, apice parce dentatis et subhyalinis, ceterum atro-brunneis; conidiis gracilibus, rectis, teretibus, hyalinis, 4-6-septatis, 20-60  $\approx$  1,5-2.

*Hab.* in folii partibus emortuis *Rhynchosporæ glomeratæ*, Auburn, Alabama Amer. bor. (ATKINSON).

180. **Cercospora striæformis** Winter in Hedwigia 1886, pag. 103. — 7747

Cæspitulis dense stipatis, maculas lineares, fumosas, plerumque hypophyllas, usque 5 mm. longas formantibus, tenuissimis, fuscidulis; hyphis fasciculatis, erectis, parum torulosis, simplicibus, fuscis, pluriseptatis, usque 120  $\mu$ . longis, 4,5  $\mu$ . crassis; conidiis tenuissimis filiformibus, deorsum vix incrassatulis, apicem versus parum attenuatis, plerumque 3-5-septatis, hyalinis, sæpe subcurvatis, usque 45  $\approx$  1,5.

*Hab.* in foliis vivis *Graminum* in insula S. Thomé Africæ occident.

181. **Cercospora Setariæ** Atk. Cerc. Alab. p. 18. — Maculis amphi- 7748

genis, atris, indefinite pallideque marginatis, ellipsoideis; hyphis epiphyllis, atro-rubro-brunneis, fasciculatis, subinde densissimis, aliis divergentibus, interdum prope basim ramosis, parce minuteque guttulatis, prope apicem denticulatis, 50-100  $\approx$  4,5-5; conidiis hyalinis, 1-pluriseptatis, cylindræis vel obclavatis, rectis vel curvis, 20-150  $\approx$  4-5.

*Hab.* in foliis *Setariæ glaucæ*, Auburn, Alabama Amer. bor. (DUGGAR).

182. **Cercospora fusimaculans** Atk. Cerc. Alab. pag. 18. — Maculis 7749

amphigenis, dilute brunneis, atro-brunneo-cinctis, late elliptico-fusiformibus, 3-4 mm. long., sæpe confluentibus; hyphis epiphyll-



lis, fasciculatis, olivaceo-rubro-brunneis, rectis, subgeniculatis vel nodosis, apicem versum parce denticulatis, septatis, 50-100  $\approx$  4-4,5; conidiis hyalinis, 3-4-septatis, utrinque subattenuatis, 25-40  $\times$  2.

*Hab.* in foliis *Panici dichotomi*, Auburn, Alabama Amer. bor. (DUGGAR).

183. **Cercospora tessellata** Atk. Cerc. Alab. p. 27. — Maculis supra 7750  
indefinitis, sæpius anguste oblongis, subtus cæruleo-nigris; cæspitulis transverse et longitudinaliter seriatis; hyphis hypophyllis, dense fasciculatis, fuligineis, brevibus, 10-12  $\approx$  2,5-3, denticulatis; conidiis gracilibus, hyalinis, teretibus, curvis, septatis, 50-90  $\approx$  2-2,5.

*Hab.* in foliis languidis *Eleusines ægyptiacæ*, Auburn, Alabama Amer. bor. (ATKINSON).

184. **Cercospora Sorghi** E. et E. Journ. Myc. 1887, p. 15. — Hyphis 7751  
amphigenis in cæspitulos minutos in parte folii emortua circumcirca late atro-sanguinea sparsos paucis aggregatis, brunneis, sursum truncatis, lateraliter denticulatis, 60-80  $\approx$  4, continuis v. parce septatis; conidiis angustis, 3-pluri-septulatis, 70-80  $\approx$  3, hyalinis.

*Hab.* in foliis *Sorghi halepensis*, Plaquemines Co. La. Amer. bor. (LANGLOIS). — Adest forma **Maydis**, ibidem, maculis brunneis nec purpureis diversa.

185. **Cercospora Köpkei** Krüg. Ber. Zuck. pag. 115, t. VI et VIII, 7752  
f. 1-5. — Maculis amphigenis, sinuosis, confluentibus, purpureo-brunneis, infra pallidioribus, margine concolori; hyphis plerumque hypophyllis fasciculatis, septatis, apice nodulosis denticulatisque fumoso-brunneis, 40-50  $\approx$  7; conidiis fusoides, subrectis, 20-50  $\approx$  5-8, medie 40  $\times$  6, utrinque obtusiusculis, 3-4-septatis, non constrictis, passim guttulatis, subhyalinis.

*Hab.* in foliis *Sacchari officinarum*, *S. edulis*, *S. Glongong*, *S. spontanei* in Java. — Morbum, javanice *Amak Krapak* dictum, sat gravem affert *Saccharis* in Java cultis.

186. **Cercospora seminalis** E. et E. Journ. Myc. 1888, p. 4. — Hy- 7753  
phis fertilibus, densis, pallide olivaceis, longissimis, ramosis, supra oblique truncatis, subtus septatis; conidiis acrogenis, subhyalinis, obclavatis, granulosis, dein 3-5-septatis, 80-110  $\approx$  6-7.

*Hab.* in spiculis *Buchloës dactyloïdis*, Manhattan Kansas Amer. bor. (W. T. SWINGLE).

187. **Cercospora Agrostidis** Atk. Cerc. Alab. p. 12. — Maculis am- 7754  
phigenis, late ellipsoideis, centro pallidissime brunneis, margine lato, atro-rubro-brunneo cinctis, 3-5 mm. long.; cæspitulis irregulariter sparsis; hyphis amphigenis, læte rubro-brunneis, septatis, e sub-

recto subflexuosis, apice parce dentatis, 40-65  $\approx$  3,5-4; conidiis hyalinis, 1-7-septatis, teretibus, rectis v. subcurvis, 10-60  $\approx$  2,5.

*Hab.* in foliis Agrostidis, Auburn, Alabama America bor. (DUGGAR et NEWMAN).

188. **Cercospora cæspitosa** Ell. et Ev. Proc. Acad. Phil. 1891, p. 88. 7755

— Plerumque hypophylla; cæspitulis sparsis, atro-brunneis, 0,2-0,3 mm. diam., fere puccinioideis; hyphis dense cæspitosis, brunneis, 3-5-septatis, undulatis, supra geniculatis, 70-100  $\approx$  4; conidiis cylindræco-fusoideis, leviter curvatis, hyalinis, 20-35  $\approx$  3-3,5.

*Hab.* in foliis vivis Eustachydis petrææ et Chloridis Swartzianæ, Ocean Springs Miss. Amer. bor. (S. M. TRACY).

189. **Cercospora seriata** Atk. Cerc. Alab. p. 27. — Maculis amphi- 7756

genis, cinereis, definite brunneo-marginatis atque indefinite flavocinctis, irregulariter oblongis, subinde confluentibus; hyphis epiphyllis, dilute rubro-brunneis, demum saturatioribus, flexuosis, dentatis, 20-50  $\approx$  4, in cæspitulos parallelos fasciculatis; conidiis hyalinis, subcylindræcis, rectis vel curvis evanide 2-6-septatis, 30-70  $\approx$  3-3,5.

*Hab.* in foliis Sporoboli asperi, Auburn, Alabama Amer. bor. (DUGGAR et NEWMAN).

## HETEROSPORIUM Kl. — Sacc. Syll. IV, p. 480.

1. **Heterosporium Goiranicum** C. Mass. Contr. Mic. Ver. p. 117. — 7757

Cæspitulis suborbicularibus, glauco-subvirentibus, stromate parvo, celluloso insidentibus, epiphyllis vel amphigenis; hyphis fertilibus, olivaceo-cinereis, erectis, dense fasciculatis, 1-2-septatis, 50-65  $\mu$ . long., simplicibus, apice nonnihil subincrassato-obtusis; conidiis acrogenis, raro subcatenulatis, elliptico-oblongis, longitudine varia, 5-7  $\mu$ . cr., plurimis continuis, aliis 1-3-septatis, superficie granulato-scabris.

*Hab.* in foliis marcescentibus Rosæ caninæ?, Precastio pr. Tregnago in agro veronensi.

2. **Heterosporium Laburni** Oud. Contr. Myc. Pays-bas XII, p. 33. — 7758

Maculis aridissimis, ex griseo fuscescentibus, linea e rubro fusca limitatis; cæspitulis amphigenis, griseis, densis, e basi stromatica, cellulosa oriundis, flexuosis, nodosis, circ. 100-240  $\approx$  4,5, dilute griseis, simplicibus, septatis; conidiis acrogenis, ovoideis, oblongis aut cylindræco-oblongis, utrinque rotundatis, minoribus continuis, 4  $\approx$  2,5, majoribus, 2-4-septatis, paullulum continuis, asperulis, fuligi-

neis vel dilutissime fuscescentibus,  $25 \approx 10$ , nonnullis piriformibus, majoribus, imo maximis quibusdam muriformibus.

*Hab.* in foliis Cytisi Laburni, in horto zoologico La Haye Hollandiæ.

3. **Heterosporium Laricis** Cooke et Mass. Grev. XVI, p. 80. — Cæ. 7759  
 spitulis sparsis, suborbicularibus, lanuginosis, fuligineis; hyphis crassis, septatis, ad septa ventricosis,  $15-18 \mu$ . cr.; conidiis ellipsoideis, utrinque obtusis, 1-3-septatis, verruculosis, pallide fuligineis,  $50-60 \approx 20$ .

*Hab.* in foliis Laricis, Norfolk Britanniæ.

4. **Heterosporium hybridum** Ell. et Ever. Journ. Mycol. 1889, p. 70. 7760  
 — Subcuticulare, dein erumpens; cæspitulis griseo-olivaceis, oblongis, velutinis,  $2-3 \approx 1-2$  mm. vel confluentibus, 1 cm. vel ultra diam.; hyphis erectis, simplicibus vel parce ramosis, septatis, 100 v. ultra  $\mu$ . long.,  $5-7 \mu$ . cr.; conidiis ellipsoideis vel oblongo-ellipsoideis, 1- v. rarius 2-septatis, minute hispidis, constrictis.

*Hab.* in caulibus emortuis Cleomes integrifoliæ, Helena, Montana Amer. bor. (Rev. T. D. KELSEY).

5. **Heterosporium Stenhammariae** Rostr. Till. Groenl. Svamp. p. 630. 7761  
 — Hyphis cæspitosis, parce ramulosis, fuscis, septatis; conidiis pleurogenis, oblongatis, valde variabilibus, simplicibus vel ut plurimum 1-3-septatis, asperulis,  $12-22 \approx 7-9$ , flavo-brunneis.

*Hab.* in Stenhammariae maritimæ, Kaersut Groenlandiæ (S. HANSEN).

6. **Heterosporium Chloridis** Speg. F. Guar. nonn. n. 157. — Maculis 7762  
 nullis v. foliis hinc inde vix cinerescenti-pallescentibus; plagulis hypophyllis, plus minus evolutis, ellipsoideis v. orbicularibus, olivaceis, velutinis; acervulis minutis, in plagulas densiuscule constipatis; hyphis repentibus gracilibus, olivaceis, septulatis; hyphis fertilibus erectis, simplicibus,  $150-200 \approx 5-10$ , septulatis, olivaceis, pellucidis, apice obtusis; conidiis sæpius acrogenis et solitariis, ellipsoideis v. obovatis non v. vix inæquilateralibus, dein 3-septatis, non constrictis,  $20-30 \approx 8-10$ , utrinque obtusis, minutissime (vix perspicue) denseque asperulis, fumoso-olivaceis.

*Hab.* ad folia languida Chloridis sp. in pratis pr. Paraguari Brasiliæ.

7. **Heterosporium cercosporoides** Speg. F. Fueg. n. 449. — Maculis 7763  
 amphigenis, pallide cinerescentibus, indeterminatis, sparsis, parvulis; hyphis cæspitulosis, cylindræis, rectis vel flexuosulis, apice obtusis, 1-3-septulatis,  $50-80 \approx 5-6$ , obscure fuligineis; conidiis acro-

genis, ellipticis, crassis, 1-2-septulatis, 20-25  $\times$  8-10, non constrictis, crasse tunicatis, dense minuteque granuloso-asperulis, pallide roseo-fuliginis.

*Hab.* ad folia languida Agrostidis magellanicae in Staten island Fuegiae. — An satis ab *H. Phragmitis* (Op.) Sacc. distinctum?

8. **Heterosporium callospermum** Speg. Guar. I, p. 166. — Pannoso-  
effusum, irregulariter subpulverulentum, olivaceum; hyphis repen-  
tibus, dense intricato-ramosis, laxè remoteque septulatis, sursum  
suberectis, simplicibus v. brevissime 1-2-ramulosis vel noduloso-  
geniculatis, subinflatis, 4  $\mu$ . cr., dilute olivaceis; conidiis e ge-  
niculis v. apicibus hypharum oriundis, elongato-ellipsoideis, rectis  
vel leniter inæquilateralibus, 30-60  $\times$  12-13, utrinque obtusiuscule  
rotundatis, episporio levi, 3-5-ocularibus v. guttulatis (septis pa-  
rum vel non perspicuis), loculis v. guttulis 1-3 centralibus eximie  
cruciformibus, 2 extimis subconicis, dilute olivaceis.

7764 =  
*Halmiosporium*  
(v. *Hapichadum*)  
*Ravenelii* P. D.  
Sacc. IV, p. 412

*Hab.* ad spicas vivas Sporoboli sp. prope S. Barbara et Villarica Brasiliæ nec non in agro montevidensi et prov. Argentina.

9. **Heterosporium Allii** E. et M., Syll. IV, p. 480. — Var. **Sisyryn-**  
**chii** Speg. F. Fueg. n. 448. — Hyphis erectis cæspitulosis, parcis-  
sime septatis cylindræis, sursum attenuatis, noduloso-geniculatis,  
apice cicatricosis, 50-100  $\times$  5-6, intense fuliginis; conidiis acro-  
pleurogenis non vel subclavulatis, utrinque obtusiusculis, 1-3-se-  
ptatis, 20-30  $\times$  7, ad septa non vel vix constrictulis, rectis vel  
curvulis, minute denseque granuloso-asperulis, pallide roseo-fuli-  
ginis.

*Hab.* ad folia putrescentia Sisyrynchii sp. cujusdam in pratis pr. Wallamatu Fuegiae.

10. **Heterosporium Colocasiae** Masee Dis. of Coloc. p. 48, t. I, f. 2. 7766  
— Cæspitulis olivaceis; hyphis fasciculatis, hinc inde furcatis, oli-  
vaceis; conidiis oblongis, 1-septatis, constrictis, granulatis, pallide  
olivaceis, 25-30  $\times$  10-12.

*Hab.* in Colocasia, Jamaica Amer. centr. — «Multum habet *Trichocladii asperi*».

11. **Heterosporium minutulum** Cooke et Mass. Grev. XVI, p. 11. — 7767  
Cæspitulis atro-olivaceis, velutinis, forma et magnitudine variis;  
hyphis subfasciculatis, brevibus, flexuosis, parce septatis, pallide oli-  
vaceis; conidiis 1-2-septatis, ellipsoideis, utrinque rotundatis, non  
constrictis, pallide olivaceis, rugosis, 16-20  $\times$  6-8.

*Hab.* in foliis Chamæropis pumilis, Kew Britannia.

12. **Heterosporium maculatum** Klot. in Herb. Kew. et Grev. XVII, 7768 p. 65. — Cæspitulis minutis, gregariis; hyphis brevibus, septatis, flexuosis, brunneis, e mycelio radiante, concolori oriundis; conidiis ellipticis, utrinque rotundatis, 1-3-septatis, 25-28  $\approx$  12, episporio minute granuloso-asperatis.

*Hab.* in caulibus foliisque Monocotyledonum, verisimiliter Typhæ et Sparganii in Germania?

13. **Heterosporium Typharum** Cooke et Mass. Grev. XVI, p. 80. — 7769 Cæspitulis elongatis, erumpentibus, gregariis, fuligineis; hyphis erectis, vulgo simplicibus, septatis, nodulosis; conidiis 1-3-septatis, ellipsoideis, utrinque acutiusculis, minute granuloso-rugosis, pallide olivaceis, 30-40  $\approx$  10-14.

*Hab.* in foliis Typhæ angustifoliæ, Kew Britannia.

14. **Heterosporium epimyces** Cooke et Mass. Grev. XVI, p. 80. — 7770 Cæspitulis olivaceis, plus minus densis, velutinis; hyphis parce furcatis, sæpe simplicibus, flexuosis, sparse septatis, pallide fuscis; conidiis 1-3-septatis, ellipsoideis, minute verrucosis, pallide olivaceis, 25-30  $\approx$  3.

*Hab.* in Polyporo squamoso et Boletto felleo, Highgate et silva Dean Britannia.

15. **Heterosporium Algarum** Cooke et Mass. Grev. XVIII, pag. 74 et 7771 XVI, p. 80. — Cæspitulis atro-olivaceis, irregularibus, effusis; hyphis erectis, parce ramosis, basi olivaceis, supra pallidis attenuatisque; conidiis oblongis, cylindræis, 1-3-septatis, leniter constrictis, pallide olivaceis, 30-35  $\approx$  10, demum echinulatis.

*Hab.* in frondibus Laminariæ flexicaulis, prope Hastings Britann. (E. M. HOLMES).

## **NAPICLADIUM** Thüm. em. Sacc. Syll. IV, p. 481.

1. **Napicladium pusillum** Cavara Dissec. Grapp. p. 29. — Hyphis brevibus, molliusculis, fasciculatis, basi incrassatis, obscure 1-2-septatis, olivaceis, pellucidis, 15-30  $\approx$  5-5,5; conidiis acrogenis piriformibus, triseptatis, 20-29  $\approx$  8,4, concoloribus.

*Hab.* in baccis Vitis viniferæ, quam vexat, Stradella agri papiensis Ital. bor.

2. **Napicladium Astragali** Ell. et Ev. Journ. Myc. 1888, pag. 114. — 7773 Cæspitulis dense sparsis, subconfluentibus, atro-fuligineis, amphigenis; hyphis e basi subtuberculari, parenchymatica fasciculariter assurgentibus, 50-75  $\approx$  5-6, fumoso-brunneis, septatis, simplicibus,

subrectis; conidiis oblongo-cylindræis, 1-4-septatis, fumosis, 15-40  $\approx$  11-13, utrinque obtusis.

*Hab.* in foliis Astragali Chamæleuces, Gray, Helena, Montana Amer. bor. (F. W. ANDERSON).

3. **Napicladium Myrtacearum** Speg. F. Guar. II, n. 192. — Maculis 7774 nullis; acervulis hypophyllis, orbicularibus, 2-3 mm. diam., tenuissime effuso-superficialibus, submembranaceis, velutinis, olivaceis; hyphis repentibus, dense intricato-ramulosis, gracilibus, 5-7  $\mu$ . cr., septulatis, olivaceis, hinc inde ramulos fertiles erectos, rectiusculos, rarius flexuosos, 5-10-septulatos, 200-250  $\approx$  4-6, non constrictos, pellucidos, concolores apice pallidiores ac noduloso-papillulatos, gerentibus; conidiis e papillis ramulorum fertilium apicalibus exsurgentibus, elongato-clavulatis, superne abruptiuscule rotundato-subtruncatis, inferne longiuscule attenuatis, 3- rarius 5-septatis, constrictis, 25-40  $\approx$  5-7, pallide olivaceis, loculis 2 (v. 4) internis obscurioribus.

*Hab.* ad folia viva Eugeniæ pungentis in silvis pr. Guarapî Brasilæ.

4. **Napicladium anomalum** Speg. F. Puigg. n. 464. — Hyphis dense 7775 intertexto-ramulosis, repentibus, gracilibus, 5  $\mu$ . cr., plagulas crustaceas, orbiculares asteromatoideas, 3-5 mm. diam., tenuissimas, arcte matrici adnatas, fusco-olivaceas, sæpe confluentes, epiphyllas efficientibus, hyhopodiis destitutis, non torulosis, vix pellucidis; conidiis pleurogenis, e fusoideo clavulatis, 80-120  $\approx$  10, utrinque attenuatis, apice acutiusculis, base subtruncatis, leniter falcatis, e latere concavo tantum constrictis, pellucidis, fusco- vel fuligineo-olivaceis, levibus.

*Hab.* ad folia coriacea plantæ cujusdam ignotæ in silvis prope Apiahy Brasilæ.

*Trib.* 4. *Aerotheciæ* SACC.

**SPONDYLOCLADIUM** Martius — Sacc. Syll. IV, p. 483.

1. **Spondylocladium tenellum** Peck 32 Rep. p. 41. — Cæspitulis te- 7776 nuibus, effusis, subolivaceis; hyphis subcæspitosis, erectis, gracilibus, simplicibus vel raro ramosis, septatis, brunneis, 150-400  $\mu$ . long.; conidiis verticillatis, bi-quaternis, oblongis, continuis, pallidis, 11-14  $\approx$  4-5.

*Hab.* in caulibus emortuis Collinsoniæ canadensis, North Greenbush Amer. bor.

2. **Spondylocladium abietinum** (Zuk.) Sacc., *Cladosporium abietinum* 7777  
Zukal Neue Ascom. p. 8, t. 1, fig. 8. — Mycelio repente, septato, brunneo; hyphis fertilibus erectis, simplicibus, 250-350  $\approx$  4-8, brunneis; conidiis obclavatis, concoloribus apicem versus attenuatis, dilutioribus, 3-4-septatis, guttulatis, basi rotundata insertis et secus hypham longe spicatis, pleurogenis, 38  $\approx$  9.

*Hab.* in fragmentis tuberum Solani, Wien Austriæ. — «Etsi conidia breviora descripta, species fere absque dubio est *Sp. atrovirens* Harz».

**ACROTHECIUM** Preuss — Sacc. Syll. IV, p. 483.

1. **Acrothecium xylogenum** Grove in Journ. of Bot. 1886, p. 203, t. 267, 7778  
f. 2. — Hyphis non maculiculis, erectis, strictis v. curvulis, æqualibus, infra fuscis, sursum pallidioribus, apice fere hyalinis, 120-250  $\mu$ . altis, coronam 6-8 conidiorum gerentibus; conidiis cylindricis, apice rotundatis, basi acutatis, 1-guttulatis, denique tenuiter 3-septatis, hyalinis, 14-17  $\approx$  3.

*Hab.* in ligno putri, Barnt Green Reservoir Britannicæ. — *A. caulium* affine at conidiis semper hyalinis, 3-septatis distinctum. Septa maturitate tantum visibilia.

2. **Acrothecium nitidum** Karst. Symb. XX, p. 99. — Cæspitulis effu- 7779  
sis, nigris; hyphis fertilibus, aggregatis, discretis v. sæpius e tuberculo communi fasciculatim oriundis, erectis, substrictis, rigidis, fragilissimis, articulatis, nigris, nitidis, apice ultimo ramulos 2-4, breves v. brevissimos, flexuosos, pallidiores gerentibus, 200-300  $\approx$  6-21; conidiis fusoido-clavatis, rectis vel curvulis, 6-21- (sæpius 13-) septatis, nigris, nitidis, acrogenis, 60-105  $\approx$  11-12.

*Hab.* in caulibus putridis Cirsii et Urticæ pr. Tammerforsiam et Mustiala Fennicæ. — Vergit ad *Dendryphium*.

*Trib.* 5. Dendryphicæ Sacc.

**DENDRYPHIUM** Wallr. — Sacc. Syll. IV, p. 487.

1. **Dendryphium cladosporioides** Ell. et Ev. Journ. Myc. 1888, p. 114. 7780  
— Hyphis fertilibus erectis, brunneis, septatis, 200-250  $\approx$  6-7, supra plus minus ramosis, indumentum atro-olivaceum, tomentosum formantibus; conidiis pallide brunneis, continuis 1-2-septatis, oblongis, 3-4-catenulatis, 12-15  $\approx$  5, acrogenis.

*Hab.* in caulibus emortuis Lycopersici, Louisiana in America boreali (LANGLOIS).

2. **Dendryphium nubilosum** Ell. et Ev. Journ. Myc. 1888, p. 114. — 7781

Hyphis erectis, pallide fuligineis, subundulatis, plerumque simplicibus, 80-100  $\approx$  6-7, indumentum atrum, tenue efformantibus; conidiis acrogenis, indistincte concatenatis, ex oblongo cylindraceo-oblongis, pallide fuligineis, sæpius subcurvulis, 2-5-septatis, 25-60  $\approx$  10-12.

*Hab.* in foliis et caulibus vivis vel emortuis Astragali flexuosi, Sand Coulee, Montana Amer. bor. (ANDERSON).

3. **Dendryphium acinorum** Ell. et Ev. Journ. Myc. 1888, p. 114. — 7782

Atro-olivaceum, effusum; hyphis erectis simplicibus, septatis, olivaceis, 150-200  $\approx$  4-5; conidiis acrogenis, solitariis vel 2-3-concatenatis, obclavatis, 5-7-septatis, fumoso-brunneis, 40-60  $\approx$  6-7.

*Hab.* in acinis exsiccatis Vitis, Newfield, N. Jersey Amer. bor.

4. **Dendryphium nitidum** Karst. Rev. Myc. 1888. — Cæspitulis effu- 7783

sis, atris, nitidis; hyphis sterilibus, filiformibus, æqualibus, flexuosis v. substrictis, rigidis, atro-fuligineis impellucidisque (sub micr.), 200-300  $\approx$  10-11, apice bi- raro trifidis, ramis brevissimis, articulatis; conidiis in apicibus ramorum acrogenis, subinde catenulatis, elongato-claviformibus, elongatis v. cylindraceis, rectis v. flexuosis, utrinque obtusis, 5-12-septatis, non constrictis, fuligineis semipellucidisque (sub micr.), articulis ultimis pallidioribus, 42-100  $\approx$  10-12.

*Hab.* supra lignum Betulæ ad Mustiala Fenniæ.

5. **Dendryphium muricatum** Ell. et Ev. Proc. Acad. Phil. 1891, p. 92. 7784

— Effusum, nigrum; hyphis erectis, ramulis brevibus, alternatis v. suboppositis donatis; conidiis 4-8-concatenatis, muricato-rugosulis, 3-5-septatis, 30-40  $\approx$  6-7.

*Hab.* in ligno dejecto Pruni virginianæ, Sand Coulee, Montana Amer. bor. (F. W. ANDERSON).

6. **Dendryphium quadrisepatum** Cooke Grev, XVII, p. 65. — Tenue 7785

effusum; hyphis fasciculatis, erectis, obscure septatis ad apicem ramulosis, ramulis plerumque oppositis; conidiis cylindraceis, quadrisepatis, non constrictis, atro-fuscis, 30-35  $\approx$  8-9.

*Hab.* in ramis decorticatis Magnoliæ, New Jersey Amer. bor. (ELLIS).

7. **Dendryphium bulbiferum** Zuk. Unters. p. 4, t. IV, f. 1. — Hyphis 7786

solitariis, fuscis, septatis, supra patule racemoso-ramosis; conidiis catenulatis, dein in massam pulveream solutis, ellipsoideis, brunneolis, episporio levi, 2  $\approx$  1; bulbillis seu gemmis stipitatis, hyphæ primariæ insertis, globulosis, 20  $\mu$ . diam., pluricellularibus, cellula centrali majori.



*Hab.* in ramulis fagineis, Austria. — «Ob conidia minutissima, continua ad *Hormodendrum* potius accedit».

8. **Dendryphium crustaceum** Ell. et Ev. in Bess. et Welb. Rep. Rabr. 7787 1889, p. 85. — Hyphis subramosis, septatis, nodosis, fuscis, 35-140  $\approx$  6-12; conidiis hyphâ saturatioribus, oblongis, 3-5-septatis, crasse tunicatis, 48-60  $\approx$  10-16.

*Hab.* in ligno putri, Milford, Nebraska Amer. bor., socia *Sphaeria* (*Hypoxylo?*) *incrustante*.

9. **Dendryphium sessile** E. et E. Journ. Myc. 1887, pag. 128. — 7788 Stratum plus minus continuum, tenue, nigrum efformans; hyphis fere obsolete; conidiis 2-4-concatenatis, sessilibus, subcylindraceis, brunneis, circ. 5-septatis, 25-45  $\approx$  6-7.

*Hab.* in caulibus emortuis *Smilacis hispidae*, Manhattan, Kansas Amer. bor. (W. T. SWINGLE).

10. **Dendryphium pachysporum** Ell. et Ev. Proc. Acad. Phil. 1891, 7789 p. 92. — Hyphis subfasciculatis, circ. 200  $\mu$ . long.; dimidia parte infera septata, 6  $\mu$ . cr., supera moniliformi, ex articulis 10-15  $\approx$  6-7, olivaceis, continuis vel 1-septatis composita, ramulos 1-2, breves gerentibus; conidiis solitarie acrogenis, subopacis, 2-3-septatis, 25-40  $\approx$  15-20.

*Hab.* parasitica in *Peniophora* sp. in ligno putri, St. Martinsville, Louisiana Amer. bor. (LANGLOIS).

11. **Dendryphium macrosporum** Karst. Hedw. 1889. — Hyphis fertilibus cæspitosis, apice ramulis brevissimis, articulatis, paucissimis, obtusis, instructis, atris, usque ad 200  $\approx$  6-9; conidiis clavulatis utrinque rotundatis, usque ad 15-septatis, non constrictis, atris, fuligineis et semipellucidis (sub lente), usque ad 105  $\approx$  9-12 (concatenatis non visis).

*Hab.* ad furem cannabinum vetustum pr. Mustiala Fenniae. (O. KARSTEN). — E sect. *Brachycladii*.

**BLODGETTIA** Wright in Trans. Irish Acad. XXVIII, pag. 25 (1881) non sensu Harveyi 1858 (Etym. a cl. BLODGETT). — Hyphæ in matrice intracellulares, initio subsimplices, dein subinde anostomosantes, rami priores tantum conidiophori; conidia oblongo-cylindracea, constricto-pluriseptata, breviter stipitellata, colorata. — «Vix *hyphomyces* videtur, sed potius forma *phycomycetoidea*».

1. **Blodgettia Borneti** Wright loc. cit. t. 2, f. 1-3 (non 4, quæ *Cladophoram* sistit). — Conidiis obscure brunneis vel rufescentibus,

inæqualiter toruloideis, 2-5-septatis, hyphis longitrosus subparallelis.

*Hab.* intra articulos *Cladophoræ cæspitosæ* ad oras Americæ borealis et ad Antibes Galliæ (FARLOW, WRIGHT). — Habitus toruloideus, sed ob vitam intracellularem prædistincta species.

#### Sect. 4. Dictyosporæ SACC.

##### Subsect. 1. Micronemeæ SACC.

**SPORODESMIUM** Link — Sacc. Syll. IV, p. 497.

1. **Sporodesmium inquinans** E. et E. Journ. of Myc. 1886, p. 38. — 7792  
 Cæspitulis densis, purpureo-nigris, pulverulentis, iis *Torulæ herbarum* similibus; conidiis subglobosis, rufescentibus, opacis, 12-25  $\mu$ . diam., pedicellatis; pedicellis (hyphis) diametrum conidiorum æquantibus, mox evanidis.  
*Hab.* in superficie inferiore asseris quercini, Plaquemines Amer. bor. (REV. A. B. LANGLOIS). — Affine *S. Leprariæ*, sed magis pulverulentum et conidiis minoribus.
2. **Sporodesmium helicoides** E. et Ev. in Journ of Myc. 1886, p. 38. 7793  
 — Compactum, atrum, crustaceum; cæspitulis 2-3 cm. longis, circiter 1 cm. latis, e conidiis cylindræis, obscure coloratis, multi-septatis, 40-60  $\approx$  6-8, nonnullis rectis, sed plerumque incurvatis, *Helicomyceti* similibus, loculis, uno vel subinde pluribus septulo longitudinali divisus, efformatis.  
*Hab.* in superficie inferiore asseris quercini, Plaquemines Amer. bor. (REV. A. B. LANGLOIS). — Affine *S. larvato*. A *S. helicosporo* distinctum.
3. **Sporodesmium tabacinum** Ell. et Ev. Proc. Acad. Phil. 1891, p. 92. 7794  
 — Effusum, stratum pulverulentum, tabacinum efformans; hyphis sterilibus inconspicuis; conidiis globosis v. oblongis, 25-35  $\mu$ . diam. v. 25-45  $\approx$  20-30, loculis globosis, 6-7  $\mu$ . diam., sæpius breviter pedicellatis.  
*Hab.* in ligno *Populi tremuloidis*, Sand Coulee, Montana Amer. bor. (ANDERSON).
4. **Sporodesmium sorosporioides** Ell. et And. Bot. Gaz. 1891, p. 85, 7795  
 t. X, f. 8-10. — Cæspitulis tenuibus, tabacinis, angustis, elongatis, sublinearibus, 2-5 cm. v. ultra long., regulariter effusis; conidiis 25-40  $\mu$ . diam., loculis laxè glomerulatis et 12-15  $\mu$ . diam.  
*Hab.* in ligno putri, Montana Amer. bor. (ANDERSON).

5. **Sporodesmium toruloides** E. et E. in Fairman Contr. Myc. West. 7796  
N. Y, p. 51, t. IV, f. 3. — Cæspitulis parvis, 1 mm. lat., gregariis, interdum subeffusis, pulviniformibus; conidiis variis sæpius torulosis, e loculis in catenas simplices vel ramosas dispositis, 12-25  $\approx$  5-7, sæpius longitudinaliter divisis vel etiam subglobosis, 5-7  $\mu$ . diam.  
*Hab.* in ligno emortuo et cortice Corni, Lyndonville Americæ borealis.
6. **Sporodesmium moriforme** Peck — Syll. IV, pag. 498 — \***S. corticolum** Karst. Symb. XX, p. 99. — Cæspitulis sparsis vel gregariis superficialibus, ut plurimum orbicularibus v. oblongatis, punctiformibus, atris; hyphis brevibus, teretibus, septatis aut continuis, subsphæroideis, hyalinis; conidiis sphæroideis v. ovoideis vel anguloso-ovoides, septato-muriformibus, fuligineis, opacis, subimpellucidis (sub vitro) 33-42  $\approx$  24-30, v. diam. 11-30  $\mu$ .  
*Hab.* supra corticem vetustum Betulæ in Fennia.
7. **Sporodesmium funereum** E. et Langl. Journ. Myc. 1888, p. 124. 7798  
— Effusum, pulvereum, tabacinum; conidiis globosis, 10-15  $\mu$ . diam., muricato-rugosis, septis 2 verticalibus sub angulo recto intersecantibus divisis, basi pedicello brevi, sæpe conico, hyalino præditis.  
*Hab.* in fragmentis ligneis cistæ ad tumulum, Pointe à la Hache Amer. bor. (LANGLOIS).
8. **Sporodesmium fumosum** Ell. et Ev. Journ. Myc. 1888, p. 53. — 7799  
Stratum tenue, atro-fumosum efformans; hyphis brunneis, ramosis, subtorulosis; conidiis 10-16  $\mu$ . diam. primo sæpe sarcinuliformibus seu 4-ocularibus, septis 2 sub angulo recto inter se secantibus divisis.  
*Hab.* in ramis emortuis Quercus albæ, Newfield, N. Jersey Amer. bor.
9. **Sporodesmium? Alytosporii** Rich. Cat. Champ. Mar. n. 2041. — 7800  
Conidiis brunneis, ellipsoideis vel triangularibus, muriformi-septatis.  
*Hab.* in ramis Rosæ caninæ, inter St. Amand et Lisse Galliæ, socia *Tapesia Rosæ*.
10. **Sporodesmium Macluræ** Thüm. M. U. n. 2074. — Acervulis hy- 7801  
pophyllis, tenuissimis, laxè effusis, velutinis, olivaceis, maculas pul-  
las gignentibus, sed folium vix leviter decolorantibus; conidiis longis-  
sime angustato-clavulatis, apice truncato-rotundatis, longe stipita-  
tis, plerumque curvatis, 6-10-septatis, ad septa non v. vix constri-  
ctis, olivaceo-fuscis, grosse nucleatis, 24-36  $\approx$  6, pedicello æquilon-  
go hyalino, subæquali.

*Hab.* in foliis vivis *Macluræ aurantiacæ*, Aiken Carol. austr. Amer. bor. (RAVENEL). — *S. scirpicolo* affine.

11. **Sporodesmium dolichopus** Passer. in Thüm. Contr. Myc. Lus. 426 7802  
(sine diagnosi) et F. N. IV, p. 15. — Maculis amphigenis fuscis, irregularibus, angulosis, tandem confluentibus; conidiis clavatis, fuscidulis, 10-12-septatis non v. vix constrictis,  $75 \approx 12,5-15$ , loculis nonnullis septulo longitudinali divisis, pedicello hyalino inferne attenuato, æquilongo, fultis.

*Hab.* in foliis languidis Solani tuberosi forte parasiticum in maculis *Phytophthoræ* infestantis, Parma Ital. bor.

12. **Sporodesmium hyalopus** Pat. Bull. Soc. Myc. 1888, p. 125. — 7803  
Cæspitulis punctiformibus, nigris, aggregatis; conidiis ovoideis deinglobosis, initio continuis, dein 1-septatis, demum multiseptatis, papillosis, brunneis, 8-16  $\mu$ . diam., pedicello brevissimo hyalino suffultis.

*Hab.* in caulibus volubilibus (*liane*) inter palos sepiarios, Atures Venezuelæ.

13. **Sporodesmium macrosporoides** Ell. et Gall. Journ. Myc. 1889. 7804  
p. 67. — Discoideum, orbiculare v. subelongatum, 1-3 mm. diam., dein nigrum; hyphis compactis, dein in massam subgrumosam mutatis; conidiis primo ovoideis v. subglobosis, subhyalinis, mox atris et 1-septatis v. sæpius sarcinuliformibus, h. e. subglobosis, 8-12  $\mu$ . diam., ob septa 2 sub angulo recto sese intersecantia 4-ocularibus, demum transverse 3-4 et longitudinaliter 1-pluriseptatis, 30-40  $\approx$  18-20, non pedicellatis.

*Hab.* in caulibus *Artemisiæ tridentatæ*, Glendale, Montana Amer. bor. (F. W. ANDERSON).

14. **Sporodesmium mucosum** Sacc. Syll. IV, p. 506 — var. **pluriseptatum** Karst. et Har. Journ. Bot. 1890, p. 363. — 7805  
Conidiis clavatis vel subcapitatis, apice rotundatis, 1-6-septatis, plus minus constrictis, loculo secundo, subinde quoque primo, septulo longitudinali diviso, dilute flavo-fuligineis, usque ad  $50 \approx 16$ .

*Hab.* in epicarpio *Cucurbitæ* in Anglia (BERKELEY). — Conidia in typo, sec. Fuckel, 2-septata, apice truncata.

### STIGMELLA Lev. — Sacc. Syll. IV, p. 507.

1. **Stigmella Celtidis** Passer. F. N. IV, p. 16. — 7806  
Cæspitulis hypophyllis, nervo mediano insidentibus, solitariis v. aggregatis, globulosis, atris (nunquam hyalinis nec viridibus visis); conidiis e sporodochio celluloso oriundis, aggregatis, oblongis, cuneatis v. sub-

globosis, bi-pluriseptatis, septo longitudinali divisis, stipite brevi, hyalio, fultis, 17-32  $\approx$  10-17,5, atris.

*Hab.* in foliis dejectis Celtidis australis, Parma Ital. bor.

— A *Stigmella Castagneana* Sacc. conidiis grandioribus non constrictis saltem differt.

2. **Stigmella pityophila** Cooke Grev. XVI, p. 71. — Epiphylla; cæ- 7807  
spitulis punctiformibus, atris, sparsis, superficialibus; conidiis aggregatis, oblongis, biseptatis, subconstrictis, septulo longitudinali divisis, pallide olivaceis, 30  $\approx$  12.

*Hab.* in foliis Pini, Harpswell, Maine Amer. bor.

**CONIOTHECIUM** Corda — Sacc. Syll. IV, p. 508.

1. **Coniothecium velutinum** Speg. F. Guar. II, n. 196. — Pulvinulis 7808  
tenuibus, effusis, sæpe totam matricem obtegentibus, aterrimis, subvelutinis; conidiis difformibus, globosis, trigonis, ovoideis, 1-30-cellulosis, ad confluentiam cellularum constrictis, sæpius hyphis minutis, cylindræis, 5-15  $\approx$  2-3, fuligineis primo suffultis, dein appendiculatis; cellulis conidiorum globosis v. e mutua pressione difformibus, minute papilluloso-asperulis, 6-8  $\mu$ . diam. subopace atrofuligineis.

*Hab.* ad palos dejectos cariosos in cultis pr. Guarapî Brasilæ.

2. **Coniothecium antarcticum** Speg. F. Fueg. n. 442. — Acervulis mi- 7809  
nutis, subglobosis, 200-400  $\mu$ . diam., erumpenti-superficialibus densiuscule sparsis aterrimis, compactiusculis; conidiis polymorphis, 1-20-cellularibus; cellulis globosis, 3-5  $\mu$ . diam. v. e mutua pressione angulosis, sæpius grosse 1-guttulatis, crassiuscule tunicatis, dense papilloso-verrucosis, fusco-atris.

*Hab.* ad truncos decorticatos et induratos Fagorum in Staten island Fuegiæ.

3. **Coniothecium anisosporum** Mont. Ann. Sc. nat. 1849, p. 57. — 7810  
Acervulis hemisphæricis, vix  $\frac{1}{5}$  mm. diam., sparsis, tandem confluentibus, atris; conidiis conglobatis et conglutinatis, globosis vel oblongis, angulosis, 15-25  $\mu$ . cr., fusco-atris, opacis, episporio papuloso.

*Hab.* ad corticem arborum in insulis ad Capo Verde Senegambiæ (WEBB).

5. **Coniothecium ampelophlœum** Sacc. *Coniothecium viticolum* Passer. 7811  
F. N. IV, pag. 16 (1888). — Acervulis minutis, punctiformibus, atris, crebre sparsis; conidiis forma et magnitudine variis, globulosis, oblongis, ellipticis, uni-pluriseptatis v. cruciatim partitis aut mu-

riformibus, 5-7  $\mu$ . diam. vel 10-15  $\approx$  5-8, fuligineis, loculis non guttulatis.

*Hab.* in cortice vetusto *Vitis*, Parma, Ital. bor.

5. **Coniothecium viticolum** Cooke et Mass. Grev. XVI, pag. 9 (Sept. 1887). — Cæspitulis erumpentibus, hemisphæricis, nigris, compactiusculis, laxe gregariis; conidiis rotundatis, subglobosis, varie agglutinatis, 2-4-ocularibus, vulgo quaternatis, pallide olivaceis, 12-15  $\mu$ . diam.

*Hab.* in foliis emortuis *Vitis viniferæ*, Kew Britannia. — *C. epidermidis* affine.

6. **Coniothecium globiferum** Corda Ic. I, p. 2. fig. 28. — Acervulis atris, erumpentibus, stromate conico, granuloso, pallido suffultis; conidiis muco luteolo in globulos irregulares conglobatis, subovoideis, fuscis, minutissimis.

*Hab.* in ramulis emortuis *Salicum* in Bohemia.

7. **Coniothecium Ribis** Karst. Symb. XX, p. 108. — Cæspitulis sphaerriiformibus, vulgo conoideis, valde compactis, suberumpentibus, minutis, nonnumquam effusis, superficialibus, olivaceo-atris v. sub-atris; conidiis sphæroideis, levibus, fuligineis et semipellucidis (sub micr.), 16-21  $\mu$ . diam., varie glomerulatis vel catenulatis.

*Hab.* ad ramos aridos *Ribis aurei*, Mustiala Fennia.

8. **Coniothecium alneum** Karst. Symb. XX, p. 99. — Cæspitulis superficialibus, irregularibus, exiguis, atris, solito confertissimis, maculas irregulares efficientibus; conidiis varie glomerulatis v. catenulatis, sphæroideis v. late ellipsoideis, fuligineis (sub micr.), 9  $\approx$  7 v. 5-6  $\mu$ . diam.

*Hab.* in ramulis exsiccatis *Alni glutinosæ*, ad Mustiala Fennia.

9. **Coniothecium Sophoræ** Pass. in Erb. critt. it. II, n. 1179. — Effusum, atrum; conidiis variis, pluricellularibus, cellulis amplis, subclavatis v. sarcinæformibus, rarius ditridymis, fuliginosis; conidiis aliis globosis v. oblongis hyalinis, intermixtis.

*Hab.* in leguminibus adhuc dependentibus *Sophoræ japonicæ*, pr. Parmam Ital. bor.

10. **Coniothecium Cupulariæ** Passer. Diagn. F. N. V, n. 49. — Effusum, punctiforme vel confluens, atrum; conidiis subglobosis, pluricellularibus, fuligineis.

*Hab.* in caulibus siccis *Inulæ viscosæ*, Vigheffio prov. Parma Ital. bor.

11. **Coniothecium caulicolum** Karst. Hedw. 1888, p. 105, Symb. XXII, 7818

p. 148. — Cæspitulis minutissimis, atris; conidiis sphæroideis vel subovoideo-sphæroideis, glomerulatis v. catenulatis, fuligineis, 6-9  $\mu$ . diam., diu conglutinatis.

*Hab.* in caulibus languidis Dianthi barbati, Mustiala Fenniæ.

12. **Coniothecium subglobosum** Cooke Grev. XIX, p. 4 et XVII, p. 65. 7819

— Epiphyllum, gregarium v. sparsum, punctiforme, nigrum; pustulis applanatis, planis, epidermide nigrificata tectis; conidiis subglobosis 8-10  $\mu$ . diam. obscure septatis, opacis, atro-brunneis, asperulis.

*Hab.* in foliis Monocotyledoneæ cujusdam in paludosis in ins. Oceanica Raritonga. — Idem videtur, etsi aliter descriptum, *Coniothecium subglobosum* Cooke Grev. XVII, p. 65: acervulis orbicularibus, applanatis, atris, circ. 1 mm. diam.; conidiis subglobosis v. ovatis, 1-3-septatis, sæpe cruciatis, fuscis 14  $\approx$  10 v. 15  $\approx$  8-9. In foliis Colocasix, Raritonga.

13. **Coniothecium lichenicolum** Linds. New lichenicol. Microfungi 7820

p. 518, t. XXIII, f. 22-28. — Punctiforme, verruciforme, atrum, superficie pulvereum; conidiis initio sphæroideis pallidis dein subcuboideis, cruciato-septatis, sarciniformibus, atro-brunneis 6-12  $\approx$  6, articulis singulis 3-4  $\mu$ . diam.

*Hab.* in lichenibus plerumque sterilibus, saxicolis Lecanora, Isidio, Diplotommate etc. in Britannia etc.

14. **Coniothecium Pyramidula** Bomm. Rouss. Sacc. Contr. Myc. Belg. 7821

IV, p. 96. — Cæspitulis sparsis, fuligineis, punctiformibus, subinconspicuis; hyphis nullis; conidiis fuligineis, globulosis, 9  $\mu$ . diam. quaternatis, raro tri- v. quinatis, pyramidulam obversam in pedicellum brevissimum tenuatam formantibus.

*Hab.* in charta impressa, putri et excrementis murinis fœdata, Watermael Belgii.

**DICTYOSPORIUM** Corda — Sacc. Syll. IV, p. 513.

1. **Dictyosporium secalinum** Delacr. Bull. Soc. Myc. 1891, p. 109, 7822

t. VIII, f. 9. — Acervulis nigris, sparsis v. subconfluentibus et tunc crustam tenuem efficientibus; mycelio fusco, parco stromatice conglutinato; conidiis ovoideis, fusco-olivaceis, 50  $\approx$  8-25, e catenulis 2-5 conidorum haud secedentium formatis constitutis; articulis subcuboideis, 4,5-5  $\mu$ . diam., grosse 1-guttatis; pedicello dilutiore 6-8  $\approx$  4-5.

*Hab.* in basi culmorum Secalis Cerealis putrescentium, Paris Galliaë.

**SPEIRA** Corda — Sacc. Syll. IV, p. 514.

1. **Speira Ulicis** Passer. Diagn. F. N. V, n. 50. — Punctiformis, atra; 7823  
conidiis totis ovatis, 25-30 × 15-25, subsessilibus e catenulis 5-10-  
seriatis, 5-9-articulatis, laxiuscule conjunctis, fuscidulis formatis,  
articulis guttulatis 2,5-3  $\mu$ . diam.

*Hab.* in ramis siccis Ulicis europæi, Collecchio in agro par-  
mensi Ital. bor.

2. **Speira inops** Bomm. Rouss. Sacc. Contr. Myc. Belg. IV, p. 96. — 7824  
Cæspitulis punctiformibus, nigricantibus, leviter pulvinatis, super-  
ficie rugulosis; conidiis e catenulis binis, 15-18 × 4, verticalibus,  
3-4-articulatis formatis, fuligineis, totis 24-27 × 10 (catenulis con-  
fertis) vel 24-30 × 12-15 (catenulis relaxatis), basi subtriangulari  
in pedicellum hyalinum obsoletum abeunte.

*Hab.* in ligno putri Pini silvestris, Groenendael Belgii.

*Subsect. 2. Macronemeæ* SACC.

**STEMPHYLIUM** Wallr. — Sacc. Syll. IV, p. 519.

1. **Stemphylium viticolum** Passer. Diagn. F. N. IV, n. 136. — Acer- 7825  
vulis crebre sparsis, subglobosis, castaneo-fuscis; hyphis brevibus,  
intricatis, septulatis, subhyalinis; conidiis piriformibus, magnitudine  
variis, muriformibus, fumosis, pedicello hyalino, 25-45 × 15-20.

*Hab.* in ramulis siccis Vitis viniferæ, Parma Ital. bor.

2. **Stemphylium insidens** Cooke et Mass. Grev. XIX, p. 49. — Effu- 7826  
sum, atro-fuscum; hyphis tenuibus, effusis, ramosis; conidiis ad  
apicem ramulorum solitariis, ellipticis, triseptatis, ad septa con-  
strictis, una alterave cellula longitudinaliter divisis, atro-fuscis  
18-20 × 8.

*Hab.* in foliis Pleurophylli speciosi, Campbell Island Ame-  
ricæ bor. (KIRK).

3. **Stemphylium paraguayense** Speg. Guar. I, p. 170. — Maculis nul- 7827  
lis; cæspitulis laxè sparsis, punctiformibus, atro-olivaceis; hyphis  
chlorinis v. fumosis, sterilibus effusis, dense ramoso-intricatis, laxè  
septulatis, 2-3  $\mu$ . cr., fertilibus exsurgentibus, rectis, breviusculis,  
1-5-septulatis, 20-50 × 2-2,5; conidiis acrogenis, solitariis, e piri-  
formi-trigono tubinato-globosis, horizontaliter septatis, loculo uno  
alterove longitudinaliter 1-2-septatis, 20-25 × 18-20, olivaceis.



*Hab.* ad folia viva arboris ignotæ in montuosis pr. Peribeby  
Brasiliæ.

4. **Stemphylium opacum** Sacc. F. Abyss. p. 10, fig. 15. — Acervulis 7828  
pulvinatis, exiguis, aterrimis, subinde confluentibus, pulvereis; conidiis sphaericis, 2-3-septato-muriformibus, raro radiatim septatis, ad septa constrictulis, 7-9  $\mu$ . diam., aterrimis (hinc septa ægre conspicienda) brevissime hyalino-pedicellatis, ex hyphis repentibus crebre septatis fuscellis, 2-3  $\mu$ . cr. subsimplicibus enatis.

*Hab.* in caulibus crassioribus decorticatis dejectis, M. Dongolle  
pr. Ghinda Abyssiniæ (PENZIG).

5. **Stemphylium asperosporum** Cooke et Masee Grev. XVI, p. 11. — 7829  
Lanatum, murinum; cæspitulis irregularibus, confluentibus, subeffusis; hyphis repentibus septatis, ramosis, hyalinis, ramis fertilibus, ramosis, erectis, gracilibus, apice subramulosis, ramulis sursum compressis globoso-incrassatis; conidiis globosis e loculis 2-3-4 verrucosis, 12  $\mu$ , circ. diam. efformatis, fuligineo-brunneis.

*Hab.* in charta, Upper Holloway, London Britannicæ. — Nonnullis notis ad *S. Alternariæ* accedit.

6. **Stemphylium (Thyrococcum) punctiforme** Sacc. — Sporodochiis sub- 7830  
superficialibus, amphigenis, pulvinulatis,  $\frac{1}{8}$ - $\frac{1}{5}$  mm. diam., nigris; conidiis globoso-sarciniformibus, 1-2-septato-muriformibus vel radiato-septatis, ad septa constrictis, 10-15  $\mu$ . diam., luteo-olivaceis dein fuligineo-olivaceis; hyphis breviusculis, filiformibus, simplicibus v. furcatis, hyalinis, 2-3  $\mu$ . cr., subinde apice incrassatulis.

*Hab.* in foliis languidis Atriplicis Halimi, Saintes Gallicæ (BRUNAUD). — A typo generis differt hæc species conidiis hyphisque in sporodochium compactiusculum junctis, hinc in posterum sub genere proprio (*Thyrococcum*) aptius seponenda et inter Tubercularieas dematieas pr. *Spegazziniam* locanda. Habitus fere *Epicocci*.

## MACROSPORIUM Fr. — Sacc. Syll. IV, p. 523.

### 1. In Dicotyledoneis lignosis.

1. **Macrosporium cæspitulosum** Rabh. Unio Itin. XXXII, Grev. XVII, 7831  
p. 65. — Cæspitulis initio sparsis, demum confluentibus; hyphis erectis, rigidis, simplicibus; conidiis omnium maximis, oblongo-cylindricis vel clavatis, plus minus curvulis, 64-85  $\approx$  15-17, multiseptatis, basi sæpius in caudam stipitiformem productis.

*Hab.* in ramis *Quercus*, Tempio-Gallura Sardinicæ (Doct. MAR-  
CUCCI).

2. **Macrosporium Oleandri** Rabh. Unio Itin. XXIX et Grev. XVIII, 7832 p. 66. — Conidiis oblongis v. subclavatis, tetrablastis.

*Hab.* in ramis Nerii Oleandri, Tortoli Sardiniae (Doct. MARCUCCI).

3. **Macrosporium Ravenelii** Thüm. M. U. n. 2071. — Caules plus minus ambiens; cæspitulis confluentibus, effusis, atro-olivaceis, velutinis; hyphis continuis, subnodosis, brevi-articulatis, raro ramosis, 4  $\mu$ . cr., fuscis; conidiis clavatis, multiseptatis, ad septa constrictis, cellulis rotundis, vertice rotundatis, fuscis, 30-36  $\simeq$  16-20, pedicello longo, 20-36  $\mu$ . long., parte super. incrassato.

*Hab.* in ramulis subputridis Cassiæ occidentalis, Aiken in Carol. austr. Amer. bor. (H. W. RAVENEL).

4. **Macrosporium puccinioides** Ell. et Anders. Bot. Gaz. 1891, p. 47, 7834 t. VII, f. 7-11. — Cæspitulis hysteriiformibus, angustis, 2-3 mm. long., per corticis rimas longitudinales erumpentibus; hyphis erectis, simplicibus, septatis, flavido-hyalinis, 60-70  $\simeq$  5, dense compactis; conidiis primo 1-septatis, ellipsoideis v. ovoideis, 20-30  $\simeq$  15-20, demum elongatis, oblongis v. oblongo-clavatis, 60-70  $\simeq$  18-22, brunneis, 3-4-septato-muriformibus.

*Hab.* in ramis emortuis Bigeloviae, sociâ *Dothidea Montaniensi*, Helena, Montana Amer. bor. (Rev. F. D. KELSEY). — Habitus fere omnino *Pucciniae*.

5. **Macrosporium Rubi** Ellis North Am. Fungi n. 544 (absque diagnosi). — Maculis epiphyllis numerosis, crebris, pallidis dein candidis, subcircularibus; cæspitulis punctiformibus, paucis, atris; hyphis fasciculatis, filiformibus, tortuosis, septatis, rufo-fuligineis, 50-60  $\simeq$  4; conidiis elliptico-oblongis, utrinque rotundatis, 3-septatis, parce muriformibus, utrinque rotundatis, rufo-brunneis, 22-25  $\simeq$  9.

*Hab.* in foliis adhuc vivis Rubi hispidi, New Jersey Americæ borealis.

6. **Macrosporium Calycanthi** Cav. Mat. Lomb. p. 16, t. I, fig. 7. — 7836 Biogenum; maculis subcircularibus, mediocribus, albo-nitentibus, ochraceo-marginatis, cæspitulis paucis, epiphyllis, sparsis, brunneis; hyphis radiatim fasciculatis, e stomatibus egredientibus, olivaceis, 40-80  $\simeq$  4-6; conidiis piriformibus, basi in pedicellum attenuatis, 3-5-septato-muriformibus, apice obtusis, olivaceis, pellucidis, 50-70  $\simeq$  11-13.

*Hab.* in foliis Calycanthi præcocis, in horto botanico, Pavia Italiæ,

7. **Macrosporium Camelliæ** Cooke et Mass. Grev. XVII, pag. 42. — 7837

Epiphyllum; maculis orbicularibus v. confluentibus, pallidis, margine lato, brunneo cinctis, 1 cm. v. ultra diam.; hyphis cæspitosis, septatis, simplicibus, 30-40  $\mu$ . long., pallide olivaceis; conidiis clavatis, 3-septatis, dein muriformi-multiseptatis, 56-60  $\approx$  15-25, basi in pedicellum gracilem 30-50  $\mu$ . long. attenuatis, pallide olivaceis.

*Hab.* in foliis vivis Camelliæ japonicæ, Kew Britannicæ.

8. **Macrosporium guaraniticum** Speg. Guar. I, p. 171. — Cæspitulis 7838

penicilliformibus, olivaceis, dense aggregatis ac matricis superficiem totam minute velutino-puberulam efficientibus; hyphis erectis, cylindræis, rectis, 3-7-septatis, 70-80  $\approx$  5, apice obtusis, a basi liberis, olivaceis; conidiis clavatis, 5-7-septatis, leniter constrictis, loculis 5 superis verticaliter 1-2-septatis, 2-3 inferis gracilibus, cylindræis, episporio levi, 30-50  $\approx$  10-15, olivaceis.

*Hab.* ad legumina Cassiæ sp. pr. Guarapî Brasiliæ.

9. **Macrosporium baccatum** Ell. et Kell. Journ. Myc. 1889, p. 144. 7839

Hyphis fertilibus indumentum atro-olivaceum, compactum, velutinum efformantibus, parce ramosis v. simplicibus, torulosis, 3-8  $\mu$ . diam., hinc inde incrassatis, guttatis; conidiis acrogenis, ambitu lobulato-irregularibus, e loculis laxiuscule aggregatis, subglobosis efformatis, 16-40  $\approx$  8-27 non pedicellatis.

*Hab.* in fructibus vetustis *Æsculi argutæ*, Manhattan, Kansas Amer. bor. (KELLERMAN et SWINGLE).

II. *In Monocotyledoneis herbaceis.*10. **Macrosporium canificans** Thüm. M. U. n. 2280 (absque diagnosi). 7840

— Maculis caulogenis sparsis, oblongis, albidis; acervulis atris, sparsis, minutis; hyphis brevibus subcæspitosis simplicibus, crebre septatis, 30-40  $\approx$  5, fuligineis; conidiis ovato-oblongis, basi acutioribus, 3-septato-muriformibus, ad septa constrictis fuligineis, guttulatis, 22-26  $\approx$  10-12.

*Hab.* in caulibus emortuis Hibisci esculenti, Aiken Carol. austr. Amer. bor.

11. **Macrosporium Readeri** Winter in Rev. Myc. 1886, p. 212. — Cæ- 7841

spitibus effusis substratum longe lateque obducentibus, aterrimis, fasciculis hypharum plus minusve convergentium, minutis, discretis constitutis; hyphis erectis, simplicibus, longissimis, rigidis, valde flexuosis torulosisque, dense septatis, fuscis, 300-320  $\approx$  9-10,5; conidiis clavatis, sursum in caudam filiformi-cylindricam dilutiorem attenuatis, septis transversalibus 10-14, septis longitudinalibus 2

aut pluribus in cellulis latioribus præditis, toruloso-constrictis, fuscis, 100-140  $\approx$  19-20.

*Hab.* ad caules aridos *Cynaræ Scolymi* pr. Melbourne Australiæ (READER). — Ab omnibus affinibus hyphis elongatis, validis, conidiorum magnitudine formaque diversum.

12. **Macrosporium spaniotrichum** Rabh. Unio Itin. XXIX et Grev. 7842 XVII, p. 66. — Cæspitulis gregariis, erumpentibus, minutis, atris; hyphis brevibus, simplicibus, septatis, conidia æquantibus, hyalinis; conidiis elongato-ellipticis, triseptatis (nondum muriformibus) fuliginis, 30  $\approx$  10.

*Hab.* in caulibus herbaceis, Terranova Sardinia (Doct. MARCUCCI). — Ad *Macrosporium* vix pertinens.

13. **Macrosporium Chelidonii** Rabh. Unio Itin. XXXVII (absque diagnosi). 7843

*Hab.* in caulibus *Glauci flavi*, Alghero Sardinia (Doct. MARCUCCI). — Speciei exemplaria non vidi; quæ in Herb. Kew., teste Cooke, sunt sterilia.

14. **Macrosporium elegantissimum** Rabh. Unio Itin. XXXV et Grev. 7844 XVII, p. 65. — Cæspitulis densis, erumpentibus, atris, floccosis; hyphis simplicibus, subtilibus, hyalinis; conidiis subglobosis oblongisve, varie divisis, sæpe muriformibus, dilute aureis, septis obscuris, 12-24  $\approx$  10-12.

*Hab.* in caulibus *Suædæ*, Alghero Sardinia (Doct. MARCUCCI).

15. **Macrosporium Valerianellæ** Roum. in Rev. Myc. 1886, p. 93. — 7845 Hyphis fasciculatis, simplicibus, septatis, 35-45  $\approx$  4-7, claviformibus; conidiis sarciniformibus, multiseptatis, episporio nigrescente donatis, 12-18  $\approx$  10-15.

*Hab.* in caulibus exsiccatis *Valerianellæ discoideæ*, Rouen Gallia, sociâ *Phomâ herbarum* (Ab. LETENDRE).

16. **Macrosporium sarcinæforme** Cav. in Dif. dei parass. 1890, n. 4, 7846 c. ic. — Hyphis sterilibus in parenchymate foliaceo repentibus, hyalinis, ramosis, septatis; hyphis fertilibus e stomatibus egredientibus, brevibus, erectis, rigidiusculis, parce septatis nodulosisque, brunneo-olivaceis; conidiis sarciniformibus, medio constrictis transverse et longitudinaliter septatis, concoloribus, 24-28  $\approx$  12-18.

*Hab.* in foliis *Trifolii pratensis* pr. Pavia Italia.

17. **Macrosporium Carotæ** Ell. et Langl. Journ. Myc. 1890, p. 36. — 7847 Hyphis fertilibus erectis, simplicibus, rectis, brunneis, septatis, demum sursum subramosis, 80-100  $\approx$  4-6; conidiis clavatis, brunneis,

5-7-septatis, 55-70  $\approx$  12-14, loculo uno binisve longitud. divisis, pedicello longo, permanente 80-110  $\approx$  1,5-2,

*Hab.* in foliis vivis, quæ flavescunt dein brunnescunt et torquentur, Dauci Carotæ, St. Martinsville La. Amer. bor. (LANGLOIS).

18. **Macrosporium nigricans** Atkins. Bot. Gaz. 1891. p. 62. — Hy- 7848  
 phis amphigenis, subfasciculatis v. sparsis, 50-140  $\approx$  6-7, nodulosis, septatis, olivaceo-brunneis; conidiis apice oblique obtuse rostratis, medio arcte constrictis, levibus, transverse longitrorsum atque oblique septatis, olivaceo-brunneis.

*Hab.* in foliis Gossypii culti, quod vexat, Alabama in America boreali.

19. **Macrosporium schemnitzense** Bäuml. F. Schemn. III, p. 15. — 7849  
 Maculis epiphyllis, subcircularibus, arescendo dealbatis, fusco-marginatis, cæspitulis parvis, gregariis, brunneis; hyphis fertilibus erectis, ramosis, articulatis, fuscis, 80-100  $\approx$  8, articulis inflatis; conidiis oblongis, utrinque rotundatis, 20-30  $\approx$  14-18, brunneis, levibus, 3-7-septato-muriformibus.

*Hab.* in foliis vivis Galeobdolonis lutei, Bardinova, Schemnitz Hungariæ.

20. **Macrosporium Abutilonis** Speg. Dec. Myc. Ital. n. 58. — Amphi- 7850  
 genum; cæspitulis in macula subdisciformi olivaceo-fusca aggregatis; hyphis articulatis, ramosis, fumoso-hyalinis; conidiis clavatis, 5-7-septatis muriformibusque, pallide flavo-fumidis, prorsus pellucidis, 50-90  $\approx$  10-15 (stipite incluso), stipite subæquilongo, basi attenuato concolore fultis.

*Hab.* ad folia languida Abutilonis Avicennæ, in horto botanico Parma (PASSERINI).

21. **Macrosporium Lycopersici** Plowr. Fung. Dis. Tom. p. 3, f. 6. — 7851  
 Hyphis bene evolutis, nigris, septatis, subflexuosis; conidiis atrofuligineis, irregulariter piriformibus v. subquadrangularibus, muriformibus, 20-70  $\approx$  10-20.

*Hab.* in fructibus Solani Lycopersici, prope King's Lynn Britannicæ.

### III. In Monocotyledoneis, Acotyledoneis etc.

22. **Macrosporium Alliorum** Cooke et Mass. Grev. XVI, p. 80. — Ef- 7852  
 fusum; cæspitulis fuligineis, tenuibus; hyphis flexuosis, simplicibus, septatis, nodulosis, siccis collabascentibus; conidiis ellipsoideis, 3-

septatis, dein in loculos quadrangulares transverse et longitudinaliter muriformi-divisis, succineis et olivaceo-tinctis, 40-50  $\approx$  20-25.

*Hab.* in foliis Allii sp., E. Bergholt Britanniae (BLOXAM).

23. **Macrosporium graminum** Cooke in Rav. Amer. Ex. 606 et Grev. 7853

XVII, p. 66. — Effusum, tenuissimum, nebulosum; hyphis repentibus, demum ramulis assurgentibus, flexuosis, septatis, fuscis; conidiis clavatis, 4-5-septatis, subconstrictis, dein muriformibus, fuscis, 60-70  $\approx$  22.

*Hab.* in foliis Bambusæ, Carolina austr. Amer. bor.

24. **Macrosporium ignobile** Karst. Symb. XX, pag. 100. — Tenuissi- 7854

mum, maculam griseo-fuscam efficiens; hyphis repentibus paucis, abbreviatis, crebre articulatis, simplicibus, dilute fuligineis (sub vitro), 6-9  $\mu$ . cr.

*Hab.* supra culmos Secales aridos pr. Mustiala Fenniae.

25. **Macrosporium Scolopendrii** Cooke Grev. XVI, p. 81. — Maculis 7855

brunneis, orbicularibus v. irregularibus; cæspitulis parvis, sparsis, olivaceis; hyphis brevibus, raro ramosis, septatis, tenuibus; conidiis 3-4-septatis, transverse 1-2-septatis, pallide brunneis, 40  $\approx$  15.

*Hab.* in frondibus languidis Scolopendrii vulgaris, Irstead Britanniae.

26. **Macrosporium Polytrichi** Peck 43 Rep. p. 31. — Cæspitulis con- 7856

tinuis, olivaceis; hyphis erectis, septatis, subnodosis, coloratis, 75-100  $\approx$  5; conidiis ellipsoideis, oblongis vel clavatis, coloratis, 2-9-septatis, septis longitudinalibus præditis v. destitutis, 20-60  $\approx$  7,5-15.

*Hab.* in urnis Polytrichi juniperini, Sevey Amer. bor.

27. **Macrosporium utile** Kell. et Sw. II Rep. Agr. Kans. pag. 285, 7857

t. IX, f. 16-17. — Effusum, indumentum atro-brunneum, olivaceum, velutinum efformans; hyphis atris, erectis, septatis, paullum v. non constrictis, simplicibus vel raro ramosis, 50-125  $\approx$  4,5-6; conidiis intense atris, elongato-cylindræis, ellipsoideo-obovatis vel oblongis, basi sæpius breviter pedicellato-angustatis, 3-8-septatis, vulgo constrictis, longitudinaliter pauciseptatis, sæpe irregularibus, 29-67  $\approx$  8-12.

*Hab.* in Ustilaginibus, spiculas Avenæ infestantibus, in Kansas, Canada et Dania. — Fungillus utilis, nam vexat Ustilaginem, quæ vice sua vexat Avenam.

28. **Macrosporium Podophylli** Ell. et Ev. Proc. Acad. Phil. 1891, 7858

pag. 92. — Sæpius hypophyllum, effusum, tenue; hyphis sterilibus repentibus, pallide brunneis vel subhyalinis, ramulis 30-40  $\approx$  4-5 continuis vel leniter septatis, erectis, subhyalinis; conidiis clavatis,

flavo-brunneis, 4-5-septato-muriformibus, 30-50  $\approx$  10-12, basi breviter et distincte pedicellatis.

*Hab.* in *Æcidio Podophylli*, Starkville, Miss. Amer. bor. (prof. S. M. TRACY).

**MYSTROSPORIUM** Corda — Sacc. Syll. IV, p. 539.

1. **Mystrosporium erectum** Ell. et Ev. Journ. Myc. 1888, p. 53. — 7859

Hyphis fertilibus erectis, septatis, fuscis, sursum subhyalinis, 35-40  $\approx$  3-4, indumentum tenue, continuum, atro-fuligineum, subgranulosum efformantibus; conidiis acrogenis, solitariis, obovato-ellipsoideis, 22-25  $\approx$  12-16, subopacis, indistincte locularibus.

*Hab.* in caulibus putribus Zeæ Maydis, Pointe à la Hache, Louisiana Amer. bor. (Rev. A. B. LANGLOIS).

**TRICHÆGUM** Corda — Sacc. Syll. IV, p. 542.

1. **Trichægum Dulcamaræ** Passer. Diagn. F. N. IV, p. 16. — Acervu- 7860

lis hypodermicis, erumpentibus, globosis, fuscis, pulverulentis, stromate cellulis minutis, subglobosis contexto, innatis; hyphis erectis, flexuosis, fuscidulis, apice pellucidis, septatis, circ. 75  $\approx$  2,5-3; conidiis obovatis, basi attenuatis, tri-multiseptatis et muriformibus, fuligineis, pellucidis, ut plurimum 20-50  $\approx$  12-20, stipite hyalino, continuo, recto v. flexuoso, 25-30  $\mu$ . long. fultis.

*Hab.* in ramulis emortuis Solani Dulcamaræ, Parma Italiæ borealis.

**SEPTOSPORIUM** Corda — Sacc. Syll. IV, p. 543.

1. **Septosporium heterosporum** Ell. et Gall. Journ. Myc. 1889, p. 67. 7861

— Maculis sparsis v. plus minus confluentibus, indefinite limitatis, supra rubiginosis, 0,5-1 cm. diam., subtus atro-fumosis v. ob tomentum folii griseis; hyphis hypophyllis, e folii stomatibus fasciculatim exsurgentibus; conidiis primo oblongo-cylindræis, 2-3-septatis, 20-40  $\approx$  5-7, mox constrictis, loculis 1-septatis.

*Hab.* in foliis vivis Vitis californicæ prope Orange, Calif. Amer. bor. (prof. F. L. SCRIBNER).

**DACTYLOSPORIUM** Harz — Sacc. Syll. IV, p. 545.

1. **Dactylosporium brevipes** Grove in Journ. of Bot. 1886, p. 204, 7862

tab. 267, fig. 7. — Gregarium, atrum; hyphis erectis, brevibus, flexuosis, fuscis, sursum pallidioribus, dense septatis, subtorulosis (cellulis subquadratis), simplicibus v. apicem versus furcatis, 50-70  $\approx$

5, apice capitulum aterrimum, compactum, 5-8 conidiorum gerentibus; conidiis obovatis, saturate fuscis, fere opacis, 20-22  $\approx$  10-13, anguloso-cellulosis, septo unico longitudinali, reliquis obliquis vel radiantibus.

*Hab.* in ligno Aceris Pseudoplatani, Sutton Coldfield prope Birmingham, Britanniae. — *D. macropodi* peraffine et quasi varietas, at satis diversum videtur.

**ALTERNARIA** Nees — Sacc. Syll. IV, p. 545.

1. **Alternaria Cucurbitæ** Let. in Roum. in Rev. Myc. 1886, pag. 93. 7863  
— Hyphis brevibus, approximatis, rectis, subsimplicibus, brunneis; conidiis lageniformibus, olivaceis, magnitudine variis, sæpius 60-68  $\approx$  8-9.

*Hab.* in maculis aridis Cucurbitæ Melonis var. cultæ, Rouen Galliae (AB. LETENDRE).

2. **Alternaria Malvæ** Roum. et Let. in Rev. Myc. 1885, pag. 177. — 7864  
Hyphis aggregatis, rectis, brevibus, non septatis, fuligineis, sæpius ramosis; conidiis superpositis, forma variis, subrotundis, sæpius cuneiformibus, brunneis, 33-54  $\approx$  9-14, transverse pluriseptatis.

*Hab.* in maculis aridis foliorum Malvæ crispæ a *Puccinia Malvacearum* vexatorum, Seine-Inférieure Galliae.

3. **Alternaria Brassicæ** (Berk.) Sacc. Syll. IV, pag. 549. — Var. **So-** 7865  
**mniferi** Har. et Br. Rev. Myc. 1891, p. 18. — Hyphis brevibus, torulosis, fasciculatis, densis, 30-40  $\approx$  6-7, fuligineis, 1-2-septatis; conidiis oblongo-clavatis, apice subacutatis, 5-9-septatis, constrictis, septo longitudinali loculos binos vel plures dividente, læte olivaceis, 52-80  $\approx$  14-20, longe pedicellatis.

*Hab.* in fructibus Papaveris somniferi in horto botanico Musei, Paris Galliae (P. HARIOT).

4. **Alternaria lancipes** Ell. et Ev. Journ. Myc. 1888, p. 45. — Hy- 7866  
pophylla, subolivaceo-velutina; maculis rotundis, nigris, concentricè rugosis, subindefinitis, 2-5 mm. diam.; hyphis brevibus, erectis, subfasciculatis, pallide olivaceis, apice noduloso-incrassatis; conidiis primo concatenatis, mox deciduis, sæpius 3-septatis, valde constrictis, loculo infero acuminato, supero obtuse rotundato, demum sursum longitudinaliter divisus.

*Hab.* in foliis vivis Argemones platyceratis Manhattan, Kansas Amer. bor. (W. T. SWINGLE) socio *Glæosporio Argemonis*.

5. **Alternaria Vitis** Cavara Dissecc. grapp. p. 29, t. III, f. 8-11. — 7867  
Maculis epiphyllis, nervisequis, cinerescentibus; hyphis subfascicu-



latis, erectis v. adscendentibus, parce ramosis, septatis, olivaceis, 60-120  $\mu$ . long.; conidiis lageniformibus, cito deciduis, concoloribus 40-60  $\approx$  12-14, transverse et longitudinaliter septatis, ad septa constrictis.

*Hab.* in foliis *Vitis viniferae*, Mazzara, Godiasco, Voghera, Stradella Ital. bor.

6. **Alternaria pulvinata** Cooke et Mass. XVIII, p. 56. — Grisea, pulvinata, 1-1½ mm. diam.; hyphis erectis, densissime fasciculatis, pulvinulos hemisphærico-depressos efformantibus; conidiis ovoideis, utrinque acuminatis, clathrato-septatis, fuscis, 65-70  $\approx$  30-35, demum opacis, isthmis subhyalinis. 7868

*Hab.* in stipitibus *Palmararum*, Java (KURZ).

### SARCINELLA Sacc. Syll. IV, p. 548.

1. **Sarcinella? solanicola** Speg. F. Guar. nonn. n. 160. — Hyphis 7869  
fertilibus e mycelio repente surgentibus, rectis vel flexuosis, 50-90  $\approx$  3, continuis, fusco-atris, subopacis; conidiis monomorphis acrogenis, solitariis, subglobosis, 16-20  $\mu$ . diam., utrinque applanatis, 4-6-cellularibus, constrictis, cellulis monostichis, 10-12  $\mu$ . diam., opace fuligineis.

*Hab.* in foliis vivis *Solanaceæ* cujusdam in dumetis Caá-gua-zú Brasilæ. — Status conid. *Dimerosporii solanicoli*. — Conidia hyalina heteromorpha — hoc in genere typice obvia — non visa, forte jam delapsa.

### Sect. 5. Helicosporæ SACC.

#### Subsect. 1. Micronemeæ SACC.

**HELICOPSIS** Karst. Rev. Myc. 1889, p. 96 (Etym. *helix* et *opsis* aspectus). — Hyphæ obsoletæ; conidia cylindræa, in spiram convoluta seu helicoidea, olivacea (sub lente fuliginea), septata. — Est *Helicomycetes* dematiæus.

1. **Helicopsis olivacea** Karst. loc. cit. — Cæspitulis gregatim spar- 7870  
sis, nonnumquam macula expallente insidentibus, obovoideis v. subsphæroideis, olivaceis, circ. 0,1 mm. lat.; conidiis in spiram arcte convolutis, 9-11-septatis, eguttulatis, dilute fuligineis (sub micr.), 3  $\mu$ . cr., tota spira 7-8  $\mu$ . diam.

*Hab.* in hymenio *Corticis rosei* adhuc vegeti pr. vicum Su-sikais in Fennia australi.

*Subsect. 2. Macronemeæ* SACC.**HELICOSPORIUM** Nees — Sacc. Syll. IV, p. 557.

1. **Helicosporium albidum** Grove in Journ. of Bot. 1886, pag. 204, 7871 tab. 267, fig. 6. — Hyphis erectis, septatis, fere hyalinis, primo simplicibus, dein infra ramosis, 200-300  $\mu$ . alt., 2½-3  $\mu$ . crass., supra æque ac ramis longis, adscendentibus, sterilibus et flagelliformibus; conidiis lateralibus, substipitatis, hyalinis, pluriguttulatis, 2-2½  $\mu$ . crass., basi attenuatis, apice obtuse rotundatis, in circulum 15-20  $\mu$ . diam. dense spiraliter convolutis; spiris plerumque quaternis.

*Hab.* in ramis tenuibus Rubi fruticosi, Middleton prope Birmingham Britannicæ. — Cl. Grove non pro certissimo habet hunc non esse statum abnormem, sed cui speciei subjungat, dijudicare nescit. Fungillus maculas albas velutinas efformat.

2. **Helicosporium herbarum** Bomm. Rouss. Sacc. Contr. Myc. Belg. 7872 IV, p. 97. — Cæspitulis minutis, subrotundis, flocculosis, prostratis; hyphis repentibus hyalinis dein fuliginosis, longe ramosis, flexuosis, septatis, 4,5-5  $\mu$ . cr., hinc inde hyalino-denticulatis; conidiis copiosis e denticulis nascentibus, filiformibus, 1,5-2  $\mu$ . cr., in spiram quater arcte convolutis, pluriseptatis, in articulos secedentibus sed non sese evolventibus.

*Hab.* in basi caulium Epilobii hirsuti, Groenendael Belgii. — Affine *Hel. albido*, sed rite distinctum.

3. **Helicosporium diplosporum** Ell. et Ev. Proc. Acad. Phil. 1891, 7873 pag. 93. — Nigrum, effusum, velutinum, tenue; hyphis sterilibus ramosis, brunneis, fertilibus erectis, conferte septatis, subcylindraceis, subopacis, 35-40  $\times$  5-6; conidiis in spiras arcte binatas, plurarticulatas, spiraliter convolutis, brunneis, solitariis, discum circulare basi leviter excavatum, 20-22  $\mu$ . diam. formantibus.

*Hab.* in caulibus emortuis Smilacis, St. Martinsville, Louisiana Amer. bor. (LANGLOIS).

**Fam. 3. Stilbeæ** FR.*Ser. 1. Hyalostilbeæ* SACC.*Sect. 1. Amerosporæ* SACC.**STILBUM** Tode — Sacc. Syll. IV, p. 564.

1. **Stilbum macrocarpum** Ell. et Ev. in Journ. of Myc. 1886, p. 103. — 7874

Stipitibus albis, cylindraceutis vel laxe floccoso-fibrillosis,  $\frac{1}{2}$  mm. altis, circiter 75  $\mu$ . crassis; capitulo subgloboso, atro, 100-125  $\mu$ . diam.; conidiis oblongis, granulosis nucleatisque, 12-20  $\approx$  6-7, subcatenulatis, muco obvolutis, in capitulum arcte congestis.

*Hab.* in ligno putri in America boreali (LANGLOIS). — A *S. parvulo* nisi capitulo atro distinguendum.

2. **Stilbum Spegazzinianum** Sacc., *Stilbum physaroides* Speg. F. Puigg. 7875 n. 465, nec Kalchbr. — Sparsum v. laxissime subgregarium, erumpens; stipite erecto, sordide lateritio-cinnabarino, 1-2 mm. long., 100-150  $\mu$ . cr., gracili compresso; capitulo globoso-hemisphærico, minuto carneo, 400-600  $\mu$ . diam., inferne applanato v. subumbilicato; conidiis obovatis, hyalinis, 6-7  $\approx$  3-4, uni-biguttatis.

*Hab.* ad corticem adhuc virentem arboris cujusdam in silvis pr. Apiahy Brasilæ.

3. **Stilbum Karstenii** Sacc., *Stilbum nigripes* Karst. Hedw. 1889, nec 7876 Carm. — Stipitibus solito fasciculatis, subulatis vel setæformibus, glabris, atris (sub micr. olivaceis), 1-2 mm. altis, capitulo globuloso-flavescente v. pallido; conidiis ellipsoideis, 5-7  $\approx$  3; sporophoris 20-30  $\approx$  0,5-1.

*Hab.* in cortice arborum frondosarum, Sepitiba in Rio de Janeiro.

4. **Stilbum Rehmianum** Rabenh. Hedw. 1862, II, pag. 59, t. X, III, 7877 fig. 2 b, c (*Eustilbum*), — Capitulo globoso, stipite cylindraceuto crassiusculo, ruguloso, triplo longiore suffulto; sporophoris capituli fasciculatis radiantibus filiformibus, hyalinis, in conidia minutissima 1,5-2  $\mu$ . longa, ovoidea, hyalina (catenulata?) abeuntibus.

*Hab.* ad cortices Pini in Germania (REHM). — Diagnosim ex icone erui.

5. **Stilbum Kurzianum** Cooke Grev. XVI, pag. 71. — Solitarium vel 7878 cæspitosum, minutum, capitulo subgloboso, albido; stipite fusco-badio, deorsum leviter incrassato; conidiis ellipticis, nucleo excentrico ornatis, 10  $\approx$  4-5.

*Hab.* in ramis, Seebpore, Bengal, India (KURZ).

6. **Stilbum corallinum** Cooke et Mass. Grev. XIX, p. 91. — Cæspi- 7879 tosum, carneum; stipite sursum attenuato, brevi-ramuloso, farinoso; capitulo hemisphærico vel subirregulari, subgloboso aurantiorubro; conidiis ellipsoideis, continuis, hyalinis, 5  $\approx$  2.

*Hab.* in corticibus, Victoria Australiæ (Mrs. MARTIN).

7. **Stilbum Hibisci** Pat. Journ. Bot. 1891, p. 320. — Sparsum v. mi- 7880 nute gregarium 1-2 mm. alt.; stipitibus erectis, simplicibus v. sursum ramosis, glabris, aurantiorufis; capitulo albo, ovoideo v. sub-

globoso; stipitis hyphis asperulis; basidiis capituli hyalinis, bacillaribus,  $50 \approx 2-3$ ; conidiis solitariis, acrogenis, ellipsoideis,  $10-15 \approx 6-8$ .

*Hab.* in cortice putri Hibisci, Ke So Tonkin Asiæ orient.

8. **Stilbum pilacriforme** Rich. Cat. Champ. Marn. n. 2070. — Minute clavatum, album, breviter velutinum; hyphis capituli apice furcatis et brunneis; conidiis glaucis, hyalinis, piriformibus. 7881

*Hab.* in ligno putri Ulmi campestris et Alni glutinosæ, St. Amand, Soulanges Galliæ.

9. **Stilbum viridipes** Boud. Rev. mycol. 1887, p. 158, t. 44, f. II. — Minutissimum, vix ultra 0,5 mm. alt.; stipite simplici, glabro, erecto, apicem versus sensim attenuato, æruginoso, basi saturatiore; capitulo albo; conidiis ovatis, 2-guttatis, minutissimis,  $1,5 \approx 1$ . 7882

*Hab.* ad ligna putrida, Montmorency Galliæ.

10. **Stilbum xanthopus** Rabenh. Bot. Zeit. 1860, pag. 174. — Gregarium, e subiculo viridi griseo, mucoriformi, dein evanescente enatum; stipite e basi plus minus dilatata cylindræo, capitulum longe superante, tenaci, flavido-subochraceo, rufescente; capitulo exsiccando pulchre smaragdino, demum in stipitis colorem mutato; conidiis minutis, globosis, hyalinis. 7883

*Hab.* in doliis vinariis in cellis, Dresden Germaniæ.

11. **Stilbum sanguineum** Oud. Microm. I, p. 13. — Hypophyllum, sparsum, erectum, 0,5-1 mm. alt.; mycelio albo, lanoso; stipite albo; capitulo perfecte globoso; conidiis e basidiis delapsis, mucilaginis ope in globulum coalitis, perfecte ovoideis, rubescentibus, non concatenateis,  $4,5 \approx 2,5$ . 7884

*Hab.* in foliis putridis Gneti Gnomonis in horto botanico Amsterdam Hollandiæ.

12. **Stilbum nigripes** (Carm.) Cooke Grev. XVI, p. 81, *Isaria nigripes* Carm. in Herb. Kew. — Minutum; capitulo subgloboso, albedo, stipite capillari, nigro, 2 mm. long. glabro, rigidulo; conidiis globosis, hyalinis,  $4-5 \mu$ . diam. 7885

*Hab.* in foliis emortuis quercinis, Appin Britanniæ.

13. **Stilbum albo-roseum** Pat. Bull. Soc. Myc. 1888, p. 126. — Stipite roseo, erecto, cylindræo, glabro, utrinque atque interdum medio incrassatis; capitulo globoso, roseo-albo; conidiis ovoideis, hyalinis. 7886

*Hab.* in fructibus putridis Protii, Puerto Zamuro Venezuelæ.

— Fungus 2-3 mm. alt.

14. **Stilbum herbarum** Rabenh. Bot. Zeit. 1858, p. 303. — Sparsum, 7887

clavatum, stipite brevi, rigido, ex albo lutescente, basi dilatato; capitulo rotundato-elongato, mox turbinato, fuscescente; conidiis ovoideis, hyalinis.

*Hab.* in foliis, petiolis capitulisque *Eryngii campestris*, pr. Daemitz Germaniæ.

15. **Stilbum physaroides** Kalchbr. Grev. XIX, pag. 6. — Stipitibus 7888  
sparsis, vitellinis, brevibus, deorsum incrassatis; capitulo subglobo-  
boso, laxo, albido; hyphis furcatis vel breviter ramulosis; conidiis  
ovoideis, hyalinis, 4-5 = 2.

*Hab.* in caulibus herbaceis in Capite Bonæ Spei Afr. austr.

16. **Stilbum Bambusæ** Pat. Bull. Soc. Myc. 1888, p. 125. — Grega- 7889  
rium, 2-3 mm. alt.; stipite cylindraceo, capitulo pallidiore, gracili,  
pruinoso, basi fibrillis radiantibus cincto; capitulo subgloboso, sub-  
tus depresso, roseo; conidiis ovoideis, utrinque obtusis, hyalinis,  
1-2-guttatis, 5-6 = 3.

*Hab.* in culmis *Bambusæ*, Puerto-Perico Venezuelæ.

17. **Stilbum capillare** E. et E. Journ. Myc. 1888, p. 46. — Stipite 7890  
capillari, albo, levi,  $\frac{1}{2}$ - $\frac{3}{4}$  mm. alt., 20-25  $\mu$ . cr., capitulo ovoi-  
deo, dilutissime carneis, circ. 75  $\mu$ . diam.; conidiis oblongo-ellipsoi-  
deis, 3-4 = 0,5, hyalinis, 2-guttatis.

*Hab.* parasitice in *Trichia varia*, Jamesville, N. York Amer. bor. — *St. aciculoso* subaffine.

18. **Stilbum sebaceum** E. et E. Journ. Myc. 1888, p. 116. — Album, 7891  
gregarium, 0,5 mm.; stipite albo, tomentoso-pubescente, laxe fibro-  
so, 40-50  $\mu$ . cr.; capitulo obovato v. subgloboso, 150-200  $\mu$ . diam.  
albo, dein carneo; sporophoris ramosissimis; conidiis subglobosis  
vel subellipsoideis, 4-5  $\mu$ . diam., hyalinis, plerumque 1-guttatis,  
demum cum iis capitulorum vicinorum in massam glæosporioideam  
conglutinatis.

*Hab.* in Stereo spadiceo, Newfield N. J. Amer. bor., socio *Penicillio Hypomycetis*.

19. **Stilbum citrinellum** Cooke et Mass. Grev. XVI, p. 81. — Minu- 7892  
tum, sparsum; stipite erecto, cylindrico, albido; capitulo subglo-  
boso, flavo-citrino, sursum subattenuato; sporophoris compactis  
apice furcatis; conidiis solitariis, ellipsoideis, continuis, hyalinis,  
7-9 = 4.

*Hab.* in foliis languidis *Lycopodii*, Kew London Britannia.  
— Totus fungillus 2 mm. altis.

20. **Stilbum formicarum** Cooke et Mass. Grev. XVIII, p. 8. — Sti- 7893  
pitibus elongatis, gracilibus 5-8 mm. long., atris, flexuosis, deor-

sum leviter incrassatis; capitulo obovato, roseo; conidiis ellipticis 10  $\approx$  3, hyalinis.

*Hab.* in Formica emortua Cheltenham, Victoria Australiæ (FRENCH).

21. **Stilbum caninum** Cooke et Mass. Grev. XX, p. 26. — Gregarium, 7894  
clavatum v. subspathulatum, carneum, 5-7 mm. alt., capitulo obscuriore, cum stipite glabro continuo; conidiis ellipsoideis, continuis, hyalinis, 5  $\approx$  3.

*Hab.* in stercore canino, Victoria Australiæ (MARTIN). — Stipes passim furcatus. *St. fimetario* majus, conidiis minoribus.

22. **Stilbum humanum** Karst. Rev. Myc. 1888. — Stromatibus gre- 7895  
gariis, subinde compactis, connatis, fragilibus, furfuraceis, usque ad 1 mm. altis, capitulis sphæroideis, ovoideis vel inæqualibus, difformibus, dein cinerescentibus; stipite tereti vel vario compresso, albido, crassiusculo; conidiis sphæroideis, chlorino-hyalinis, mucobvolutis, 3  $\mu$ . diam. v. 4  $\approx$  3, copiosis acervatis.

*Hab.* in merda humana prope Mustiala Fennicæ. — Si conidia non essent mucobvoluta, species ad *Ciliciopodium* ducenda.

23. **Stilbum coprogenum** E. et E. Journ. Myc. 1888, p. 116. — Sti- 7896  
pite molli, deorsum rubenti-brunneo, sursum pallidiore, subæquali, 5-6 mm. alto, 0,2-0,3 mm. cr.; capitulo flavido-albo, clavato, 1,5 mm. long.; conidiis breve ellipsoideis vel subglobosis, subhyalinis, 3-3,5  $\mu$ . long.

*Hab.* in stercore animalis cujusdam (Taxideæ?) in silvis humidis Newfield N. J. Amer. bor.

### **CORALLODENDRON** Jungh. — Sacc. Syll. IV, p. 576.

1. **Corallo dendron cervinum** Cooke et Mass. Grev. XVI, pag. 71. — 7897  
Stromatibus erectis, rigidis, cervinis ad 25 mm. long., et hyphis violaceis, septatis 10  $\mu$ . diam. compositis; stromate sparse ramoso, ramis breviter ramulosis, ramulis numerosis, patentibus, brevibus, apice in capitula globosa incrassatis; conidiis ovalibus 12  $\approx$  7-8, primo (3-4) catenulatis.

*Hab.* in seminibus Landolphiæ ex Africa (E. M. HOLMES). — Articulus ultimus hypharum compactarum est fuscillus et, tamquam basidium, gerit conidiorum catenulas.

### **CILICIOPODIUM** Corda — Sacc. Syll. IV, p. 577.

1. **Ciliciopodium auriflum** Gerard in Grev. XIX, p. 15. — Stipitibus 7898

elongatis, setulis strigosis, aureo-flavidis; capitulo piriformi vel clavato, albido; conidiis minutissimis globosis, 1  $\mu$ . vix excedentibus.

*Hab.* in Dædalea unicolore in America boreali.

**CLAVULARIA** Karst. Symb. ad Myc. Fenn. IX, p. 67 (Etym. a *clavula*). — Stipites teretes, ex hyphis tenuissimis, longitudinalibus, coalitis constantes, superne clavato-conidiophori. Conidia fusioidea vel teretia, simplicia, eguttulata, hyalina. — «Genus *Ciliciopodio* affine, an ab eo satis distinctum?»

1. **Clavularia fuispora** Karst. Symb. ad Myc. Fenn. IV, pag. 67. — 7899  
Sparsa vel gregaria, obovato-clavata, pallida seu albida, circiter 1 mm. alta; strato conidiorum ceraceo, siccitate subcollabente; conidiis fusioideis, rectis, concatenatis, 6-9  $\approx$  2-3,

*Hab.* ad lignum induratum populinum prope Mustiala Fenniae. — Primo obtutu pro specie *Pistillaricæ* vel *Caloceræ* facile sumitur.

2. **Clavularia stenospora** Karst. Symb. ad Myc. Fenn. IX, p. 67. — 7900  
Stipitibus oblongato-clavatis, breviter stipitatis, albidis; conidiis cylindraceutis, rectis, hyalinis, 4,5-6  $\approx$  1-1,5.

*Hab.* ad lignum sectum Alni incanæ prope pagum Kytö in parocia Tammela Fenniae.

3. **Clavularia mycogena** Karst. Symb. XIX, pag. 92. — Stromatibus 7901  
dense gregariis, 0,5-1 mm. alt.; stipite teretiusculo v. compresso, crasso, stricto, dein glabrescente, albido; capitulo ovoideo v. sphaeroideo, ceraceo, nudo, flavescente (saltem in sicco); hyphis dense radiato-fasciculatis, filiformibus; conidiis elongatis vel oblongatis, rectis, hyalinis, 4-6  $\approx$  1-2.

*Hab.* in Fuligine variante vetusta pr. pagum Mansikkanie-mi par. Tammela Fenniae.

**PILACRE** Fr. — Sacc. Syll. IV, p. 579.

1. **Pilacre Solani** Cohn et Schöt. in Schröt. Pilze Schles. p. 385 (*Pi-* 7902  
*lacrella*). — Gregaria, minutissima, albida; stipite usque ad 2 mm. alt., ex hyphis dense intertextis composito, supra abrupte in discum planum vel subconvexum, circ. 1 mm. lat., album, e basidiis clavatis, 60-70  $\approx$  6-7 et paraphysisibus prominulis efformatum, dilatato; conidiis solitariis, elongato-ovoideis, 15-17  $\approx$  7-9, basi acuminatis, hyalinis, membrana levi.

*Hab.* in tuberibus Solani tuberosi, Breslau Silesiæ (F. COHN).

2. **Pilacre poricola** Rich. Cat. Champ. Marn. n. 2074 (*Ecchyna*). — 7903  
 A *P. faginea*, cui omnino affinis, differt præcipue statura majore.  
*Hab.* in poris Polypori (Fomitis) salicini putris in silvis  
 St.-Amand Galliæ.

**COREMIUM** Link — Sacc. Syll. IV, p. 581.

1. **Coremium vulpinum** Cooke et Mass. Grev. XVI, p. 81. — Sparsum, 7904  
 ochraceum; hyphis fasciculato-concretis, erectis, septatis, superne  
 ramulosis; conidiis ellipticis, uniguttulatis, concatenatis, hyalinis,  
 10  $\approx$  5; capitulis compactis, mucro hyalino involutis.  
*Hab.* in stercore vulpino (ex herb. HOOKER, sed locus non  
 indicatus).
2. **Coremium cinereo-album** (Bon.) Sacc., *Scleromitra* Bon. Handb. 7905  
 pag. 141, t. X, fig. 243. — Capitulo obovato, griseo-cæsi, stipite  
 albo cylindræo, paullo longiore; hyphis fasciculatis, filiformibus  
 septulatis, hyalinis, sursum bis ter dichotomo-ramosis in catenulas  
 conidiorum abeuntibus; conidiis ellipsoideis, minutis, hyalinis.  
*Hab.* gregatim in excrementis in Guestphalia.

**MICROSPATHA** Karst. Rev. Myc. 1889 (Etym. *micro* parvus et *spa-*  
*tha*). — Stromata verticalia, spathulata, plana, distincte stipitata,  
 submembranacea, inferne conidifera. Conidia concatenata, sphæroi-  
 dea vel ellipsoidea, continua, hyalina.

1. **Microspatha glauca** Karst. loc. cit. — Stromatibus sparsis, defle- 7906  
 xis, submembranaceis, margine sterili tenuissimo ex hyphis coalitis  
 compositis, spathulatis, stipitatis, nudis, glauco- v. olivaceo-palli-  
 dis, siccitate nigrescentibus, 0,5-1 mm. altis, stipite tereti, molli,  
 pallidiore; strato conidiifero infero, gelatinoso-molli, pallido; co-  
 nidiis in catenulas fasciculatas, ramosas, rectas connexis, sphæroi-  
 deis, ultimis seu apicalibus ellipsoideis minoribusque, mucro obvo-  
 lutis, hyalinis, 3-4  $\mu$ . diam. v. 3,5  $\approx$  2-4.  
*Hab.* ad corticem vetustum in Minas Geraes, Sitio Brasilæ  
 (EDW. WAINIO).

**ISARIA** Pers. — Sacc. Syll. IV, p. 584.

1. **Isaria brevis** B. et C. North Am. Fungi n. 585. — Candida, re- 7907  
 ceptaculis, brevibus, linearibus, obtusis, fasciculatis, hispidis; con-  
 diis globosis.  
*Hab.* in ligno emortuo in Pennsylvania Amer. bor. (MICHENER).
2. **Isaria radiata** B. et C. North Am. Fungi n. 584. — Prostrata, 7908



radians, albida, sicca flavida; receptaculis filiformibus obtusiusculis; conidiis globosis, 5  $\mu$ . diam.

*Hab.* in ligno pineo Alabama Amer. bor. (PETERS). — Stromata seu receptacula basi ex hyphis laxius junctis, continuis formata.

3. **Isaria glauca** Ditm. — Syll. IV, pag. 592 --- \***americana** Karst. 7909 Hedw. 1889. — Stromatibus cæspitosis, rarius basi connatis, subsimplicibus, teretibus v. complanatis, apice attenuatis vel obtusis, fuligineo-pallidis, seu fuscescentibus, undique pruina puberula canescente obductis, vix 2 mm. altis; conidiis fuscoideo-oblongatis, rectis, eguttulatis, hyalinis, 4-6 = 1,5-2, pilis asperis fuliginosis v. hyalinis, usque ad 30 = 3.

*Hab.* in cortice arborum frondosarum vetusto in Minas, Lafayette Brasiliæ. — *Isariam glaucam* cum *Is. glaucocephala* conjungit; verisimiliter omnes tres ad unam eandemque speciem pertinent.

4. **Isaria hystricina** Karst. Rev. Myc. 1889. — Stromatibus solito 7910 simplicibus, setaceis v. filiformibus, 1-3 mm. altis et 50-150  $\mu$ . cr., ex hyphis fasciculatis, subcontinuis, flavido-hyalinis tenaciter coactis, præsertim basin versus laxè floccosis, hyphasmate floccoso-intertexto, albido insidentibus, cæspites magnos, circiter 1 cm. latos, argillaceo-alutaceos (in statu sicco) formantibus; conidiis sphæroideo-ellipsoideis vel sphæroideis, eguttulatis, hyalinis, 7-9 = 6 v. 6  $\mu$ . diam.

*Hab.* ad truncum putrescentem Salicis fragilis in oppido Tammerfors Fenniæ.

5. **Isaria straminipes** E. et E. Journ. Mycol. 1888, p. 117. — Stromatibus simplicibus, clavatis, tomentoso-farinosis, capitulo obtuso, circ. 1 mm. cr.; conidiis copiosis, obovatis, hyalinis, 2-2,5 = 1. 7911

*Hab.* in ramis dejectis in umbrosis uliginosis St. Martinsville La. Amer. bor. (LANGLOIS). — Stromata insident subiculo initio flavo, demum tabacino, stipes quoque demum tabacinus. Affinis *I. clavata*.

6. **Isaria rhodosperma** Bres. Verhand. bot. Ver. Brand. 1890, p. X. — 7912 Dense gregaria lateque distributa; stromate albo, clavato, 2-3 mm. longo, apice 1 mm. crasso, ex hyphis cylindræis dense stipatis, 4-6  $\mu$ . latis conflato, strato conidifero farinaceo, læte roseo, corticato; conidiis obovato-elongatis, 5-8 = 3½-4.

*Hab.* in tepidariis horti botan. berlinensis ad truncos Seafortthiæ elegantis, quos ex integro obducit (P. HENNINGS).

7. **Isaria ambigua** Karst. Rev. Myc. 1890, n. 47. — Stromatibus gregariis v. cæspitosis, solito basi membranula albida conjunctis, filiformibus, teretibus v. compressis, vulgo superne in ramos paucos aciculares erectos divisis, nudis, ex hyphis parallelis, filiformibus, coalitis, continuis, 3  $\mu$ . crassis compositis, albidis, siccitate pallidis v. flavescens, subindeque apice obscurioribus, vix 1 cm. alt., 75-150  $\mu$ .; conidiis non visis.

*Hab.* ad lignum putrescens in ollis in Fagervik, prædio Fenniæ (EDW. HISINGER).

8. **Isaria Arbuscula** Bres. et Roum. Rev. Myc. 1890, p. 38. — Stromate gregario, candido, arboriformi, stipite filiformi 2 mm. alt., prædito, sursum in ramos plurimos intricatos protenso, 2,5-3 mm. alt. et lat.; conidiis globoso-ellipsoideis vel obovatis, hyalinis, 8-9 = 6.

*Hab.* in cortice lignorum putrescente in insula St. Thomé (NEWTON).

9. **Isaria aggregata** Cooke et Mass. Grev. XIX, p. 48. — Cæspitosa; stromatibus basi incrassatis, confluentibus, sursum subacutis, simplicibus, rarissime furcatis, subinde compressis flexuosisve, 1 cm. longis, in corticem fasciculato-erumpentibus, fasciculis gregariis, cinereis, glaucescentibus; conidiis albidis, 3 = 2.

*Hab.* in cortice Mahoe Mount Egmond, New Zealand (KIRK).

10. **Isaria fulvipes** Peck 32 Rep. p. 39. — Sparsa v. raro cæspitosa, clavata, 2-4 mm. alt.; capitulo albido v. cinereo, farinoso, obtuso; stipite brevi, aurantio-fulvo, ochraceo; conidiis minutis, ovoideis v. subellipsoideis, circ. 2,5  $\mu$ . cr., filamentis brevibus, processus virides, late divergentes, breves gerentibus, insertis.

*Hab.* in caulibus herbaceis, North Greenbush Amer. bor.

11. **Isaria repens** Cooke Grev. XVI, p. 71. — Stromatibus filiformibus, intertextis, niveis, ex hyphis fasciculatis compositis, ubique sporophora brevia gerentibus; conidiis ellipticis, continuis, hyalinis, 8 = 4-5.

*Hab.* in glumis Gynerii argentei in California. — Anomala species, *Acremonium* compositum imitans.

12. **Isaria plumosa** Cooke Grev. XVI, p. 71. — Solitaria; stromate erecto, ad 25 mm. alto, carneo, plumoso-ramosissimo, ramulis elongatis, attenuatis, undique glabris, subcorneis; conidiis minutis, globosis, hyalinis, 3  $\mu$ . diam.

*Hab.* in nervo foliorum emortuorum in Brasilia (SPRUCE).

13. **Isaria congesta** B. et C. North Am. Fungi n. 586. — Recepta-

culis congestis, gilvis, deorsum nodosis, apice nodulosis; conidiis minutissimis, elliptico-oblongis, acrogenis.

*Hab.* in stromate *Ustulinæ vulgaris* in Carolina inf. Americæ borealis.

14. **Isaria muscigena** Cooke et Mull. Grev. XVI, p. 81. — Pallida, 7920  
gregaria, non fasciculata, stromate erecto, simplici v. furcato compressoque, 2-4 mm. alt.; conidiis majusculis, sphæroideis,  $9 \approx 8$ , hyalinis.

*Hab.* ad truncos inter *Hypnum serpens*, Eastbourne Britannicæ (MULLER).

15. **Isaria suffruticosa** Cooke et Masee Grev. XIX, p. 45. — Sub- 7921  
cæspitosa, alba, 3 cm. alta; stipite distincto, simplici glabro vel subfarinoso, sursum ramoso-diviso, ramis tenuibus intricatis lateraliter acute ramulosis, ramulis ultimis conidiophoris; conidiis anguste ellipsoideis,  $4-5 \approx 1,5$ , in apice sterigmatum brevium solitarie acrogenis.

*Hab.* in brucho quodam hirsuto, New England Australiæ (A. R. CRAWFORD).

16. **Isaria ramosissima** Zoll. Flora 1847, pag. 300. — Subgregaria, 7922  
basi flavescenti albida, apicem versus candida dendroidea, ramosissima, ramulis farinaceis.

*Hab.* ad elytra *Caraborum* emortuorum inter folia putrida in silvis pr. Bant Asiæ orient.

17. **Isaria cuneispora** Boud. in Rev. mycol. 1887, p. 158, t. 44, f. I. 7923  
— Effusa, alba, entomogena; mycelio albo, e filamentis minute granulosis, albis, septatis, racemosis, intricatis efformato; hyphis sporiferis erectis,  $600-700 \approx 2-3$ , simplicibus aut 1-2-ramosis, continuis, hyalinis, apice attenuatis; conidiis solitariis, hyalinis longe conicis, non v. vix granulosis, basi crassiore adfixis,  $12-14 \approx 2-2,5$ .

*Hab.* ad *Araneas* emortuas sub cortice truncorum putridorum in terra jacentium, Montmorency Gallicæ.

18. **Isaria gracilis** Speg. Guar. I, p. 171. — Effusa, crustaceo-tomen- 7924  
tella, candida, hinc inde ramulos tenuissimos, concolores, rectos, simplices,  $9-10 \approx 0,1-0,2$  mm. emittens; ramulis ex hyphis gracilissimis,  $1,5-2 \mu$ . cr., densissime constipatis ac subcoalescentibus, apice tantum liberis efformatis; conidiis acrogenis, ellipsoideis, utrinque acutiuscule rotundatis,  $3-4 \approx 1,5$ , non vel minute guttulatis, hyalinis.

*Hab.* ad *Coleoptera* (*Cassis* sp.) emortua putrescentia in rimis corticis truncorum, Cerro de S. Thomas Brasilicæ.

19. **Isaria melanopus** Speg. F. Puigg. n. 468. — Sparsa v. gregaria; 7925  
stipitibus erectis teretibus coriaceis, basi atris, apice pallidis, glabris 1-5 mm. alt. 150-200  $\mu$ . cr., capitulo clavulato carneo-aurancio 0,5-1 mm. long., 250-500  $\mu$ . cr., levi; conidiis e cylindraceo obovatis, hyalinis, 5-10  $\approx$  3-4, sterigmatibus cylindraceis 10-15  $\approx$  3, apice obtusulis suffultis.

*Hab.* ad corpora putrescentia Coleopterorum in truncis cariosis et muscosis prope Apiahy Brasiliæ. — Species statum conidicum *Cordycipitis australis* Speg. facillime sistens, inter *Stilbum* et *Isariam* nutans.

20. **Isaria lutea** (Brond.) Sacc. *Coniocephalum* Brond. Rec. Crypt. 7926  
Agen. I, p. 17, t. IV, f. 1-3. — Globulosa, primo lutea, demum virescenti-cinerea pulverulenta; stipite concolore, cylindraceo capitulum subæquante.

*Hab.* in stercore murino foliis dejectis quercinis oblecto, Agen Galliæ. — An *I. sulphureæ* affinis? Ceterum hæc et sequens, ignota conidiorum dispositione, ad *Stilbum* referri possent.

21. **Isaria exigua** (Brond.) Sacc. *Coniocephalum* Brond. Rec. Crypt. 7927  
Agen. I, pag. 17, t. IV, f. 4-5. — Subrotunda vel ovoidea, primo alba, demum ærugineo-cinerea pulverulenta; stipite rufo, exili, cylindraceo, capitulum subæquante.

*Hab.* in stercore columbino, Agen Galliæ.

## Sect. 2. Phragmosporæ SACC.

### ARTHROSPORIUM Sacc. Syll. IV, p. 598.

1. **Arthrosporium parasiticum** Winter in Hedwigia 1886, pag. 103. 7928  
— Cæspitulis sparsis, laxis, plerumque ex individuis parcis compositis, minutis,  $\frac{1}{2}$ -2 mm. latis, interdum autem confluentibus et majoribus, ochraceis; stipitibus erectis, simplicibus vel apicem versus furcatis, fulvis, 450-700  $\mu$ . longis, subteretibus, sursum dilatatis, ex hyphis dense coalitis, parallele stipatis, apicem versus divergentibus et conidia gerentibus, compositis; conidiis copiosis, fusiformibus, deorsum in stipitem tenuem attenuatis, sursum acutatis, triseptatis, dilutissime ochraceis, 33-44  $\mu$ . (cum stipite) longis, 5-7  $\mu$ . crassis.

*Hab.* parasitice in *Meliola inermi* in foliis vivis ignotis in insula S. Thomè Afr. occ.

### ATRACTIUM Link — Sacc. Syll. IV, p. 599.

1. **Atractium? cronartioides** Speg. F. Guar. nonn. n. 161. — Maculis 7929

amphigenis, determinatis, irregulariter repando-orbicularibus vel confluenso difformibus, arescentibus, superne cinereo-albis, inferne pallide avellaneis; stipitibus hypophyllis, in maculis laxissime aggregatis, fusco-olivaceis, erectis v. arcuatulis, 0,5-1 mm. alt., 50-100  $\mu$ . cr., cylindræis, basin versus leniter incrassatulis, apice non v. vix attenuatis ac subpallescentibus ex hyphis tenuibus, 2-4  $\mu$ . cr., chlorino-olivascentibus dense fasciculatis, efformatis; conidiis cylindræis, rectis v. vix flexuosis, utrinque obtusiusculis, 40-60  $\approx$  4-5, continuis v. sæpius 3-septatis, non constrictis, levibus, chlorinis, pellucidis.

*Hab.* ad folia languida Bignoniacæe cujusdam pr. Calle-pot pr. Yaguaron Brasilæ.

**SYMPHYOSIRA** Preuss — Sacc. Syll. IV, p. 600.

1. **Symphyosira alba** Karst. in Hedw. 1891, p. 300. — Stromatibus 7930 sparsis v. subgregariis, carnosulis, stipitato-clavatis, glabris, capitulo sphæroideo v. lentiformi, albo, 0,1-0,2 mm. diam. stipite capitulo breviorè lutescente; conidiis cylindræis utroque apice obtusissimis, rectis, concatenatis, pluriguttulatis, hyalinis, usque 36  $\approx$  3.

*Hab.* ad lignum Pini (?) vetustum in agro mustialensi Fenniæ. — Forte var. *Symph. luteæ*.

Ser. 2. **Phæostilbeæ** SACC.

Sect. 1. **Amerosporæ** SACC.

**SPOROCYBE** Fr. em. — Sacc. Syll. IV, p. 604.

1. **Sporocybe Robiniæ** (Schw.) Fr. S. M. III, pag. 342, *Periconia* 7931 Schw. Carol. p. 125. — Cinerea, 12 mm. long.; stipite crasso compresso, rigido, nigricante, sæpe furcato; capitulo inæquali, farinaceo.

*Hab.* ad ramos dejectos Robiniæ, Carolina Amer. bor.

2. **Sporocybe carnea** Rich. Cat. champ. Marn. n. 2088. — Stipite 7932 ex hyphis coalitis, septatis, carneis efformato; capitulo sphærico, compacto; conidiis ellipsoideis, roseis.

*Hab.* in asseribus quærneis vetustis, St. Amand Galliæ. — «Species a typo generis colore desciscit».

3. **Sporocybe Persicæ** (Schw.) Fr. S. M. III, p. 342, *Periconia* 7933 Schw. Car. p. 125. — Mycelio nullo stipite subbulboso, incurvo, nigro; capitulo ovato-globoso, compacto.

*Hab.* ad truncos et ramos emortuos Persicarum, quos fere

spinulosos reddit, Amer. bor. — Verisimiliter status junior *Cornulariæ Persicæ*. In n. 44 Ellis N. A. Fung. (*Sp. Persicæ*) conidia non vidi.

4. **Sporocybe Resinæ** Fr. S. M. III, p. 341. — Atra, mycelio effuso, 7934 floccoso; capitulo rotundato, inæquali; stipite æquali, simplici; conidiis seriatis.

*Hab.* ad truncos resinosos Abietis excelsæ in Suecia. — Passim fungilli 2-3 coalescunt et *Calicii* speciem imitantur.

5. **Sporocybe antarctica** Speg. F. Pat. n. 189. — Stromatibus spar- 7935 sis v. hinc inde plus minusve dense gregariis matrice dealbata insidentibus, atris stipite setaceo, recto v. subflexuoso, cylindraceo, 2 mm. alt. 100-150  $\mu$ . crass. inferne non v. vix incrassatulo, superne abrupte in capitulum subglobosum v. subhemisphæricum, vix pallidius expanso, contextu prosenchymatico subindistincto olivaceo; conidiis globosis, minutis, 2-3  $\mu$ . diam., grosse 1-guttulatis olivaceis.

*Hab.* vulgatissima ad truncos decorticatos cariosos Fagi antarcticæ prope Cabo Negro, P. Arenas, Voces bay Patagoniæ.

6. **Sporocybe cellaris** Peck 42 Rep. p. 33. — Stipitibus 1-1,7 mm. 7936 long., cylindraceis v. e basi subbulbosa v. incrassata attenuatis, rectis, atro-brunneis, ex hyphis dense compactis, capitulo stipite crassiore, fulvo-brunneis; conidiis numerosissimis, globosis, coloratis, 5-6,5  $\mu$ . diam.

*Hab.* in doliis in cella vinaria, Flatbush Amer. bor. (ZABRISKIE).

7. **Sporocybe Lycopersici** Plowr. Fung. Dis. Tom. p. 3. f. 4. — Mi- 7937 nuta, sphærica, 150  $\mu$ . diam., concentrice seriata, capitulo conidiorum sordide carneo; conidiis minutis, cylindraceis v. suballantoideis, hyalinis, guttatis vel eguttulatis, 10  $\approx$  2-3.

*Hab.* in fructibus Solani Lycopersici, Clenehwardon, King's Lynn Britannicæ.

8. **Sporocybe graminea** Karst. Rev. Myc. 1888. — Sparsa vel subgre- 7938 garia, atra, circiter 0,5 mm. alta; stipite cylindraceo, gracillimo, stricto; capitulo obovoideo vel subsphæroideo; conidiis ellipsoideo-sphæroideis vel subsphæroideis levibus, fuligineis (sub lente), uniguttulatis, 15  $\approx$  12 vel 13  $\mu$ . diam.

*Hab.* in foliis culmisque siccis graminum prope Mustiala Fennicæ.

## GRAPHIUM Corda — Sacc. Syll. IV, p. 609.

1. **Graphium squarrosum** Ell. et Langl. Journ. Mycol. 1890, p. 36. — 7939

Cinereum; stipite 0,7-1 mm, 20  $\mu$ . cr., erecto, stricto e fibris arcte fasciculatis composito, extremitatibus liberis dense spiculiferis, subrectangulariter divaricatis, 8-12  $\simeq$  2-2,5, rectis v. curvis, acutis, apice denticulato obtusulo; conidiis ovato-oblongis, hyalinis, continuis, 5-7  $\simeq$  2-2,5.

*Hab.* in ramis emortuis Sambuci, St. Martinsville La. Amer. bor. (LANGLOIS). Occurrunt et conidia majora 10-11  $\mu$ . long. 2-3-nucleata, forte heterogenea.

2. **Graphium? fuegianum** Speg. F. Fueg. n. 454. — Stipitibus densiuscule gregariis sæpe cæspitulosus ac basi confluentibus, cylindræis 0,5-1,5 mm. alt., 50-60  $\mu$ . crass., atris, basi non v. vix incrassatis, apice penicillato-expansis, contextu fibroso-fasciculato fuliginæo; hyphis capitulis gracilibus, dense septulato-coarctatulis, flexuosis, ramulosis, apice liberis; conidiis cylindræis v. ellipticis, utrinque obtusissimis, 2  $\simeq$  1 ac minute 1-guttulatis, hyalinis vel subfumosis, an catenulatis. 7940

*Hab.* ad lignum denudatum putrescens Mayteni magellanicæ prope Ushuvaia Fuegiæ.

3. **Graphium verticillioides** Speg. Guar. I, p. 171. — Dense gregarium, 1-2  $\simeq$  0,3-0,4 mm. rectum, apice simplex rarius subramuloso-fissum, coriaceum, basi glabrum, fusco-atrum, sursum ob hyphas puberulum, sordide rubiginosum; hyphis liberis, ramoso-intricatis, sæpe 2-3-subverticillato-ramulosis; conidiis ellipsoideis, 4-5  $\simeq$  2-5, utrinque acutiuscule rotundatis, hyalinis, non concatenatis, adnato-pleurogenis. 7941

*Hab.* ad ramenta lignea putrescentia in silva pr. Guarapi Brasilæ.

4. **Graphium giganteum** Speg. Guar. I, p. 172. — Subfasciculato-gregarium, sæpe basi confluens, 5-10 mm. alt., 0,2-0,5 mm. diam., erectum, rectum, subcylindræum, simplex, apice subcapitulato-incrassatum vel laciniato-ramulosum, deorsum atrum, glabrum, apice ob hyphas 50-60  $\simeq$  3, dense intricato-ramulosas, puberulum; conidiis non catenulatis, ellipsoideis v. ovoideis, 4-6  $\simeq$  2-2,5, rectis vel vix inæquilateralibus, utrinque obtusiusculis, hyalinis. 7942

*Hab.* ad corticem truncorum putrescentium prope Guarapi Brasilæ.

5. **Graphium rhizophilum** Pat. Bull. Soc. Myc. 1888, p. 126. t. XX, f. 8. 7943 — Capitulo globoso, albo, sicco griseo, stipite cylindræo v. ampulliformi-incrassato, nigro, fibrilloso fulto; conidiis hyalinis, ovoideis minutissimis.

*Hab.* in radicibus vivis, Puerto Zamuro Venezuelæ. — Fungus 1-2 mm. alt.

6. **Graphium calicioides** (Berk.) Cooke et Mass. Grev. XVI, pag. 11, 7944  
*Periconia* Berk. ex p. — Conidiis hyalinis, subellipticis, minutis, 3-4  $\times$  2.

*Hab.* in ligno putri, Kew et Glamis Britannicæ.

7. **Graphium Sorbi** Peck 40 Rep. p. 65. — Maculis sæpius parvis, 7945  
 2-4 mm. lat., orbicularibus, definitis, rubro-brunneis; stipitibus hypophyllis, validiusculis, æqualibus vel sursum attenuatis; hyphis apice divaricatis et hyalinis; conidiis oblongis, hyalinis, 20-25  $\approx$  6-20, interdum minute 1-2-guttulatis.

*Hab.* in foliis Piri americanæ, Adirondack Amer. bor.

8. **Graphium leguminum** Cooke Grev. XVI, p. 71. — Stipitibus gre- 7946  
 gariis, rigidis, erectis, tenuibus, atris 1 mm. long., ex hyphis septatis, atro-fuscis compositis; capitulo conidiorum subelliptico; conidiis clavatis, superne rotundatis, inferne truncatis 20-25  $\approx$  6, hyalinis.

*Hab.* in leguminibus *Rhynchosia* in Carolina inf. Amer. bor. (RAVENEL).

9. **Graphium graminum** Cooke et Mass. Grev. XVI, p. 11. — Spar- 7947  
 sum, minutum, griseum; stipite erecto, ex hyphis delicatis, septatis, hyalinis (seorsim visis); conidiis ellipsoideis, continuis, hyalinis, 6  $\approx$  3-4.

*Hab.* in foliis culmisque emortuis *Gynerii argentei*, Kew London Brit.

## HARPOGRAPHIUM Sacc. Syll. IV, p. 619.

1. **Harpographium quaternarium** Cooke et Mass. Grev. XVI, pag. 3. 7948  
 — Cæspitulis atris, minutis; stipitibus compositis, sursum subclavatis, deorsum subfasciculatis, olivaceis; hyphis septatis, ad apicem leniter incrassatis, subquadri-spiculatis; conidiis fusiformibus continuis, hyalinis, 12  $\approx$  2-3 spiculis tenuissimis, 10-15  $\mu$ . longis; conidiis plerumque quaternatis.

*Hab.* in ramis *Passifloræ*, Brisbane Australiæ (BAILEY).

2. **Harpographium corynelioides** Cooke et Mass. Grev. XVI, p. 16. 7949  
 — Cæspitosum, erumpens, atrum (*Coryneliam* simulans) stipitibus compositis, radiantibus, ad basim connatis, sursum clavatis vel subulatis, simplicibus vel furcatis 2-3 mm. long.; cæspitulis 1 cm. long., 5 mm. lat.; hyphis deorsum dichotomis, fuligineis, sursum



ramosissimis, hyalinis, septatis; conidiis cylindræis, curvulis (allantoideis) nucleatis, hyalinis, 12  $\approx$  3.

*Hab.* in ramis *Leptospermi juniperini*, Port Phillip Australiæ (HAMILTON), Harkaway Range (C. FRENCH).

3. **Harpographium graminum** Cooke et Mass. Grev. XVI, p. 81 (ex errore sub *Haplographyo*). Sparsum, minutum, subsolitarium; hyphis fertilibus pallide olivaceis septatis, in fasciculum stipitiformem connexis sursum relaxatis; conidiis fusiformibus, 2-nucleatis, hyalinis, 12  $\approx$  5.

*Hab.* in graminibus (stramen efficientibus), Hampstead Britannia.

**STEMMARIA** Preuss Fungi Hoyersw. n. 128 (Etym. *stemma* mitra).

— Stipes erectus, compositus, carnosus, supra scopulato-ramulosus, non septatus, capitulum formans. Conidia concatenata, simplicia, floccos moniliformes, apicibus ramorum insertos formantia.

1. **Stemmaria globosa** Preuss Hoyersw. loc. cit. et in Sturm Crypt. Fl. III, tab. 67. — Stipite erecto, supra scopulato, ramoso, fusco; capitulo rotundato candido, floccis conidiorum simplicibus v. ramosis tecto; conidiis ovatis minutis.

*Hab.* in foliis *Pini silvestris* delapsis, prope Hoyerswerda (Pinka) Silesiæ.

**STYSANUS** Corda — Sacc. Syll. IV, p. 690.

1. **Stysanus setaceus** Pass. in Martelli Flor. Bog. p. 149. — Gregarius, fuscus; stipitibus e basi bulboso-incrassata, sensim attenuatis, 250-400  $\mu$ . longis, ex hyphis filiformibus, 2,5  $\mu$ . crassis, continuis, fuliginis formatis; conidiis.....

*Hab.* in ramis putrescentibus *Acaciæ* pr. Keren Abyssiniæ.

2. **Stysanus Calicium** Speg. F. Puigg. n. 470. — Laxe gregarius, superficialis, ater; stipitibus erectis teretibus atris, 1-2 mm. long., 100-150  $\mu$ . cr. levibus; capitulo subgloboso subpulverulento atro-olivaceo 200-250  $\mu$ . diam.; conidiis globosis minutis obscure olivaceis, levibus, 4-5  $\mu$ . diam.

*Hab.* ad palos decorticatos putrescentes late dealbatos in hortis prope Apiahy Brasiliæ. — Species statum conidicum *Calicii peraffinis* Speg. sistens. An huc *Sporocybe calycioides* Fr.?

3. **Stysanus ramifer** Roll. Bull. Soc. myc. 1890, VI, pag. 106 cum icone. — Subsparsus, niger, usque ad 3 mm. alt.; hyphis 2,5  $\mu$ . cr., septatis, olivaceo-fuscis, basi in stipitem coalitis, sursum in

ramos et altius in ramulos conidiorum tot paniculas gerentes, disjunctis; capitulis plerumque lanceolatis; conidiis catenulatis, ovoideis, subangulosis, plus minus oblongis, circ.  $7,5 \approx 5$ , olivaceo-griseis.

*Hab.* in trunco Salicis prope Montmorency Galliæ.

4. **Stysanus bulbosus** Sorok. Mikol. izsledav. p. 31, tav. VI, f. 9-12. 7955  
— Gregarius; stipite 60-80  $\mu$ . long., basi bulboso-incrassato et 16-20  $\mu$ . circ. diam., apice attenuato, 8-10  $\mu$ . cr.; conidiis in catenulas radiantes, stipitis apice insidentes dispositis,  $4 \approx 2$ , subhyalinis.

*Hab.* in fragmentis semiputridis ligneis Pini in Rossia.

5. **Stysanus pallescens** Fuck. Symb. myc. p. 102. — Cæspitulis la- 7956  
xis in macula expallescanti; stipitibus crassiusculis, albidis, minutis ex hyphis dense congestis formatis; conidiis oblongo-ovatis, simplicibus,  $12 \approx 6$ , hyalinis in hypharum curvatarum apice insertis et totum fere stipitem tegentibus.

*Hab.* in foliis vivis Stellarum nemorum, Æstricher Wald Rhenogoviæ. — Status conidicus *Sphærellæ isariphoræ*. «An potius *Graphiothecii* sp.?»

6. **Stysanus capitatus** Reinke et Berth. Zerset. Kertoff. p. 51, t. VI. 7957  
— Solitarius, griseo-brunneus; stipite subcylindræo, simplici vel apice fisso, ex hyphis filiformibus septatis compacto, sursum capitulo subgloboso terminato; conidiis ellipsoideis utrinque rotundatis,  $6 \approx 3$ .

*Hab.* in tuberibus Solani tuberosi vetustis, Germania.

7. **Stysanus Stemonites** (Pers.) Corda — Sacc. Syll. IV, p. 621 — 7958  
var. **fimetarius** Karst. Symb. XIX, p. 93. — Stipitibus simplicibus, rarissime ramosis, sparsis vel gregariis, setuliformibus, teretibus, strictis vel leniter flexuosis, gracillimis, nigrescentibus, circ.  $120 \approx 30$ ; capitulo elongato-cylindræo, primitus pallescente; hyphis sterilibus ramosis, articulatis, dilutissime fuligineis, parcis, circ. 6  $\mu$ . cr.; conidiis ovoideis vel subglobosis, e glaucescente dilute fuligineis, semipellucidis, subverrucosis,  $6-8 \approx 4-5$ .

*Hab.* in stercore Arvicolæ agrestis pr. Mustiala Fenniæ.

**GRAPHIOTHECIUM** Fuck. — Sacc. Syll. IV, p. 624.

1. **Graphiothecium maculicolum** Karst. Hædw. 1889. — Stromatibus 7959  
macula expallescante subgregatim insidentibus, simplicibus, gracilibus, erectis, strictis, basi perithecioideo-incrassatis, atris, sur-

sum cylindræis, pallidis vel demum fuligineo-pallidis, 4-5 mm. long., 15-30  $\mu$ . cr.; conidiis non visis.

*Hab.* in foliis languidis et emortuis Magnoliæ? in Minas Lafayette Brasiliæ.

**BASIDIELLA** Cooke in Grev. VI, p. 118 et Some Moulds p. 1 (Etym. a *basidio*). — Stipites ex hyphis paucis compositi, fusci, clavati apice capitato-conidiophori. Hyphæ clavatæ, superne basidiis minutis ornatae. Conidia capitato-congesta, globosa, asperula, fuliginea.

1. **Basidiella sphærocarpa** Cooke in Grev. IV, p. 118 et Some Moulds 7960 pag. 1, t. IX, f. 1. — Stipitibus brevibus, ex hyphis tribus v. amplius, parce coalitis, compositis, fuligineis; hyphis sursum clavatis, continuis, basidiis acicularibus præditis,  $\frac{1}{10}$  mm. altis, 30  $\mu$ . latis, basi attenuatis, 5  $\mu$ . diam., mycelio repente, brunneo insertis; conidiis in capitulum globosum congestis, sphæroideis, episporio verruculoso, 4  $\mu$ . diam. fuscis.

*Hab.* in ligno emortuo putri Gloriosæ superbæ, Madras Indiæ.

**BRIOSIA** Cav. Bitt. Rot. pag. 31, t. V, f. 1-3 (Etym. a cl. prof. G. BRIOSI direct. Horti Papiensis). — Stroma verticale, cylindræum, stipitatum, hyphis fasciculatis compositum, apice capitulum compactum efformans; conidia globosa, typice catenulata, fusca, acrogena. — Quoad affinitates cfr. Cav. loc. cit.

1. **Briosia ampelophaga** Cav. loc. cit. — Stipibus elongato-cylindræis, basi leviter dilatatis, albidis; capitulo compacto globoso vel subhemisphærico, ochraceo; sporophoris simplicibus, parce septatis, articulis constrictis; conidiis globosis, acrogenis, catenulatis, 4-5  $\mu$ . diam., brunneis.

*Hab.* ad baccas Vitis viniferæ, Stradella in agro ticinensi Ital. bor.

**ANTROMYCES** Fres. — Sacc. Syll. IV, p. 626.

1. **Antromyces Copridis** Fres., Syll. IV, p. 626 — Sec. cl. Boudier Champ. nouv. p. 8, t. XVI [ubi species fuse descripta] conidia sunt diu continua, dein (matura) uniseptata, granuloso-nubilosa, pallide fuscescentia, 13-20  $\times$  5-8. Nascitur quoque in folliculis Copridis lunaris in Gallia merid.

*Sect. 2. Didymosporæ* SACC.**DIDYMOBOTRYUM** Sacc. Syll. IV, p. 626.

1. **Didymobotryum atrum** Pat. Journ. Bot. 1891, p. 320. — Filiforme, 7962  
sparsum, 0,5-1 mm. alt.; stipite recto, cylindraco, circ. 20  $\mu$ . cr.,  
ex hyphis gracilibus, septatis, brunneis, 2-3  $\mu$ . cr., subparallelis  
efformato; capitulo subglobo, ex hyphis brunneis, confertis com-  
posito; conidiis brunneis, elongatis, cylindracois, utrinque rotunda-  
tis, 1-septatis, plus minus constrictis, 16-18  $\approx$  6.

*Hab.* in ligno putri, Ke So Tonkin Asiæ orient.

*Sect. 3. Phragmosporæ* SACC.**PODOSPORIUM** Schw. — Sacc. Syll. IV, p. 627.

1. **Podosporium Penicillium** Speg. F. Puigg. n. 471, *Meliola penicil-* 7963  
*lata* Speg. Pug. Arg. n. IV, n. 117. — Stipitibus atris sparsis v.  
laxe hinc inde gregariis erectis 300-400  $\approx$  25, teretibus rigidulis  
apice abrupte penicillatim ramoso-expansis, e fibris gracilibus 5  
 $\mu$ . cr. arcte coalitis, fuligineis, parce septulatis levibus apice liberis  
p. lib. 150-160  $\mu$ . long., verruculoso-scabris, monosporis efforma-  
tis; conidiis in fibris penicillorum acrogenis, cylindraco-fusoideis  
25-30  $\times$  4-5 sursum obtusiuscule attenuatis deorsum elongatulis,  
triseptatis, pallide fuligineis.

*Hab.* in mycelio *Meliolæ calvæ* Speg. parasitans ad folia  
*Laurinæ* cujusdam, *Apiahy* Brasilæ.

2. **Podosporium penicillioides** Karst. et Roum. Rev. Myc. 1890. — 7964  
Stipitibus erectis, atris, teretibus, rigidulis, apice abrupte penicil-  
latim ramoso-expansis, ex hyphis gracilibus arcte coalitis fuligi-  
neis parce articulatis levibus apice liberis undulatis monosporis  
efformatis, circiter 200  $\approx$  20-30; conidiis acrogenis in hyphis peni-  
cillorum fusoido- vel clavulato-cylindracois, 2-5, vulgo 4-septa-  
tis, dilute fuligineis, ad septa non constrictis, 50-75  $\approx$  9-10.

*Hab.* in mycelio *Meliolæ* ad folia *Fici* cujusdam in Tu-Phap.  
— A *Podosporio Penicillio* Speg. conidiis majoribus aliisque no-  
tis diversum. Statum conidicum forte sistit *Meliolæ*.

3. **Podosporium aciculare** Sacc. et Paol. Fung. Malac. p. 28, t. III, 7965  
f. 9. — Effusum, atrum, setosum; fasciculis hypharum subulatis,  
2-4 mm. longis, dense gregariis et subinde 3-4 apice confluenti-  
bus; hyphis filiformibus, septulatis, 4-5  $\mu$ . diam., basi subliberis,

sursum coalitis, fuligineis, apice emergente sursum reflexo, pallidioribus; conidiis hyphis emergentibus insertis, fusoides, 35-70  $\times$  12-15, crasse tunicatis, 7-9-septatis, non constrictis, fuligineis.

*Hab.* in culmis Bambusæ? emortuis, Malacca (SCORTECHINI). — A *Pod. rigido* et *Pod. grandi* differt præcipue stipitibus brevioribus, a *Pod. Spegazziniano* conidiis fusoides, utrinque acutiusculis etc.

**ISARIOPSIS** Fresenius — Sacc. Syll. IV, p. 630.

1. **Isariopsis subulata** Ellis et Ev. in Journ. of Myc. 1886, p. 104. 7966  
— Stipitibus subulatis, 1-1,5 mm. altis, sursum attenuatis et pallidius coloratis, ex hyphis arcte compactis, brunneis compositis, basi subbulbosis strigosisque conidia plerumque binucleata, hyalina, ovata, 7-8  $\times$  4 ferentibus.

*Hab.* in culmis putrescentibus Zeæ Maydis, Louisiana in America bor. (LANGLOIS).

2. **Isariopsis Acanthacearum** Cooke Grev. XIX, p. 8. — Hypophylla, 7967  
cæspites minutos compactiusculos semiorbiculares, cinereos dein fuligineo-atros formans; hyphis tenuibus, septatis, flexuosis, intertextis, brunneis; conidiis fusoides, 3-septatis, hyalinis, 20-22  $\times$  5.

*Hab.* in foliis Eranthemii, Bristol (DEWAR) et Dædalacanthi nervosi, Exeter (E. PARFITT) Britannia.

3. **Isariopsis Stellariae** Trail Trans. Crypt. Scot. 1889, p. 49. — Al- 7968  
ba; maculis indefinitis, supra pallidioribus, siccis stramineis; cæspitulis hypophyllis; hyphis suberectis, gracilibus, apice subincrassatis; conidiis ellipsoideis vel subcylindræis, utrinque rotundatis, 10-16  $\times$  5-6, semper continuis, hyphis isthmo angusto insertis.

*Hab.* in foliis Stellariae gramineæ, Cladich pr. Loch Awe Scotia. — *Is. albo-rosellæ* affinis. — «Verisimiliter non diversa a *Stysano pallescente*».

**Fam. 4. Tuberculariæ** EHRENB. emend.

**Ser. 1. Tuberculariæ mucedineæ** SACC.

**Sect. 1. Amerosporæ** SACC.

**TUBERCULARIA** Tode — Sacc. Syll. IV, p. 638 \*).

1. **Tubercularia antarctica** Speg. F. Fueg. n. 445. — Sporodochiis 7969

\*) Cfr. G. PAOLETTI Rev. gen. Tuberc. cum 2 tab. Padova 1887, ubi plures

primo tectis, dein per peridermium erumpenti-exsertulis, tuberculo-diformibus, 0,5-1,5 mm. diam., levibus, glabris, pallide testaceo-carneis; conidiis ellipticis, utrinque plus minus rotundatis, 5-7 = 3-4 ac sæpe 1-guttulatis, hyalinis.

*Hab.* ad ramos emortuos Berberidis ilicifoliæ in Staten island Fuegiæ.

2. **Tubercularia rhodophila** Passer. Diagn. F. N. V, n. 52. — Sporochiis erumpentibus, subglobosis, nigris, opacis; sporophoris filiformibus simplicibus, longissimis; conidiis acrogenis, fusiformibus, hyalinis, 5-7,5 = 1,5. 7970

species recte delentur v. reformantur. Sec. cl. auctorem species magis typicæ et vulgatiore ita distinguuntur:

A. Conidia acro-pleurogena.

† Conidia utrinque obtusa, enucleata.

§ Sporodochia stipite brevi immerso v. nullo.

*T. vulgaris.* Sporophora ramis omnibus conidio æquilongis v. brevioribus.

*T. confluens.* Sporophora ramis uno vel pluribus conidio multo longioribus.

§§ Sporodochia stipite elongato emerso suffulta.

\* Stroma rubrum.

*T. granulata.* Sporophora ramis uno vel pluribus conidio multo longioribus 90-150  $\mu$ . longa.

f. *major.* Sporophora ut in typo sed 210-240  $\mu$ . longa.

*T. Coryli.* Sporophora ramis omnibus conidio æquilongis.

\*\* Stroma luteum v. albidum.

*T. Rhamni.* Sporophora ramis omnibus conidio æquilongis; sporodochia stipite matricis cortice omnino oblecto basique non incrassato.

*T. sarmentorum.* Sporophora ramis omnibus conidio æquilongis; sporodochia stipite nudo basique incrassato.

*T. minor.* Sporophora ramis pluribus valde elongatis.

†† Conidia utrinque subacuta, uninucleata.

*T. pinophila.*

B. Conidia tantum acrogena.

*T. versicolor.* Sporophora apice papillâ sporigerâ intracta; sporodochia tenerrima, fragilia, numquam nigra.

*T. Libertiana.* Sporophora papillâ carentia; sporodochia dura, non fragilia, nigricantia.

*Hab.* in ramis siccis *Rosæ* cultæ, sociâ *Diplodiâ rhodophilâ*, Parma Ital. bor.

3. **Tubercularia Calycanthi** Passer. Diagn. F. N. V, n. 51. — Sporodochiis subglobosis, sparsis, erumpentibus, aurantiacis; sporophoris filiformibus, tenuissimis, 80  $\mu$ . et ultra long.; conidiis cylindricis, 5-7,5  $\approx$  1-1,5. 7971

*Hab.* in ramis emortuis *Calycanthi præcoci*, Parma Italiae borealis.

4. **Tubercularia Rhamni** Paoletti Rev. Tuberc. p. 10, t. III, fig. 1-5. 7972  
— Sporodochiis solitariis, cinnabarinis, sursum capitatis, ciliis destitutis, stipite plus minus elongato, cylindræo, basi non incrassato et omnino matricis cortice arcte oblecto suffultis; stromate luteolo; sporophoris ramis omnibus conidio æquilongis, rectiusculis, 150-160  $\approx$  2,5; conidiis ovoideis v. sæpius tereti-oblongis, utrinque obtusis, eguttatis, rectis v. leniter curvulis, 6-7  $\approx$  2-3.

*Hab.* in ramulis *Rhamni Alaterni* in Gallia (ROUMEGUÈRE),

5. **Tubercularia cactophila** Speg. F. Guar. II, n. 197. — Sporodochiis primo epidermide tectis, dein erumpenti-subsuperficialibus e globoso subhemisphæricis, minutis, 250-500  $\mu$ . diam., densiuscule gregariis sæpeque confluentibus, compactiusculis, roseis; sporophoris in sporodochio carnoso coalitis, apice longiuscule fusiformi liberis, 15-20  $\approx$  2, acutiusculis, hyalinis; conidiis ellipticis v. subovoideis, utrinque acutiuscule rotundatis, 4-6  $\approx$  3-4, rectis v. subinæquilateralibus hyalinis. 7973

*Hab.* ad corticem putrescentem *Cerei* arborei cujusdam in silvis pr. Paraguari Brasiliæ.

6. **Tubercularia? leptosperma** Speg. F. Guar. II, n. 198. — Sporodochiis obovatis v. piriformibus, sæpe basi substipitatis, dense gregariis sæpiusque confluentibus, pulvinulos majusculos, 1-3 mm. long., 1 mm. lat., crassiusculos, irregulares e rimulis corticis erumpentes efficientibus, sordide obscureque carneis; sporophoris dense constipato-coalescentibus, 60  $\approx$  1, vix apice acutiusculo liberis, pallide rufescentibus; conidiis fusoidæo-subcylindræis, utrinque acutiusculis, 10-12  $\approx$  1-1,5, rectis, arcuatis vel sigmoideis, continuis, hyalinis. 7974

*Hab.* ad corticem ramorum putrescentium *Psidii pomiferi* in cultis pr. Guarapi Brasiliæ.

7. **Tubercularia Ligustri** Cooke Grev. XVI, p. 49. — Sporodochiis minutis, convexis, erumpentibus, mox nigris et centro depressis, subsessilibus; sporophoris brevibus, tenuibus, apparenter simplicibus. 7975

*Hab.* in ramis Ligustri, Kew Britanniae.

8. **Tubercularia Coryli** Paol. Rev. Tuberc. p. 10, t. IV, f. 24-29. — 7976

Sporodochiis solitariis v. sæpius omnino connatis v. subinde stipitibus tantum discretis, rubentibus, margine ciliis destitutis, stipite elongato, emerso, cylindraceo, albido, cortice non oblecto suffultis; stromate rubro; sporophoris ramis omnibus conidiis æquilongis, 200-220  $\approx$  2,5-3; conidiis ovoideis vel sæpius tereti-oblongis, utrinque obtusis, eguttatis, rectis vel leniter curvulis, 5,5-7  $\approx$  2-3.

*Hab.* in ramis emortuis Coryli Avellanæ in agro veneto (SACCARDO).

9. **Tubercularia Libertiana** Paoletti Rev. Tuberc. p. 12, t. III, f. 21- 7977

25. — Sporodochiis solitariis, nigris, 0,5 mm. diam., non fragilibus, duris; sporophoris distincte septatis et in articulos cylindraceos facile secedentibus, 40-70  $\approx$  2,5, ramis simplicibus, conidia longe superantibus præditis; conidiis papilla basilari carentibus, ovoideis, utrinque rotundatis, sæpius leviter curvulis, 5,5-7  $\approx$  2,5.

*Hab.* in ramis Fraxini et Fagi in Arduennis (LIBERT). — Ab affini *T. versicolori* sporodochiis non fragilibus, nigris etc. diversa.

10. **Tubercularia atra** Passer. Diagn. F. N. IV, n. 137. — Sporodo- 7978

chiis sparsis, erumpentibus, globuloso-depressis, ligno basi insculptis, extus atris, opacis, intus fuscis; sporophoris fasciculatis, filiformibus, simplicibus, 30-55  $\mu$ . long.; conidiis minutis, oblongis, hyalinis, 2,5-3,7  $\approx$  1-1,5, ad polos obscure nucleatis.

*Hab.* in ramulis fracidis Fici Caricæ, Parma Ital. bor.

11. **Tubercularia minor** Link — Syll. IV, p. 639 — f. **Syringæ** Cooke 7979

et Mass. Grev. XVII, p. 80. — Minuta, erumpens, cornicolor, dein carnea vel rubra, micans, uda gelatinosa; stromate maturo mox deciduo; sporophoris simplicibus; conidiis oblongis, rectis, utrinque rotundatis, 10  $\approx$  2.

*Hab.* in ramis Syringæ, Kew Britanniae.

12. **Tubercularia subpedicellata** Schw. — Syll. IV, p. 645. — Sec.

Cooke in Grev. præbet conidia 6-7  $\approx$  3-4 et nascitur quoque in ramis Syringæ vulgaris, Kew Britanniae.

13. **Tubercularia hydnoidea** Rich. Cat. Champ. Marn. n. 2100. — Spo- 7980

rodochiis nunc globosis vel lobatis, nunc clavato-ramosis, pallide rubris v. roseis; conidiis ellipsoideis, maximis, hyalinis.

*Hab.* in cortice udo Populi, in silva St. Lumier Galliae.

14. **Tubercularia guaranifica** Speg. Guar. I, p. 172. — Sporodochio 7981

sub epidermide crustaceo-effuso, eaque hinc inde fissa, suberum-



penne non v. vix pulvinulato, applanato, undulato, difformi, magnitudine maxime ludente, 0,5-5 mm. diam., acute marginato, glabro, pallide aurantio-roseo v. aurantio; sporophoris filiformibus, 15-20  $\approx$  1-1,5, cylindræis, coalescentibus, apice cuneato-attenuatis, acutatis, liberis, hyalinis, monosporis; conidiis ovoideis, rarius ellipticis, 5-6  $\approx$  2-2,5, hyalinis.

*Hab.* ad corticem putrescentem ramorum in silvis pr. Guarapî Brasilæ.

15. **Tubercularia Léveillei** Berl. et Sacc., *Tubercularia depressa* Lév. 7982 in Ann. Sc. nat. 1863, pag. 298, non *T. depressa* Lév. in Ann. Sc. Nat. 1846. — Sporodochiis erumpentibus, discoideis, applanatis, subtus albis, disco depresso cinnabarino; basidiis stipatis, rectis, brevibus continuis; conidiis ovatis, obtusis, incoloribus, diametro duplo triplove longioribus.

*Hab.* ad cortices, Acerradero Novæ Granatæ (LINDIG). — *Tuberculariam discoideam*, optime evoluta, refert.

16. **Tubercularia paraguayana** Speg. Guar. I, pag. 173. — Sporodochiis 7983 sparsis, innato-erumpentibus, vix pulvinulatis, repando-orbicularibus vel confluenso difformibus, mediocribus, 0,5-1 mm. diam., superne applanatis v. vix convexulis, roseis, margine pallidioribus; sporophoris cylindræo-clavulatis, 20  $\approx$  2,5-3, apice obtuse rotundatis, hyalinis, conidiis e globoso ellipticis, 4-6  $\approx$  2,5-4, hyalinis.

*Hab.* ad corticem putrescentem truncorum in silvis pr. Paraguari Brasilæ.

17. **Tubercularia Passerinii** Paol. Rev. Tuberc. p. 13, *Tubercularia* 7984 *carnea* Pass. in Martelli Flora Bog. p. 150, nec Sacc. ex Corda. — Sparsa, superficialis, carnea, lenticularis; conidiis exiguis, ellipsoideis, 3 $\frac{1}{2}$ -4  $\approx$  2 $\frac{1}{2}$ , plus minus perspicue binucleatis, hyalinis, basidiis tenuibus, longioribus fultis.

*Hab.* in . . . . . Keren Abyssinæ.

18. **Tubercularia Kmetiana** Bäuml. F. Schemn. p. 12. — Sporodochiis 7985  $\frac{1}{4}$ - $\frac{1}{2}$  mm. diam., ex epidermide prorumpentibus, udis gelatinosis, siccis duriusculis, strato conidiorum carneo-cinnabarino, intus albedo; sporophoris filiformibus, gracillimis, eximie helicoideis, 100-120  $\approx$  1,5, parce ramulosis, ramulis 3-5  $\approx$  1, hyalinis; conidiis acrogenis v. ramulorum apicibus insertis, oblongo-cylindræis, utrinque rotundatis, 8-10  $\approx$  2, hyalinis.

*Hab.* in ramis Lycii barbari, Cista Voda prope Pencow Hungariæ.

19. **Tubercularia Abrotani** Fautr. Rev. Myc. 1891, p. 14. — Sporo- 7986

dochiis minutissimis, cortice nidulantibus; conidiis hyalinis, simplicibus, oblongis, 8-10  $\approx$  2-2,5.

*Hab.* in ramulis siccis Artemisiæ Abrotani, pr. Epoisses, Côte-d'Or Galliæ (F. FAUTREY).

20. **Tubercularia aquifolia** Cooke et Mass. Grev. XVI, p. 45. — Sporodochiis 7987  
 sparsis, innatis, demum erumpentibus, pallide carneis, subsessilibus; sporophoris crassiusculis, furcatis; conidiis anguste ellipsoideis v. allantoideis, obtusis, 12-15  $\approx$  2-3.

*Hab.* in foliis emortuis Ilicis Aquifolii, Highgate Britanniæ.

21. **Tubercularia hirtissima** Peck 32 Rep. pag. 40. — Sporodochiis 7988  
 parvis, 1-2 mm. lat., orbicularibus, depressis, flavis v. pallide aurantiis, longe lanatis; conidiis elongatis, cylindraceis, hyalinis, 20  $\approx$  3-3,5.

*Hab.* in foliis Fraxini sambucifoliæ dejectis, South Corinth Amer. bor.

22. **Tubercularia conorum** Cooke et Mass. Grev. XVI, p. 49. — Sporodochiis 7989  
 sessilibus, lineariter erumpentibus, convexis, sæpe confluentibus, roseis; sporophoris longis, rectis; conidiis allantoideis, obtusis, 8-10  $\approx$  2-3.

*Hab.* in conis Abietis, Carlisle Britanniæ (Doct. CARLYLE).

23. **Tubercularia leguminum** Cooke et Mass. Grev. XVI, p. 33. — Minuta, 7990  
 erumpens, carnea; sporodochiis sessilibus, irregularibus, subconfluentibus; sporophoris brevibus, rectis; conidiis elongato-ellipsoideis, plerumque leniter curvulis, 20  $\approx$  5.

*Hab.* in leguminibus Cassiæ, Brisbane Australiæ (F. M. BAILEY).

24. **Tubercularia carpogena** Peck 43 Rep. p. 31. — Sporodochiis minutis, 7991  
 depressis, glabris, subsuperficialibus, rubris; sporophoris gracilibus, ramosis; conidiis oblongis vel subfusoides, rectis vel subcurvis, 10-12,5  $\mu$ . long., utrinque acuminatis.

*Hab.* in fructibus Rubi villosi, Menands Amer. bor.

25. **Tubercularia acinorum** Cavara Dissecc. grapp. p. 32, t. V, f. 6-7. 7992  
 — Sporodochiis verruciformibus, sparsis vel confluentibus, albido-ceraceis, erumpentibus, interdum stipitatis; sporophoris simplicibus, filiformibus, fasciculatis, obscure septatis; conidiis cylindraceis, utrinque rotundatis hyalinis, acrogenis 12-15  $\approx$  3,5.

*Hab.* in baccis Vitis viniferæ, Stradella, Voghera Ital. bor.

26. **Tubercularia fungicola** Peck 42 Rep. p. 33. — Sporodochiis minutis, 7993  
 sparsis, subglobosis, 175-350  $\mu$ . lat., aurantiacis; conidiis oblongis v. fusoides, hyalinis, rectis vel subcurvis, 10-15  $\approx$  2.

*Hab.* in Hypoxylo coccineo, Kowersville Amer. bor.

**CHÆTOSPERMUM** Sacc. nov. gen. (Etym. a *chæte* seta et *sperma* semen, spora). — Sporodochia gelatinosa. Sporophora ramosa. Conidia ovoidea, hyalina, utrinque 7-8-setosa.

1. **Chætospermum tubercularioides** Sacc. *Tubercularia chætospora* 7994  
Pat. Bull. Soc. Myc. 1888, p. XL cum ic. — Sporodochiis sessilibus, sparsis v. gregariis 0,5-2 mm. lat., albis, gelatinosis, orbicularibus; sporophoris ramosis, hyalinis; conidiis ovoideis, 38-43 = 8-10, hyalinis, copiose guttulatis, setis 7-8 æquilongis præditis.

*Hab.* in foliis et caulibus Graminum putridis prope Lons-le-Saulnier, Jura Galliæ.

**DENDRODOCHIUM** Bon. — Sacc. Syll. IV, p. 650.

1. **Dendrodochium? olivaceum** Passer. Diagn. F. N. IV, p. 138. — Sporodochiis erumpentibus, globosis, solitariis v. 2-pluribus conjunctis, epidermide cinctis, ceraceo-fuscis, opacis; sporophoris e basi parenchymatica oriundis, fasciculatis, brevibus, cylindricis, hyalinis; conidiis acrogenis, ovatis, pallide olivaceis, 5-6 = 2,5. 7995

*Hab.* in ramulis siccis Poincianæ Gillesii, Parma Ital. bor.

2. **Dendrodochium Padi** Oud. Contr. Mycol. XIII, p. 62, f. 43. — Sporodochiis corticulis, erumpentibus, subolivaceis, semiglobosis vel tantum convexis, sæpe depressis, solitariis vel confluentibus et tunc rugosulis vel inæqualibus; sporophoris valde intricatis, ramosissimis, ramis subverticillatis, in massam pallide flavam, carnosulam coalitis; conidiis numerosissimis, oblongis, hyalinis, continuis, 7 = 2 $\frac{1}{3}$ , utrinque rotundatis, granuloso-farctis, eguttatis. 7996

*Hab.* in ramulis Pruni Padi, Zorgvliet prope Haye Hollandiæ (DESTREE).

3. **Dendrodochium Pinastri** Paol. Rev. Tuberc. p. 17, t. III, f. 31-35. 7997  
— Sporodochiis solitariis,  $\frac{1}{4}$  mm. diam., luteo-brunneis vel luteis; stromate luteolo; sporophoris hyalinis, filiformibus, continuis, furcatis vel dendroideo-ramosis, 32-37 = 1, ramis indivisis; conidiis tantum acrogenis, hyalinis, tereti-oblongis, utrinque rotundatis, rectiusculis, 3,5-5 = 1.

*Hab.* in ramis Pini Pinastri in agro veneto Ital. bor. (SACCARDO).

4. **Dendrodochium simile** Ell. et Ev. Journ. Myc. 1888, p. 117. — Sporodochiis seriato-erumpentibus, pallide aurantiis, albidis, pulverulentis, 0,5-1 mm. diam. vel confluentibus et 2-3 mm. lat.; spo- 7998

rophoris erectis, ramis adpresse confertis donatis; conidiis oblongis, 2-2,5 = 0,5-0,7.

*Hab.* in cortice *Caryæ oliviformis*, Louisiana Amer. bor. (LANGLOIS). — Ab affini *D. densipedi* conidiis minoribus diversum.

5. **Dendroochium lignorum** Fautr. Rev. Myc. Oct. 1891. — Sporophoris intermixtis, fragilibus, cylindræis, multiseptatis, fuligineis, apice pallidioribus et breviter 3-4-ramulosis, 200-250 = 8-9; conidiis concoloribus, oblongis, 3-4-septatis, 20-27 = 8-9. 7999

*Hab.* in ligno decorticato *Quercus* in silva, Côte-d'Or Galliæ.

6. **Dendroochium fugax** Bomm. Rouss. Sacc. Contr. Myc. Belg. IV, p. 300. — Sporodochiis gelatinosis, superficialibus, granuliformibus, initio albo-flavidis, dein melleis, dense confertis et passim confluentibus, 90-120  $\mu$ . diam.; conidiis copiosissimis, hyalinis, bacillaribus, plerumque rectis, 3-4 = 0,6; basidiis fasciculatis, tortuosis, 30  $\mu$ . long., in ramos 2-3 divisis, ramis eadem altitudinem attingentibus, basidia vel ramulos alternos, breves, inflatos monosporogentibus. 8000

*Hab.* in trunco decorticato et putri *Carpini Betuli*, Groenendael Belgii.

7. **Dendroochium gelatinosum** Karst. Symb. XX, p. 108. — Sporodochiis sparsis, superficialibus, pulvinatis vel rotundatis, carnosogelatinosis, disco fluxili, totis pallidis, siccis rufescentibus, 1 mm. circ. diam.; sporophoris verticillato-ramosis circ. 2  $\mu$ . cr., hyalini; conidiis acrogenis, ellipsoideis vel oblongatis, eguttatis, rectis, hyalinis, 3-6 = 1,5-2,5. 8001

*Hab.* ad lignum putridum *Populi tremulæ* pr. Mansikkaniemi par. Tammela Fenniæ.

8. **Dendroochium betulinum** Rostr. Till Grönl. Svamp. p. 630. — Sporodochiis irregulariter claviformibus, compressis, rufis, 1-2 mm. long. et lat.; conidiis oblongis, minutissimis, 2-3 = 0,5, in sporophoris subverticillato-ramosis acrogenis. 8002

*Hab.* in truncis *Betulæ odoratæ*, Nanortalik Groenlandiæ (N. HARTZ).

9. **Dendroochium densipes** Sacc. et Ell. Journ. Myc. 1888, pag. 117. — Sporodochiis seriato-erumpentibus, globosis, minutis, dein applanato-pulvinatis, suborbicularibus, margine partim libero cinctis, 1 mm. vel ultra diam., pallide aurantiis, subconfluentibus; sporophoris fasciculatim ramosis, ramis erectis, 20-35 = 1,5; conidiis acrogenis, ovato-acrogenis, hyalinis, circ. 5 = 2,5. 8003

*Hab.* in cortice *Juniperi virginianæ* emortuo, Faulkland,

Delaware Amer. bor. (A. COMMONS). — Var. **prolificum** Ell. et Ev. Journ. Myc. 1888, pag. 117: sporophoris evanescentibus; conidiis 5-6 = 2,5, utrinque subacutis. In cortice Salicis, Louisiana Amer. bor. (LANGLOIS).

10. **Dendroochium ellipticum** Cooke et Mass., Grev. XVI, p. 76. — 8004  
Sporodochiis pulvinatis, erumpentibus, oblongis, pallidis,  $\frac{1}{2}$ -1 mm. long., convexis; basidiis sursum furcatis; conidiis ellipticis, 8  $\times$  5, hyalinis.

*Hab.* in ligno putrido, Waitaki New Zealand.

11. **Dendroochium verticillatum** Cooke et Mass. Grev. XVIII, p. 34. 8005  
— Sporodochiis pulvinatis, molliusculis, gelatinosis, carneis, erumpentibus,  $\frac{1}{2}$ -1 mm. diam.; sporophoris repetite verticillato-ramosis; conidiis acrogenis, ovatis, hyalinis, 5 = 2.

*Hab.* in Liquidambare putri, Carolina austr. Amer. bor. (RAVENEL).

12. **Dendroochium microsorum** Sacc. Syll. IV, p. 652 — Var. **Phragmitis** Fautr. Rev. Myc. Oct. 1891. — 8006  
Sporodochiis flavescentibus, superficialibus, discoideis, sparsis vel confluentibus; sporophoris furcatis, longissimis, 80-90  $\mu$ . long.; conidiis acro-pleurogenis, cylindræis, rectis vel subcurvis, 4,5  $\times$  1.

*Hab.* in culmis Phragmitis communis, Pont-Royal Galliæ (F. FAUTREY).

13. **Dendroochium subeffusum** Ell. et Gall. Journ. Myc. 1890, p. 33. 8007  
— Sporodochiis subeffusis, hinc inde in massas compactas, aurantiorubras, subapplanatas, 1 mm. circ. diam. dense gregariis; sporophoris subulatis, 25-35  $\times$  2-3, parce ramosis; conidiis acrogenis, solitariis, e subgloboso ovoideis vel ellipsoideis, hyalinis, 1-2-guttatis, 5-8 = 4,5-6.

*Hab.* in thallo et apotheciis Lichenum frondosorum quibusdam, Farmington, N. York Amer. bor. (E. BROWN).

**ENDOCONIDIUM** Prill. et Delacr. Bull. Soc. bot. Fr. 1891, p. 116 cum ic. et p. 183-208 (Etym. *endon* intus et *conidium*). — Sporodochia pulvinata, albida. Sporophora hyalina, ramosa. Conidia hyalina, rotundata, in interiore ramulorum subinde generata et mox ex apice exsilia. — Cl. Cooke Grev. XX, pag. 94, recte comparat hoc genus cum *Bloxamia*, quæ vero excipuli (genuini?) præsentia sat recedere videtur.

1. **Endoconidium temulentum** Pr. et Delacr. loc. cit. — Mycelio hyalino, effuso; sporodochiis primo candidis, dein lenissime roseis, 0,5-

1  $\approx$  0,5 mm.; sporophoris hyalinis, septatis, guttatis, subtortuosis, 3  $\mu$ . cr., 2-3-repetito-ramosis, conidiis e sphærico ovoideis, hyalinis, in interiore ramulorum sporophori catenulatim nascentibus, dein liberis, 2,5  $\mu$ . circ. diam.

*Hab.* in tegumento grani Secalis Cerealis, Miallet Dordogne Gallie. — Status ascophorus est *Phialea temulenta* Pr. et Delacr. Bull. Soc. Myc. 1892, p. 23.

2. **Endoconidium ampelophilum** Pat. Bull. Soc. Myc. 1891, pag. 183, 8009  
t. XI, f. V. — Maculis orbicularibus, subprominulis, 5-6 mm. lat., sub lente vix punctulatis; sporodochiis convexis, dimidiatis, 40-100  $\mu$ . diam., primo subepidermicis, dein liberis; sporophoris cylindraceis, basi brevissime stipitato-attenuatis, apice late hiantibus, conidia 4-7 liberantibus, simplicibus, difficile secedentibus; conidiis globosis vel ovoideis, 4-5.  $\mu$ . diam.

*Hab.* in baccis Vitis maturis, Æquatoria Amer. centr. — « A *Tuberculina? ampelophila* genesi conidiorum omnino differre mihi videtur ».

**TUBERCULINA** Sacc. Syll. IV, p. 653. — Genus a nonnullis auctoribus ad *Ustilagineas* spurias relatum. Cfr. Schröt. Pilz. p. 291.

1. **Tuberculina japonica** Speg. in Rev. Myc. 1886, pag. 183. — Spo- 8010  
rodochiis parvulis, hemisphærico-applanatis, subpulveraceis, solitariis, sordide fulvescentibus, 300-400  $\mu$ . diam., areola parum incrassato-pulvinata, subfulvescente insidentibus; conidiis globosis, crassiuscule tunicatis, levibus, 7-8  $\mu$ . diam., fulvescenti-hyalinis, in sterigmatibus filiformibus, rectis, subcoalescentibus, 30  $\approx$  1 $\frac{1}{2}$ , olivaceis acrogenis.

*Hab.* ad folia viva Lycii sinensis in dumetis prope Tokio Japon Asiæ orient.

2. **Tuberculina paraguayensis** Speg. F. Guar. II, n. 41. — Maculis 8011  
amphigenis v. hypophyllis, tantum pallescentibus, parvulis; acervulis hypophyllis, laxissimis, aggregatis, subhemisphæricis, minutis, 100-120  $\mu$ . diam., parum prominulis, fusco-ferrugineis vel ferrugineo-subpurpurascensibus; conidiis globosis, 10-12  $\mu$ . diam., tenui tunicatis, levibus, fusco-subviolascensibus; sporophoris elongato-clavulatis, 25-30  $\approx$  7-10, nonnullis sterilibus, apice obtusis, ceteris fertilibus, apice mucronato-acutatis, basi subcoalescentibus, fusco-fuligineis, subopacis. Status microstylosporicus *Cronartii paraguayensis* Speg.

*Hab.* ad folia viva Barnadesiæ cujusdam in dumetis prope Guarapî Brasilæ.

3. **Tuberculina Talini** Speg. F. Guar. nonn. n. 72. — Maculis palle- 8012  
scenti-arescentibus, amphigenis, indeterminatis, orbicularibus, 2-  
10 mm. diam.; sporodochiis amphigenis, centralibus, densiuscule  
aggregatis, minutis, 250-400  $\mu$ . diam., sordide violaceo-purpura-  
scentibus; sporophoris antice liberis, obtuse acutatis, 20 = 4-5, po-  
stice coalescentibus; conidiis subglobosis, 7-9  $\mu$ . diam., hyalino  
olivascentibus.

*Hab.* ad folia viva Talini patentis pr. Posta-cué Brasilæ.

4. **Tuberculina africana** Cooke et Mass. XVI, p. 15. — Sporodochiis 8013  
hemisphæricis vel globoso-depressis, exiguis, purpureo-fuscis; spo-  
rophoris crassiusculis, continuis, 3  $\mu$ . cr.; conidiis globosis, hya-  
linis, 3-4  $\mu$ . diam.

*Hab.* circum *Æcidium* [sporibus hexagonis, 17-20  $\mu$ . diam. præ-  
ditum] in *Ophiocaulo cissampeloide*, Gaboon (E. L. SIM-  
MONDS).

5. **Tuberculina Pelargonii** Pat. Journ. Bot. 1889, p. 168. — Conidiis 8014  
ovoideis, hyalinis, levibus, granuloso-farctis, 8-10 = 6, stratum cras-  
sum efformantibus.

*Hab.* parasitica ad *Æcidium Pucciniæ granularis* in  
foliis *Pelargonii*, Yemen Arabiæ.

6. **Tuberculina maxima** Rostr. Ustil. Dan. p. 46. — Late effusa, atro- 8015  
violacea, plura cm. extensa, compactiuscula; conidiis inæqualiter  
sphæricis, 10-13  $\mu$ . diam., pallide violaceis.

*Hab.* in *Peridermio Klebahni* ad *Pinum Strobum* in  
Dania.

7. **Tuberculina ovalispora** Pat. Bull. Soc. Myc. 1888, p. 126, t. XX, 8016  
f. 6. — Sporodochiis gelatinosis, ovoideis v. globosis, rubidis, lu-  
centibus, 0,5-1 mm. diam.; conidiis levibus, hyalinis, ovoideis, plu-  
riguttatis, 8-11 = 5-6.

*Hab.* in *Uredine maculante cum Darluca filo*, Caracas  
Venezuelæ.

#### ILLOSPORIUM Mart. — Sacc. Syll. IV. p. 656.

1. **Illosporium ampelophagum** Berl. et Sacc. Add. Syll. n. 3655. — 8017  
Sporodochiis erumpenti-superficialibus, albidis, globoso-pulvinatis  
vel confluendo elongatis,  $\frac{1}{5}$ - $\frac{1}{4}$  mm. diam., ex sporophoris dense  
intricato-stipatis efformatis; sporophoris tortuosis, ramulosis, se-  
ptatis, hyalinis, basi subinde per ganglia sporomorpha, ellipsoideo-

inæqualia, 13 = 10, uni-biseptata coalescentibus; conidiis ovato-ellipsoideis, continuis, 7-10 = 4-5, acrogenis, subinde (germinando?) apiculatis.

*Hab.* in pedunculis et pedicellis languidis *Vitis viniferæ* ustione solis correptæ, in agro veneto.

2. **Illosporium vagum** Sacc. Myc. Sib. pag. 26, fig. 30. — Sporodochiis erumpentibus, gregariis, epiphyllis, depresso-pulvinatis, brunneolis, vix  $\frac{1}{2}$  mm. lat.; hyphis sterilibus nubiloso-hyalinis repentibus, flexuosis, tenuibus, fertilibus congestis, assurgentibus, tortuosis, irregularibus, sursum in conidia obovato-clavulata, curva, basi acuta apiceque oblique acutata, infra medium septata, 15-16 = 7-8, fumoso-hyalina, catenulata abeuntibus.

*Hab.* in foliis subviviis *Violæ unifloræ* pr. Minussinsk Sibiriae (MARTIANOFF). — Conidia ea *Marsoniæ Potentillæ* in memoriam revocant.

3. **Illosporium obscurum** Cooke et Mass. XVI, p. 113. — Sporodochiis subgregariis, orbicularibus, erumpentibus, demum subsuperficialibus, dein secedentibus, minutis, fuliginosis; hyphis abbreviatis, dichotomo-ramosis; conidiis acrogenis, solitariis v. 2-3-catenulatis, globosis, hyalinis, 12  $\mu$ . diam.

*Hab.* in foliis *Eucalypti Globuli*, Melbourne Australiae (CAMPBELL).

4. **Illosporium lignicolum** Delacr. Bull. Soc. Myc. 1890, pag. 139. — Sporodochiis cinnabarinis, madore tremelloideis, verruciformibus, irregularibus, sparsis v. confluentibus, 1-1,5 mm. lat.; sporophoris ramosis, flexuosis, dense aggregatis, septato-constrictis, 2,5-3  $\mu$ . cr., hyalinis, in conidia dilabentibus; conidiis hyalino-flavis, ovato-cylindræis, primum concatenatis, continuis, demum fatiscen-  
tibus, obscure 1-septatis, leniter constrictis, 11 = 5.

*Hab.* in ligno abietino subputrido, Paris Galliae.

5. **Illosporium Populi** Oud. Contr. Mycol. XIII, p. 63 (absque diagnosi).

*Hab.* in ramulis decorticatis *Populi* sp., Loosduinen Hollandiae (DESTRÉE).

#### **ÆGERITA** Pers. — Sacc. Syll. IV, p. 661.

1. **Ægerita virens** Carm. Grev. XVI, p. 81. — Sparsa, granuliformis, minuta, olivacea, hemisphærica; sporophoris basi fasciculatis radiantibus, crassiusculis, flexuosis, simplicibus v. dichotomis, apice



sæpe clavatis, pallide olivaceis; conidiis acrogenis, globosis, pallide olivaceis, 15  $\mu$ . diam.

*Hab.* in cortice Betulæ, Appin Britanniæ (CARMICHAEL).

2. **Ægerita torulosa** (Bon.) Sacc. Syll. IV, p. 662, teste Karst. Symb. Myc. Fenn. XXIX, p. 106, præbet conidia ex ovoideo sphæroidea, 10-13  $\mu$ . diam., hyphis torulosis, ramosis adnata; et nascitur quoque in ramis salicinis in Fennia. Monente ipso Karst., *Æg. alba* non differret.

**FUSICOLLA** Bon. — Sacc. Syll. IV, p. 664.

1. **Fusicolla tuberculata** Har. et Karst. Rev. Myc. 1890, p. 80. — 8023  
Effusa, confluens, ceraceo-mollissima, carnea, tuberculata, tenuis; sporophoris brevissimis, gracillimis; conidiis elongatis, oblongatis, cylindræis v. clavatis, sæpe irregularibus, rectis, continuis, guttulatis, hyalinis, 17-30  $\approx$  4-6.

*Hab.* ad ramos Sterculiæ fœtidæ in Ceylon.

2. **Fusicolla incarnata** Cooke et Mass. Grev. XVII, p. 8. — Epiphyl- 8024  
la; sporodochiis parvis, gregariis, maculis pallidioribus insidentibus, convexis, carneo-roseis, hinc inde confluentibus, vix  $\frac{1}{4}$  mm. diam., subgelatinis, interdum sparsis; sporophoris brevissimis deciduis; conidiis cylindræis, utrinque rotundatis, guttulatis v. granulosis, hyalinis v. rectis, continuis, 16-20  $\approx$  4-5.

*Hab.* in petiolis v. foliis, Brisbane Australiæ (BAILEY).

3. **Fusicolla Pteridis** Karst. Symb. ad Myc. Fenn. XXIII, p. 13, *Fu-* 8025  
*sidium Pteridis* Kalchbr. in Bot. Zeit. 1861, p. 296, Sacc. Syll. IV, p. 31. — Sporodochiis pulvinato-lobatis, subeffusis, gelatiuosis, pallescentibus, siccitate fulvescentibus; conidiis fusoideo-elongatis, rectis, hyalinis, continuis, 4-6  $\approx$  1-2.

*Hab.* in pagina inferiore foliorum Pteridis aquilinæ circa Mustiala Fenniæ, sociâ *Phyllachorâ Pteridis* (Reb.) Fuck., cujus forte formam conidiiferam sistit.

**HYMENULA** Fr. — Sacc. Syll. IV, p. 667.

1. **Hymenula bicolor** Oud. Contr. Flora Myc. Pays-Bas XI, p. 53. — 8026  
Sporodochiis suborbicularibus,  $\frac{1}{2}$ -1 mm. diam., cum subiculo arcte connatis, colore primitus albidissimo, postea centro dilute griseo, margine paullum sinuoso, oculo armato explorato plus minus flocculoso; colore griseo portionis centralis, sensim versus peripheriam sese extenuante, e conidiis orto; conidiis exacte sphæricis, 14

$\mu.$  diam., minutissime asperulis, in apice basidiorum conico-papilliformium solitariis.

*Hab.* in ligno Pini udo in Horto Botanico Amsterdam Hollandiæ.

2. **Hymenula microspora** Bäuml. F. Schemn. III, p. 16. — Sporodochiis gregariis, erumpentibus, discoideis v. lenticularibus, miniatis, udis gelatinosis, siccis duriusculis; sporophoris densissimis, filiformibus ramosis, 30-40  $\approx$  0,5-0,7; conidiis minutissimis, acrogenis, hyalinis, 1,5-2  $\mu.$  diam. 8027

*Hab.* in ramulis emortuis Salicis fragilis prope Schemnitz Hungariæ.

3. **Hymenula stictoidea** Bomm. Rouss. Sacc. Contr. Myc. IV, p. 301. 8028  
— Sporodochiis stictiformibus, innatis, sparsis, epidermide laciniata cinctis, e carneo dilute ochraceis, 0,3-0,5 mm. diam.; conidiis ellipsoideis, hyalinis, 13-18  $\approx$  6, interdum guttulatis; basidiis fasciculatis, filiformibus, longe ramosis, 45-90  $\mu.$  long., apice monosporis.

*Hab.* in pag. inferiori foliorum Buxi sempervirentis, Yvoir, Hastière Belgii. — An st. conidicus *Næviæ pallidæ*?

4. **Hymenula citrina** Boud. Bull. Soc. Myc. 1891, p. 82, t. V, f. IV. 8029  
— Sporodochiis sessilibus, 0,5 mm. lat., primo cupuliformibus, dein explanatis, repandis, margine minutissime puberulo cinctis; sporophoris 60  $\mu.$  long., ramosis, ramulis 20-25  $\mu.$  long.; conidiis cylindræis, rectis, 16-10  $\approx$  2-3, utrinque obtusiusculis et 1-guttatis, hyalinis, coacervatis.

*Hab.* ad squamas putridas strobilorum Pini silvestris, in silva Montmorency Galliæ.

5. **Hymenula glandicola** Cooke Grev. XVI, pag. 71. — Sporodochiis gregariis, oblongis, pallidis, subgelatinosis; conidiis ellipsoideis, continuis, hyalinis, 8  $\approx$  5. 8030

*Hab.* in glandibus, New York Amer. bor. (GERARD).

6. **Hymenula Urticæ** Har. et Br. Journ. de Bot. 1891, p. 173. — Sporodochiis oblongis,  $\frac{1}{2}$ -1 mm. long.,  $\frac{1}{3}$ - $\frac{1}{2}$  mm. lat., sparsis, superficialibus, aurantio-pallidis; basidiis brevibus; conidiis ellipsoideis, aurantio-pallidis (oculo nudo), sub lente hyalinis, guttulato-granulatis, 15-20  $\approx$  8. 8031

*Hab.* ad caules siccos Urticæ dioicæ, Mery-sur-Seine, Aube Galliæ (P. HARIOT).

7. **Hymenula vulgaris** Fr. — Sacc. Syll. IV, p. 668 — var. **Brassicæ** Karst. in Hedw. 1891, pag. 299. — Sporodochiis polymorphis, 8032

pallide cœrulescentibus, siccitate nigrescentibus, gelatinosis, mollissimis; conidiis cylindræis, rectis, 4-5  $\approx$  1-1,5.

*Hab.* in rapis putrescentibus Brassicæ Napi var. Napobrassicæ, Mustiala Fenniæ.

8. **Hymenula microsporella** Karst. in Hedw. 1891, p. 302. — Sporodochiis sæpius elongatis v. oblongatis, gelatinosis, matrici adglutinatis, incarnatis, siccis saturatoribus, usque ad 1 mm. long.; hyphis brevissimis, tenerrimis; conidiis elongatis, rectis, utrinque vix v. leviter attenuatis, 4-5  $\approx$  1-1,5.

*Hab.* in rapis putridis Brassicæ Napi var. Napobrassicæ, Mustiala Fenniæ. — *Hym. rubellæ* affinis.

**MYXONEMA** Corda Ic. I, p. 10 (Etym. *myxa* mucus). — Sporodochia minuta, læte colorata, subsuperficialia. Hyphæ simplices radiantes, continuæ, fasciculatæ. Conidia globosa copiosa (pleurogena?) mucu conglutinata. — Sec. Fr. Summa p. 520, fluxus esset pathologicus arborum, quod ex Cordæana analysi non deducitur.

1. **Myxonema assimile** Corda Ic. I, p. 10, t. II, f. 150. — Sporodochiis minutis, nitidis, aurantio-croceis; hyphis albis; conidiis luteis copiosissimis, globosis, perexiguis, 2,3-2,5  $\mu$ . diam., gelatina mucosa alba conglutinatis.

*Hab.* in ligno et cortice arborum emortuarum in Bohemia. — Habitus *Myxosporii crocei*.

**TRICHO THECA** Karst. Symb. XX, p. 101 (Etym. *thrix* pilus [sporophorum] et *theca*). — Sporodochia superficialia, plano-pulvinata, ceracea, læte colorata, e sporophoris tenerrimis, densissime stipatis, seriatim multiguttatis, demum conidia ellipsoidea vel sphæroidea, hyalina, continua exserentibus, hypothallo tenuissimo, minute celluloso oriundis.

1. **Trichotheca alba** Karst. loc. cit. — Sporodochiis sparsis, albis, dein disco lutescentibus, 1-2 mm. diam.; sporophoris filiformibus, rectis, cohærentibus, dilutissime lutescentibus (sub lente) 90-180  $\approx$  2; conidiis sphæroideis v. ellipsoideis 2  $\approx$  1 v. 1-2  $\mu$ . diam.

*Hab.* in ligno (pineo?) vetusto, Mustiala Fenniæ.

**MYROPYXIS** Ces. — Sacc. Syll. IV, p. 672.

1. **Myropyxis guttiformis** Karst. in Hedw. 1891, p. 302. — Sporodochiis sparsis superficialibus, adiposis, sphæroideis vel subsphæroideis, hyalinis, 100-200  $\mu$ . diam.; sporophoris filiformibus, conti-

nuis, simplicibus, raro ramosis, 0,5  $\mu$ . cr.; conidiis copiosissimis, cylindræis, utrinque obtusis v. subtruncatis, continuis, rectis, hyalinis, circ. 4  $\approx$  0,5-1.

*Hab.* in pagina interiore corticis putris arborum frondosarum, Mustiala Fennia.

**DIAPHANIUM** Fr. — Sacc. Syll. IV, p. 672.

1. **Diaphanium serpens** Karst. Symb. XX, p. 101. — Sporodochiis superficialibus, plus minus elongatis, linearibus, reticulatim confluentibus, gelatinosis, carneo-aurantiacis, 1-2 mm. cr., e conidiis anguloso-sphæroideis, intus granulosis, lutescentibus (sub micr.), conglutinatis, magnis, 10-45  $\mu$ . diam. 8037

*Hab.* in cortice Betulæ pr. oppidum Raumo Fennia.

**CYLINDROCOLLA** Bon. — Sacc. Syll. IV, p. 673.

1. **Cylindrocolla cylindrophora** E. et Ev. in Journ. of Myc. 1886, p. 39. 8038  
— Cæspitulis (nudis) minutis, 1 mm. diam., vix translucidis (?), gelatinosis, subinde confluentibus et tum 3-4 mm. longis, siccitate dilabentibus; hyphis fasciculatis, erectis, gracilibus, dichotome ramosis, conidia oblongo-cylindræa, hyalina, primo granulosa, demum uniseptata, 20-24  $\approx$  5-6, lateraliter gerentibus.

*Hab.* in superficie inf. asseris pinei, Newfield, New Jersey Amer. bor.

2. **Cylindrocolla quercina** Cooke et Ell. Grev. XVI, p. 25. — Sporodochiis verruciformibus, erumpentibus, aurantiacis; sporophoris dichotomis; conidiis cylindræis, obtusis, hyalinis, concatenatis, 20  $\approx$  3. 8039

*Hab.* in ramis emortuis Quercus, New Jersey Amer. bor. (ELLIS).

3. **Cylindrocolla corticola** Karst. Rev. Myc. 1889. — Sporodochiis dispersis, difformibus, planiusculis, tremelloideis, aurantio-rubris, exiguis, fere punctiformibus; sporophoris ramosis, gracillimis; conidiis cylindræis, utrinque truncatis, continuis, rectis, hyalinis, 3-6  $\approx$  0,5-1. 8040

*Hab.* supra corticem arborum in Minas Geraes Sitio Brasilia (EDW. WAINIO).

4. **Cylindrocolla diffluens** E. et E. Journ. Myc. 1887, p. 117. — Sporodochiis carneis, siccis aurantiacis, adpressis, immarginatis, circ. 1 mm. diam., primo subtuberculosis; sporophoris non visis; conidiis oblongis v. cylindræis, circ. 4-12  $\approx$  1,5, hyalinis et continuis, in catenas trichotomas dispositis. 8041

*Hab.* in caulibus herbaceis emortuis, Scofield, Utah, Amer. bor. (HARKNESS).

5. **Cylindrocolla tenuis** Karst. Symb. mycol. XXIV, p. 18. — Sporodochiis sparsis, difformibus, vulgo elongatis v. oblongatis, planis, tenuissimis, gelatinosis, madore turgescens, aurantiacis, circ. 0,5 mm. lat.; sporophoris dichotome ramosis in conidia cylindræa, continua, eguttata, recta, hyalina, 3-10  $\approx$  0,5-1, abeuntibus. 8042

*Hab.* in foliis Graminacearum pr. Mustiala Fennicæ.

6. **Cylindrocolla graminea** Karst. Symb. Mycol. XXIV, p. 18. — Sporodochiis gregariis vel sparsis, sæpius difformibus, orbicularibus, planiusculis, gelatinosis, pallidis, siccis flavidis, 0,5-1 mm. diam.; sporophoris fasciculatis, gracillimis, repetite dichotome ramosis; conidiis cylindræis, hyalinis, catenulatis, 6-12  $\approx$  0,5-1. 8043

*Hab.* in culmis emortuis Calamagrostidis, Mustiala Fennicæ.

**SPHÆRIDIDIUM** Fres. — Sacc. Syll. IV, p. 675.

1. **Sphærididium lacteum** Ell. et Langl. Journ. Myc. 1890, pag. 36. — Lacteum, minutum,  $\frac{1}{4}$ - $\frac{1}{2}$  mm. diam., basi substipitato-contractum; conidiis in catenas dendroideo-ramosas dispositis, ellipsoideis, hyalinis, 5  $\approx$  3. 8044

*Hab.* in caulibus herbaceis, St. Martinsville, Louisiana Americæ borealis.

**BIZZOZIERIELLA** Speg. F. Guar. II, p. 199 (Etym. a sollerte botanico JAC. BIZZOZERO, patav.). — Sporodochia phyllogena, majuscula, carnosula, læticoloria, hypothallo mucedineo, radiante sæpius insidentia, subpileato-dilatata, stipite crasso, cingulo gelatinoso-succineo, conidiifero cincto, suffultis. Conidia minuta, cylindræo-fusoidea, catenulata (an semper?), in sporophoris filiformibus acrogena. — Genus singulare *Aschersoniæ* Mont. peraffine, a quo recedit perithecorum defectu: statum conidicum *Hypocrellæ* sistit.

1. **Bizzozieriella phyllogena** Speg. F. Guar. II, n. 199. — Hypophylla; hypothallo tenuissime membranaceo, vix perspicuo, radiosorbiculato, ex albo hyalino late expanso, 2-5 mm.; sporodochiis centro hypothalli solitariis vel 2-3-aggregatis, subcylindræo-hemisphæricis, 1-1,5 mm. diam., 1 mm. alt., stipite conoideo, brevissimo crassoque, 500-700  $\mu$ . alt., 700-800  $\mu$ . cr., basi 250-300  $\mu$ . cr., apice in pileum applanato-hemisphæricum, abrupte expanso, donatis, carnosulo-coriaceis, in sicco duris, subfriabilibus, extus albis vel pallescenti-fulvis, intus albis, fibrosulo-compactis; stratu conidiifero 8045

crassiusculo, stipitem atque partem inferam pilei vestiente, 300-350  $\mu$ . cr., in sicco subcorneo, in vivo tremelloideo, corniculis longiusculis crassiusculisque, simplicibus vel bifidis, 250-300  $\approx$  25-30, albis, e stipite oriundis horizontaliter implexo (an parietes peritheiorum *Aschersoniæ*?) succineo-aurantio; conidiis e fusoideo cylindraceis, acutiusculis, 12-14  $\approx$  2-2,5, hyalinis, continuis, rectis vel subinæquilateralibus, utrinque apiculo conico, 4-5  $\approx$  1, auctis, catenulatis (?), sporophoris e corniculis exsurgentibus, filiformibus, 20-25  $\approx$  1, hyalinis, suffultis.

*Hab.* ad folia exsiccata adhuc pendula Laurinææ cujusdam in silvis pr. Guarapî Brasilæ. — Species *Aschersoniæ tahitensi* et præcipue *Asch. oxysporæ* peraffinis nisi identica, loculis descriptis tamen non visis. Huic generi sine ullo dubio *Asch. basicystis* B. et C. est adscribenda!

**PATELLINA** Speg. — Sacc. Syll. IV, p. 677.

1. **Patellina? pusilla** Bomm. Rouss. Sacc. Contr. Myc. Belg. IV, p. 99. 8046

— Sparsa, globulosa dein subpatellata, albo-hyalina dein sordide alba, 320-350  $\mu$ . diam., contextu peripherico e fibrillis subparallele stipatis formato; conidiis bacillaribus, rectis, catenulatis (?), 6-8  $\approx$  1, subinde 2-guttatis; basidiis filiformibus supra curvis, 120-150  $\approx$  1-1,5 in ramulos plures sæpius oppositos divisissimosque denticulosque sporigeros laterales gerentibus.

*Hab.* in fragmentis ligneis Fagi silvaticæ, Groenendael Belgii.

2. **Patellina buellioides** Speg. F. Puigg. n. 476. — Sporodochiis in- 8047

ter lichenes (an ex illis) erumpentibus, dein subsuperficialibus, applanatis, primo minute orbicularibus, 0,5-1 mm. diam., dein magis explanatis, irregulariter repandulis, disco aurantiaco, margine strictissimo sed bene distincto, albo cinctis, extus sordide albescens, levibus; sporophoris dense constipatis ac subcoalescentibus, 20-30  $\approx$  1, hyalinis, apice acutiusculis, monosporis; conidiis subcylindraceis v. ex obovato ellipsoideis, utrinque obtusiusculis, 4-6  $\approx$  1,5-2,5, continuis eguttulatis.

*Hab.* ad corticem lichenosum viventem pr. Apiahy Brasilæ. — Species pulchella in juventute præcipue apotheciis *Buellia* cujusdam simillima.

3. **Patellina bicolor** Karst. Rev. Myc. 1889. — Sporodochiis sparsis, 8048

sessilibus, cupulatis, primitus subsphæroideis, ceraceo-coriacellis, albis; contextu subprosenchymatico, disco valde convexo, flavo, 0,1

mm. diam. v. paullo ultra; conidiis oblongatis v. ellipsoideis, guttulis 2 apicalibus, magnis præditis, hyalinis, 5-7  $\times$  2-3; sporophoris dense constipatis, 20-45  $\approx$  0,5.

*Hab.* supra corticem vetustum in Brasilia prope Rio de Janeiro (Doct. EDW. WAINIO).

**SCORIOMYCES** Ell. et Sacc. Syll. IV, p. 680.

1. **Scoriomyces Andersonii** Ell. et Gall. Journ. Myc. 1890, p. 33. — 8049

Sporodochiis ceraceo-flavis, porosis, 4-12 cm. long., 2-4 cm. cr., 2-4 cm. lat., ambitu irregularibus, in superficie colliculosis; conidiis laxè compactis, globosis, 35-55  $\mu$ . diam.

*Hab.* in caudice putri Pini ponderosæ, Belt mountains, Montana Amer. bor. (F. W. ANDERSON). — A *S. Cragini* sporodochiis compactioribus, conidiis majoribus diversa.

**VOLUTELLA** Tode — Sacc. Syll. IV, p. 682.

1. **Volutella occidentalis** Ell. et Anders. Bot. Gaz. 1891, p. 46, t. VII, 8050

f. 1-6. — Sporodochiis gregariis, tenuibus, applanatis, usque ad 1 mm. diam., pallide aurantiacis v. carneis, ob pilos suberectos, pallidos, rugosulos, leniter septatos, 110-150  $\mu$ . long. fimbriatis; sporophoris ramosis; conidiis concatenatis, cylindræis, rectis hyalinis utrinque 1-guttatis, 6-8  $\approx$  1,5-2.

*Hab.* in caulibus emortuis Astragali flexuosi et Astr. Drummondii, Sand Coulee county, Montana Amer. bor.

2. **Volutella Boydiana** Sacc. *Volutella citrina* Cooke et Mass. Grev. 8051

XVIII, pag. 74 nec E. et Ev. — Erumpens, sparsa, discoidea, citrina,  $\frac{1}{3}$  mm. diam., sessilis; hyphis densis, gracilibus, hyalinis, flexuosis, levibus, septatis; conidiis oblongis, 3-4  $\approx$  1,5.

*Hab.* in caulibus Trollii, West Kilbride, Ayrshire Britannicæ (D. A. BOYD).

3. **Volutella gilva** (Pers.) Sacc. Syll. IV, p. 685 — \***V. intricata** Kast. 8052

Symb. Myc. Fenn. XXIV, p. 19. — Sporodochiis sparsis, sessilibus, orbiculatis vel oblongatis, roseis, filamentis valde flexuosis, septatis, asperulis, pallidioribus 250-350  $\approx$  5-6 vestitis; conidiis cylindræis rectis, subeguttulatis, hyalinis, 6-10  $\approx$  1,5-2,5; sporophoris fasciculatis 15  $\approx$  1,5.

*Hab.* in petiolis putrescentibus Armoraciæ in horto mustiensi Fennicæ. — A typo filamentis longioribus et conidiis minoribus differt.

4. **Volutella lanuginosa** Pat. Bull. Soc. Myc. 1891, p. 183. — Sporo- 8053

dochiis carnosis, sessilibus, crassis, pulvinatis, sparsis v. confluentibus, intus rufidulis, extus roseo-cinereis, 0,5-10 mm. lat., undique setis prælongis, 350  $\approx$  5-6, cylindricis, septatis, apice obtusis, verruculosus, pallidissime brunneis, tectis; sporophoris linearibus, brevibus, hyalinis, 10-12  $\mu$ . long.; conidiis hyalinis, cylindraceis, rectis, utrinque obtusis, 3-5-guttulatis, 8-10  $\approx$  2-3.

*Hab.* in ramulis dejectis, Egido prope Quito Æquatoriæ Americæ centr.

5. **Volutella citrina** Ell. et Ev. Journ. Myc. 1888, p. 55. — Sporo- 8054  
dochiis turbinato-lenticularibus sessilibus, 0,5-1 mm. diam., margine laciniato-denticulato sed non ciliatis; basidiis 12-15  $\approx$  1, copiosis; conidiis..... (non descriptis).

*Hab.* in ligno putri Pini, Newfield, N. Jersey Amer. bor.

6. **Volutella conorum** E. et E. Journ. Mycol. 1888, p. 55. — Sporo- 8055  
dochiis sphæroideis, primo lacteis,  $\frac{1}{4}$  mm. lat., demum planis, sessilibus, 0,5 mm. diam., setis gracilibus 300-400  $\approx$  3-4, albis, continuis, supra sensim attenuatis margine cinctis; hyphis simplicibus, 15-20  $\approx$  1-1 $\frac{1}{4}$ ; conidiis subglobosis, hyalinis, 1-1 $\frac{1}{4}$   $\mu$ . diam. continuis, rectis.

*Hab.* in fructibus dejectis Magnoliæ glaucæ, Newfield, N. Jersey Amer. bor. — Differt a *V. fusarioidi* conidiis minoribus et rectis.

7. **Volutella paraguayensis** Speg. Guar. I, p. 173. — Sporodochiis 8056  
hinc inde sparsis, globoso-depressis v. sublenticularibus, minutissimis, 150  $\mu$ . diam. melleis, non v. vix substipatis, margine longe laxisque ciliatis; setulis cylindraceis, sursum sensim attenuatis, parce remoteque septulatis, levibus 150-200  $\approx$  5-8, hyalinis; contextu sporodochii carnosio, tenuissime ac subindistincte prosenchymatico; conidiis papillulis epithecii acrogenis, cylindraceis, 5-6  $\approx$  1, utrinque truncato-subrotundatis, non v. minute 1-guttulatis, rarius subincrassatulis, hyalinis.

*Hab.* ad legumen dejectum putrescens in montuosis pr. Peribeby Brasilæ.

8. **Volutella albido-pila** Boud. Bull. Soc. Myc. 1891, p. 82, t. V, f. III. 8057  
— Sporodochiis sessilibus, disciformibus v. oblongis, immarginatis, tenuibus, olivaceis, extus pilis albis, 0,8-1,5 mm. long., 10  $\mu$ . cr., septatis, apice subattenuatis cinctis; sporophoris numerosissimis, 25-30  $\mu$ . long., continuis, sporodochio dilutioribus; conidiis 12-16  $\approx$  3, oblongo-cylindraceis, rectis, non septatis, utrinque sæpius minutissime 1-guttulatis, hyalinis, coacervatis subolivascentibus.



*Hab.* ad basim caulium Orchidum exsiccatum in Gallia.

9. **Volutella Ellisii** Langlois Journ. Myc. 1887, p. 57. — Sporodochiis 8058  
sessilibus, hemisphæricis, late roseis,  $\frac{1}{4}$ - $\frac{1}{2}$  mm. lat., setulis 80-  
100  $\approx$  3-4, erectis, hyalinis, continuis, ex margine v. ex toto recepta-  
culo membranaceo assurgentibus; sporophoris bacillaribus, 18-20  
 $\approx$  3; conidiis oblongis, 6-10  $\approx$  2,5-3, curvulis, obscure guttulatis.

*Hab.* in culmis, vaginis et foliis Graminacearum, præcipue  
Panici, Pointe à la Hache, Louisiana Amer. bor.

10. **Volutella bombycina** Speg. F. Fueg. n. 456. — Sporodochiis cu- 8059  
pulato-applanatis, 400-750  $\mu$ . diam., tenuibus, submembranaceis,  
superficialibus, late arcteqe matrice adnatis, gossypino-lanugino-  
sis, candidis, pilis lamellosis, involutis, longe lineari-spathulatis,  
50-150  $\approx$  5-6, apice applanatis, irregulariter truncatis vel retusis,  
hyalinis vestitis; conidiis ellipticis vel ovoideis, utrinque acutissi-  
mis 2,5-3  $\approx$  1 ac minute 1-guttulatis, hyalinis, sterigmatibus cy-  
lindræis, apice acutissimis, 5  $\approx$  1-1,5, hyalinis suffultis.

*Hab.* ad folia emortua Hierochloæ antarcticæ pr. Pen-  
guin rookery in Staten island Fuegiæ. — Ad *Vol. ciliatam* certe  
spectat *Psilonia Medicaginis* Brond. Rec. Crypt. Agen. II, p. 37,  
t. X, f. 4-7. — *Vol. nivea* (Fr.) Sacc. Syll. IV, pag. 685, teste  
Cooke et juxta exempl. orig. est opus entomogenum (*Adelges Fagi*).  
— *Psilonia hapalospora* B. et C. in Rav. Carol. III, n. 82, in  
culmis Zeæ in Carolina Am. bor. est forma major *Colletotrichi*  
*Lineolæ* Corda, conidiis 30  $\approx$  5-6, distincte curvatis, acutis, hyali-  
nis, sporodochii setulis dense seriatis, rigidulis, parce septatis, 70-  
90  $\approx$  3-4, atro-fuligineis.

**GUELICHIA** Speg. Guar. I, p. 173 (Etym. ab egregio botanophilo C.  
VON GÜLICH). — Sporodochia disciformia, margine tomentoso-cilia-  
ta. Sporophora filiformia, inferne coalescentia, superne libera, sub  
apice 6-setigera, setulis 3 minoribus descendentibus. Conidia fusoi-  
dea, continua, hyalina, solitarie acrogena. — Habitus *Cyphellæ*.

1. **Guelichia paradoxa** Speg. Guar. I. p. 174. — Maculis nullis; spo- 8060  
rodochiis epiphyllis, sparsis v. rarius 3-9-aggregatis, 0,3-1 mm.  
diam., cupulatis, carnosulis, dense imperspicueque prosenchymati-  
cis, ob setulis 100-250  $\approx$  6-7 albo-tomentellis; sporophoris hyalinis,  
cylindræis, in dimidia parte infera coalescentibus, supra libera  
et ciliis 6 concoloribus, donatis, 3 superis longissimis, 40-50  $\approx$  1,5,  
subfalcato-divaricatulis, 3 inferis rectiusculis, 14-15  $\approx$  1-1,5; coni-

diis solitarie acrogenis, fusoides, 25-30  $\approx$  3,5-4, continuis, hyalinis, utrinque obtusiusculis.

*Hab.* ad folia viva Rhamnæ sp. pr. Paraguari Brasiliæ. — *Cyphellæ albo-violascenti* habitu simillima.

### Sect. 2. Didymosporæ SACC.

**PATOUILLARDIELLA** Speg. F. Puigg. n. 477. (Etym. a cl. PATOUILLARD, qui hujus generis naturam suspicatus est). — Sporodochia læticoloria, ceracea, subdiffluentia. Sporophora filiformia, monospora. Conidia acrogena, elongata, didyma, hyalina.

1. **Patouillardiella guaranítica** Speg. F. Puigg. n. 477, *Gymnosporangium? guaraniticum* Speg. Fung. Guar. Pug. I, n. 106, *Tubercularia Spegazzinii* Pat. Revue myc. 1889, p. 35. — Pulvinulis primo epidermide tectis, longitudinaliter erumpentibus, in juventute compactiusculis, per ætatem submucoso-diffluentibus, aurantiacis; sporophoris filiformibus, prælongis, 50-100  $\approx$  1-1,5, hyalinis, simplicibus, rectis, mucō junctis; conidiis ellipsoideo-elongatis v. elongato-subbiconicis, medio 1-septatis, non constrictis, 10-20  $\approx$  3-4, hyalinis.

*Hab.* ad ramulos et folia viva Sapindacææ cujusdam pr. Apiaby Brasiliæ.

### Sect. 3. Phragmosporæ SACC.

**FUSARIUM** Link — Sacc. Syll. IV, p. 694.

A. Conidia typice septata.

I. In Dicotyledoneis lignosis.

1. **Fusarium Robiniæ** Passer. Diagn. F. N. V, n. 53. — Sporodochiis erumpentibus, subglobosis v. lineari-elongatis; conidiis falcatis, 5-7-septatis, 35-40  $\approx$  5.

*Hab.* in ramulo dejecto Robiniæ Pseudacaciæ, Vigheffio pr. Parma Ital. bor.

2. **Fusarium stillatum** De Not. in herb. — Acervulis epidermide valvatim secedente denudatis, oblongatis, humectis pallescentibus tremellosis, fluxilibus, 1-2 mm. long. æquantibus; sporodochiis tenuibus, dense flocculosis; conidiis innumeris, coacervatis, teretibus utrinque obtusis, curvatis, hyalinis, 20-35  $\mu$ . long., nucleo lacunula angusta ad medium interrupto.

*Hab.* in caulibus exsiccatis Genistæ tinctoriæ ad pontem Possaccio Val Intrasca Ital. bor.

3. **Fusarium desciscens** Oud. Contr. Mycol. XIII, p. 63, f. 44. — 8064  
Sporodochiis primo subepidermicis, dein prominulis, minutissimis, dilutissime carneis, subhemisphæricis, ceraceis; sporophoris repetitive dichotome ramosis, ramis brevibus, absolute hyalinis; conidiis nunc clavatis, nunc piriformibus, imo obovato-oblongis, minoribus 1-2-septatis, maturis pluriseptatis et 20-30  $\approx$  7.

*Hab.* in ramulis junioribus siccis Sarothamni vulgaris, Schéveningue Hollandiæ (DESTREE).

4. **Fusarium Volutella** Ell. et Ev. Proc. Acad. Phil. 1891, p. 93. — 8065  
Sporodochiis penicillatis, per corticis rimas erumpentibus; sporophoris hyalinis, simplicibus v. parce ramosis, continuis v. pauciseptatis, 100  $\mu$ . v. ultra long., 4-5  $\mu$ . cr., erectis, supra tuberculoso-spiculosus; conidiis falcatis, 1-septatis, hyalinis, 50-70  $\approx$  4-5.

*Hab.* in cortice Vitis bipinnatæ, e Cytospora? quadam immersa oriundum, St. Martinsville, Louisiana Am. bor. (LANGLOIS). — Habitus Volutellæ.

4. **Fusarium parasiticum** Fautrey in Rev. Myc 1889, p. 153. — Mi- 8066  
nutissimum, roseum, secus ligni v. corticis rimas seriatum; conidiis semilunatis, parum incurvis, hyalino-roseis, 5-septatis, 60-80  $\approx$  5.

*Hab.* in sarmentis emortuis Vitis viniferæ, Noidan, Côte-d'Or Galliæ.

5. **Fusarium (?) Rubi** Winter in Hedw. 1885, p. 258. — Hyphis 8067  
densissime stipatis, partes florales præcipue filamentis obducentibus, erectis, brevibus, plerumque simplicibus, rarius parcissime ramulosis, hyalinis; conidiis fusiformibus, utrinque acutis, sæpe parum curvatis seu inæquilateralibus, 1-3-septatis, ad septa non constrictis, hyalinis, 14-30  $\approx$  3-3,5.

*Hab.* ad flores Ruborum cultorum prope Cobden, Illinois Amer. bor. (F. S. EARLE).

6. **Fusarium discoideum** Faut. et Roum. Rev. Mycol. Oct. 1891. — 8068  
Sporodochiis carneis, erumpentibus, discoideis, epidermide lacera cinctis, 1,5-2 mm. diam.; conidiis semilunaribus, 40  $\approx$  4-6, continuis v. 1-4-septatis.

*Hab.* in cortice ramorum dejectorum Sambuci nigrae, Noidan Côte-d'Or Galliæ (F. FAUTREY). — A *Fus. sambucino* et *Fus. pyrochroo* f. *Sambuci* conidiis satis diversum.

7. **Fusarium elongatum** Cooke Grev. XIX, p. 4. — Sporodochiis erum- 8069  
pentibus, carnosus, convexus, compactus, aurantio-rubellis; hyphis

tenuibus, ramulosis, stipatis; conidiis in ramulorum apice insidentibus, tenuibus, elongatis, fusiformibus, paullum curvatis, acutis, 5-7-septatis, hyalinis 60-70, sæpe 80  $\approx$  2-3.

*Hab.* in ramis, New Zealand (COLENSO).

8. **Fusarium carneo-roseum** Cooke Grev. XIX, p. 4. — Erumpens, 8070  
tuberculiforme, carneo-roseum; conidiis fusiformibus, curvulis, hyalinis, 3-5-septatis, pallide roseo-tinctis, 45-50  $\approx$  5.

*Hab.* in corticibus New Zealand (KIRK). — Verisimiliter statum conidiophorum Nectriæ otagensis Curr. sistit.

9. **Fusarium sphæroideum** Passer. Diagn. F. N. IV, n. 140. — Spo- 8071  
rodochiis subgregariis, atris, globoso-conicis, ligno denudato insidentibus; hyphis longis filiformibus, ramosis; conidiis fusiformibus, rectis, falcatis vel sigmoideis, chloro-joduri zinci ope distincte triseptatis, 22-38  $\approx$  2,5-3, apicibus acuminatis, hyalinis.

*Hab.* in ramo denudato Fici Caricæ, Parma Ital. bor.

10. **Fusarium sphæriæforme** Sacc. *Fusarium Celtidis* Passer. Diagn. 8072  
F. N. V, n. 54 (1891) nec Ell. et Trac. — Sporodochiis epidermide velatis, dein nudatis, sphæriæformibus, atris; conidiis falcatis; apicibus acutis, hyalinis, 3-5-septatis, 25-30  $\approx$  4.

*Hab.* in ramulis emortuis Celtidis australis, Vigheffio pr. Parma Ital. bor.

11. **Fusarium Celtidis** Ell. et Trac. Journ. Myc. 1890, p. 76. — Spo- 8073  
rodochiis sparsis, erumpentibus, pulvinatis, pallide aurantiis,  $\frac{1}{4}$ -1 mm. diam.; sporophoris supra subfasciculato-ramosis, ramis erectis, septatis, 40-60  $\approx$  4; conidiis fusoides, acutis, subrectis utrinque tantum subcurvulis, 5-septatis, 40-60  $\approx$  4-5.

*Hab.* in fructibus Celtidis australis, Starkville, Missouri Amer. bor. (TRACY).

## II. In Dicotyledoneis herbaceis.

12. **Fusarium longisporum** C. et M. Grev. XVI, pag. 4. — Sporo- 8074  
dochiis erumpentibus, convexis, demum confluentibus, roseis, dein albidis; hyphis repetite dichotomis, septatis, hyalinis; conidiis fusiformibus, utrinque abrupte uncinatis vel subrectis, acutis, 5-septatis, hyalinis, 100  $\approx$  5-7.

*Hab.* in ramulis Passifloræ, Brisbane Australiæ (BAILEY).

13. **Fusarium Myosotidis** Cooke Grev. Grev. XVI, p. 49. — Hypophyl- 8075  
lum; maculis minutis, irregularibus, pallidis; sporodochiis tenuibus; conidiis fusoides, curvis, 3-septatis, hyalinis, 30  $\approx$  3-4.

- Hab.* in foliis languidis *Myosotidis*, Forden Britanniæ (J. E. VIZE).
14. **Fusarium protractum** Lév. Ann. Sc. nat. 1848, I, p. 246. — Sporodochiis erumpentibus, elongatis 2-6 mm. long., aurantiacis, initio tectis; conidiis fusiformibus utrinque obtusulis, 1-3-septatis, curvatis. 8076
- Hab.* ad sarmenta emortua *Solani Dulcamaræ*, Romainville Galliæ.
15. **Fusarium rutæcolum** Fautr. et Roum. Rev. Myc. 1891, p. 82. — Sporodochiis roseis, erumpentibus, majusculis, confluentibus, secus corticis rimas dispositis; sporophoris ramosis; conidiis arcuatis, acutis, 1-3-septatis, 40-50  $\approx$  4-6. 8077
- Hab.* in ramis dejectis *Rutæ graveolentis*, Noidan, Côte-d'Or Galliæ (F. FAUTREY).
16. **Fusarium Succisæ** Schröt in Thüm. M. U. n. 675 et Hedw. 1873, p. 180, *F. anthophilum* A. Br. in Rab. F. E. n. 1964. — Acervulis epicorollinis, exiguis, miniatis; hyphis mycelicis 3-4  $\mu$ . cr.; conidiis cylindræis, valde curvatis, utrinque acutis, demum pluriseptatis, 20-60  $\approx$  3-4, hyalinis, coacervatis rubellis. 8078
- Hab.* in partibus super. corollarum *Succisæ pratensis*, quæ corollæ clausæ manent et mox arescunt et fuscescunt, in Silesia, Bavaria, Borussia.
17. **Fusarium diffusum** Carm. Grev. XVI, pag. 81. — Effusum, aurantium; conidiis fusoides, acuminatis, subincurvis, 3-5-septatis, hyalinis, 60-70  $\approx$  3. 8079
- Hab.* in caulibus *Cardui*, Appin Britanniæ. — *F. roseo* affine.
18. **Fusarium oidioides** Speg. in Rev. Myc. 1886, pag. 183. — Maculis nullis, mycelio epiphylo, laxissime effuso, subpulveraceo, indefinito, albo; hyphis hyalinis, repentibus dense ramosis, gracilibus, 3-4  $\mu$ . crass., hinc inde ramulis irregulariter subfasciculatis, rarius solitariis, utrinque non vel vix attenuatis, 5-10  $\approx$  4-5, apice truncatis ac 2-3 sterigmatibus papilliformibus brevissimis coronatis; conidiis fusoides, leniter falcatis, non constrictis, utrinque acutis, hyalinis, 30-50  $\approx$  3-4, solitariis. 8080
- Hab.* ad folia viva *Polygoni multiflori* in dumetis prope Tokio Japoniæ.
19. **Fusarium ruberrimum** Delacr. Bull. Soc. Myc. 1890, p. 139. — Effusum, intense cinnabarinum; sporophoris curvulis, continuis, simplicibus, 15-18  $\approx$  1-1,5; conidiis curvulis v. subrectis, utrinque acutis, ex hyalino aurantio-rubris, 40  $\approx$  3. 8081

*Hab.* in seminibus *Onobrychidis sativæ*, Paris Galliæ. —

*F. roseo* subaffine.

20. **Fusarium æruginosum** Delacr. Bull. Soc. Myc. 1891, p. 110, t. VIII, 8082  
f. 4. — Sporodochiis magnis, hemisphæricis, e cyaneo æruginosis; sporophoris ramosis, parce septatis, hyalinis, ramis brevioribus; conidiis falcatis, 3-5-septatis, non constrictis, granulatis, hyalinis v. glaucescentibus, 20-25  $\approx$  4-5.

*Hab.* in tuberibus *Solani tuberosi*, Paris Galliæ.

III. *In Monocotyledoneis.*

21. **Fusarium Iridis** Oud. Contr. Mycol. XIII, p. 63. — Sporodochiis 8083  
parum distinctis; conidiis cylindræis, curvulis, utrinque acuminatis, hyalinis, 5-septatis, 40-50  $\approx$  3,5.

*Hab.* in foliis *Iridis Pseudacori*, Haye Hollandiæ (DESTREE).

22. **Fusarium carneolum** Karst. Symb. Myc. Fenn. XXVII, p. 35. — 8084  
Sporodochiis superficialibus, exiguis sæpe confluentibus, ceraceis, carneis; sporophoris filiformibus, fasciculatis, tenerrimis; conidiis fusoido-bacillaribus, utrinque acutis (falcatis), continuis hyalinis, 24-39  $\approx$  2-3.

*Hab.* in foliis putridis *Iridis Pseudacori* prope Kojo in parœcia Tammela Fenniæ.

23. **Fusarium Asparagi** Briard in Rev. Myc. I Jul. 1890, pag. 142, 8085  
Suppl. Crypt. Aube p. 138. — Sporodochiis minutis oblongis, 0,5-1 mm. long. 0,2 mm. lat., erumpentibus, roseis; conidiis fusoidis, curvulis v. subrectis, 3-6-septatis, non v. vix constrictis, roseo-pallidis, sub microsc. hyalinis, 40-72  $\approx$  5-7.

*Hab.* in caulibus siccis *Asparagi*, St.-Parres-les-Tertres pr. Troyes Galliæ.

24. **Fusarium Delacroixii** Sacc. *Fusarium Asparagi* Delacr. Bull. Soc. 8086  
myc. XV Jul. 1890, p. 99, t. XV, f. III-IV. — Sparsum vel subgregarium, roseo-carneum; sporophoris subsessilibus, ramulis verticillatis; conidiis hyalinis, curvulis v. subrectis, 4-5-septatis, loculis mediis plerumque subprotuberantibus, guttulatis, primo ovatis, continuis v. 1-septatis, 30-40  $\approx$  4-5.

*Hab.* in caule sicco *Asparagi officinalis*, Herbley pr. Parisios Galliæ. — «An satis diversum a præcedente?»

25. **Fusarium bulbigenum** Cooke et Mass. Grev. XVI, p. 49. — Effu- 8087  
sum, albidum; sporodochiis in cæspitulòs dein confluentes suberumpentibus; conidiis fusoidis, arcuatis vel incurvis utrinque acutis, 3-septatis, hyalinis, 40-50  $\approx$  5.

*Hab.* in bulbis ægrotantibus *Narcissi* in Britannia.

26. **Fusarium Ampelodesmi** Fautr. et Roum. Rev. Myc. 1891, p. 82. 8088

— Sporodochiis amorphis, effusis, tenuibus, sordide albis; conidiis fusoides, acutissimis, incurvis 5-septatis, 30-40  $\approx$  3.

*Hab.* in foliis *Ampelodesmi tenacis*, Noidan, Côte-d'Or Galliæ (F. FAUTREY).

27. **Fusarium Caricis** Oud. Microm. I, p. 14. — Sporodochiis minu- 8089

tis, tandem in stratum pallide roseum confluentibus; sporophoris ramosis, ex articulis brevibus, oblongis compositis; conidiis bacillari-fusoides, utrinque paullum incurvis, 5-septatis, intermixtis paucioribus 3-4-6-septatis, hyalinis, dein 50  $\approx$  7.

*Hab.* in foliis *Caricis* sp. pr. Hagam Hollandiæ (DESTREE).

28. **Fusarium nivale** Ces. in Rabenh. Herb. Myc. Ed. I, n. 1439, *Fu.* 8090

*sarium oxysporum* Schlech. El. Ber. II, pag. 139? — Sporodochiis primo optime distinctis, punctiformibus, seriatis, e carneo-miniatis, demum in stratum gelatinosum confluentibus; conidiis minutis, parum curvatis, utrinque rotundatis, apiculatis, fere inæqualibus, 1-5-septatis, 14-20  $\mu$ . longis.

*Hab.* in culmis *Cerealium* hibernantium prope Vercelli Italiæ borealis.

29. **Fusarium Andropogonis** Cooke in Thüm. in M. U. n. 676, et Ellis 8091

N. U. F. n. 809. — Sporodochiis erumpentibus, discoideis, exiguis, 200  $\mu$ . diam., brunneis, excipulo prosenchymatico fuligineo cinctis; conidiis anguste tereti-fusoides, curvulis, 3-5-septatis, 33-40  $\approx$  3, hyalinis; basidiis filiformibus passim furcatis, hyalinis, conidio brevioribus.

*Hab.* in culmis emortuis *Andropogonis virginiani*, Newfield N. J. Americæ borealis. — « Mihi videtur potius *Protostegia* species ».

30. **Fusarium Tritici** Erikss. in Bot. Centr. 1891, n. 36, p. 299, *F. Tri-* 8092

*tici?* Liebm. Tidskr. f. Landækon. 1840, p. 515, f. B, 1,2; *F. culmorum?* W. G. Smith. Dis. Gard. and Field. Cr. p. 209-210. — Sporodochiis primo sparsis, punctiformibus, nervisequis, aurantiacis, demum diffluentibus; conidiis fusoides, curvulis, 1-2-septatis, 12-20  $\approx$  1,5-2.

*Hab.* in glumis et valvis *Tritici duri*, Stockholm Suec.

31. **Fusarium Schribauxii** Delacr. Bull. Soc. myc. 1890 p. 99, t. XV, 8093

f. I. — Pallide carneum, sparsum, minutum; sporophoris iterato-verticillatis; conidiis hyalinis, 4-septatis, rectis v. curvulis, levissime constrictis, 35-40  $\approx$  6-7.

*Hab.* in caryopsidibus *Tritici sativi* germinantibus, socio *Cephalothecio roseo*, Paris Galliæ.

32. **Fusarium miniatulum** Sacc. *F. miniatum* Prill. et Delacr. Bull. 8094  
Soc. Myc. 1891, p. 117, c. ic., nec Auct. — Miniatum pulvinulatum  
vel subeffusum; hyphis sterilibus, hyalinis, repentibus, septatis, 2  
 $\mu$ . lat.; sporophoris rectis, simplicibus, continuis, sursum obtuse  
attenuatis, 10-12  $\approx$  2; conidiis fusoides, curvulis vel interdum sub-  
rectis, hyalinis, 3-septatis, 19-22  $\approx$  4-5.

*Hab.* in caryopsidibus putridis *Secalis Cerealis*, Paris Galliæ.

33. **Fusarium gigas** Speg. Guar. I, p. 174. — Mycelio tenuissimo, 8095  
effuso, vix perspicuo, arachnoideo, ex hyalino albo-roseo; hyphis  
repentibus, laxe ramoso-intricatis, remotissime septulatis, 3-4  $\mu$ . cr.  
hinc inde ramulos brevissimos, simplices, monosporos, erectos emit-  
tentibus; conidiis cylindraceo-fusoides, utrinque attenuato-acutatis,  
100-130  $\approx$  7-8, apice tantum inæquilaterali-subfalcatis, 9-11-septa-  
tis, non constrictis, hyalinis.

*Hab.* ad culmos dejectos *Bambusaceæ* cujusdam, socio *Pyrenomycte* sterili, pr. Arroyo-Guazû Brasiliæ.

#### IV. In Acotyledoneis.

34. **Fusarium Agaricorum** Sarraz. in Rev. Mycol. 1887, p. 170. — 8096  
Sporodochiis gregariis, compactis, parvis, verruculosis, maculas  
fulvas, dein nigricantes, orbiculares, dein late confluentes efforman-  
tibus; hyphis brevibus, ramosis, guttatis, hyalinis; conidiis fusoi-  
des, incurvis, 16-22  $\approx$  4.

*Hab.* in pileo *Agarici campestris* var. albæ cultæ, Sen-  
lis, Oise Galliæ (Cap. F. SARRAZIN).

35. **Fusarium Sclerodermatis** Oud. Contr. Mycol. XIII, p. 64 (1889). 8097  
— Sporodochiis roseis, primitus separatis, dein confluentibus; con-  
idiis fusoides, curvatis, hyalinis, utrinque acutissimis, imo subapi-  
culatis, vulgo 5-septatis, 40  $\approx$  4 $\frac{2}{3}$ .

*Hab.* in *Sclerodermate* vulgari putri, Schéveningue Hol-  
landiæ (DESTREE).

36. **Fusarium Peckii** Sacc. *Fusarium Sclerodermatis* Peck 43 Rep. 8098  
p. 31 (1890). — Sporodochiis minutis, convexis, rubro-flavis vel  
aurantiacis; sporophoris subramosis, conidia subæquantibus; con-  
idiis continuis v. obscure 2-3-septatis, subcurvis, utrinque acutis-  
simis, 30-45  $\approx$  4.

*Hab.* in peridio *Sclerodermatis* vulgaris, Manor Amer.  
bor. — Probabiliter non satis diversum a præcedente.



37. **Fusarium Ustilaginis** Kell. et Sw. II, Rep. Agr. Kans. pag. 285, 8099  
t. IX, f. 1-13. — Compactum, album v. roseolum, effusum; sporophoris erectis, valde ramosis, hyalinis; conidiis fusoides, sæpius subcurvis, magnitudine variis,  $20-66 \approx 3-6,5$  plerumque 2-9-septatis.

*Hab.* in Ustilagine Avenæ in ovariis Avenæ, Manhattan, Kansas Amer.

38. **Fusarium parasiticum** E. et K. Journ. Myc. 1887, pag. 127. — 8100  
Stratum tenue, griseo-album efficiens; sporophoris  $35 \mu$ . long., supra valde ramosis; conidiis lunatis, utrinque attenuatis et acutis, leniter subtriseptatis,  $20-30 \approx 3$ .

*Hab.* parasiticum in Puccinia Seymeriæ in Seymeria macrophylla, Manhattan, Kansas Amer. bor.

39. **Fusarium uredinicolum** J. Muell. Berichte deut. bot. Gesell. 1885, 8101  
pag. 395. — Mycelio endophleo et endophyllo, ramoso, septato, hyalino, ex soris Uredinearum erumpens, ramis fertilibus erumpentibus fasciculatis; conidiis acrogenis, fusoides, uno v. utroque apice acutatis,  $27-48 \approx 2,5-3$ , hyalinis, 2-5-septatis.

*Hab.* in soris Uredinearum ad ramos Rosæ et Rubi in Borussia.

V. In animalibus et in fabrefactis.

40. **Fusarium Acridiorum** (Trab.) Brongn. et Delacr. Champ. paras. des 8102  
criquets p. 7-8, *Lachnidium Acridiorum* (Trab.) Giard, *Botrytis* Trab. — Mycelio copioso, albo pluriseptato, ramoso, sinuoso, intus granuloso, hinc inde inflato; hyphis fertilibus brevibus plerumque e partibus inflatis oriundis, mono-tetrasporis; conidiis modo ovoideis continuis, modo oblongis constricto-1-septatis,  $11 \approx 5$ , modo falcatis 2-4-septatis,  $25-35 \mu$ . longis.

*Hab.* in Acridio peregrino in Algeria. — Hæc species, nec non *Polyrrhizium Leptophyæ* Giard — Syll. IX, p. 356 — quod simul occurrit in Algeria, sec. cl. Brongniart l. c., saprogena sunt nec insecta necant.

41. **Fusarium aquæductuum** (Radl. et Rab.) Sacc. *Selenosporium* 8103  
*aquæductuum* Radl. et Rabenh. in Hedwigia 1861, p. 73. — Stromate libere evoluto, carnosio-floccoso, stratum gelatinoso-fibrosium dilute flavidum formante, floccis septatis, plus minus ramosis sæpius flexuosis, fructiferis erectis, conidiis in superiori floccorum parte lateraliter sparsis, interdum oppositis vel binatis, falcatis, utrinque acutis, septatis, 1-pluri-guttatis,  $24,5-59,9$  (ex errore 599)  $\approx 2,7-4$ .

*Hab.* in aquæductibus, sociâ *Zooglœâ Termone*, urbis München Bavarix, copiose (RANDLKOFER).

42. **Fusarium moschatum** (Rab. et Radlk.) Lagerh. in Beiheft. Bot. 8104  
Centr. 1891, p. 409, *Selenosporium* Rab. et Radlk. (ubi?), *Fu-*  
*sisporium moschatum* Kitasato. — Subgelatinosum, acriter mo-  
schatum, pulvinatum, albo-cinereum, dein purpurascens; mycelio  
ramoso-septato; conidiis variis, sæpe falcatis, acro-pleurogenis.

*Hab.* in aquæductibus, etiam metallicis, in institutis anatomicis  
et pathologicis in Germania, Suecia. — Odor fortis moschatus per  
alcholem extrahi non potest. Sec. cl. Kitasato in Centralbl. 1889,  
IV, p. 351, species nascitur in infusione fœni et præbet conidia  
falcata, 1-septata, 7-13  $\approx$  1-1,5, pleurogena.

B) Conidia continua (*Fusamen* Sacc. et *Leptosporium* Sacc.).

43. **Fusarium hypocreoideum** Cooke et Mass. Grev. XVI, p. 76. — 8105  
Sporodochiis convexis, pulvinatis, hypocreifformibus, 1 mm. diam.,  
aurantiis, subdiscoideis; conidiis fusoideis, continuis, hyalinis, 15  $\approx$  3.

*Hab.* in foliis languidis *Fici asperæ*, Brisbane (BAILEY).

44. **Fusarium Poincianæ** Passer. Diagn. F. N. IV, n. 139. — Erum- 8106  
pens, aurantiacum, discoideum, epidermide cinctum, lineari-seria-  
tum; hyphis fasciculatis, 12-15  $\mu$ . longis; conidiis minutissimis,  
bacteroideis, hyalinis, 3-4  $\approx$  1.

*Hab.* in ramo sicco *Poincianæ Gillesii* in horto botanico  
Parma Ital. bor. — « Vix *Fusarium*, an potius *Næmospora*? ».

45. **Fusarium nucicolum** Karst. et Har. Rev. Myc. 1890, n. 47. — 8107  
Sporodochiis aggregatis, sæpe confluentibus, gelatinoso-ceraceis,  
pulvinatis vel tuberculiformibus, exiguis, nudis, carneis; conidiis  
oblongatis, utrinque obtusissimis, subinde inæqualibus, solito rectis,  
continuis hyalinis, 10-20  $\approx$  3-5.

*Hab.* ad epicarpium nucis, Méry-sur-Seine, Aube in Gallia.

46. **Fusarium Patouillardi** Sacc. *Fusarium uredinicolum* Pat. Bull. 8108  
Soc. Myc. 1888, p. 127, nec J. Müll. — Minutissimum, sparsum,  
roseum, subtus stipitiforme, apice ramosum; conidiis ovoideis, sim-  
plicibus, elongatis, 10  $\approx$  3,5, hyalinis.

*Hab.* sub soris *Pucciniæ pallidissimæ* inter perithecia  
Darluçæ fili, Caracas Venezuelæ.

47. **Fusarium spermogoniopsis** J. Muell. Berichte deut. bot. Gesell. 8109  
1885, p. 394. — Dense fasciculatum, ex soris *Uredinearum* erum-  
pens; hyphis gracillimis, hyalinis; conidiis acrogenis acute ovoideis,  
8-9  $\approx$  1,5-2,5, granulosi, hyalinis.

*Hab.* in soris Phragmidii Subcorticii et Phr. Rubi ad sarmenta Rosæ atque Rubi in Borussia.

48. **Fusarium hydnicolum** E. et E. Journ. Mycol. 1888, p. 45. — Aculeos Hydni mycelio albo obvolvens; conidiis minutis, subglobosis, 2-2,5  $\mu$ . diam. vel ellipsoideis, 2-nucleatis, 3-5  $\times$  2-2,5.

*Hab.* parasiticum in Hydno membranaceo ad corticem quercinum, Concordia Mo. Amer. bor. (DEMETRIO).

49. **Fusarium fungicolum** Karst. Rev. Myc. 1890, n. 47. — Sporodochiis sparsis, superficialibus, rotundatis, fulvescentibus, saltem in statu sicco, 0,1 mm. v. paullo ultra cr., hyphis intertextis, continuis, 5-6  $\mu$ . cr. cinctis; conidiis anguste fusoideo-elongatis, continuis, rectis v. subrectis, 6-12  $\approx$  1; sporophoris 20-30  $\approx$  0,5.

*Hab.* ad lamellas Lenzitis betulinae in Mustiala Fenniae (P. A. KARSTEN). — (Hic animadvertere liceat, sporas *Lenz. betulinae* esse oblongatas, 5-7  $\approx$  2 nec sphaeroideas, Karst. loc. cit.)

50. **Fusarium mycophilum** (Karst.) Sacc. *Leptosporium mycophilum* Karst. Symb. Myc. Fenn. XXV, pag. 24. — Sporodochiis effusis, mollibus, tenuissimis, aurantiacis, ambitu subbyssino, albo; conidiis oblongatis, continuis, rectis, hyalinis, 3-4  $\approx$  1-1,5.

*Hab.* in specie indescrupta Myxomycetum in regione Aboensi, Merimasku Fenniae.

51. **Fusarium heterosporoides** Fautrey in Rev. Myc. 1890, pag. 126. — Sporodochiis violaceis, mollibus; conidiis variabilibus, ovoideis, oblongis, rotundatis, hyalinis, guttatis, 10  $\approx$  4-5, dein 13-15  $\approx$  6-7.

*Hab.* in Sclerotio Clavo ad Glyceriam fluitantem, Charny, Côte-d'Or Galliae (F. FAUTREY).

52. **Fusarium barbatum** E. et E. Journ. Myc. 1888, p. 45. — Sporodochiis applanatis, subconfluentibus, cinereis, dein aurantiis; hyphis erectis, simplicibus, hyalinis, continuis vel tenuiter septatis, sursum tenuatis, 20-25  $\approx$  2,5, apice conidia piriformia, hyalina, continua, 4-6  $\approx$  2-2,5 gerentibus.

*Hab.* in Usnea barbata, Newfield N. J. Amer. bor. — **Bactidium flavum** Kunze, Sacc. Syll. IV, p. 691. Huc fere absque dubio spectat *Ericianella aurea* Brond. Rec. Crypt. Agen. pag. 14, tab. 3.

#### PIONNOTES Fr. — Sacc. Syll. IV, p. 725.

1. **Pionnotes Pinastri** Karst. in Hedw. 1888, p. 105, — Sporodochiis sparsis vel gregariis, subinde confluentibus, pertenuibus, gelatino-

sis, lutescentibus, pallescentibus vel succineis, minutis; conidiis filiformibus, continuis, rectis, hyalinis, usque ad 90  $\mu$ . long., 1  $\mu$ . cr.

*Hab.* in foliis emortuis Pini silvestris in Fennia austr.

2. **Pionnotes Pseudonectria** Speg. F. Guar. II, n. 200. — Sporodochiis 8116

hinc inde per rimulas corticis erumpentibus, subsuperficialibus, solitariis v. 3-10-aggregatis sæpeque confluentibus, subglobosis vel piriformibus, minutis, 250-350  $\mu$ . diam., succineo-aurantiis, glabris, levibus; sporophoris e nucleo centrali basalique subparenchymatico-oriundis, dense fasciculatis, cylindræis, 250-300  $\simeq$  3, rectis, simplicibus, continuis v. parce septatis, hyalinis, monosporis; conidiis cylindræis, utrinque attenuatis ac curvulis, 80  $\simeq$  6, 5-7-septatis, non constrictis, hyalinis.

*Hab.* ad corticem ramorum putrescentium plantæ ignotæ in silvis pr. Paraguari Brasiliæ.

**MICROCERA** Desm. — Sacc. Syll. IV, p. 727.

1. **Microcera Clavariella** Speg. Guar. I, p. 175. — Maculis nullis; 8117

sporodochiis cylindræis, minutis, 250-500  $\mu$ . alt., 50-80  $\mu$ . cr., simplicibus, apice obtusis, erectis, ceraceis, tenacellis, rigidulis, flavidulis v. carneis, solitariis v. sæpius 2-10 aggregatis e nucleo lenticulari, 0,5-1 mm. diam. concolori, subepidermico, parenchymate innato oriundis, glabris; sporophoris sporodochii superficiem totam obtegentibus (an apicibus ejusdem hypharum?), clavulatis, apice obtusatis v. acutatis, dense ruguloso-strictis, 10-15  $\simeq$  3, hyalinis, monosporis; conidiis clavulatis, curvulis, 3-5-septatis, non constrictis, 20-27  $\simeq$  1,5-2, utrinque acutis, hyalinis.

*Hab.* ad folia viva Eugeniæ sp., sociâ *Phyllachorâ involutâ* pr. Caâ-guazû Brasiliæ.

2. **Microcera pluriseptata** Cooke et Mass. Grev. XVII, p. 43. — Exi- 8118

gua, sparsa, pulvinata, aurantia, sessilis; conidiis bacillaribus, utrinque conico-attenuatis, rectis vel leniter curvulis ad 11-septatis, hyalinis, 100-120  $\simeq$  10; sporophoris filiformibus, ramosis.

*Hab.* in *Calocera* glossoide et in corticibus, Cordova, Mexico (SALLÉ).

3. **Microcera rectispora** Cooke et Mass. Grev. XVI, p. 4. — Spo- 8119

rodochiis subsphæroideis, subsessilibus, primo rubellis, demum albidis; conidiis elongato-fusiformibus, utrinque acutis, 7-9-septatis, hyalinis, 150-200  $\simeq$  10; sporophoris brevibus, tenuibus, furcatis, hyalinis.

*Hab.* ad coccos in Citro Aurantio, Brisbane Australiæ (BAILEY).

*Sect.* 4. Helicosporæ SACC.

**EVERHARTIA** Sacc. et El. Syll. IV, p. 729.

1. **Everhartia lignatilis** Thaxt. Bot. Gaz. 1891, p. 204, t. XX, f. 10-12. — Sparsa, superficialis, stipitata vel substipitata, flavida, dein basi nigricante, subcylindræa vel supra expansa, 250-400  $\times$  100-150; conidiophoris septatis, subdichotomis; hyphis sterilibus simplicibus intertextis; conidiis acrogenis, hyalinis, 3-septatis, cylindræis vel subapplanatis, 4  $\mu$ . diam., basi rotundata et apice rostrato in circulum simplicem, 12-13  $\times$  8-9, adproximatis, massa viscosa, flava inclusis.

*Hab.* in caudicibus udis, Connecticut Amer. bor.

*Ser.* 2. Tubercularieæ dematieæ

*Sect.* 1. Amerosporæ SACC.

**EPICOCCUM** Link — Sacc. Syll. IV, p. 736.

1. **Epicoccum Malinvernianum** Cesat. et De Not. in Erb. Critt. It. I, n. 789, Sacc. Syll. IV, p. 742. — Hypophyllum, punctiforme, atrum, effusum v. subcircinnatum; sporodochiis pulviniformibus, fuscis, obscure cellulosis, cellulis periphericis subelongatis, articulatis sporiferis; conidiis sphaericis, fuligineo-fuscis, muriculatis, vix translucidis, decussis, appendicula diaphana auctis.

*Hab.* in foliis emortuis Mororum, Oldenico Vercelli Ital. bor.

2. **Epicoccum diversisporum** Preuss — Syll. IV, pag. 741. — Sec. Peck 44 Rep. p. 28, conidia variant magnitudine 7-20  $\mu$ . diam. Nascitur quoque in ligno plerumque rubefacto Abietis, Wilmurt Lake Amer. bor.

**BONPLANDIELLA** Speg. Guar. I, p. 175 (Etym. ab ill. bot. A. J. A. BONPLAND). — Sporodochia globosa e sporophoris simplicibus, olivaceis coalescentibus, apice liberis ac in appendicem gracilem productis, composita. Conidia globosa, in appendicibus basidiorum dense pleurogena, chlorina, non catenulata. — Genus inter *Tubercularieas* et *Dematieas* anceps.

1. **Bonplandiella guaranítica** Speg. Guar. I, p. 175. — Sporodochiis 8122

hinc inde laxè aggregatis, hypophyllis, superficialibus, globosis, 150-180  $\mu$ . diam., obscure olivaceis, puberulis, matrici arcte adnatis; sporophoris cylindræis, coalescentibus, olivaceis, apice abruptè cuneato-rotundatis, 65-70  $\approx$  3-4, ac in appendicem cylindraceam, 5-20  $\approx$  2-3, denticulato-nodosam, subhyalinam productis; conidiis elliptico-globosis, 1,5  $\mu$ . diam., pallide olivaceis v. fumosis, in parte media appendicis basidiorum dense 10-20-pleurogenis, rarius 2-3 acrogenis.

*Hab.* ad folia viva Sapotacæe cujusdam, sociâ *Phyllachorâ pulcrâ* Paraguari Brasiliæ.

**STRUMELLA** — Sacc. Syll. IV, p. 742.

1. **Strumella Darntiana** Roum. et Wint. in Rev. Myc. 1886, p. 213. 8123

— Sporodochiis gregariis, in macula permagna, rotundato-subirregulari, ambitu flexuoso, lobato crenatoque, determinato, albido, margine lato, lutescente et area obscuriori indeterminata, pro maxima parte epiphyllis, parcius hypophyllis, forma variis, sphæriæformibus vel plus minusve elongatis, fere hysteriiformibus, usque  $\frac{1}{2}$  mm. longis, atris, erumpentibus, demum superficialibus, ex hyphis erectis vel ascendentibus, crassis, articulatis, deorsum nigricantibus, sursum hyalinis, ramosis (interdum dichotomis) et dense contextis formatis; conidiis ignotis.

*Hab.* in foliis vivis *Artocarpî integrifoliæ* in insula Mauritio (DARNTY).

2. **Strumella elongata** Bres. Rev. Myc. 1891, p. 33, t. 114, f. X. — 8124

Sporodochiis gregariis vel confluentibus, erumpenti-superficialibus, subpulvinatis, atro-olivaceis, 4-6  $\approx$  2 mm.; sporophoris simplicibus vel subramosis, septatis, olivaceis, fasciculatis, 5-6  $\mu$ . cr.; conidiis obovato-elongatis, continuis vel demum spurie 3-septatis, 12-18  $\approx$  5-6,5.

*Hab.* in caulibus *Sambuci nigræ* pr. Leutschau Hungariæ.

3. **Strumella strobilina** Cooke et Mass. Grev. XVIII, p. 20. — Pu- 8125

stulis gregariis erumpentibus, subprominulis, subglobosis, nigris, 0,25 mm. diam.; hyphis simplicibus vel furcatis, filiformibus; conidiis fusoides, 1-septatis, utrinque acutis, fumoso-olivaceis, 15-17  $\approx$  2,5.

*Hab.* in conis *Abietum*, Newcastle Britannicæ. — «An *Epicladium?*».

4. **Strumella conigena** Br. et Sacc. *Str. strobilina* Br. et Har. Journ. 8126

Bot. 1891, p. 173. — Sporodochiis erumpentibus punctiformibus, pulvinulatis, 150-200  $\mu$ . diam. nigricantibus, dense gregariis vel

subconfluentibus; hyphis fasciculatis, subrectis, simplicibus, continuis vel parce septatis, brunneis, 40-50  $\times$  4-5; conidiis oblongo-fusoides vel subellipsoideis, obtusulis, dilute olivaceis, subhyalinis, continuis 10-20  $\times$  4-5, catenulatis (?).

*Hab.* in squamis subsiccis strobilorum Pini silvestris, Clermont, Puy-de-Dôme Galliæ.

5. **Strumella hysteroidea** Cooke et Mass. Grev. XVII, pag. 69. — 8127  
Sporodochiis gregariis, erumpentibus, prominulis, elongato-ellipticis, hysteriiformibus 1-2 mm. long., 0,5-1 mm. diam., compactis, atris; hyphis brevissimis; conidiis sphæroideis vel subsphæroideis, continuis, olivaceis, 7-8  $\mu$ . long.

*Hab.* in ramis decorticatis, Brisbane Australiæ (BAILEY).

6. **Strumella patelloidea** Cooke et Mass. Grev. XX, p. 7. — Sporodochiis orbiculari-patellatis, sparsis, superficialibus, nigris, 1-1,5 mm. diam.; conidiis subglobosis vel ovoideis, continuis, atro-olivaceis, 7-8  $\mu$ . diam., sporophoris brevibus suffultis. 8128

*Hab.* in ligno decorticato in Tasmania (MARTIN). — Fructificatione *S. hysteroideæ* accedit, sed habitus omnino diversus.

7. **Strumella dealbata** E. et E. Journ. Mycol. 1888, p. 50. — Sporodochiis areolas dealbatas ligni occupantibus, gregariis, erumpentibus, olivaceo-nigris, tuberculiformibus, supra plerumque deplanatis, 1 mm. diam., hyphis vel sporophoris subrudimentariis conidia subglobosa copiosa, subcatenulata varieque affixa, brunnea, rugulosa gerentibus. 8129

*Hab.* in ligno emortuo, British Columbia Americæ borealis (J. MACOUN).

8. **Strumella Sacchari** Cooke Grev. XIX, p. 45. — Sporodochiis gregariis, erumpentibus, nigris, patellaribus vel subclavatis, basi stipitiformi brevi fultis vel cylindræo-multiformibus, 0,5 mm. diam.; hyphis brevibus, hyalinis, simplicibus; conidiis tereti-ellipsoideis, continuis, pallide fuscis, 10-12  $\approx$  3. 8130

*Hab.* in culmis Sacchari officinarum, Queensland Australiæ (BAILEY).

**TRIPLICARIA** Karst. Hedw. 1889 (Etym. *triplex*). — Sporodochia superficialia, convexa, e stratis tribus composita; infimo ex hyphis ramosis fuliginis compacto, intermedio grumoso subcinnamomeo, superiore floccoso, lurido-cinerecente. Conidia pleurogena, sphæroidea, sublevia, hyalina.

1. **Triplicaria hypoxyloides** Karst. loc. cit. — Sporodochiis pulvina- 8131

tis, discretis, connatis vel confluentibus, rarius plus minus effusis, strato imo fusco-atro, intermedio subochraceo-cinnamomeo, superiore ex hyphis ramosis, obsolete articulatis, varie flexuosis, repentibus, circ. 9  $\mu$ . crassis laxè composito, 2-4 mm. alt. et lat.; conidiis sphæroideis, 6-8  $\mu$ . diam.

*Hab.* in ligno ramorum Salicis phylicæfoliæ locis uliginosis, umbrosis dejectorum ad Mustiala Fenne.

**SCLERODISCUS** Pat. Journ. de Bot. 1890, p. 66 (Etym. *scleros* durus et *discus*). — Sporodochia disciformia, brunnea dein nigricantia; hyphæ obsoletæ. Conidia ovoidea, continua, brunnea, totum sporodochium obducentia. — In nonnullis speciminibus adsunt sclerotia endophylla lata, dura, intus alba, fungilli initia forte sistentia.

1. **Sclerodiscus nitens** Pat. loc. cit. fig. 11. — Sporodochiis dense gregariis, 1,5-2 mm. lat., applanatis, subsuperficialibus, nitidis, brunneis dein nigris; conidiis ovoideis, 4-5  $\approx$  1,5-3, bi-triguttulatis, brunneis, copiosissimis.

*Hab.* in foliis vivis Moreæ cujusdam spinosæ, Fu-Phap et Banton Tonkin.

**HYMENOPSIS** Sacc. Syll. IV, p. 744.

1. **Hymenopsis decipiens** Passer. Diagn. F. N. IV, n. 141. — Gregaria, e ligno erumpens subhysteriiformis, atra; basidiis densis bacillaribus hyalinis; conidiis cylindræis, rectis, hyalinis, 6-8  $\approx$  1,5.

*Hab.* in ramis denudatis Fici Caricæ, Parma Ital. bor.

**EPIDOCHIUM** Fr. — Sacc. Syll. IV, p. 747.

1. **Epidochium olivaceum** E. et Ev. Proc. Acad. Phil. 1891, p. 93.

— Sporodochiis solitariis v. cæspitosis, tuberculiformibus, subhemisphæricis,  $\frac{1}{2}$ - $\frac{3}{4}$  mm diam., atro-olivaceis, carnosis, dein erumpentibus, discoideis v. subcollapsis; sporophoris simplicibus, validis, 20-30  $\approx$  3-4, continuis, viridulo-granulosis, dein hyalinis, subæqualibus; conidiis subfalcatis, obtusis, viridulo-hyalinis, granulosis, continuis, 25-35  $\approx$  5-7.

*Hab.* in ramis emortuis Fraxini, London, Canada Amer. bor. (DEARNESS).

2. **Epidochium petiolorum** Kell. et Fautr. in Rev. myc. 1890, p. 168.

— Sporodochiis erumpentibus, minutis, vivis læte roseis; sporodochiis simplicibus, fasciculatis, longitudine variis, 3  $\mu$ . diam.



*Hab.* in petiolis dejectis Fraxini excelsioris, Noidan, Côte-d'Or Galliæ (KELLERMAN).

3. **Epidochium Eucalypti** Cooke Grev. XVI, p. 71. — Sporodochiis 8136  
erumpentibus, gregariis, sessilibus, atris, tremelloideis, discoideis, plerumque concavis; basidiis filiformibus, ramosis, fuscis; conidiis elongato-ellipsoideis, 10-14  $\approx$  3-4, utrinque rotundatis, hyalinis, continuis.

*Hab.* in foliis emortuis Eucalypti, California Amer. bor.

4. **Epidochium disciforme** (Fr.) Sacc. Miscell. Mycol. n. 2192. *Cryptomyces disciformis* Fr. Cfr. supra p. 48. — Sporophoris fasciculatis, filiformibus e strato prolifero lutescente oriundis in clavulam ovatam 10-15  $\approx$  8-9 apice dilatatis; sporis..... 8137

*Hab.* ad ramos Ulmi, Malmedy in Rhenogovia (LIBERT). — Stirps iterum inquirenda in exempl. orig. Friesianis.

**CHÆTOSTROMA** Corda. — Sacc. Syll. IV, p. 749.

1. **Chætostroma nigricans** Speg. Guar. I, p. 176. — Sporodochiis amphigenis, densiuscule sparsis, atro-olivaceis, e turbinato globosis, minutissimis, 40-70  $\mu$ . diam., sessilibus, margine parce ciliatis; setis minutis, rigidulis, cylindræo-attenuatis, apice obtusiusculis, basi subbulbosis, 50-85  $\approx$  3-5, fuligineis, 5-10-septatis, non constrictis; contextu tenuissime membranæo, olivæo, anhisto; basidiis cylindræis, 7-8  $\approx$  4, basi coalescenti evanida, apice cuneato-acutatis, pallide chlorinis; conidiis cylindræis, utrinque rotundatis, 12-15  $\approx$  4-4,5, continuis, hyalinis. 8138

*Hab.* ad folia languida v. emortua adhuc pendula Smilacis sp. in silva Caà-guazù Brasilæ.

2. **Chætostroma atrum** Sacc. Syll. IV, p. 749. — Huc spectat *Coccularia graminis* Cooke in Rav. F. Am. n. 557, in foliis Eulaliæ in Amer. bor.
3. **Chætostroma Holoschœni** Passer. Diagn. T. N. V, n. 55. — Sporodochiis globoso-pulvinatis vel interdum cylindricis, atris, setulis olivæis, spathulatis, sursum attenuatis, tunicatis 180  $\approx$  4 basi parce vestitis; conidiis innumeris, cylindræo-fusiformibus 6-8  $\approx$  1,5-2 olivæis, non vel obscurissime guttulatis, in sporophoris filiformibus dense fasciculatis 25  $\mu$ . longis acrogenis. 8139

*Hab.* in foliis fracidis Scirpi Holoschœni, Vigheffio in torrente Baganza, Prov. di Parma Ital. bor.

**MYROTHECIUM** Tode — Sacc. Syll. IV, p. 750.

1. **Myrothecium pulchellum** Speg. Guar. I, p. 176. — Sporodochiis 8140 amphigenis, sparsis, discoideo-repandis, minutis 100-300  $\mu$ . diam. tenuibus, intense viridi-olivaceis, applanatis, zona alba, tomento-sulo-radiante marginatis, matrici arcte adnatis, contextu prosenchymatico; sporophoris cylindræis, breviusculis, gracillimis, 20-25 = 1, in conidia catenulata apice productis; conidiis cylindræis utrinque truncatis ac minute 1-guttulatis, 12-13 = 1,5, levibus, dilutissime chlorinis.

*Hab.* ad folia exsiccata adhuc pendula Luheæ grandifloræ in silvis pr. Guarapî Brasilæ.

2. **Myrothecium medium** Sacc. et Wint. Hedw. 1883, p. 14. — Sporodochiis 8141 gregariis subsuperficialibus, globoso-depressis, dein subumbilicatis, nigris, vix  $\frac{1}{4}$  mm. diam.; sporophoris fasciculatis, bacillaribus, 25-30 = 3-3,5, conidio pallidioribus; conidiis fusoides, rectis, 13-14 = 3-5-4, olivaceo-fuscis.

*Hab.* in scapis aridis pr. Salem Badeniæ. — Inter *M. ellipso-sporum* et *M. trochiloides* medium.

**TRICHOSTROMA** Corda — Sacc. Syll. IV, p. 752.

1. **Trichostroma fuscum** Karst. Symb. XX, p. 100. — Sporodochiis 8142 gregariis, verruciformibus, convexis, siccis, corneis, atro-fuscis, 1,2 mm. lat.; sporophoris undique erumpentibus, dilute olivaceo-fuscis, erectis, septatis, 6  $\mu$ . cr.; conidiis oblongatis, ellipsoideis vel ellipsoideo-sphæroideis, hyalinis, 4-6 = 2-4.

*Hab.* in caulibus aridis *Solidaginis canadensis*, *Mustiala Fenniæ*. — *T. olivaceo* affine.

2. **Trichostroma Quercus** Rich. Cat. Champ. Marn. n. Suppl. p. 551. 8143 — Gregarium, minutissimum, sphæricum, sordide flavo-viridulum, primo glabrum, dein, apice pezizoideo-disciformi excepto, pilis nigris hirtum; sporophoris hyalinis, ramosis; conidiis ovoideis, 3  $\mu$ . long.

*Hab.* in ligno denudato et udo ramorum *Quercus*, St. Amand Galliæ.

**Sect. 2. Didymosporæ** SACC.

- PUCCINIOPSIS** Speg. F. Guar. II, n. 202 (Etym. *Puccinia* et *opsis* aspectus). — Sporodochia subglobosa, minuta, superficialia, bioge-

na. Conidia dense constipata, majuscula, clavulata, didyma, stipite brevissimo suffulta, fuscescentia.

1. **Pucciniopsis guaranitica** Speg. F. Guar. II, n. 202. — Maculis amphigenis elongatis indeterminatis 1-10 mm. long. 1-5 mm. lat. areolatis, zona purpurascens cinctis; sporodochiis sæpius hypophyllis, densiuscule in centro macularum aggregatis globosis minutissimis 50-150  $\mu$ . diam. olivaceis; conidiis pucciniæformibus didymis obscure olivaceis, clavulatis 20-28  $\times$  10, apice late v. subtruncato-rotundatis, mucrone pallidiore obtuso plus minusve evoluto auctis, loculo supero crasse tunicato, levibus, glabris, inferne stipitibus mox coalescentibus nucleum carnosulum efformantibus, pallidioribus suffultis.

*Hab.* ad folia viva Cocos Yatai in montanis Sierra de Peribeby Brasilæ. — Species pulcherrima conidiis teleutosporas *Pucciniæ* cujusdam perfecte æmulantibus.

**Epiclinium** Fr. — Sacc. Syll. IV, p. 754.

1. **Epiclinium phacidioides** Sacc. et Romell sp. nov. — Sporodochiis amphigenis erumpentibus, discoideis, minutis, nigricantibus, phacidioides, 0,2 mm. diam.; hyphis fasciculatis, suberectis, septatis, 60-90  $\times$  5-6, olivaceo-fusco-ochraceis e basi stromatica cellulosa obscuriore oriundis, apice in conidia ovato-oblonga sæpius constricto-didyma, utrinque rotundata 8-15  $\times$  6-8 abeuntibus.

*Hab.* in foliis ramulisque emortuis *Arctostaphyli* prope Upsala Sueciæ (L. ROMELL).

*Sect. 3. Phragmosporæ* SACC.

**EXOSPORIUM** Link — Sacc. Syll. IV, p. 755.

1. **Exosporium sociatum** Ell. et Ev. Proc. Acad. Phil. 1891, p. 93. — Sporodochiis amphigenis, erumpentibus, minutis, demum ob conidia numerosa subpulvereis; sporophoris conidia æquantibus; conidiis oblongis, rectis v. subcurvis, utrinque sæpius subacutis, 12-15  $\times$  4-5, atro-brunneis, 3-septatis.

*Hab.* in foliis *Aceris rubri*, Bayon Chene, Louisiana Amer. bor. (LANGLOIS).

2. **Exosporium pusillum** Karst. Symb. XVII, p. 164. — Sporodochiis gregariis v. confertis, subinde confluentibus, subsuperficialibus, atrofuscis, pusillis; conidiis clavatis, 6-septatis, fuliginis, 39-50  $\times$  9.

*Hab.* in gemmis emortuis *Alni glutinosæ* pr. *Vasam Fennicæ*.

3. **Exosporium deflectens** Karst. *Fragm. Myc. Fenn. XXIII*, p. 2. — 8148

Sporodochiis sparsis, epiphyllis, sphaeriæformibus, rotundatis, obovoideis vel difformibus, erumpenti-superficialibus, glabris, olivaceo-atris, circiter 0,2 mm. diam.; conidiis oblongatis vel cylindræis, rectis utrinque obtusissimis, 3-septatis, ad septa vix vel leniter constrictis, dilute flavo-fuligineis, pellucidis, 14-20 × 5-6; basidiis cylindræis, brevibus, dilute fuligineis.

*Hab.* in foliis emortuis *Juniperi communis* circa *Mustiala Fennicæ*, passim (ONNI KARSTEN). — Ad *Coryneum* vergit. Cum *Læstadia juniperina* (Ellis) Sacc. mixtim crescit.

*Sect. 4. Dictyosporæ* SACC.

**SPEGAZZINIA** Sacc. *Syll. IV*, p. 758.

1. **Spegazzinia tessarthra** (B. et C.) Sacc. *Syll. IV*, n. 3582. — Huc, teste Cooke, cui assentior, spectat *Triposporium cristatum* Pat. *Bull. Soc. Myc. 1888*, p. 125, t. XX, f. 7, pariter nascens in foliis Graminum in Venezuela.

Locis in quibus...

Expositum...

Sporobolus...

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# FUNGI FOSSILES

AUCTORE

**ALOYSIO MESCHINELLI S. D.**

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## PRÆFATIO

In terrestri compagine inter copiosa et splendida herbaria, quibus natura nostrum globum diversis ævis geologicis exornavit, fungi quoque vestigia haud dubia reliquerunt.

Ab ævo carbonifero vegetabilia hæc per posteriores geologicas series semper et numero et elementis augescunt quoad ad præsens ævum perveniant, quo maximum incrementum consequuta esse videntur.

Quorum vegetabilium pauca post carboniferum ævum vestigia invenies, nam tertiarium attingere opus erit, ut hunc vegetabilium ordinem et optime explicatum et conspicuo tam generum quam specierum numero descriptum invenire possimus.

Species hæc tertiariæ tot sunt ut specierum omnium anteriorum simul collectarum numerum longe superent.

Ævo quaternario specimina huius vegetabilis ordinis invenimus, quæ, etsi numero pauca, tamen ad familias pertinent, quarum structura superior et multiplex est.

Verum maximam eorum explicationem fungi nostro hoc ævo attigerunt, quo evolutionis apice forsitan consequuto, per intelligentes assiduasque illustrium mycologorum investigationes extraordinarium momentum adsumpserunt.

Ab expositis colligimus fungorum explicationem perpetuo ascendenti motu augere; ita ut hodie explicatio hæc culmen attigerit.

Quod ex variis causis, præcipue vero ex physicis condicionibus, in quibus vegetabilia hæc versabantur, proficisci videtur, ut liceat sane adfirmare eorum explicationem auctam esse postquam cosmicæ condiciones nostri planetæ ad præsentem rerum ordinem accesserunt. Et sane thermicæ et udometricæ vicissitudines nostri ævi amplioris propagationis potestatem præbent huic floræ, quæ vitam viresque ex aliena dissolutione sumit.

Idque ex hodiernæ mycologicæ floræ studio satis comprobatum videtur. Enim vero harum cryptogamarum plura magisque varia specimina illis in regionibus latitudinibusque invenies, quibus temperaturæ humiditatisque variationes juxta diversa anni tempora maximæ notantur.

Ex cosmicarum condicionum studio, quibus carbonifero ævo noster planeta utebatur, eo scilicet ævo, quo primitus fungi apparuere, facile eruitur ipsas ad hæc vegetabilia augenda minime aptas fuisse. Equidem ævo illo, calore et humiditate æque in orbe distributis, nondum climaticæ variationes inceperant.

Quo calor tenore ætate jurassica et oolitica permanente, nulla quoque anni temporum distributio habetur.

Ævo cretaceo tantum tenor hic perturbatur et in orbe levissima vicissitudo incipit. Hoc anni temporum indicium primum.

Nihilominus tertiariorum ævo tantum et præcipue extremis ejusdem ævi momentis incipiunt anni temporis vicissitudines; tunc tantum cosmicæ condiciones iis, quibus planeta noster hodie utitur, aliquantulum comparari possunt.

Fungorum igitur explicatio eorumque consequens propagatio longe aliter ac fortuita apparet; immo etiam cosmicis phænomenis in terrestri superficie subsequutis intime connexa.

Fossilium fungorum inopia præ aliis vegetabilibus omnibus alia recte panditur ratione, idest harum cryptogamarum structura; ex illis enim multæ, quippe quæ natura ipsa molles et carnosæ et ideo lapidificationi ineptæ, perpauca sui vestigia reliquerunt. Et sane ex profusissima copia mollium fungorum hodie in orbe vigentium pauci admodum in statu fossili supersunt; attamen antiqua eorum existentia nobis ex insectorum reliquiis, quæ cum exceptione carnosorum fungis sese nutricant, probatur.

Et ideo ex fossilibus fungis maxima pars ad epyphyllas species reducitur, quæ tunc etiam, prout in præsentibus, illorum ingentium nemorum plantas frequentes habitabant.

Nobis autem de fungis singillatim loquentibus dubitatio illa silentio prætereunda non erit, quæ etiam nunc non modo ad generum sed et ordinum et tribuum characteres spectat, in quæ a palæophytologis distribuuntur. Quæ incertitudo ab ipsa fossilium conservationis conditione pendet, quippe qui examini microscopico fere semper inepti, ut in classes redigantur, characteres tantum morphologicos externos præbeant.

Characteres vero isti in epiphyllis speciebus ad perpauca rediguntur; scilicet generalis forma, margo, papillarum numerus, concavitas seu convexitas media, ostiolum, sulcus, rima longitudinalis, areola circumstans, perithecorum color, mutua dispositio, eorum super folii paginas situs, ii sunt characteres externi, parum quidem specifici, tamen plus minusve generibus et ordinibus diversis communes. — Characteres generum ad fungos fossiles in classes redigendos adhibitos examinanti facile compertum erit eosdem characteres, quibus ad eorum distinctionem utimur, sæpenumero fallaces, ita ut vera et secundum rationem divisio minime institui possit.

Ita exempli gratia ad genus *Sphæria* rediguntur formæ, quæ ob externos characteres æque adscribi possent tum hodiernis generibus *Sphærella*, *Læstadia*, *Leptosphæria* etc., ex *Sphæriaceis*, tum generibus *Septoria*, *Phyllosticta*, *Ascochyta* etc., ex *Sphæropsideis*; item generi *Xylomites* adscripta fuerunt

specimina, quæ ob characteres morphologicos externos æque pertinere possent ad genera *Stegia*, *Actinothyrium*, *Æcidium*, *Uredo*, *Phacorrhiza*, *Uromyces*, *Stictis* etc. Unde quamvis audax non tamen improbanda illa cl. Massalongi <sup>1)</sup> sententia, quæ ait: Strictè loquendo omnia fungorum parasiticorum specimina hucusque e tertiariis formationibus effossa describenda essent sub unico nomine, exempli gratia *Fungites*, ut olim Algæ *Algacites*, folia omnia dubia *Phylites*, fructus *Carpolithes*, flores *Antholithes* vocabantur.

His de causis omnibus nominibus, quibus fungorum genera exprimuntur, desinentiam *ites* adjungendam censui, ut clarius ab adhuc vigentibus distinguerentur, quibus quamvis intimis jungantur rationibus, tamen absolute æquari nequeunt.

Quod si hæc de characteribus generalibus, quid de specificis loquendum?

Mycologiam fossilem a multis, quibus obnubilatur, erroribus et tenebris non nisi exactis observationibus ac exemplarium, quibus singulæ species constitutæ fuere, comparatione expurgari posse puto. Tunc tantum taxonomiam fungorum fossilium satis veridicam habebimus, quæ sane absolutissima evadet quum microscopii ope interna fungillorum constitutione inspecta organorum carpomorphorum structuram singillatim perscrutari licebit. Nonnullæ quidem species tali examini jam subjectæ fuere, at major earum pars scientificis subtilibusque his investigationibus se subtraxit, adeo ut certa ratione ad earum specificam essentiam et perfectam in classes distributionem determinandas adhuc careamus.

Et forsitan quis mihi fungorum fossilium monographiam conscribenti objiciet prius species jam recognitas et rationes, quibus earum distributio innitur, cribrandas fuisse. Sed opus hoc, utilissimum sane, non æque facile illi, cui exemplaria, e quibus species istæ depromptæ fuerunt, desunt, dum icones tantum, illæque minus propriæ atque non satis perspicuæ (nisi aliquando et hæc omnia desiderantur), in præsto sunt ita ut diagnosi deficienti et nonnullarum modo specierum inniti tantum possit. Mihi igitur, quas vehementer optaveram, systematicis fungorum fossilium emendationes peragere, quamvis totis viribus huic operi incumberem, impossibile fuit.

Clarissimus quoque Heer <sup>2)</sup> promptæ et subtilis horum vegetabilium disquisitionis necessitatem adstruens, multas ipsorum antiquas species hodiernis apprime respondere autumat. Nostri quoque ævi palæophytologis <sup>3)</sup>, nullis

1) *A. Massalongo et G. Scarabelli*. — Studi sulla flora fossile e Geologia stratigrafica del Senigalliese, Imola 1859, p. 81.

2) *Heer* Fl. tertiaria Helv. III, p. 242 et 256.

3) *Schenk A.* Die fossilen Pflanzenreste, Breslau 1888, p. 16. — *Solms-Laubach H.* Einleitung in die Palæophytologie vom botanischen Standpunkt, Leipzig 1887, p. 35. — *Lesquereux L.* Contributions to the fossil Flora of the Western Territories, P. II, The Tertiary Flora, pag. 33 (Un. St. Geol. Survey of the Territories, VII, 1878). — *Schimper und Schenk.* Palæophytologie pp. 70-72 (Handbuch der Palæontologie von K. A. Zittel, II Abth., München 1877-90). — *Geyler H. Th.* Ueber fossile Pflanzen von Labuan (Vega-expeditionens vetenskapliga arbeten, IV, p. 487).



scientiæ botanicæ regulis species usque adhuc descriptas inniti sentientibus, plenissime et ego subscribo.

Quidquid tamen de hac re notatu digna reperi, hæc colligenda duxi, aliquantum utilitatis palæophytologiæ conferre putans, quia etsi istorum vegetabilium reliquiæ botanicæ scientiæ bonum parum augent, tamen ceu chronologicæ comparationis modos ad consimiles species quæ, in posterum eruerentur, describendas et eorum omnium phylogenicam historiam enarrandam, quammaxima opportunitate adhiberi posse censeo.

His igitur fretus rationibus brevi specierum ad nostram usque ætatem detectarum descriptioni, operum titulo, in quibus descriptio ipsa reperitur, numquam silentio prætermisso, locorum, naturæ et ætatis formationum ad quam spectant, indicia semper adjungenda curavi.

Observationes demum majori cujusque speciei declarationi inservientes et eas, quas potui, cum hodiernis aut aliis antiquis quoque speciebus comparationes non prætermisi.

Ceterum hæc mea, quæcumque sit, opella illi, qui majori ingenio præditus elucubrationi subtiliori horum vegetabilium perutilem disquisitionem instituet, facilius saltem præbebit iter.

Nunc autem priusquam de alio loquar mihi sunt maximæ gratiæ agendæ cl. **F. Lampertico**, vicetino, regni italici senatori, cl. **P. A. Saccardo**, regi Horti botanici patavini præfecto et cl. doctori **Lester F. Ward** Washingtonensi, qui consilio et officiis mihi maxime suffragati sunt.

Cohors 1. **Hymenomycetæ****AGARICITES** L. (*Agaricus*) sensu latissimo.

1. **Agaricites Wardianus** Mesch., Di un probab. agaric. mioc., Atti 8149  
Soc. Ven. Trent. Di Sc. Nat., vol. XII, fasc. II, pag. 312, t. VIII,  
Mesch. et Squin. Fl. tert. it. p. 7. — Pileo convexo-expanso, mar-  
gine acutiusculo, 8 mm. lato, centro 3 mm. crasso; hymenio.....  
non distincto; stipite subcentrali, tereti, obclavato, 7 mm. longo,  
prope medium 3 mm. crasso.

*Hab.* in marga cinerea aquitaniana Chiavon in agro viceti-  
no Italiæ bor.

**LENZITITES** Fries (*Lenzites*), Sacc. Syll. V, p. 637.

1. **Lenzites Gastaldii** Heer in Gastaldi, Cenn. vert. foss. p. 38 (*Len-* 8150  
*zites*), Eug. Sismonda, Matér. p. servir à la Paleontol. du terr. tert.  
du Piémont; Memor. d. Acad. d. scienze di Torino, 1865. Schimp.,  
Tr. Pal. Veg., V, I, p. 144, Mesch. et Squin. Fl. tert. it. p. 6. —  
Pileo dimidiato, superne anguste concentrice zonato-piloso, inferne  
coriaceo-lamelloso, lamellis robustis ramosis.

*Hab.* in fragmentis truncorum in formatione helvetiana, Collina  
di Torino Italiæ borealis.

**ARCHAGARICON** Hancock et Atthey, Foss. Fungi Northumb. Coal-  
Field, in Ann. Mag. Nat. Hist., 1869, n. 22, p. 226, t. IX. — Con-  
ceptacula forma varia sed plerumque orbicularia vel elliptica,  
plus minus depressa. Filamenta (hyphæ) ramosa hinc inde in ve-  
siculas inflatas vel spinulis vel verrucis conspersa.

1. **Archagaricon bulbosum** Hancock et Atthey, Foss. Fungi Northumb. 8151  
Coal-Field, in Ann. Mag. Nat. Hist., 1869, n. 22, p. 226, t. X. —  
Filamentis (hyphis?) circ. 25  $\mu$ . diam., ramis primariis subrectis,  
longis, leniter sinuosis, ramis secundariis valde contortis, involu-  
tis, confertis, raro papillosis, sæpe in vesiculam globosam magnam  
desinentibus, basi nodulis plerumque 2-3 minoribus superpositis, ra-  
mulorum diametro 3-4-plo præditis.

*Hab.* in stratis carboniferis Northumberland Britanniae. — Sec.  
Cohn (Cfr. Bot. Jahresb. 1873, p. 435) cum filamentis adsunt cor-  
puscula copiosa globosa v. ellipsoidea, forte sporæ.

2. **Archagaricon globuliferum** Hancock et Atthey loc. cit. — Fila- 8152  
mentis magnitudine variis, majoribus circiter 12,5  $\mu$ . diam., levibus

simul et ramulis rectis vel subsinuosis, nodulis numerosis, tubulorum diametro 5-6 majoribus, vesiculis sphaericis maximis 312  $\mu$ . diam. praeditis.

*Hab.* in stratis carboniferis Northumberland Britanniae. — Ab *A. bulboso* differt ramis rectis, levibus, minutis, nodulis numerosioribus et praecipue vesicularum magnitudine.

3. **Archagaricon radiatum** Hancock et Atthey loc. cit. — Filamentis 8153 magnis, 42  $\mu$ . diam., brevibus, levibus, subtortuosis, irregulariter e centris radiantibus, marginibus non semper parallelis, sed plerumque subirregulariter sinuosis.

*Hab.* in stratis carboniferis Northumberland Britanniae.

4. **Archagaricon dendriticum** Hancock et Atthey loc. cit. — Filamentis 8154 minutissimis, 1,6  $\mu$ . diam., dendritice caespitosis, vesiculis magnis, ellipsoideis interpositis, apparenter terminalibus,

*Hab.* in stratis carboniferis in Northumberland Britanniae.

5. **Archagaricon conglomeratum** Hancock et Atthey, loc. cit. — Filamentis 8155 magnis, inaequalibus, 16,5  $\mu$ . vel ultra diam., interdum usque ad 8,3  $\mu$ . diam. constrictis, anastomosantibus, cellulis magnitudine variis, subinde numerosissimis conglomerato-conspersis.

*Hab.* in stratis carboniferis, Northumberland Britanniae.

#### **POLYPORITES** Fr. (*Polyporus*) sensu lato.

1. **Polyporites mollis** Fr. (*Polyporus*) — Sacc. Syll. VI, p. 113 — 8156 f. *succinea* Conw. Monog. d. Balt. Bernsteinb.

*Hab.* in succino ad mare Balticum.

2. **Polyporites igniarius** Linn. (*Boletus*) Heer Die Pflanzen d. Pfahlb. 8157 Naturforschende Gesell. LXVIII Stück, Zürich 1866, p. 42 (*Polyporus*) Coppi Paleont. modenese p. 136, Sacc. Syll. VI, pag. 180 (*Fomes*).

*Hab.* in formatione placentina vallis Tiepido in agro mutinensi Ital. bor. (COPPI).

3. **Polyporites nigricans** Fr. (*Polyporus*), Sacc. Syll. VI, pag. 180 8158 (*Fomes*).

*Hab.* in turfa (torba) ad lacum Fimon et in valle Fontega pr. Vicenza Ital. bor.

4. **Polyporites foliatus** Ludw. Jüngere Wetterauer Braunkohle in 8159 Palæontogr. vol. V, p. 85, t. XVI (*Polyporus*), Schimp. Tr. Pal. Vég. v. I, p. 143. — Fungus ligneus, pileo rugoso in zonas lamellatas concentricas diviso, lamellis in discum coadunatis; tubulis hymenii per stratus complures superpositis, canali cylindrico.

*Hab.* in lignite pliocenica, Dorheim Wetteraviæ Germ. bor. —

*Polyp. igniario* L. similis.

5. **Polyporites Sequoiæ** Heer Nachtr. z. mioc. Fl. Grönlands pag. 7, 8160  
t. I, f. 1 a, Tert. Fl. v. Grönland p. 48. — Pileo suberoso, zonato  
radiatim striato.

*Hab.* adhærens eidem petræ fragmento in quo adsunt ramuli Sequoiæ Sternbergi et nuculæ Biotæ; facillime crevit super truncos ejusdem Sequojæ, Netluarsuk Groenlandiæ.

6. **Polyporites lucidus** Leyss (*Boletus*), Mass. Fl. foss. Senig. p. 80 et 8161  
nota, Sacc. Syll. VI, p. 157 (*Fomes*).

*Hab.* in formatione quaternaria in agro bergomensis Ital. bor.  
ad ramos Salicis seu Populi.

7. **Polyporites vaporarius** Fries (*Polyporus*) — Sacc. Syll. VI, p. 311 8162  
(*Poria*) — f. **succinea** Conw. Monog. d. Balt. Bernsteinb.

*Hab.* in succino ad mare Balticum.

8. **Polyporites sp.** Ludw. Ueb. mitteldeutsche Tertiärbildungen in Zeit- 8163  
schr. deutsch. geol. Gesell. IX, Bd. 1857, p. 184.

*Hab.* in argilla miocenica (mayenciana?) Dorheim-Wülfersheim  
Wetteraviæ Germ. bor. — Loc. cit. nulla adest descriptio.

9. **Polyporites Bowmani** Lindl. et Hult. Foss. Fl. of Great Brit., 8164  
vol. I, n. 65, Schimp. Tr. Pal. Vég. v. I, pag. 144, Ung. Gen. et  
Species p. 40, *Carpolithes umbonatus* Sternb.

*Hab.* in stratis carboniferis Comitatus Denbigh, Britanniae bor.  
— Potius piscis squamam vel molluscorum concham quam fungum  
refert.

#### **DÆDALEITES** Pers. (*Dædalea*), Sacc. Syll. VI, p. 370.

1. **Dædaleites quercinus** L. (*Agaricus*), Mass. Fl. foss. Senig. p. 80 et 8165  
nota, Sacc. Syll. VI, p. 370 (*Dædalea*).

*Hab.* in trunco *Quercus* formationis quaternariæ ad S. Bonifacio in agro veronensi Italiæ borealis.

2. **Dædaleites volhynicus** Eichwald Hist. nat. Lithuan. Volhyn. et 8166  
Podol. 1820 (*Daedalea*), Lév. Considérat. mycol. p. 63.

*Hab.* in sabulo tertiaro, Bilka Volhyniæ Rossiae.

#### **TRAMETITES** Fr. (*Trametes*), Sacc. Syll. VI, p. 334.

1. **Trametites Pini** Brot. (*Boletus*) — Sacc. Syll. VI, p. 345 (*Tra-* 8167  
*metes*) — f. **succinea** Conw. Monog. d. Balt. Bernsteinb.

*Hab.* in succino ad mare balticum.

**HYDNITES** L. (*Hydnum*), Sacc. Syll. VI, p. 430.

1. **Hydnites argillæ** Ludw. Palæontogr. v. VIII, p. 57, t. VIII, f. 1 *a-e* 8168  
(*Hydnum*), Ettingsh., D. foss. Fl. d. ält. Braunkohl. d. Wett. (Sitz.  
d. k. k. Ak. d. Wiss. 1868, p. 815), Schimp. Tr. Pal. Vég. v. I,  
p. 143. — Pileo irregulariter ovali, convexo, centim. 6 metiente,  
aculeis tenuibus longis, stipite centrali.

*Hab.* in argilla aquitaniana Münzenberg Hassia Darmst. Ger-  
maniae centr.

2. **Hydnites antiquus** Heer Fl. tert. Helv. v. III, p. 149, t. CXLII, 8169  
f. 24 (*Hydnum*), Schimp. Tr. Pal. Vég. v. I, p. 143, t. I, fig. 24.  
— Aculeis brevissimis, papilliformibus, geminis, regularibus.

*Hab.* in marga aquitaniana Rochette prope Lausannam Helve-  
tiæ, rarissime. — *H. suaveolenti* Scop. similis.

Cohors 2. **Phycomyceteæ****PERONOSPORITES** Corda (*Peronospora*), Sacc. Syll. VII, 1, p. 244.

1. **Peronosporites antiquarius** Smith in Gardener's Chronicle 1877, 8170  
Oct. 20, vgl. Academy Nov. 17, Geolog. Record for 1887, p. 377,  
Botan. Jahresb. VII, Jahrg. 1879, p. 135, Masee Brit. Phyc. p. 213,  
f. 136. — Mycelio varie ramoso, septato, 7-9  $\mu$ . cr.; oogoniis in  
ramulis brevibus, sæpius acrogenis, rarius intercalaribus, globosis  
v. basi leniter tenuatis, 40-60  $\mu$ . diam.

*Hab.* in axi vasculari *Lepidodendri* formationis carboniferæ  
West Yorkshire Angliæ.

**PROTOMYCITES** Ung. (*Protomyces*), Sacc. Syll. VII, 1, p. 319.

1. **Protomyces protogenes** W. Sm. Diseas. of Field and Gard. 8171  
Crops p. 333, f. 140, Masee Br. Fungi Phyc. p. 212, f. 135. —  
Mycelio parcissimo 18  $\mu$ . cr.; oogoniis sphaericis, circ. 200  $\mu$ . diam.,  
oosporis solitariis 130  $\mu$ . diam.

*Hab.* in radiculis *Lepidodendri* in formatione carbonifera  
Angliæ.

Cohors 3. **Hypodermeæ****PUCGINITES** Pers. (*Puccinia*), Sacc. Syll. VII, 2, p. 600.

1. **Puccinites lanceolatus** Ettingsh. Die tert. Fl. v. Haering in Tirol. 8172  
Abh. k. k. Geol. Reichsanst. v. II, Wien 1855, pag. 26, tab. IV,

f. 11. — Epiphyllus, maculas longitudinales formans 3-8 mm. long., 0,5-1 lat.

*Hab.* in foliis plantæ cujusdam monocotyledoneæ in margina bituminosa tongriana ad Haering Tiroliaë (Sec. cl. Ettingshausen propter dispositionem macularum Pucciniam Graminis et P. arundinaceam in mentem revocat).

**PHELONITES** Fr., *Æcidium* Auct. p. p.

1. **Phelonites lignitum** Fresen. Ueber Phelon. lign. Palæont. vol. VIII, 8173 p. 155, t. LXII, f. 1-15, Ettingsh. D. foss. Pfl. ält. Braunkohl. Wett. Sitz. k. k. Ak. Wien, 1868, pag. 14. — Pseudoperidiis rotundis, elongatis v. irregularibus, interdum e mutua pressione triangularibus, usque ad 8 mm. metientibus, minute areolatis, brunneolis, subinde ad viridem vergentibus; æcidiosporis irregulariter angulosis, sæpius hexagoniis, 55,5-83  $\mu$ . diam., levibus.

*Hab.* in fragmento semina Glyptostrophi continente in lignite Salzhausen et Bommersheim in agro vogelsbergensi Hassia Darmst. Germ. centr. — *Æcidio strobilino* viventi affinis.

**ÆCIDITES** Pers. (*Æcidium*), Deb. et Ett. D. Urw. Thalloph. d. Kreideg. v. Aachen u. Maestricht Denksch. k. Ak. der Wiss. XVI Band, p. 312, Sacc. Syll. VII, 2, p. 774.

1. **Æcidites stellatus** Deb. et Ett. D. Urw. Thalloph. d. Kreideg. v. 8174 Aachen u. Maestricht Denksch. k. Ak. d. Wiss., XVI Band, p. 212, t. III, f. 2, 3. — Pseudoperidiis coacervatis, ad 5-7 irregulariter stellatim in lamina folii dicotyledonei inferiore dispositis, circ. 0,5 mm. diam.

*Hab.* ad folia Dryophylli in argillis arenacei dicti aquisgranensis. *Rhytismiti Populi* Heer quodammodo similis.

2. **Æcidites Rhamni-tertiariae** Engelh. Ueb. d. foss. Pfl. d. Süßwass. 8175 v. Grasset ein neu. Beitr. z. foss. Fl. Böhmens (*Æcidium*) in N. Acta Ac. Leop.-Carol. Halle 1881, Bd. XLIII, n. 4, p. 283, t. II, (XI), f. 1. — Pseudoperidiis depresso poculiformibus, ad 0,5 mm. maximum metientibus, plerumque nerviculis sed passim internerviis, copiosissimis, folium demum hinc inde inæqualiter elevantibus.

*Hab.* in arenaria tongriana prope pagum Grasset ad Falkenau Bohemiae, ad folia Rhamni Rossmässleri Ung. — Species *Æcidio Rhamni* Pers. ad folia Rh. Frangulae L. hodie vigenti valde similis.

3. **Æcidites subcornutus** Goepf. Tert. Fl. Schosnitz p. 1, t. I, f. 18 8176

(*Æcidium*) Tert. Fl. Insel Java p. 150. — Pseudoperidiis maculosis, margine lacinoso, laciniis cylindricis elongatis.

*Hab.* ad folia *Quercus* in argilla cinerea tortoniana Schosnitz prope Vratislaviam. Mac. circ. 3-7 mm. diam. *Æc. cornutum* in mentem revocat.

#### Cohors 4. **Pyrenomycetæ**

**EUROTITES** Link (*Eurotium*), Sacc. Syll. I, p. 25.

1. **Eurotites elegans** Göpp. u. Menge in Göpp. Ueb. Bernsteinflora 8177 Monatsber. Kön. preuss. Ak. Wiss. Berlin 1853, pag. 453 (*Eurotium*).

*Hab.* in succino Borussiae. — Loc. cit. nulla adest descriptio.

**ROSELLINITES** De Not. (*Rosellinia*), Sacc. Syll. I, p. 252.

1. **Rosellinites congregatus** (Beck) Engelh. Ueb. Ross. congreg. Beck 8178 sp., eine neue Pilzart a. d. Braunkohlenf. Sachs. Sitz. Ges. Isis in Dresden 1887, Abh. 4, t. I, fig. 1-9, in Bot. Centralbl. 1888, II, p. 304, *Cucurbitariopsis congregata* Beck Oligocän v. Mittweida, Zeitschr. deutsch. geol. Ges. XXXIV, 4, Berlin 1883, p. 752. — Peritheciis glabris, plerumque in acervulos dense confertis, nigris, nitentibus obtuse conicis, basi orbiculari donatis, apice disco plano, margine subelevato, circulari coronatis, ostiolo papilliformi, e disci centro oriente; ascis non visis; sporidiis continuis, brunneis, elongatis, plerumque subincurvis.

*Hab.* in formatione lignitica oligocenica Saxoniae (H. ENGELHARDT) et in «Flötz» Brandis pr. Lipsiam Saxoniae (BECK).

**LÆSTADITES** Auersw. (*Læstadia*), Sacc. Syll. I, p. 420.

1. **Læstadites Nathorstii** Mesch. conf. Eriksson in Nathorst Fl. foss. 8179 du Japon Kongl. Sv. Vet. Ak. Handl. vol. 20, n. 2, pag. 75, t. I, f. 2, 2a. — Peritheciis sparsis, sphæroideis, atris,  $\frac{1}{3}$ - $\frac{1}{2}$  mm. latis; ascis ovoideis, 26-30 mm. longis; sporidiis (6-nis) hyalinis, oblongatis, 12-14 mm. longis, 6-10 mm. crassis, simplicibus.

*Hab.* in folio indeterminato in argilla postpliocenica Mogi Japoniae. — Perithecia in icone fere circulariter et inter sese approximate disposita.

**LEPTOSPHERITES** Ces. et De Not. (*Leptosphaeria*), Sacc. Syll. II, pag. 13.

1. **Leptosphaerites Lemoinii** Ch. Richon Soc. Botan. de France v. XXXII, 8180  
1885, p. VIII, t. X. — Fungus ascophorus; peritheciis simplicibus, atris, levibus, nitidulis, sparsis, semiemergentibus, hemisphaericis, ostiolo crasso, pertuso instructis, nucleo fulvo; ascis et paraphysibus non visis; sporidiis fusoides, curvulis, triseptatis, loculo penultimo protuberante, fuscis, 25  $\mu$ . longis; fungus spermogonium: spermogoniis, magnitudinis et forma perithecorum, spermatia minutissima, simplicia, allantoidea, in series concatenatas includuntibus.

*Hab.* in culmis vel foliis Monocotyledoneæ fossilis cujusdam, prope Reims Gallia.

**TREMATOSPHERITES** Fuck. (*Trematosphaeria*), Sacc. Syll. II, p. 115.

1. **Trematosphaerites lignitum** (Heer) Beck Oligocæn v. Mittweida 8181  
Zeitschr. Deutsch. geol. Gesell. XXXIV Bd., Hft 4, p. 752 (*Trematosphaeria*), *Sphaeria lignitum* Heer Foss. Fl. of Bovey Tracey Phil. Trans. MDCCCLXII, t. LV, f. 1, Pengelly et Heer, The lign. form. Bovey Tracey, Devonshire p. 29, t. IV, f. 1-3, Ettingsh Die foss. Fl. d. tert. Beck. v. Bilin I, Deukschr. k. Ak. Wien 1866, p. 85, Schimp. Tr. Pal. Vég. v. I, p. 133, t. I, f. 16 *b, c*. — Peritheciis gregariis, liberis, conicis, nigris, apice nitidis, papillatis, ostiolo minuto circulari pertusis; sporidiis fusoides, constricto-2-3-septatis, raro 1-septatis, 32-42 = 9-11.

*Hab.* in cortice Sequoiæ Couttsiæ?, Bovey Tracey, Devonshire Brit. austr. in cortice Glyptostrobi europæi Heer, Priesen, prope Bilin Bohemiæ in argilla plastica mayenciana. — Ex grege *Trematosphaeriæ pertusæ*, etiam *Amphisphaeriæ umbrinæ* valde similis, a qua magnitudine minori et septatione differt.

**SPHÆRITES** Hall. (*Sphaeria*) sensu latissimo. — Omnes species dubiæ, nam, ignota fructificatione, nescimus utrum ad Sphæriaceas, an ad Sphæropsideas pertineant.

I. *Follicolæ*.

1. **Sphaerites deperditus** Heer Fl. tert. Helv. vol. III, p. 147, t. CXLII, 8182  
f. 2 (*Sphaeria*) Ettingsh. Beitr. z. Kennt. d. foss. Fl. v. Parschlug, Denkschr. k. Ak. Wiss. XXXVIII, Bd. I, Abth. p. 84, t. V, f. 3,



Schimp. Tr. Pal. Vég. v. I, p. 132. — Peritheciis minutis, ovalibus, convexiusculis, nigris, sparsis, circ. 0,25 mm. diam.

*Hab.* ad folia Palæolobi Sotzkiani, in marga aquitaniana Monod pr. Lausanne, ad foliola Cassiæ hyperboreæ, in schisto margaceo tortoniano, ad Parschlug Steiermark.

2. **Sphærites persistens** Heer Fl. tert. Helv. vol. III, p. 147, t. CXLII, 8183 f. 14 (*Sphæria*), Schimp. Tr. Pal. Vég. v. I, p. 133, t. I, f. 17 *b, c*, *Phacidium persistens* Gaud. Fl. foss. Env. Lausanne Bull. Soc. Vaud. Sc. nat. vol. V, p. 360. — Peritheciis immersis, circ. 0,5 mm. diam., breviter ovalibus vel rotundato-disciformibus, ostiolo papilliformi.

*Hab.* ad folia Cassiæ phaseolitis, Monod Helvetia in marga aquitaniana.

3. **Sphærites Dalbergiæ** Heer Fl. tert. Helv. vol. III, p. 148, t. CXLII, 8184 f. 21 (*Sphæria*), Schimp. Tr. Pal. Vég. v. I, p. 133. — Peritheciis sparsis, majusculis, circ. 1 mm. diam. discoideis, ostiolo latiusculo pertusis.

*Hab.* ad folia Dalbergiæ retusifoliæ, in calcareo albo tortoniano Locle Helvetiæ, in topho vulcanico albo tortoniano Hohenkraehen, prope Muhlhausen Alsatiae.

4. **Sphærites hyperboreus** Heer Mioc. Fl. Spitzb. p. 30, t. XIII, f. 41 8185 (*Sphæria*), Schimp, Tr. Pal. Vég. v. III, p. 431. — Peritheciis minutis, punctiformibus, orbiculatis, sparsis, ostiolo lato.

*Hab.* ad folia Rubi scabriusculi, in arenaria nigra mioce-nica cap. Staraschin Spitzberg. — *Sph. disperso* Heer similis.

5. **Sphærites Amygdali** Engelh. Tertiärf. Jesuitengr. Nordböhmen 8186 Nova Acta Acad. Leop.-Carol. vol. XLVIII, n. 3, Halle 1885, p. 310, t. VIII, f. 10, 10 *a* (*Sphæria*). — Peritheciis rotundatis, raro leviter angulosis, parvis, circ. 1 mm. metientibus, immersis, margine folii insidentibus, limbo nigro circumdati.

*Hab.* ad folia Amygdali in schisto bituminoso aquitaniano Jesuitengrabens prope Kundratitz Bohemiæ borealis.

6. **Sphærites Weberi** Heer Fl. tert. Helv. vol. III, p. 302 (*Sphæria*), 8187 Rech. s. le climat et la Vég. du pays tert. pag. 105 et nota. — Peritheciis orbiculatis, supra subconcavis, medio ostiolo papilliformi perforato ornatis.

*Hab.* ad folia Amygdali peregrinæ, Vogelsberg pr. Fulda. — *Xylomiti umbilicato* Web. valde affinis.

7. **Sphærites Eucalypti** Ettingsh. Foss. Fl. v. Sagor, Denkschr. k. Ak. 8188 Wiss., Bd. XXXII, Wien 1872, pag. 161, tav. I, f. 8 (*Sphæria*),

Voss Wilh. Mat. z. Pilzk. p. 221. — Peritheciis partim sparsis, partim aggregatis, subglobosis, magnis, apice ostiolo latiusculo pertusis.

*Hab.* ad folia *Eucalypti*, in marga aquitaniana pr. Savine, apud Sagor Carnioliae.

8. **Sphærites milliarius** Ettingsh. Die tert. Fl. v. Haering. Abh. k. k. 8189  
Geol. Reichs. II Bd., Wien 1855, pag. 26, t. IV, f. 8, 9, *Sphæria milliaria* Engelh. Tertiärf. Jesuitengr. in Nardböhmen, Nova Acta Acad. Leop.-Carol. vol. XLVIII, n. 3, Halle 1885, p. 309, t. VIII, f. 1. — Peritheciis simplicibus, discretis, minimis, punctiformibus.

*Hab.* ad folia *Myrtacearum* ad Haering Tiroliae in marga bituminosa tongriana, in schisto bituminoso aquitaniano Jesuitengrabens pr. Kundratiz Bohemiae borealis. — Parum a *Sph. punctiformi* Ung. diversus et fortasse cum illo ad *Sph. venisequum* Göpp. rejicendus sec. cl. Massalongo (St. sulla fl. foss. e geol. strattigr. d. Senigall. p. 84).

9. **Sphærites baccharicola** Sap. Dern. adjonct. à la Fl. foss. d'Aix en 8190  
Provence p. 5, t. I, fig. 3 (*Sphæria*). — Peritheciis minutissimis, circ. 1-1,50 mm. diam., sparsis, orbiculatis, convexioribus, ostiolo centrali pertusis, secus nervos nervulosque praesertim insidentibus.

*Hab.* in foliis *Baccharitis (Lomatitis) aquensis* Sap. in schisto margaceo liguriano Aix in agro Narbonensi Galliae.

10. **Sphærites concentricus** Mass. Lett. a Scar. p. 8, n. 2, Synops. Fl. 8191  
foss. Senog. p. 4, Fl. foss. Senog. t. I, f. 17-18, *Sphæria concentrica* Baily Rep. of Comm. Tert. (Miocene) Fl. Basalt of North Ireland. Report 49<sup>th</sup>. Meet. Brit. As. Adv. Sc. at Sheffield London 1879, p. 164. — Peritheciis duplicibus, concentricis, umbonatis conicis prominulis, apice truncatis, papillatis, perforatis.

*Hab.* ad folia *Cissi ulmifolii* Mass., in marga gypsacea tortoniana Senogallia in agro umbro Italiae centralis et in formatione miocenica ripae orientalis fluminis Lough Neagh, prope Sandy Bay Irlandiae septentrionalis.

11. **Sphærites atomarius** Mass. S. Piante foss. vic. pag. 58 Conspect. 8192  
Fl. prim. bolc. p. 10. — Peritheciis punctiformibus, simplicibus, distinctis, in circulum concentricè dispositis, impressis, areolas 4-5 mm. diam. efformantibus.

*Hab.* ad folia *Solandrae Heliadum* Mass., in calcareo margaceo aquitaniano inferiori «Salcedo» in agro vicetino. Ital. bor. — *Sph. punctiformi* Pers. affinis.

12. **Sphærites cretaceus** Heer Fl. foss. arctica vol. VII, p. 1, t. LX, 8193

f. 2, 2b et p. 35 (*Sphæria*). — Peritheciis numerosis, orbiculatis, 1-1,5 mm. latis, ostiolo rotundato pertusis.

*Hab.* ad folia Viburni zizyphoidis, in argilla rubra formationis cretacæ superioris Patoot Groenlandiæ.

13. **Sphærites Palæo-Sapindi** Ettingsh. Beitr. z. Kennt. d. foss. Fl. 8194 v. Parsch. in Steierm. Deukschr. k. Ak. Wiss. XXXVIII, Bd. 1, Abth. pag. 85, t. III, f. 2, 3, 5 (*Sphæria*). — Peritheciis sparsis, immersis, orbiculatis, magnis, circ. 1 mm. diam., apice ostiolo minuto, fere punctiformi pertusis.

*Hab.* ad foliola Sapiindii Pythii, in schisto margaceo tortoniano ad Parschlug in Steiermark. — A *Sph. Mureti* Heer ostiolo minore distincta sec. cl. Ettingshausen.

14. **Sphærites Suessii** Ettingsh. Foss. Fl. v. Sagor. Deukschr. k. Ak. 8195 Wiss. Bd. XXXII, Wien 1872, pag. 161, t. I, f. 5, 6 (*Sphaeria*), Voss Wilh. Mat. z. Pilzk. pag. 221. — Peritheciis orbiculatis vel ellipticis, subplanis, nigris, distinctis v. sæpe confluentibus, in circulum 1,5-2 mm. diam. dispositis et maculam pallidam circumdantibus.

*Hab.* ad folia Rhamni, in marga aquitaniana prope pagum Savine Carniolæ (Austria).

15. **Sphærites Rhamni** Ettingsh. Die foss. Fl. d. Tert.-Beck. v. Bilin 8196 Denkschr. Ak. Wien XXVI, Bd. I, pag. 8, t. I, fig. 12 (*Sphæria*), Schimp. Tr. pal. vég. vol. III, p. 431. — Peritheciis subaggregatis, rotundato-ellipticis, circ. 1-2 mm. diam., paullulum convexis, apice ostiolo rotundato pertusis.

*Hab.* ad folia Rhamni in argilla plastica mayenciana Priesen prope Bilin Bohemiæ. — *Sph. evanescens* Heer majorem peritheciorum convexitatem et majorem ostioli exiguitatem exhibet. Etiam cum *Sph. Mureti* Heer comparanda, sed species Heerii peritheciorum magnitudine, eorum immersione et majore ostioli latitudine diversa.

16. **Sphærites evanescens** Heer Fl. tert. Helv. vol. III, pag. 147, 8197 tab. CXLII, fig. 16, 17 (*Sphæria*), Schimp. Tr. pal. Vég. vol. I, p. 133, Engelh. Ueb. Cyprissch. Nordböh. Zitz. naturw. Gesell. «Isis» Jahrg. 1879, p. 135, t. VII, fig. 1, *Phacidium evanescens* Gaud. Fl. foss. Env. Lausanne Bull. Soc. Vaud. Sc. nat. vol. V, p. 360. — Peritheciis sparsis, 1-2 mm. latis, rotundatis, convexis, sat magnis, ostiolo minuto pertusis.

*Hab.* ad folia Rhamni Gaudini Heer in marga aquitaniana

Monod Helvetiæ et in argilla tortoniana inf. Linkes Egerufer inter Falkenau et Königswarth Bohemiæ.

17. **Sphærites sp.** Geysler Foss. Pfl. v. Labuan Vega-Exp. vetensk. 8198  
Iakttagr. Bd. IV, Stockholm 1887, pag. 488, t. XXXII, f. 3, 3 a  
(*Sphæriopsis*). — Peritheciis minutis rotundatis, circ.  $\frac{1}{4}$ - $\frac{1}{5}$  mm.  
diam., irregulariter dispositis, ostiolo minutissimo pertusis.

*Hab.* ad folia illis Evonymi Javanici Blume similia in argilla insulæ Labuan prope Borneo. — *Sph. pustulæ* Pers. quodammodo similis.

18. **Sphærites vetustus** Sap. Ess. s. l. vég. à l'ep. d. mar. Heers de 8199  
Gelinden Mém. Acad. Roy. Belgique XXXV, 1873, p. 63, t. XII,  
f. 1, 1 a (*Sphæria*). — Peritheciis discoideis, exacte circularibus,  
convexis, margine angusto cinctis centroque ostiolo impresso notatis,  
1-1,5 mm. diam.

*Hab.* ad folia Celastrophylli Benedenii Sap. et Mar. in formatione eocenica inferiori (Mauduniana) Overbroeck pr. Gelinden in provincia Limbourg Belgii.

19. **Sphærites effossus** Heer Fl. tert. Helv. vol. III, p. 148, t. CXLII, 8200  
fig. 19, 20 (*Sphæria*), Ettingsh. Beitr. z. Kennt. d. foss. Fl. v.  
Parschlug. Denkschr. k. Ak. Wien, XXXVIII, Bd. I, Abth. p. 84,  
Schimp. Tr. Pal. Vég. vol. I, pag. 133. — Peritheciis sparsis,  
omnino discoidois, circ. 0,5 mm. diam., planiusculis, ostiolo rotundato  
pertusis.

*Hab.* ad folia Ilicis stenophyllæ, in calcareo tortoniano Oeningen Helvetiæ et in schisto margaceo tortoniano ad Parschlug Steiermark in eadem specie.

20. **Sphærites transiens** Sap. Dern. adjonct. à la Fl. foss. d'Aix en 8201  
Provence pag. 7, t. I, f. 4 (*Sphæria*). — Peritheciis minutissimis  
 $\frac{1}{5}$ - $\frac{1}{4}$  circ. mm. diam., sparsim gregatis, convexiusculis, orbiculatis,  
ostiolo pertusis.

*Hab.* in foliis Zanthoxyli aquensis Sap. in calcareo liguriano, Aix, Narbonne Galliæ.

21. **Sphærites Palæo-Lentisci** Ettingsh. Beitr. z. Kennt. d. foss. Fl. 8202  
v. Parschl. in Steierm. Denkschr. ibid. p. 85, t. I, f. 3 (*Sphæria*).  
— Peritheciis sparsis et fere confluentibus, minutissimis, punctiformibus,  
nigris.

*Hab.* ad folia Pistaciæ lentiscoidis Ung. in schisto margaceo tortoniano ad Parschlug, Steiermark.

22. **Sphærites venisequus** Göpp. Die Tertiärfl. v. Schossnitz in Sch- 8203  
lesien pag. 3, t. I, f. 9, 10 (*Sphæria*), Tertiärfl. a. d. Insel Java

p. 150. — Gregarius (ægre oculo haud armato visibilis); peritheciis inæqualibus, minutissimis, discretis, nervorum decursum sequentibus.

*Hab.* ad folia Rhois quercifoliæ Göpp. in argilla tortoniana Schosnitz prope Canth ad Vratislaviam. — Sec. cl. Massalongo (St. s. Fl. foss. e geol. stratigr. Senigall. p. 84) species hæc a *Sph. minuto* Göpp. et a *Sph. milliario* Ettingsh. non differt.

23. **Sphærites minutissimus** Ettingsh. Foss. Fl. Sagor Denkschr. k. 8204  
Ak. Wiss. Math.-Nat. Cl. L, Wien 1885, p. 2, t. XXVIII, f. 2, 2  
*a, b* (*Sphæria*). — Peritheciis sparsis, nonnumquam ad nervos secundarios seriatis, minutissimis, rotundatis, nigris, ostiolo conformi pertusis.

*Hab.* ad fragmentum foliorum Rhois in marga aquitaniana prope pagum Savine Carniolæ (Austria). — A *Sph. interpungenti* Heer propter maximam peritheciolorum exiguitatem distincta.

24. **Sphærites Bumeliarum** Sap. Dern. adjunct. à la Fl. foss. d'Aix 8205  
en Provence p. 5, t. I, f. 12 (*Sphæria*). — Peritheciis orbiculatis, minutis mm. 0,25 circ. diam. prominulis, sparsim paginæ inferiori foliorum *Bumeliæ* affixis, nervulis præsertim insidentibus aut etiam contiguis, ostiolo centrali parvulo donatis.

*Hab.* in foliis *Bumeliæ* subspathulatæ Sap. in calcareo margaceo liguriano Aix, Narbonne Galliæ.

25. **Sphærites achreius** Ettingsh. Beitr. z. Kennt. d. foss. Fl. v. Parschlug in Steierm. l. c. p. 84, t. V, f. 4 (*Sphæria*), Foss. Fl. v. Leoben. Denk. k. Ak. Wiss. LIV Bd. I Abth. Wien 1888, p. 265, t. I, f. 7. — Sparsus, peritheciis minutis, punctiformibus, interdum confluentibus, ostiolo minuto rotundato pertusis.

*Hab.* in foliis *Achratis lycobromæ* in argilla miocenica media Moskenberg prope Leoben Steiermark et in eadem specie in marga tortoniana Parschlug, Steiermark.

26. **Sphærites atomicus** Mass. Lett. a Scar. p. 8, n. 3 Fl. foss. Senig. t. I, f. 4, 5. — Peritheciis punctiformibus minutissimis, regularibus, discretis dispersisque, circ.  $\frac{1}{3}$ - $\frac{1}{4}$  mm. diam. 8207

*Hab.* ad folia *Ardiniæ daphnoidis* Massal. in marga gypsacea tortoniana Senogallia in agro umbro Italiæ med. — Sec. cl. Massalongo a *Sph. atomario* Mass. dispositione et concentricitate peritheciolorum distinctus.

27. **Sphærites Duncani** Ettingsh. Beitr. z. Kennt. d. foss. Fl. v. Parschlug in Steierm. Denkschr. l. c. pag. 84, t. III, f. 4 *a* (*Sphæria*). — Peritheciis sparsis, omnino orbiculatis, immersis, apice ostiolo rotundato pertusis, 8208

*Hab.* in foliis *Andromedæ glaucæ* in schisto margaceo tortoniano ad Parschlug, Steiermark.

28. **Sphærites antheræformis** Heer Fl. tert. Helv. vol. III, p. 147, 8209  
tab, CXLII, f. 8, 9 (*Sphæria*), Ettingsh, foss. Fl. Schönegg. Denkschr. k. Ak. Wien, LVII Bd. pag. 6, *Hysterium antheræforme* Schimp. Tr. pal. vég. vol. I. pag. 137, t. I, f. 23, 23 b. — Peritheciis minutis, oblongis, medio carinatis, sparsis, nigris, 1 mm. long., 0,5 mm. latis.

*Hab.* ad folia *Andromedæ protagææ* in calcareo tortoniano Locle Helvetiæ, in argilla subflava Neu-Josephi-Tagbau prope Wies, Steiermark.

29. **Sphærites Vaccinii** Sap. Dern. adjunct. à la Fl. foss. d'Aix en 8210  
Provence p. 6, t. I, f. 5 (*Sphæria*). — Peritheciis minutis  $\frac{1}{4}$ - $\frac{1}{2}$  mm, circ. diam., dense sparsis, convexis, orbiculatis, ostiolo apicali rotundo pertusis.

*Hab.* ad folia *Vaccinii elliptici* Sap. in calcareo liguriano Aix, Narbonne Galliæ.

30. **Sphærites Unger** Ettingsh. Beitr. z. Kennt. d. foss. Fl. v. Parschl. 8211  
in Steierm. Denkschr. k. Ak. Wien XXXVIII, Bd. I. Abth. p. 85, t. III, f. 1 (*Sphæria*). — Peritheciis sparsis, minutis (ex icone parum visibilibus), orbiculatis, subplanis, apice ostiolo latiusculo rotundato pertusis.

*Hab.* ad folia *Vaccinii Unger* Ettingsh. in schisto margaceo tortoniano ad Parschlug in Steiermark. — A *Sphær. effosso* Heer peritheciis subplanis et a *Sphær. Dalbergiæ* Heer, peritheciis minoribus distinctos sec. cl. Ettingshausen.

31. **Sphærites Cinnamomi** Sap. Dern. adjunct. à la Fl. foss. d'Aix en 8212  
Provence p. 4, t. I, f. 2 (*Sphæria*). — Peritheciis majusculis 2-3 mm. circ. diam., orbiculatis, convexiusculis, foliorum *Cinnamomi camphoræfolii* paginæ inferiori affixis, nervulis aut inter nervulos insidentibus.

*Hab.* ad folia *Cinnamomi camphoræfolii* Sap. in schisto margaceo liguriano Aix Narbonne Galliæ.

32. **Sphærites circulifer** Heer Fl. tert. vol. III, pag. 147. tab. CXLII, 8213  
f. 3 (*Sphæria*), Ettingsh D. foss. Fl. d. Tert. Beck. v. Bilin Denkschr. k. Ak. Wien, CLXXVI Bd. I, p. 8, t. I, f. 7, Schimp. Tr. Pal. Vég. vol. I, p. 133. — Peritheciis minutissimis, nigris, in circulum dispositis.

*Hab.* ad folia *Lauri principis* in calcareo albo tortoniano Locle Helvetiæ, ad folia *Betulæ argillæ plasticæ mayencianæ* Prie-

sen prope Bilin Bohemiæ. — Dispositione peritheciorum *Gnomoniæ Coryli* similis.

33. **Sphærites dispersus** Heer Fl. tert. Helv. vol. III, pag. 147, tab. 8214 CXLII, f. 6 (*Sphæria*), Schimp. Tr. Pal. Vég. vol. I, p. 133. — Peritheciis minutissimis, globosis, sparsis, nigris, 0,25-0,50 circ. mm. diam.

*Hab.* ad folia Lauri primigeniæ in marga aquitaniana, Rivaz Helvetiæ.

34. **Sphærites limbatus** Ettingsh foss. Fl. v. Sagor Denkschr. k. Ak. 8215 Wiss. XXXII Bd. Wien 1872, p. 160, t. I, f. 11, 12, a, b (*Sphæria*), Voss Wilh. Mat. z. Pilzk. p. 221. — Peritheciis sparsis, minutis, subangulatis, irregulariter orbiculatis v. ellipticis, limbo pallido cinctis, ostiolo rotundato pertusis.

*Hab.* ad folia Lauri stenophyllæ in marga aquitaniana prope Savine apud Sagor Carnioliæ, Austria.

35. **Sphærites Palæo-Lauri** Ettingsh. foss. Fl. v. Leoben Denkschr. 8216 K. Ak. Wiss. LIV Bd., I Abth., Wien 1888, p. 265, t. I, f. 6, 6 a (*Sphæria*). — Peritheciis minutissimis, 0,10-0,20 circ. mm. diam., punctiformibus, nigris, interdum confluentibus, ostiolo rotundato pertusis.

*Hab.* ad folium Lauri cujusdam in argilla miocenica media Moskenberg prope Leoben Steiermark. — Sec. cl. Ettingshausen *St. interpungenti* Heer similis, a quo peritheciis confluentibus et matricis diversitate tantum differt.

36. **Sphærites eugeniophilus** Mass. Syll. pl. foss. p. 17. 8217

*Hab.* ad folia Eugeniæ laurifoliæ Mass., in formatione oecenica media montis Bubulcæ in agro veronensi Italiæ bor.

37. **Sphærites münzenbergensis** Ettingsh. Foss. Fl. Leoben Denkschr. 8218 k. Ak. Wiss. LIV, Bd. I, Abth. Wien 1888, p. 265, t. I, f. 8, 8 a (*Sphæria*). — Peritheciis sparsis minutis 0,20-0,50 mm. circ. diam., subrotundis, subimmersis, nigris, ostiolo rotundato pertusis.

*Hab.* ad folium Laurineæ cujusdam, in argilla aquitaniana, Münzenberg, Hassia Darmst. Germ. centr. — A *Sph. deperdita* Heer peritheciis majoribus et matricis diversitate distinctus.

38. **Sphærites socialis** Heer Foss. Fl. of Bovey Tracey tab. LXV, 8219 f. 13 (*Sphæria*), Schimp. Tr. Pal. Vég. vol. I, pag. 133, Engelh. Ueb. Braunkohlenpfl. v. Meuselwitz, Mittheil. dem Osterlande, N. Folge vol. II, Altenburg 1884. — Peritheciis congregatis, minutissimis 1½ mm., orbiculatis, ostiolo rotundato pertusis.

*Hab.* ad folia Dryandroidis lævigatæ Heer Bovey Tracey

Devanshire Brit. austr. in lignite aquitaniana et in lignite oligocenica Meuselwitz Saxonia-Altenburg.

39. **Sphærites regularis** Goepp. Web. Fl. Nied. Palæontographica II, 8220 t. 8, f. 1, p. 40, Mass. Lett. a Scarab. p. 8, n. 1, Fl. foss. Senig. t. I, f. 11, 12, Synops. Fl. foss. Senog. p. 3. — Peritheciis simplicibus 0,5-1 circ. mm. diam., discretis, subscutellæformibus, subrotundis, regularibus.

*Hab.* ad folia *Daphnes Rucellajanæ* Massal. in marga gypsacea tortoniana, Senegallia in agro umbro Italiæ bor.; in lignite Liessem, Niederheim, Rott, Orberg ad folia *Salicis grandifoliæ* Web. — A *Sphærite Braunii* Heer paullo diversus.

40. **Sphærites Palæo-Daphnes** Ettingsh. Foss. Fl. Leoben Denkschr. 8221 K. Ak. Wiss. LIV Bd., Abth. Wien 1888, p. 266, t. I, f. 5, 5 a (*Sphæria*). — Peritheciis minutissimis, 0,20-0,50 circ. mm. diam., punctiformibus, nigris, sparsis, ostiolo pertusis.

*Hab.* ad folia *Daphnes* sp. in argilla miocenica media Moskenberg pr. Leoben, Steiermark. — Sec. cl. Ettingshausen *Sph. Palæo-Lauri* valde affinis, ab eo peritheciis leviter majoribus distinctus.

41. **Sphærites Palæo-Santali** Ettingsh. Foss. Fl. Schoenegg Denkschr. 8222 k. Ak. Wiss. LVII Bd. p. 6, t. I, f. 1, 1 a, 2 (*Sphæria*). — Peritheciis minutissimis,  $\frac{1}{10}$ - $\frac{1}{3}$  circ. mm. diam., punctiformibus, nigris, sparsis, ostiolo rotundato pertusis.

*Hab.* ad folia *Santali styriaci* Ettingsh. in argilla subflava Johanni-Stollen prope Wies Steiermark.

42. **Sphærites Myricæ** Lesquer. Contrib. to the foss. Fl. of the West 8223 terr. Parte II, The tert. Fl. p. 34, t. I, f. 4 (*Sphæria*). — Peritheciis punctiformibus, minutis, sparsis seu in circulum dispositis, maculas rotundas efficientibus.

*Hab.* ad folia *Myricæ Torreyi* Lesq. in formatione cretacea superiori Black Buttes Station in Wyoming et in foliis *Myricæ nigricantis* in formatione eocenica Green River in Wyoming Amer. bor.

43. **Sphærites perforans** Goepp. Ueb. Braunkohlenfl. d. Nordöst Deut. 8224 schl. Zeitsch. d. Deutschen geol. Gesell. Berlin 1852, pag. 487, Tert. Fl. v. Schosnitz in Schlesien, pag. 2, tab. I, fig. 3, 4, D. Tertiärfl. a. d. Insel Java pag. 150. — Sparsus; peritheciis simplicibus minutis, 0,5-1 circ. mm. diam., crassiusculis, profunde impressis, stromati punctiformi innatis, apice ostiolo pertusis.

*Hab.* ad folia *Ulmi pyramidalis* Göpp. in argilla tortoniana Schosnitz prope Canth ad Vratislaviam.



44. **Sphærites glomeratus** Engelh. Tertiärl. Jesuitengr. in Nordböh. 8225  
men, Nova Acta Acad. Leop. Carol. vol. XLVIII, n. 3, Halle 1885,  
p. 310, t. VIII, f. 4 (*Sphæria*). — Peritheciis minutis, 0,2 circ.  
mm. diam., globosis, confluentibus, maculas 1-2 circ. mm. latas ef-  
ficientibus.

*Hab.* ad folia Ulmi plurinerviæ Ung., in schisto bitumi-  
noso aquitaniano, Jesuitengrabens prope Kundratitz Bohemiæ bo-  
realis.

45. **Sphærites rhytismoides** Ettingsh. Beitr. Kennt. Tertiärl. Steierm. 8226  
Sitzungs. K. Ak. Wiss. LX Bd., I Abth. Wien 1869, p. 34, t. I,  
f. 3 (*Sphæria*), Tert. Fl. v. Leoben Denkschr. k. Ak. Wiss. LIV  
Bd., I Abth., Wien 1888, p. 266. — Peritheciis magnis, 2-5 mm.  
circ. diam., subimmersis, rotundatis, solitariis, ostiolo lato irre-  
gulariter fisso pertusis.

*Hab.* ad folia Ulmi Bronnii Ung.? in argilla miocenica me-  
dia Moskenberg prope Leoben Steiermark.

46. **Sphærites interpungens** Heer Fl. tert. Helv. I, p. 14, t. I, f. 3, 8227  
III, p. 146, t. CXLII, f. 4, II, t. LXXVI, fig. 4 (*Sphæria*), Tert. Fl.  
v. Grönland vol. VII, pag. 47, t. LXXXVI, f. 7, Ettingsh. Beitr.  
Kennt. foss. Fl. Parschlug, Denkschr. k. Ak. Wiss. XXXVIII Bd.,  
I Abth. p. 83, Foss. Fl. Schoenegg Denkschr. ibid. LVII Bd, p. 5,  
t. I, f. 7, 7 a, Schimp. Tr. pal. Vég. I, p. 131, Capell. La formaz. gess.  
Castell. maritt. p. 37, Staub Med. Pfl. a. d. Baran. Com. p. 29,  
t. I, f. 1, 1 a, *Sphaerites minutus* Göpp. Foss. Fl. v. Schosnitz  
p. 2, t. I, f. 7, 8, Tert. Fl a. d. Ins. Java p. 150, *Sphæria pun-  
ctiformis fossilis* A. Br. in Stizenb. Ueb. Verst. Grossherz. Baden  
1871, p. 71, *Sphærites microstigma* Göpp. Ueb. Braunkohlenfl.  
d. Nordöst. Deutschl., Zeitschr. Deut. geol. Gesell. Berlin 1852,  
p. 487. — Peritheciis sparsis minutissimis, punctiformibus, nigris,  
a stromate vix discretis, globosis, apice ostiolo pertusis.

*Hab.* ad folia Quercus commutatae et Gmelini Ung., in  
calcareo tortoniano Ceningen Helvetiæ; ad folia Andromedæ  
protogeæ in calcareo tortoniano Locle Helvetiæ; ad folia My-  
ricæ lignitum in schisto margaceo tortoniano Parschlug Sty-  
riæ et in schisto argillaceo subflavo Neu-Josephi-Tagbau et Johan-  
ni-Stollen prope Wies, Steiermack; ad folia Rhamni in marga mi-  
nuta miocenica superiori Cerretello Tusciæ Italiæ med.; ad folia  
Quercus Lyellii Heer in siderite, Naujat Groenlandiæ; ad folia  
Quercus semiellipticæ, Q. pseudoprinoïdis Göpp., et  
Rhois quercifoliæ Göpp., in argilla tortoniana Schosnitz pro-

pe Canth ad Vratislaviam; ad folia *Leucothoës* (*Andromeda*) protogææ (Ung.) in formatione tertiaria Varalja in comitatu Baranyensi Hungariæ. — *Sph. punctiformi* Pers. simillimus: perithecia adeo parva sec. cl. Göpp. ut in lineæ quadratæ spatio ad quadraginta numerentur. Sec. cl. Massalongo (St. s. Fl. foss. e geol. strat. d. Senigall. p. 84) species hæc cum *Sph. milliario* Ettingsh. et *Sph. venisequo* Göpp. synonyma.

47. **Sphærites Daphnes** Ettingsh. Beitr. z. Kennt. d. foss. Fl. v. Parschlug in Steierm. l. c. p. 84, tab. I, f. 4, 5 (*Sphæria*). — 8228  
Supra totum folium æqualiter dispersus; peritheciis minutis, punctiformibus, nigris, apice ostiolo minutissimo pertusis.

*Hab.* ad folia *Quercus Daphnes* in schisto margaceo tortoniano ad Parschlug Steiermark.

48. **Sphærites mediterraneus** Ettingsh. Beitr. z. Kennt. d. foss. Fl. v. Parschl. in Steierm. l. c. p. 83, t. I, f. 6, 8 (*Sphæria*). — 8229  
Sparsus; peritheciis minutis, punctiformibus, interdum confluentibus, nigris.

*Hab.* ad folia *Quercus mediterraneæ* ad Parschlug Steiermark in schisto margaceo tortoniano.

49. **Sphærites disciformis** Ung. Gen. et Spec. p. 37. — 8230  
Peritheciis simplicibus, discretis, minutis, medio impressis pertusisque.

*Hab.* ad folia *Quercuum* et *Vacciniorum* ad Parschlug Stirix in marga tortoniana.

50. **Sphærites Mureti** Heer Fl. tert. Helv. vol. III, p. 148, t. CXLII, f. 18 (*Sphæria*), Schimp. Tr. Pal. Vég. vol. I, pag. 133. — 8231  
Peritheciis sparsis immersis, orbicularibus, majusculis 1-2 circ. mm. diam., ostiolo latiusculo pertusis.

*Hab.* ad folia *Quercus Mureti* in marga aquitaniana Monod Helvetia. — Verisimiliter generi *Phacidio* adscribendus.

51. **Sphærites Palæo-Juglandis** Ettingsh. Foss. Fl. Schonegg Denkschr. k. Ak. Wiss., LVII Bd. pag. 6, t. I, f. 3, 3 a (*Sphæria*). — 8232  
Peritheciis minutissimis  $\frac{1}{10}$ - $\frac{1}{4}$  circ. mm. diam., punctiformibus, fuscis, sparsis, ostiolo vix conspicuo pertusis.

*Hab.* in argilla subflava Johanni-Stollen prope Wies Steiermark. — A *Sph. münzenbergensi* Ettingsh. rotunditate magis conspicua perithecorum et nutricis diversitate distinctus.

52. **Sphærites excipuloides** Mass. S. Piante foss. Vic. pag. 59, Vis et Mass. Fl. foss, Nov. p. 9, t. I, f. 5 A. — 8233  
Peritheciis subsimplicibus, discretis, in circulum dispositis, 0,5-1 circ. mm. diam., disco aperto, crasso, concaviusculo.

*Hab.* ad folia *Juglandis* pristinx Ung. in calcareo marga-

ceo aquitaniano inferiori «Novale» in agro Vicetino Ital. bor. — Peritheciolorum dispositione cum *Sph. punctiformi* Pers. et forma cum *Excipula Rubi* Fries bene congruit.

53. **Sphærites** sp. Boulay Not. S. la Fl. tert. d. env. de Privas Ar- 8234  
dèche, Bull. Soc. Bot. de France XXXIV, Paris 1887, pag. 236  
(*Sphæria*).

*Hab.* ad folia Juglandis acuminatæ in tripoli tortoniano Rochesauve prope Privas Ardèche Galliæ austr.

54. **Sphærites Caryæ** Ettingsh. Die foss. Fl. d. Tert.-Beck. v. Bilin 8235  
Denkschr. k. Ak. Viss. Wien, XXVI Bd., p. 85, t. 1, f. 20 (*Sphæ-*  
*ria*), Schimp. Tr. Pal. Vég. vol. III, p. 432. — Peritheciis sparsis,  
orbiculatis, magnis 3-5 circ. mm. diam., immersis, apice ostiolo la-  
tissimo pertusis.

*Hab.* ad folia Caryæ in argilla plastica mayenciana Priesen prope Bilin Bohemiæ.

55. **Sphærites Fici** Heer Fl. tert. Helv. vol. III, p. 146, t. CXLII, 8236  
f. 25 (*Sphæria*), Schimp. Tr. Pal. Vég. vol. I, p. 132. — Peri-  
theciis minutis, punctiformibus, nigris, medio pallidioribus.

*Hab.* ad folia Fici tiliæfoliæ var. grandifoliæ in formatione tortoniana Elgg canton de Zurich Helvetiæ.

56. **Sphærites Fici-tenuinervis** Ettingsh foss. Fl. Sagor in Krain Sitz. 8237  
K. Ak. Wiss., L Bd, I Abth., Wien 1885, p. 2, t. XXVIII, f. 3,  
3 a-c (*Sphæria*). — Peritheciis sparsis, minutissimis, ovalibus,  
nigris, ostiolo rotundato pertusis.

*Hab.* ad folia Fici tenuinervis Ettingsh. in marga aquitaniana prope pagum Savine Carniolæ (Austria). — A *Sph. interpungenti* ob peritheciolorum formam et magnitudinem minorem diversus.

57. **Sphærites Braunii** Heer Fl. tert. Helv. vol. I, p. 14, t. I, f. 2 (*Sphæ-* 8238  
*ria*), Ludw. Palæontographica vol. VIII, p. 58, t. VIII, f. 2, Ludw.  
l. c., p. 135, t. XXVII, f. 1, Ettingsh. D. foss. Fl. ält. Braunkohl. Sitz.  
d. k. k. Ak. d. Wiss. 1868, p. 813, Die foss. Fl. d. Tert. Beck v.  
Bilin Denkschr. k. Ak. Wiss. Wien, XXVI Bd., p. 83, t. I, f. 10,  
Capell. La formaz. gess. di Castellina Maritt. p. 37, Schimp. Tr.  
pal. Vég. vol. I, p. 131, t. I, f. 18, *Sphæria Populi-ovalis* Al. Br.  
(ex parte) in Stitz. Verst. Grossh. Baden 1851, p. 71, Heer Uebers.  
d. Tert. p. 48, *Sphæria Populi-transversæ* Al. Br. in Stitz. Uebers.  
Verst. Grossherz. Baden 1851, pag. 71. — Peritheciis rotundatis,  
nigerrimis, disco paulo pallidioribus.

*Hab.* ad folia Populi ovalis et latioris, in mollaxa tor-

toniaua Æningen et Albis Helvetiæ Salzhausen et Münzenberg (Hessen); ad folia Juglandis, in argilla plastica mayenciana Priesen prope Bilin Bohemiæ, in argilla aquitaniana; ad folia Sideroxyli hepios Ung. in marga miocenica superiori Cerretello Tusciæ Ital. centr. — Sec. cl. Capellini l. c., *Sphæria regularis* Göpp. a cl. Massalongo figurata (Fl. Senig. tab. I, f. 11) potius ad hanc speciem referenda.

58. **Sphærites ceuthocarpoides** Heer Fl. tert. Helv. vol. I, pag. 15, 8239 tab. I, f. 1 (*Sphæria*), Schimp. Tr. Pat. Vég. vol. I, p. 131, t. I, f. 6, Capell. La formaz. gess. Castell. maritt. p. 38, *Sphæria Populi-ovalis* Al. Br. (ex parte) in Stitz. Verst. Grossherz. Baden 1851, p. 71. — Peritheciis nigris, applanatis, in macula expallente positis.

*Hab.* ad folia Populi ovalis in calcareo tortoniano Æningen Helvetiæ, in marga miocenica superiori Cerretello Tusciæ Ital. med. — *Sph. ceuthocarpæ* Fries similis.

59. **Sphærites annulifer** Heer Flora foss. art. I, p. 86, t. I, f. 2, 4, 8240 vol. VII, Tert. Fl. v. Grönland p. 47 (*Sphaeria*), Mioc. Fl. Spitzb. p. 30, tab. X, f. 3, Schimp. Tr. Pal. Vég. vol. III, p. 431. — Peritheciis punctiformibus, in circulum lineam diametro metientem dispositis et maculam candidam circumdantibus.

*Hab.* ad folia Populi? in arenaria nigra miocenica cap. Staratschin Spitzberg et ad folia Magnoliæ Inglefieldi in calcareo ferruginoso miocenico Atanekerdluk Groenlandiæ. — *Gnom. Coryli* Batsch. proxima.

60. **Sphærites maculifer** Heer Fl. tert. Helv. vol. III, p. 146, t. CXLII, 8241 f. 1 (*Sphæria*), Schimp. Tr. Pal. Vég. vol. I, p. 132. — Peritheciis minutissimis, nigris, globosis, aggregatis, maculas pallidas rotundatas circumdantibus.

*Hab.* ad folia Populi mutabilis var. ovalis in calcareo tortoniano Æningen Helvetiæ.

61. **Sphærites Salicis** Engelh. Tertiärfl. Jesuitengr. Nordböhmen Nova 8242 Acta Acad. Leop.-Carol. vol. XLVIII, n. 3, Haller 1885, p. 310, t. VIII, f. 14, 14 a (*Sphæria*) — Peritheciis orbicularibus, nigris, parvis, immersis, 1 circ. mm. diam.

*Hab.* ad folia Salicis in schisto bituminoso Aquitaniano, Jesuitengrabens prope Kundratitz Bohemiæ borealis.

62. **Sphærites vagans** Goepp. Tertiäre-Fl. Schossnitz in Schlesien 8243 p. 2, t. I, f. 5, 6, Tert. Fl. a. d. Insel Java p. 150. — Parvulus, accumulatus; peritheciis simplicibus discretis punctiformibus, 0,10-

0,30 circ. mm. diam., stromatibus applanatis, apice ostiolo latiusculo pertusis.

*Hab.* ad folia Salicis variantis Goepp. in argilla tortoniana Schossnitz prope Canth ad Vratislaviam.

63. **Sphærites connatus** Goepp. Tert. Fl. Schossn. in Schles. pag. 3, 8244 t. I, f. 11, 12, Tertiärf. a. d. Insel Java, pag. 150. — Gregarius, connatus; peritheciis inæqualibus 3-5-7 inter sese connatis, hinc inde substellatis 0,3-0,5 circ. mm. diam., stromati maculæformi innatis, apice ostiolo pertusis.

*Hab.* ad folia Salicis in argilla tortoniana Schossnitz prope Canth ad Vratislaviam.

64. **Sphærites Dryadum** Etingsh. Beitr. Kennt. Tertiärf. Steierm. 8215 Sitz. K. Ak. Wiss. LX Bd., I Abth. Wien 1869, p. 34, t. I, f. 1, foss. Fl. Leoben, ibid. LIV, Bd., I Abth. Wien 1888, p. 266 (*Sphæria*). — Peritheciis magnis, 2-3 mm. diam., orbiculatis, sparsis, apice ostiolo minuto pertusis.

*Hab.* ad folia Betulæ Dryadum Brongn., in argilla miocenica media Moskenberg prope Leoben Steiermark. — A *Sph. Troggii* Heer, et a *Sph. Caryæ* Ett. paullo diversus.

65. **Sphærites pinicola** Heer Miocen. Fl. Spitzb. pag. 30, tab. XIII, 8245 f. 41 (*Sphæria*), Schimp. Tr. Pal. Vég. vol. III, pag. 431. — Peritheciis minutis, punctiformibus, ovalibus, seriatis, ostiolo centrali.

*Hab.* in acubus Abietis in arenaria nigra miocenica prope cap. Staratschin (Spitzberg).

66. **Sphærites Widdringtoniæ** Ludw. Foss. Fl. Wetter. t. LXIII, f. 1, 8247 t. LXVI, in Palaeontogr. vol. VIII, p. 162 (*Sphæria*), Schimp. Tr. Pal. Vég. vol. I, p. 134. — Peritheciis minutissimis, orbicularibus, nigris, ostiolo rotundo.

*Hab.* ad folia Widdringtoniæ stigmatosæ Ludw., in argilla sphærosideritica aquitaniana, Dernbach, Saxoniae Weimar Germaniae centr.

67. **Sphærites punctiformis** Ung. Gen. et Spec. p. 37. — Peritheciis 8248 simplicibus, discretis, punctiformibus, stromate maculæformi innatis, apice pertusis.

*Hab.* supra totum folium æquabiliter dispersum in marga tortoniana Parschlug Stiriae.

68. **Sphærites arcticus** Heer Mioc. Fl. v, Nordgrönland tab. I, f. 5, 8249 p. 86 (*Sphæria*), D. foss. Fl. v. Groenland p. 47. — Peritheciis ovalibus, sparsis, medio impressis, 2-2,5 mm. diam.

*Hab.* ad folii fragmentum, in calcareo ferruginoso firmo formationis miocenicæ Atanekerdluk Groenlandiæ.

69. **Sphærites kutschlinicus** Ettings. Foss. Fl. v. Bilin, Denkschr. k. 8250  
Ak. Wiss. Wien XXVI Bd. p. 84, t. I, f. 27, 28 (*Sphæria*), Schimp.  
Tr. Pal. Vég. vol. III, p. 432. — Peritheciis sparsis, 0,25-1 mm.  
diam., rotundato-ellipticis, convexis apice ostiolo rotundato pertusis.

*Hab.* in folio indeterminato, Kutschlin Bohemiæ. — A *Sph. effosso* Heer propter perithecia magis convexa et elliptica distinctus.

70. **Sphærites acuminatus** Wat. Pl. foss. du Bass. de Paris pag. 36, 8251  
t. XI, f. 2 (*Sphæria*). — Peritheciis satis magnis, oblongo-acuminatis, sparsis, nervo insidentibus.

*Hab.* ad folia Dicotyledoneæ cujusdam in «grès» suessoniano lignitibus insidente, Bellen, Aisne Gall. bor. — Affinis *Sph. Braunii*, sed perith. utrinque acuminatis differt.

## II. Cortici-lignicolæ.

71. **Sphærites Pini** Ludw. Foss. Fl. Wetter. p. 163, t. LXIII, f. 3 8252  
(*Sphæria*), Schimp. Tr. Pal. Vég. vol. I, p. 134. — Peritheciis minutis, 0,25-0,5 circ. mm. diam., hemisphæricis, ostiolatis.

*Hab.* in cortice Pini rotundo-squamosæ Ludw. in argilla sphærosideritica aquitaniana Derobach, Saxonie Weimar, Germ. centr. — Peritheciis hemisphæricis a *Sph. areolato* Fres. et rotunditate a *Sph. turbineo* Ludw. diversus.

72. **Sphærites schoeneggensis** Ettingsh. Foss. Fl. Schönegg Denkschr. 8253  
k. Ak. Wiss. Wien, LVII, p. 6, t. I, f. 8 (*Sphæria*). — Peritheciis magnis, 1,5-3 mm. diam., orbiculatis, sparsis, apice ostiolo latiusculo pertusis.

*Hab.* in cortice Glyptostrobi europæi, in argilla subflava Neu-Josephi-Tagbau pr. Wies, Steiermark. — A *Sph. Mureti* Heer sec. cl. Ettingshausen peritheciis majoribus et planioribus distinctus.

73. **Sphærites Secretani** Heer Fl. tert. Helv. I, p. 15, t. I, fig. 4 a 8254  
(*Sphæria*), Schimp. Tr. pal. Vég. I, pag. 132, Ettingsh. Foss. Fl. Sagor Denkschr. k. Ak. Wiss. math. nat. Cl. L, Wien 1885, p. 2. — Peritheciis minutissimis, rotundatis, planis, aggregatis, nigris, disco albido.

*Hab.* ad caulem in marga tortoniana Oeningen Helvetiæ et in topho vulcanico Hohenkraehen prope Muhlhausen Alsatie et ad folia Phragmitis œningensis Heer in marga aquitaniana pr. pagum Savine Carniolie (Austria). — *Sph. Fici* simillimus, inter species vigentes cum *Pleospora herbarum* habitu bene congruit.

74. **Sphærites Sismondæ** Ettingsh. Foss. Fl. v. Bilin Denkschr. k. Ak. 8255  
Wiss. XXVI Bd., I, p. 83, t. I, f. 21 (*Sphæria*), Schimp. Tr. Pal.  
Vég. vol. III, p. 431. — Peritheciis fuscis, minutis, subglobosis,  
sparsis, apice ostiolo minimo punctiformi pertusis.

*Hab.* in ramo Dicotyledoneæ cujusdam in argilla plastica  
mayenciana Priesen prope Bilin Bohemiæ. — A *Sph. Trogii* Heer  
peritheciolorum dispositione et ostiolo distinctus.

75. **Sphærites turbineus** Ludw. Foss. Fl. Wetter. (Palæontograph. 8256  
vol. VIII, p. 54, t. VIII, f. 10) (*Sphæria*) Ettingsh. D. foss. Fl.  
d. ält. Braunkohlenf. d. Wett. Sitz. d. k. k. Ak. d. Wiss. 1868,  
p. 812, Schimp. Tr. Pal. Vég. vol. I, p. 134. — Peritheciis ova-  
libus, 0,5-1 mm. diam., breviter pedicellatis, superne coarctatis,  
ostiolo centrali aperto marginato.

*Hab.* in lignitibus aquitanianis, Salzhausen Hassiæ Darmstadt  
Germ. centr.

76. **Sphærites lapideus** Lesquer. Contrib. to the Foss. Fl. of the West 8257  
terr. Part II, The Tert. Fl. p. 34, t. I, f. 3 (*Sphæria*). — Pe-  
ritheciis rotundatis, admodum convexis, 1 vel 2 mm. latis, in se-  
ries lineales dispositis, subcorticalibus, corticem perforantibus, dein  
erumpentibus, membranaceis seu coriaceis, albidis.

*Hab.* in fragmento ligni fossilis formationis cretaceæ superioris  
Raton Mountains, New Mexico Amer. bor.

77. **Sphærites areolatus** Fresen. Palæontograph. vol. IV, pag. 202, 8258  
t. XXXVII, f. 9-12 (*Sphæria*), Ludw. Foss. Fl. Wetter. t. VIII,  
f. 11, Ettingsh. Fl. foss. d. ält. Braunkohlenf. d. Wett. Sitz. d.  
k. k. Ak. d. Wiss. 1868, pag. 812, Schimp. Tr. Pal. Vég. vol. I,  
p. 134. — Peritheciis aggregatis, subsphæricis, 0,50-0,75 mm. diam.,  
superne deplanatis, ostiolo aperto marginato producto.

*Hab.* inter fragmenta vegetabilia putrescentia, in lignite aquit-  
aniana Salzhausen et Hesseubruckener-Hammer. — *Sph. mam-*  
*mæformi*, *spermoidi* et *Bombardæ* facie similis.

### III. In Monocotyledoneis et Acotyledoneis.

78. **Sphærites sp.** Lugeon La Molasse de la Borde Bull. soc. Vaud. 8259  
1887, XXIII, p. 174 (*Sphæria*).

*Hab.* ad folia Manicariæ formosæ in mollaxa vallis de la  
Borde prope Lausannam Helvetiæ.

79. **Sphærites Flabellaræ** Ettingsh. et Gard. Rep. Phyto-Pal. Invest. 8260  
foss. Fl. of Sheppey Proc. Roy. Soc. London vol. XXIX, 1879,  
p. 392 (*Sphæria*), loc. cit. nulla adest descriptio.

*Hab.* in argilla eocenica insulæ Sheppey Angliæ.

80. **Sphærites Lesquereuxi** Mesch., *Sphæria rhytismoides* Lesq. Contrib. to the foss. Fl. of the West terr. Part II, The tert. Fl. p. 35, t. I, f. 5, 5 *a*. — Peritheciis punctiformibus, in circulum dispositis, illis *Sph. Myricæ* et *lapideo* majoribus, margine irregulari notatis. 8261

*Hab.* ad folia *Caulinitis sparganioidis*, formationis cretaceæ superioris Black Buttes Station in Wyoming Amer. bor.

81. **Sphærites Zosteræ** Schmalh. Beitr. Tertiärf. Süd-West-Russlands Palaeontologische Abhandl. Berlin 1883, p. 289 (*Sphæria*). 8262

*Hab.* in formatione tertiaria Rossicæ austro-occidentalis.

82. **Sphærites Palæo-Typhæ** Etingsh. Foss. Fl. Schöneegg p. 5, t. I, f. 4, 4 *a* (*Sphæria*). — Peritheciis minutis, nigris, circ. 0,25-0,50 mm. diam., rotundis, subseriatis, ostiolo rotundato pertusis. 8263

*Hab.* ad folia *Typhæ latissimæ* in argilla subflava Neu-Josephi-Tagbau prope Wies, Steiermark. — A *Sph. Trogii* Heer sec. cl. Etingshausen peritheciis rotundis tantum distinctus.

83. **Sphærites minutulus** Sap. Étud. s. l. Vég. du S.-E. de la France I<sup>re</sup> part., pl. III, f. 19, A. et B. (*Sphæria*), Schimp. Tr. Pal. Vég. vol. I, p. 132. — Peritheciis minutissimis sparsis. 8264

*Hab.* in fragmento folii *Typhæ maximæ* A. Br., in calcareo liguriano Aix, Narbonne Gallicæ. — *Sph. Kunkleri* similimus.

84. **Sphærites proximus** Sap. Étud. s. l. Vég. du S.-E. de la France I part., pl. III, fig. 19 (*Sphæria*), Schimp. Tr. Pal. Vég. vol. I, p. 132, t. I, f. 14 *a*, *b*. — Peritheciis fuscis, minutis, orbicularibus, sparsis, nervis insidentibus. 8265

*Hab.* in fragmento folii *Typhæ maximæ* A. Br. calcaris liguriani Aix, Narbonne Gallicæ.

85. **Sphærites Kunkleri** Heer Fl. tert. Helv. vol. I, p. 15, t. I, f. 4 *a* (*Sphæria*), Sap. in Heer Le climat et la Vég. du pays tertiaire p. 159, Etingsh. D. Foss. Fl. d. Tert.-Beck. v. Bilin Denkschr. k. Ak. Wiss. Wien XXVI Bd. p. 84, t. I, f. 23, Foss. Fl. Schoenegg ibid. LVII Bd. p. 5, t. I, fig. 5, 5 *a*, Schimp. Tr. Pal. Vég. vol. I, p. 132, t. I, f. 5. — Peritheciis minutissimis, planiusculis, orbicularibus, minute ostiolatis, aggregatis, nigris disco impressis. 8266

*Hab.* ad fragmenta foliorum *Graminacearum*, in argilla helvetiana ad Saint-Gall Helvetiæ, in schisto bituminoso aquataniano Manosque Basses Alpes Gallicæ austr. in caule argillæ plasticæ mayencianæ Priesen prope Bilin, in argilla subflava Neu-Josephi-



Tagbau prope Wies, Steiermark. — A *Sph. Trogii* Heer propter perithecia dense disposita distinctus.

86. **Sphærites Trogii** Heer Fl. tert. Helv. I, pag. 15, t. I, f. 5, III, 8267  
p. 147, t. CXLII, f. 5 (*Sphæria*), Schimp. Tr. Pal. Vég. I, p. 132,  
Ettingsh. Tert. Fl. Leoben Denkschr. Ak. Wien LIV, p. 226, Foss.  
Fl. Schöneegg ibid. LVII Bd. p. 5, t. I, f. 6, 6 a. Fliche Fl. tert.  
env. Mulhouse Soc. ind. Mulhouse tom. LVI, Mulhouse 1886, p.  
352, Engelh. Tertiärf. v. Göhren Acta Acad. Leop.-Carol. XXXVI,  
p. 9, t. II (IX), fig. 1. — Peritheciis punctiformibus, sparsis, sub-  
seriatis.

*Hab.* ad folia Phragmitis œningensis, in calcareo tor-  
toniano Oeningen et in marga aquitaniana Monod Helvetiæ, in ar-  
gilla subflava Neu-Josephi-Tagbau prope Wies, Steiermark, in ar-  
gilla miocenica media Moskenberg prope Leoben, Steiermark, ad  
folia Poacites sp. in marga aquitaniana inferiore Riedisheim pr.  
Mulhouse Alsatæ; ad folia Phragmitis, in argilla aquitaniana  
Göhren, inter Wechselburg et Lunzenau Saxonæ. — *Sph. gra-*  
*minis* Pers. et *Actinothyrio graminis* Kunz. habitu similis.

87. **Sphærites Gaudinii** Mesch., *Sphæria atomica* Gaud. Contrib. a 8268  
la Fl. Foss. italienne II, Nouv. mém. Soc. helv. Scienc. nat. vol.  
XVII, n. 4, p. 32, t. I, f. 13, Lausanne (?) 1859, nec Mass. (1851).  
— Peritheciis sparsis, perexiguis, circularibus, margine tumidulis,  
nigris, centro pallidioribus.

*Hab.* ad folia Phragmitis œningensis, in arena flava «Ca-  
stro» Tusciæ Ital. centr. (GAUDIN, coll. STROZZI). — Perith. 80-100  
µ, diam. A *Sph. Trogii*, *Kunkleri*, et *Secretani* magnitudine mi-  
nore et dispositione perithecorum diversus.

88. **Sphærites Phragmitis** Ludw. Foss. Fl. Wetter. p. 168, t. LXIII, 8269  
f. 2 et t. LXVII, f. 4, 5 (*Sphæria*), Schimp. Tr. Pal. Vég. vol. I,  
p. 134. — Peritheciis orbicularibus v. subovalibus, 0,5-1 mm. diam.,  
ostiole centrali tumide marginato.

*Hab.* in culmis Phragmitis aquæ-ferratæ Ludw., in argilla  
sphærosideritica aquitaniana, Dernbach Saxonæ Weimar, Germ.  
centr. — A *Sph. Kunkleri* Heer et *Sph. Trogi* Heer orbe majore  
distinguitur.

89. **Sphærites pristinus** Ettingsh. Foss. Fl. Bilin Deuk. Ak. Wien 8270  
XXVI, vol. I, p. 85, t. I, f. 25 (*Sphæria*), Schimp. Tr. Pal. Vég.  
vol. VIII, pag. 432. — Peritheciis congestis, circ. 0,28-0,50 mm.  
diam., subglobosis, immersis, apice ostiole minimo vix conspicuo  
pertusis.

*Hab.* ad *Monocotyledoneam* quamdam in argilla plastica mayenciana Priesen prope Bilin, Bohemiæ.

90. **Sphærites solitarius** Deb. et Ettingsh. D. Urw. Acrobryen u. 8271  
Thalloph. Kreidegeb. Aachen und Mästricht Denkschr. k. Ak. Wiss. XVI Bd., Wien 1859, pag. 213, t. III, f. 4, e, f, g (*Sphæria*). — Peritheciis solitariis, remotis, suborbicularibus,  $\frac{1}{5}$ -1 mm. latis, planis, disco centrali minimo immerso.

*Hab.* in folio plantæ *Monocotyledoneæ*, in stratis argillosis arenacei dicti aquisgranensis, rarissimus.

91. **Sphærites Morloti** Fisch.—Ost. Heer Fl. tert. Helv. vol. III, p. 147, 8272  
t. CXLII. f. 25 (*Sphæria*), Schimp. Tr. Pal. Vég. vol. I, p. 133.  
-- Peritheciis punctiformibus, circ. 1-1,5 mm. diam., rotundatis, ferrugineis, sparsis.

*Hab.* in pinnula *Lygodii acutanguli* in marga mayenciana Lützelflüh, canton de Berne Helvetiæ.

#### IV. In matrice ignota.

92. **Sphærites Feistmantelianus** Rabenh. in Geinitz. Ueber eine neue 8273  
foss. Frucht aus den Zechstein und eine überreste aus der Steinkohlenf. «Isis» Dresden 1870, p. 8 (*Sphæria*), Feistmantel Verstein. d. böhm. Ablag. (Palæontograph. vol. XXIII, pag. 78), D. Mittelböhmen, Steinkohlenabl. Archiv. d. Naturw. Durchforsch. v. Böhmen V Bd., n. 3, geol. Abth. Prag. 1883, p. 59. — Sparsus v. subgregarius; peritheciis innatis subparvis, basi plana (ut videtur) sphæroideis, opacis, ostiolo mammillari; sporis cylindrico-fusiformibus, obscuris, impellucidis, utroque polo obtusis, nonnumquam appendiculatis, diametro 4-5-plo longioribus.

*Hab.* in eodem lapide cum *Baccilarite* (?) problematico K. Fst., Radnitz Bohemiæ bor. in formatione carbonifera (Zechstein).

93. **Sphærites muricatus** Meng. et Göpp. in Göpp. Fl. d. Bernstein 8274  
Monatsbericht k. Ak. Berlin 1853, p. 453 (*Sphæria*). — Peritheciis rotundatis, minutissimis, muricato-rugosis, ostiolo rotundato pertusis.

*Hab.* in succino Borussiæ.

94. **Sphærites Annulus** Gaud. et Str. Contr. II, p. 9, t. II, f. 6 (*Sphæ-* 8275  
*ria*). — Peritheciis magnis, circ. 1,5-2 mm. diam. circularibus, disco interiore, ostiolo centrali præditis, raro medio depressis.

*Hab.* in formatione pliocenica, Piombino Ital. med.

95. **Sphærites italicus** Gaud. et Str., Feuill. foss. Toscane p. 26, t. I, 8276

f. 11, 12 (*Sphæria*). — Peritheciis sparsis, orbicularibus, circ. 1 mm. diam., planis et ad marginem leviter inflatis.

*Hab.* in marga ferruginea, Val d'Arno Ital. med. — A *Sph. vagante* Göpp. magnitudine peritheciolorum tantum differt.

96. **Sphærites verrucarioides** Mass. Syll. pl. foss. p. 17. 8277

*Hab.* ad folia varia in marga aquitaniana, Chiavon in agro vicetino Ital. bor. — Loc. cit. nulla adest descriptio.

97. **Sphærites primævus** Göpp. Uebers. Gatt. foss. Pflanzen Germar's 8278  
Lehrbuch d. Mineral. Halle 1837, p. 430.

*Hab.* fossilis in Germania (?).

98. **Sphærites sp.** Klüpf. Z. Tertiärfl. Schwabischen Alb. Verein f. 8279  
Vaterl. naturk. Württemberg 21 st. Jahrg. Stuttgart 1866, p. 156.

*Hab.* in formatione tertiaria Schwabach Bavariæ.

99. **Sphærites sp.** Brongn. Tabl. d. genres de végét. foss. Paris 1849, 8280  
pag. 6.

*Hab.* fossilis, ubi?

100. **Sphærites intumescens** Al. Br. Stiz. Verzeich. p. 71, Heer Fl. 8281  
tert. Helv. I, p. 16 (*Sphæria*).

*Hab.* in formatione tertiaria helvetica. — Sec. Heer est potius forma entomogena a gallis *Nemati saliceti* Hartig parum diversa.

**Obs.** Cl. V. Procaccini-Ricci in Lettera prima e seconda al prof. A. Alessandrini, sulla Anat. fill. sinigall. Bol. 1838, memorat maculas nigras minutas in foliis fossilibus Lauri, Populi Aceris etc. occurrentes, in Sinigallia, quæ fere absque dubio fungillos (*Sphærites* v. *Depazites*) spectant. Etiam cl. A. G. Nathorst in Contr. Fl. fossil. Japon, Stokh. 1883 indicat et delineat fungillum (?) in foliis fossilibus Fagi ferrugineæ ex Japonia, sed forte de insectorum puncturis agitur.

Sec. Geyley H. Th. und Kinkelin F., Ober-Pliocen Flora aus den Baugruben des Klärbeckens bei Niederrad und der Schleuse bei Höchst a. M. (Abhandl. d. Senkenberg. Naturf. Gesell. Bd. XIV, Frankfurt 1887), in formatione pliocenica superiori Klärbecken pr. Niederrad et Schleuse pr. Höchst, occurrunt duo pyrenomycetes, unus *Hypoxyylon fuscum* et *Diatrypen disciformem*, alter *Roseliniam Aquilam* referentes.

**POLYSTIGMITES** Pers. (*Polystigma*), Sacc. Syll. II, p. 458.

1. **Polystigmities priscus** Mass. Lett. a Scarab. p. 9, n. 7, Synops. Fl. 8282  
foss. Senog. p. 4, Fl. foss. Senig. p. 87, t. I, f. 15, 16, Sacco, II

Piano Messiniano, p. 386. — Maculis latis, 5-14 mm. diam., convexis, irregularibus, prominulis, crassiusculis, impresso-punctatis.

*Hab.* ad folia varia in marga gypsacea tortoniana Senogalliæ in agro umbro Ital. med., et in formatione pliocenica inferiori Pedemontii. — *Polyst. fulvo* D. C. habitu proximus.

**DOTHIDITES** Fr. (*Dothidea*), Sacc. Syll. II, pag. 639, sensu lato et quoad habitum.

1. **Dothidites acericola** Heer Fl. Tert. Helv. vol. III, pag. 148, tab. 8283 CXLII, f. 7 (*Dothidea*), Schimp. Tr. Pal. Vég. vol. I, p. 136. — Stromate minuto, rotundato, nigro; peritheciis minutissimis 0,25 circ. mm. diam., aggregatis.

*Hab.* ad folia *Aceris trilobati* in calcareo cœruleo tortoniano Locle Helvetiæ.

2. **Dothidites Andromedæ** Heer Fl. tert. Helv. vol. III, p. 148, tab. 8284 CI, f. 26 (*Dothidea*), Schimp. Tr. Pal. Vég. vol. I, p. 136, *Sphærites connatus* Goepp. Tert. Fl. v. Schoss. p. 3, t. I, f. 11, 12. — Stromate ovato vel subrotundo, peritheciis minutis 0,25-0,50 circ. mm. diam., aggregatis, hinc inde substellatis,

*Hab.* ad folia *Andromedæ protogææ* in calcareo albo tortoniano, Locle Helvetiæ et in argilla tortoniana Schosnitz prope Canth ad Vratislaviam.

3. **Dothidites Sterculiæ** Ettingsh. Beitr. z. Kennt. Tertiärf. Steierm. 8285 Sitz. d. K. Ak. d. Wiss. LX Bd., I Abth. Wien 1869, p. 34, t. I, fig. 6 (*Dothidea*), Foss. Fl. v. Leoben., Denkschr. d. k. Ak. d. Wiss. LIV Bd., I Abth. Wien 1888, p. 267. — Sparsus, rotundus, minutus, 0-5-1 mm. diam., niger, e pustulis minutissimis circulariter dispositis aggregatis.

*Hab.* ad folia *Sterculiæ cinnamomeæ* in argilla miocenica media, Moskenberg prope Leoben, Steiermark. Sec. cl. Ettingshausen a *Doth. myricicola* Ettingsh. propter pustulas in circulum, circum pustulam majorem, dispositas, distinctus et a *Sph. connato* Göpp. propter macularum magnitudinem majorem et matricis diversitatem diversus.

4. **Dothidites Dryadum** Ettingsh. Foss. Fl. v. Leoben in Steierm. Denkschr. k. Ak. d. Wiss. LIV Bd., I Abth., Wien 1888, p. 267, t. I, f. 9 (*Dothidea*). — Confluens, rotundus, niger, mm. 0,50-2 circ. diam., e pustulis minutis, irregulariter dispositis aggregatis.

*Hab.* ad folia *Betulæ Dryadum* in argilla miocenica media Moskenberg, Steiermark. — Propter macularum confluentiam a *Doth.*

*Sterculiæ* Ettingsh. diversus. *Doth. Ulmi* Desv. habitu valde affinis sec. cl. Ettingshausen.

5. **Dothidites borealis** Heer Mioc. Fl. v. Island pag. 139, tab. XXV, 8287 f. 17 (*Dothidea*), S. le climat et la Vég. du pays tert. p. 175. — Epiphyllus, rotundatus vel angulato-diformis, subconfluens, 0,25-0,50 circ. mm. diam.

*Hab.* ad folia *Betulæ macrophyllæ* in topho friabili flavidulo tortoniano Hredavatu in Nordrardalr Thule. — *D. betulinae* Fries habitu similis.

6. **Dothidites myricicola** Ettingsh. Foss. Fl. v. Leoben in Steierm. 8288 Denkschr. k. Ak. d. Wiss. LIV Bd., Abth., p. 266, t. I, f. 10 (*Dothidea*). — Sparsus, rotundus, minutus, 0,5-1,20 mm. diam., niger, e pustulis minutissimis irregulariter dispositis aggregatis.

*Hab.* ad folia *Myricæ* lignitum in argilla miocenica media Moskenberg prope Leoben Steiermark.

7. **Dothidites cypericola** Bleicher et Fliche, Note s. C. Fl. plioc. du 8289 Monte Mario pag. 8, f. 2,2' (*Dothidea*). — Peritheciis parvis, rotundatis. punctiformibus, sparsis.

*Hab.* ad folia *Cyperis* in marga flavidula pliocenica superiori « Monte Mario » prope Romam Ital. centr. (FLICHE). — Perith. 0,5 circ. mm. diam. Ejus similitudo inter species fossiles cum *Sphærite Trogii* Heer, mirifica. A vigente *Doth. (Phyllach.) graminis* Pers. parum diversus videtur.

**HYSTERITES** Tode (*Hysterium*), Sacc. Syll. II, p. 743, sensu lato et quoad habitum.

1. **Hysterites subopegraphoides** Geyler Foss. Pfl. v. Labuan Vega- 8290 Exp. vetensk. Iakttag., Bd. IV, Stockholm 1887, p. 487, t. XXXII, f. 1 (*Hysteriopsis*). — Peritheciis in series aut irregulariter dispositis, oblongo-linearibus mm. 1-2 fere longis, supra aut prope aut inter nervillos dispositis.

*Hab.* ad folia *Aceris*? in argilla insulæ Labuan prope Borneo. — *Hyst. foliicolæ* Fries affinis. Qua ratione ab *Hyst. opegraphoidi* (Goepp.) Heer differat, nisi peritheciolorum magnitudine, nescio.

2. **Hysterites parschlugianus** Ettingsh. Beitr. z. Kennt. d. foss. Fl. 8291 v. Parsch. in Steierm. Denkschr. k. Ak. Wien XXXVIII Bd., I Abth. pag. 85, t. II, f. 1-2 (*Hysterium*). — Peritheciis ovalibus, concatenatim conjunctis, lineas parallelas confertas vel concentricas dispositas formantibus.

*Hab.* ad folia *Aceris* decipientis in schisto margaceo tor-

toniano ad Parschlug Steiermark. Ab *Hyst. labyrinthiformi* Ung. parum diversus.

3. **Hysterites opegraphoides** Goepp. Gen. pl. foss. pag. 111, t. XIV, 8292  
f. 1, 2, *Hysterium deperditum* Heer olim, *Hysterium opegraphoides* (Goepp.) Heer. Fl. tert. Helv. vol. I, p. 18, t. II, f. 8, Schimp. Tr. pal. Vég. vol. I, pag. 137, tab. I, fig. 12, Ludw. Palaeontogr. vol. VIII; p. 55, t. VIII, f. 7, Ettingsh. D. foss. Fl. d. ält. Braunkohlenf. d. Welt. Sitz. d. K. K. Ak. d. Wiss. 1868, pag. 813. — Peritheciis irregulariter vel concentrice dispositis, oblongo-linearibus, 1 mm. circ. longis, solitariis et per paria vel plura lateraliter confluentibus.

*Hab.* ad folia *Aceris tricuspидati* A. Br. in marga aquitaniana Hohe Rhonen Helvetiæ, in lignite aquitaniana Salzhausen Hassiæ Darmst. Germ. centr. *Hyst. foliicolo* Fries affinis. — Verisimiliter huic speciei *Hyst. catenulatus* Ludw. adscribendus.

4. **Hysterites deperditus** Heer Uebers. Tertiärfl. Schweiz. Mittheil. 8293  
d. Naturf. Gesell. in Zürich. III Bd, Zürich 1853, n. 84, p. 94, n. 87, p. 135 (*Hysterium*).

*Hab.* ad folia *Populorum* in marga aquitaniana, Hohe Rhonen Helvetiæ.

5. **Hysterites serialis** Göpp. Tert. Fl. Schossnitz in Schlesien, p. 2, 8294  
t. I, f. 1, 2, Gatt. foss. Pfl. Heft V, VI, p. 3, *Melanconites serialis* Göpp. Ueb. d. Braunkohlenf. d. nordöst. Deutschl. Zeitschr. Deutschen geol. Gessell. Berlin, 1852, p. 487, *Hysterium seriatum* Göpp. Tertiärfl. a. d. Insel Java p. 150. — Epiphyllus; peritheciis æqualibus, 0,5 circ. mm. latis, 1 mm. longis, regularibus in series lineari-elongatas dispositis.

*Hab.* ad folia *Salicis variantis* Göpp. in argilla tortoniana Schossnitz prope Canth ad Vratislaviam.

6. **Hysterites protographis** Mass. Syll. pl. foss. p. 17. 8295

*Hab.* ad folia *Sapotacididis vacciniopsis* Mass. in calcareo margaceo aquitaniano Chiavon in agro vicetino Ital. bor. — Loc. cit. nulla adest descriptio.

7. **Hysterites Cordaitis** Grand'Eury Mém. Fl. Carb. Depart. Loire 8296  
Mém. Acad. Scien. Inst. nat. tome XXIV, n. 1, p. 10, t. I, f. 7. — Peritheciis numerosis plus minus confertis, oblongis, rima longitudinali dehiscentibus, 1-2 mm. longis, 1 fere latis.

*Hab.* ad folia *Dammarae Brownii* in formatione carbonifera superiori Ligeris superioris Galliæ. — Perithecia minora similia sunt illis ad pinnulas *Nevropteridis subcrenulatae* a cl.

- Germar inventa (Verst. d. Steinkohlengeb. v. Wettin u. Löbejün, p. 11, t. V, f. 1).
8. **Hysterites protogæus** Heer Fl. foss. Arct. vol. VI, pars II, p. 20, 8297 t. XXIV, f. 9, 9 *b* (*Hysterium*). — Peritheciis minutis, oblongis, 0,5-1 mm. longis, 0,3-0,5 mm. latis, rima media profunda notatis.  
*Hab.* ad lignum Coniferæ in formatione cretacea superiore Atanekerdluk Groenlandiæ.
9. **Hysterites Friesii** Nath. Beitr. foss. Fl. Schwedens. pag. 9, t. I, 8298 f. 1, 2. — Peritheciis sessilibus, transversim seriatis, rarius solitariis et longitudinaliter confluentibus, linearibus vel lanceolato-linearibus, 1,5-2 mm. longis, rima longitudinali dehiscente.  
*Hab.* ad folia Podozamitis distantis Presl in schisto argilloso griseo formationis rhæticiæ Palsjö Sueciæ. — Ab *Hyst. opegraphoide* (Goepp.) Heer parum diversus.
10. **Hysterites (?) Zosteræ** Schmalh., Beitr. z. Tertiärfl. Süd-West-Russlands Palaeontolog. Abhandl. Berlin 1883, p. 289 (*Hysterium*). 8299  
*Hab.* ad Zosteram in formatione tertiaria Rossiciæ austro-occidentalis.
11. **Hysterites decipiens** Al. Br. Heer Fl. tert. Helv. vol. I, p. 18, 8300 tab. XII, f. 5 (*Hysterium*). Schimp. Tr. Pal. Vég. vol. I, p. 137. — Peritheciis sparsis, minoribus, ovalibus, 0,5-1 mm. diam., rima medio brevioribus notatis numquam confluentibus.  
*Hab.* in rachide Pteridis œningensis in calcareo tortoniano Cœningen Helvetiæ.
12. **Hysterites dubius** Deb. et Eittingsh., Urw. Thall. Kreideg. Aachen 8301 und Mästricht Denkschr. k. Ak. Wiss. XVI Bd., Wien 1859, p. 213, t. III, f. 5, *d*. — Peritheciis ellipticis v. rarius rotundatis, seriatim dispositis, segregatis vel rarius confluentibus  $\frac{1}{4}$ - $\frac{1}{2}$  mm. latis.  
*Hab.* ad folium indeterminabile in strato argilloso arenaceo, dicto aquisgranensi, rarissimus.
13. **Hysterites labyrinthiformis** Ung. Chlor. prot. t. I, fig. 1, Schimp. 8302 Tr. Pal. Vég. vol. I, p. 137, t. I, f. 13, Ung. Gen. et Spec. p. 37. — Epiphyllus, maculis pallidis innatus; peritheciis linearibus, parallelis confertis concentricè dispositis.  
*Hab.* ad folium magnum indeterminatum in schisto calcareo argilloso mayenciano Radoboj in Croatia Austriæ.
14. **Hysterites catenulatus** Ludw. Fl. Wetter. tab. VIII, p. 9 (*Hy-* 8303 *sterium*), Schimp. Tr. Pal. Vég. V, I, p. 137. — Peritheciis ovalibus utraque extremitate acuminatis, 1-1,25 mm. longis, binatim vel quaternatim cohærentibus, transversim seriatis.

*Hab.* in formatione aquitaniana Salzhausen, Hassiæ Darmst. Ger. centr. — Sec. cl. Eittingshausen species hæc *H. opegraphoidi* (Goepp.) Heer subscribenda.

15. **Hysterites torulosus** Göpp. Tertiärfl. auf Insel Java, p. 96. 8304

*Hab.* in lignite aquitaniana Salzhausen pr. Fulda in agro vogesbergensi. — Loc. cit. nulla adest descriptio.

16. **Hysterites seriatus** Göpp. Tertiärfl. auf d. Insel Java, p. 150. 8305

*Hab.* in argilla tortoniana Schosnitz prope Canth ad Vratislaviam. — Loc. cit. nulla adest descriptio.

### Cohors 5. **Discomyceteæ.**

**PEZIZITES** Dill. (*Peziza*), Sacc. Syll. VIII, p. 74, sensu lato et quoad habitum.

1. **Pezizites silvaticus** Ludw. Palaeontogr. vol. VIII, p. 57, t. VIII, 8306 p. 12 (*Peziza*), Eittingssh. D. foss. Fl. d. ält. Braunkohl. d. Wett. Sitz. d. k. k. Ak. d. Wiss. 1868, pag. 815, Schimp. Tr. Pal. Vég. vol. I, p. 142. — Cupulæ gregarix, 0,75–1 mm. diam. metientes, pachydermeis, exacte sessilibus.

*Hab.* in lignite aquitaniana Salzhausen, Hassiæ Darmst. Germ. centr. *Humaricæ humosæ* habitu affinis.

2. **Pezizites claviformis** Göpp. et Meng. in Göpp. Ueber d. Bernstein- 8307 flora, Monatsbericht k. Ak. Berlin 1854, p. 454 (*Peziza*).

*Hab.* in succino Borussix. — *P. clavo* Alb. et Schwein., facie valde similis. — Loc. cit. nulla adest descriptio.

3. **Pezizites candidus** Goepp. u. Berendt in Berendt. Die im Bernst. 8308 befindl. Organ. Reste Vorwelt p. 119, t. VI, f. 47, 68, Göpp. Ueb. Bernsteinflora, Monatsb. kön. Ak. Wiss., Berlin 1853, p. 454, Ueb. Braunkohlenfl. Nordöstl. Deutschl. Zeitschrift. Deut. geol. Gesell. Berlin 1852, p. 488, Schimp. Tr. pal. Vég. I, p. 142, Ung. Gen. et Spec. pl. foss. p. 39. — Mycelio tenuissimo suffultus, receptaculo substipitato, candido, cyathiformi, margine integro, disco primum clauso, demum aperto, concavo, subtus fibroso.

*Hab.* in Lepismate in succino incluso in Borussia orientali. — Sec. cl. Göpp. *Pezizæ umbonatæ* Pers. valde affinis quamvis ill. Berkeley dissentiat.

**CENANGITES** Fr. (*Cenangium*), Sacc. Syll. VIII, p. 556, sensu lato et quoad habitum.

1. **Cenangites Piri** Ludw. Palæont. vol. VIII, p. 164 t. LXIII, f. 8, 8309



8 a, 8 b (*Cenangium*), Schimp. Tr. Pal. Vég. vol. I, p. 143. — Fungus suborbicularis, leniter convexus, breviter stipitatus, 5 mm. diam., metiens, disco minute pustulato.

*Hab.* ad folia Piri ovatifoliæ Goepp. in argilla sphærosideritica Dernbach Saxoniae Weimar, Germ. centr.

**PHACIDITES** Fr. (*Phacidium*), Sacc. Syll. VIII, p. 709, sensu latiore et quoad habitum.

1. **Phacidites sinuosus** Ludw. Fl. Wetter., Palæont. vol. VIII, p. 164, 8310 tab. LXIII, 6, 6 a, 6 b (*Phacidium*), Schimp. Tr. Pal. Vég. vol. I, p. 135. — Maculis diversiformibus, 2-3 mm. longis, margine sinuoso, levibus, disco punctulato.

*Hab.* ad folia Piri serrulatæ Goepp. in argilla sphærosideritica aquitaniana Dernbach Saxoniae Weimar, Germ. centr.

2. **Phacidites multiformis** Ludw. Palæont. (Fl. Wetter.), vol. VIII, 8311 p. 163, tab. LXIII, f. 4, 4 a (*Phacidium*), Schimp. Tr. Pal. Vég. vol. I, p. 135. — Maculis irregularibus oblongis, 2-5 mm. latis, turgide marginatis, disco interno punctulato.

*Hab.* in foliis Piri ovalifoliæ Goepp in argilla sphærosideritica aquitaniana Dernbach, Saxoniae Weimar, Germ. centr.

3. **Phacidites Palæocassiae** Ettingsh. Die Kreidefl. v. Niedersch. in 8312 Sachsen Sitz. k. k. Ak. d. Wiss. Wien, 1867, p. 242, t. I, f. 8. (*Phacidium*). — Maculis irregularibus, polygonis, 1-3 mm. diam. depressis, disco subrotundato, pallido.

*Hab.* ad foliola Palæocassiae lanceolatæ in argilla schistosa cenomaniana ad Niederschoena prope Freiberg Saxoniae. — *Ph. Eugeniarum* Heer similis.

4. **Phacidites Eugeniarum** Heer Fl. tert. Helv. vol. I, pag. 17 t. II, 8313 f. 1 (*Phacidium*), Schimp. Tr. Pal. Vég. vol. I, pag. 134, t. I, f. 2, Engelh. Tertiärpfl. Leitm. Mittelgeb., Nova Acta Acad. Leop.-Carol., XXXVIII, p. 368, n. 4, t. XIX, f. 2. — Maculis rotundatis, minoribus nigris, 0-7 circ. mm. diam. majoribus in medio pallidis, perithecia gerentibus rotunda, parvula e medio ad marginem radiata.

*Hab.* ad folia Eugeniæ hæringianæ in marga friabili helvetica Saint-Gall Helvetiæ, in topho basaltico aquitaniano Holoikuk, Leitmeritz Bohemiæ borealis.

5. **Phacidites Buxi** Franq. in West. in Bull. Acad. Brux. XII, n. 9, 8314 Sord. F. Atti Soc. Sc. Nat. vol. XVI, p. 426 Milano 1874.

*Hab.* ad folia Buxi, in formatione verisimiliter quaternaria Pianico Longobardiæ Ital. bor. — *Phacidium Buxi* Franq. in West.

loc. cit. a cl. Desmazières in *Septoriam phacidiodem* Desm., XIII Not., p. 67, translatum fuit. Prof. Saccardo ad *Phomam Candollei* (B. et Br.) Sacc. Syll. III, p. 105 adduxit et nuperius *Macrophoma Candollei* (B. et Br.) a cl. Berl. et Vogl., Atti Soc. Ven. Trent. 1886, p. 178 nuncupatum. — Hæc diagnosis sec. Syll. loc. cit.: peritheciis gregariis, amphigenis, majusculis, innato-erumpentibus; sporulis oblongis, magnis,  $35 \approx 12$ , utrinque obtusiusculis, nubilosus, basidiis brevissimis hyalinis suffultis. — Sed si talis sit species fossilis, omnino latet.

6. **Phacidites Populi-ovalis** Al. Br. Heer Fl. tert. Helv. vol. I, p. 17, 8315 tab. 11, f. 2, vol. III, pag. 148, tab. CXLII, fig. 15 (*Phacidium*), Schimp. Tr. Pal. Vég. I, f. 2, Engelhardt, Tertiärfl. Jesuitengrabens, Nova Acta Ac. Leop.-Carol. XLVIII, n. 3, p. 310, t. VIII, fig. 9. — Maculis majusculis, 3-5 mm. diam., nigris in medio pallidioribus; peritheciis rotundatis, disco subhemisphærico pallido.

*Hab.* ad folia Populi ovalis, in calcareo tortoniano Ænningen Helvetiæ, ad folia Salicis angustæ, in calcareo tortoniano Locle Helvetiæ, in schisto bituminoso aquitaniano, Jesuitengraben prope Kundratitz Bohemiæ borealis. — *Ph. dentato* Schm. valde similis.

7. **Phacidites Populi** Bleicher et Fliche, Note s. la Fl. plioc. du Monte Mario p. 7, f. 1 (*Phacidium*). — Peritheciis rotundatis, margine irregularibus, nigris.

*Hab.* in marga flavidula pliocenica superiori « Monte Mario » prope Romam Ital. centr. ad folia Populi albæ (FLICHE). — Perith. 5 circ. mm. diam. Inter species fossiles accedit proxime ad *Ph. Populi-ovalis* Al. Br., si tamen idem non consideratur; inter vigentes congruit cum *Ph. dentato* Fries, sec. cl Fliche.

8. **Phacidites Feroniæ** Ettingsh. Beitr. Kennt. Tertiärfl. Steierm. 8317 Sitzungs. k. Ak. Wiss. LX Bd., I, Abth. Wien, 1869, p. 35, t. I, f. 7, Foss. Fl. v. Leoben Denksch. ibid. LIV Bd., I, Abth. Wien 1888, p. 267 (*Phacidium*). — Peritheciis rotundatis, subimmersis, 2-3 mm. diam., disco subhemisphærico, nigro.

*Hab.* ad folia Fagi Feroniæ in argilla miocenica media Münzenberg, Moskenberg prope Leoben, Steiermark. — A *Ph. Populi-ovalis* Al. Br. parum distinctus.

9. **Phacidites Juglandis** Ludw. Palaeont. (Fl. Wetter) vol. VIII, p. 164, 8318 tab. LXIII, f. 5, 5 a (*Phacidium*), Schimp. Tr. Pal. Vég. vol. I, p. 135. — Maculis irregularibus, 5 mm. latis, circuitu emarginato subtumido, disco pallidior punctato.

- Hab.* ad folia *Juglandis corrugatæ* Ludw., in argilla sphærosideritica aquitaniana, Dernbach Saxoniae Weimar, Germ. centr.
10. **Phacidites rimosus** Ludw. Palaeont. (Fl. Wetter.), vol. VIII, 8319  
tab. VIII, f. 3 (*Phacidium*), Ettingsh., D. foss. Fl. d. ält. Braunkohlenf. d. Wett. Sitz. d. k. k. Ak. d. Wiss. 1868, p. 813 Schimp. Tr. Pal. Vég. vol. I, p. 135. — Peritheciis hemisphæricis, 1 mm. diam. metientibus, innatis, solitariis, disco parvulo tririmoso.
- Hab.* ad folia *Quercus*, in argilla aquitaniana prope Leoben, Steiermark. — A *Ph. Eugeniæ* Heer peritheciis hemisphæricis tantum distinctus.
11. **Phacidites Gmelinorum** Heer Fl. tert. Helv. vol. I. pag. 17, tab. 8320  
LXXVI, f. 12 (*Phacidium*), Schimp. Tr. Pal. Vég. vol. I, p. 135, Engelh., Tertiärfl. Leitm. Mittelg. Nova Act. Ac. Leop.-Carol. XXXVIII, n. 4, p. 368, t. XIX, f. 1. — Peritheciis rotundatis, depressis lividis, disco majori 3-4 mm. metiente, radiato-subrotundo, medio pallido.
- Hab.* ad folia *Quercus Meriani* et *Quercus Gmelini*, in calcareo tortoniano Æningen, Helvetiæ, in schisto bituminoso aquitaniano Holskuk prope Leitmeritz Bohemiæ borealis. — *Ph. coronato* Fr. facie similis.
12. **Phacidites Ari** Ludw. foss. Pfl. tert. Spatheisenstein von Montaubauer, Palæontographica, vol. VIII, p. 164, t. LXIII, f. 7, 7 a, 7 b. 8321  
(*Phacidium*). — Maculis ovalibus seu irregulariter formatis, ad marginem elevatum rugosis.
- Hab.* ad folia *Ari* pertenuis Ludw. in argilla sphærosideritica aquitaniana Dernbach, Saxoniae Weimar, Germ. centr.
13. **Phacidites Smilacis** Ettingsh. Foss. Fl. v. Bilin I, Denkschr. k. 8322  
Ak. Wiss. Wien XXVI Bd. p. 86, t. II, f. 1 (*Phacidium*), Schimp. Tr. Pal. Vég. vol. III, p. 432. — Peritheciis rotundatis depressis, aggregatis, disco subangulato, pallido.
- Hab.* ad folia *Smilacis grandifoliæ*, in argilla plastica mayenciana Priesen prope Bilin Bohemiæ. — *Phacidio Populi-ovalis* Al. Br. proximus sec. cl. Ettingshausen.
14. **Phacidites sp.** Geyler Foss. Pfl. Labuan Vega-exped. vetensk. 8323  
Jakttag., Bd. IV, Stockholm 1887, p. 487, t. XXXII, f. 2 (*Phacidiopsis*). — Peritheciis ovalibus 1 mm. latis, 1,5-2 mm. longis....
- Hab.* ad folium indeterminatum in argilla formationis tertiariæ inferioris insulæ Labuan prope Borneo. — *Ph. coronato* Fries quodammodo similis.

15. **Phacidites umbonatus** Beck Oligocæn von Mittweida Zeitschr. 8324  
Deutsch. geol. Gesell. XXXIV, Bd. Hft. 4, Berlin 1882, pag. 752,  
tab. XXXI, f. 2 (*Phacidium*). — Peritheciis orbicularibus margi-  
ne acuto cinctis, nigris, 0,5 mm. diam., ostiolo rotundato medio  
pertusis.

*Hab.* ad folium indeterminatum in lignite aquitaniana Mittwei-  
da Saxoniae. — Inter species vigentes *Ph. Aquifolii* Schm. (*Ceu-  
thospora phacidoides* Grev.) simillima, inter fossiles *Sphaeriti  
Mureti* Heer propius accedit.

16. **Phacidites communis** O. Feist. Vorbericht u. d. Peruczer Krei- 8325  
desch. in Böhmen u. ihre foss. Reste, Sitz. d. k. böhm. Gesell.  
Wiss. 1874, Prag 1874, p. 262, 266 (*Phacidium*).

*Hab.* ad folia varia? in schisto cenomaniano Hodkovitz, Ku-  
chelbad, Vyscherovitz, Rounitz prope Pragam Bohemiae. — Dia-  
gnosis desideratur.

17. **Phacidites coronatus** Fries (*Phacidium*), Bleicher et Fliche, 8326  
Note s. la Fl. plioc. du Monte Mario p. 7, f. 9 A, A', Sacc. Syll.  
VIII, p. 744 (*Coccomyces*).

*Hab.* in marga flavidula pliocenica superiori «Monte Mario»  
prope Romam Ital. centr. ad folia *Quercus Ilicis* L. var. græ-  
cæ Gaudin. — Perithecia 2 mm. diam.

18. **Phacidites spectabilis** Heer Beitr. z. näh. Kennt. d. Sächs.-thür. 8327  
Braunkohlenform. p. 3, t. VI, f. 7, Abh. d. naturw. Ver. f. Sachs.  
u. Thür. Berlin 1861 (*Phacidium*). — Peritheciis orbiculatis, spar-  
sis, magnis, 1,5–3 mm. latis, annulo latiusculo, levigato, impresso  
ornatis, medio umbonulatis.

*Hab.* in formatione oligocenica Skopau Silesiae. (Cf. Friedrich,  
Ueb. tertiärfl. d. Umgeb. v. Halle a. S. Mittheil. d. Ver. f. Erd-  
kunde in Halle a. S. 1883 et Abhandl. z. Geol. Specialk. v. Preuss.  
u. d. Thüring. Staaten Bd. IV, Heft. 3).

**STEGITES** Fr. (*Stegia*), Sacc. Syll. VIII, p. 733, sensu latiore et  
quoad habitum.

1. **Stegites Poacitum** (Al. Br.). Mesch. *Phacidium?* *Poacitum* Al. 8328  
Br. in Stizenb. Verz. pag. 71, *Stegilla Poacitarum* Heer Fl. tert.  
Helv. vol. I, p. 18, t. II, f. 9; Schimp. Tr. pal. Vég., vol. I, p. 138,  
t. I, f. 11. — Peritheciorum disco (nucleo) magno, margine tume-  
scente nigro limitato, peritheciis junioribus omnino nigris, in me-  
dio (operculo?) umbonatis, 0,5–15 circ. mm. diam.

*Hab.* ad folia Graminearum in calcareo tortoniano Cœnigen Helvetiæ. — *Stegiacæ arundinacæ* Fries habitu similis.

2. **Stegites?** sp. De la Harpe, Quelq. mots. s. la Fl. tert. de l'Angleterre, Bull. Soc. Vaudoise, Sc. nat., tome V, Lausanne 1856, p. 131 (*Stegilla*). 8329

*Hab.* ad folia Cyperitum in argilla alba formationis eocenicæ mediæ, Alum-Bay insulæ Wight Britannicæ austr. — Diagnosis deest.

**RHYTISMITES** Fries (*Rhytisma*), Sacc. Syll. VIII, p. 752, sensu latiore et quoad habitum.

1. **Rhytismites Eucalypti** Ettingsh. et Gard. Rep. on Phyto-Pal. Invest. of the foss. Flora of Alum Bay. Proc. Roy Soc. London vol. XXX, 1880, p. 231 (*Rhytisma*). 8330

*Hab.* ad folia Eucalypti in formatione eocenica media Alum Bay ins. Wight Britannicæ. — Loc. cit. nulla adest descriptio.

2. **Rhytismites palæo-acerinus** Engelh. Tertiärf. Jesuitengr. in Nordböhmen Nova Acta Acad. Leop.-Carol. vol. XLVIII, n. 3, Halle 1885, p. 310, t. VIII, f. 8, 8 a, c (*Rhytisma*). — Peritheciis suborbicularibus, 0,5-1 mm. diam. metientibus, rugosis, rugis radiantibus seu irregulariter dispositis. 8331

*Hab.* ad folia Aceris platanoidis et Pseudoplatani in schisto bituminoso aquitaniano, Jesuitengraben prope Kundratitz Bohemiæ borealis.

3. **Rhytismites Aceris** Ettingsh. Beitr. z. Kennt. d. foss. Fl. v. Parschl. in Steierm. Denkschr. k. Ak. Wien, XXXVIII Bd. I, Abth. p. 89, t. V, f. 1,5 (*Rhytisma*). — Peritheciis rotundatis, verrucosis, in maculas irregulares confluentibus (ex icone parum distinctis). 8332

*Hab.* ad folia Aceris decipientis A. Br. in schisto margaceo cinereo flavidulo tortoniano ad Parschlug, Steiermark. — A *Rhyt. Pythii* Ettingsh. sec. cl. auctorem peritheciolorum exiguitate tantum distinctus.

4. **Rhytismites induratus** Heer Fl. tert. Helv. vol. III, p. 54, 149, tab. CXII, fig. 7 (*Rhytisma*), S. le Clim. et la Vég. du pays tert. p. 175, Mioc. Fl. v. Island pag. 140, t. XXIV, f. 1, Schimp. Tr. pal. Vég. I, p. 140. — Crassus, sinuoso-rotundatus, sæpius in maculam irregularem, mm. 1 diam., confluens, irregulariter dehiscens. 8333

*Hab.* ad folia Aceris trilobati var. tricuspидati Heer in marga aquitaniana Hohe Rhonen, Helvetiæ et ad folia Aceris

Otopteridis Göpp., in topho arenaceo, basaltico aquitaniano Gaulthramr Thoule. — *Rh. acerino* Fries facie valde similis.

5. **Rhytismites Pythii** Ettingh. Beitr. z. Kennt. d. foss. Fl. v. Parschl. in Steierm. Denkschr. k. Ak. Wiss. Wien, XXXVIII Bd. I, Abth. p. 88, t. V, f. 2 (*Rhytisma*). — Peritheciis rotundatis, solitariis et confluentibus, verrucosis, rimosis, 1-2,5 circ. mm. diam.  
*Hab.* ad folia Sapindi Pythii Ung. in schisto margaceo tortoniano ad Parschlug, Steiermark. — A *Rh. Planeræ* Ettingsh. sec. cl. Ettingshausen peritheciis paullulo majoribus, planis et magis verrucosis distinctus.

6. **Rhytismites Hederæ** Heer Fl. foss. arct. vol. VI, parte II, p. 20, t. XXIV, f. 6 a (*Rhytisma*). — Perithecio circulari, 2-3 mm. lato, margine elevato, disco umbilicato.

*Hab.* ad folia Hederæ primordialis Sap. Atanekerdluck Groenlandiæ, in formatione cretacea superiori. — *Rh. Salicis* Fr. et *Rh. Populi* Heer affinis. Species huic similis ad folia Ficus angulatæ inventa fuit. (Confr. Hosius und Von der Mark, Kreideflora Westfalens, t. XXXI, f. 89).

7. **Rhytismites maculifer** Heer Fl. tert. Helv. vol. III, pag. 148, t. CXLII, f. 23 (*Rhytisma*), Schimp., Tr. Pal. Vég. vol. I, p. 140, t. I, fig. 3, Sism. Matériaux Mem. Acc. Sc. Torino, 1855, p. 395, t. I, f. 1, *Xylomites maculifer* Heer loc. cit., vol. I, p. 19, t. I, f. 8, vol. III, p. 149. Mesch. et Squin. Fl. tert. it., p. 3, n. 7. — Orbiculatus, confluens, applanatus, levis, 0,5-1,5 mm. diam.

*Hab.* ad folia Grewiæ (*Dombeyopsis*) crenatæ Ung. in marga aquitaniana Hohe Rhonen, Helvetiæ, in calcareo argilloso aquitaniano Bagnasco Pedemontii, Ital. bor. — Ad *Rhytisma Ungerii* Mesch. verisimiliter reijciendus.

8. **Rhytismites Ungerii** Mesch. *Xylomites umbilicatus* Ung., Chl. prot. p. 3, t. I, f. 2, Gen. et sp. p. 38, Ettingsh., foss. Fl. v. Haering, Abh. k. k. Geol. Reichsanst. v. II, Wien 1855. p. 26, t. IV, f. 10, D. foss. Fl. tert.-Beck. v. Bilin Denkschr. k. Ak. Wiss. Wien, CLXXVI, Bd. I, p. 11, t. II, f. 10, Weber Palæontographica, II, t. XVIII, fig. 1, Schimp. Tr. pal. Vég., I, p. 138, t. I, f. 8, *Rhytisma Populi* Heer Fl. tert. Helv. I, p. 20, t. II, f. 7, Schimp. loc. cit. p. 140, t. I, fig. 10. — Peritheciis rotundatis, 2-9 mm. diam. metientibus, interdum confluentibus, verrucosis atque rimosis, medio elevatis.

*Hab.* ad folia Bumeliæ Oreadum? Ung. in calcareo argilloso mayenciano Radoboj Croatiae, Austriæ, ad folia nondum de-

terminata Rott prope Bonnam, Germ. austr., ad folia Populi latioris in calcareo tortoniano Æningen, Helvetiæ, ad folia Sapotacitis mimusopsis, in argilla plastica mayenciana Priesen prope Bilin Bohemiæ bor. et etiam Holzhausen prope Homberg in Kurhessen; in marga bituminosa tongriana Haering Tirolæ et in marga aquitaniana apud Sagor Carniolæ Austriæ. — *Rh. salicino* Fr. valde affinis. Verisimiliter *Rh. maculifer* Heer et *Rh. grandis* Ettingsh. hic referendi sunt. Sec. cl. Ettingshausen (Foss. Fl. Sagor. Denkschr. k. Ak. Wien 1885, t. L, p. 3) hæc species ad *Xylomitum* potius pertinet quam ad *Rhytismitem*.

9. **Rhytismites** sp. Fliche Note Fl. tert. env. Mulhouse, Bull. soc. 8338  
 industr. Mulhouse, tome LVI, Mulhouse 1886, p. 353 (*Rhytisma*).

*Hab.* ad folia Myricæ in marga aquitaniana inferiore Riedsheim prope Mulhouse Alsatia. — Loc. cit. nulla adest descriptio.

10. **Rhytismites Hrubeschei** Ettingsh. D. Foss. Fl. tert.-Beck. v. Bi- 8339  
 lin Denkschr. k. Ak. Wiss. Wien, CLXXVI, I, p. 87, t. II, f. 11-12 (*Rhytisma*), Schimp. Tr. Pal. Vég. vol. III, p. 433. — Peritheciis rotundatis, circ. 6-8 mm. diam., immersis, solitariis, irregulariter rimosis.

*Hab.* ad folia Juglandis, in argilla plastica mayenciana Priesen prope Bilin, Bohemiæ. — A *Rh. Ungerii* Mesch. et a *Rh. Juglandis* Ettingsh. sec. cl. Ettingshausen, peritheciis majoribus, magis immersis et rimis magis conspicuis distinctus.

11. **Rhytismites parschlugianus** Ettingsh. Beitr. z. Kennt. d. foss. Fl. 8340  
 v. Parschl. in Steierm. Denkschr. k. Ak. Wiss. Wien, XXXVIII Bd. I, Abth. pag. 89, tab. V, f. 6 (*Rhytisma*). — Peritheciis parvis, rotundatis, sublevibus, applanatis, in maculas irregulares confluentibus.

*Hab.* ad foliola Juglandis parschlugianæ Ettingsh. in schisto margaceo tortoniano ad Parschlug in Steiermark. (Ex icone parum distinctus)

12. **Rhytismites Juglandis** Ettingsh. Die foss. Fl. d. Tert.-Beck. v. 8341  
 Bilin Denkschr. k. Ak. Wiss. Wien, CLXXVI Bd. I, p. 11, t. II, fig. 5 (*Rhytisma*), Schimp. Tr. Pal. Vég. vol. III, p. 433. — Peritheciis rotundatis vel confluentibus, valde verrucosis rimosisque, macula mm. 1 et ultra latis.

*Hab.* ad folia Juglandis in argilla plastica mayenciana, Priesen prope Bilin Bohemiæ. — A *Rh. Ungerii* Mesch. propter matricis diversitatem distinctus, et præter, hoc propter magnitudinem, dispositionem et perithecorum rimas irregulares diversus.

13. **Rhytismites? borealis** Heer Mioc. Fl. v. Nordgrönland p. 86, t. I, 8342  
f. 1, D. Tert. Fl. v. Grönl. p. 48 (*Rhytisma*). — Peritheciis verruciformibus, convexis, rimosis, 1,5 mm. diam.

*Hab.* ad folia Fici groenlandicæ in calcareo ferruginoso firmo miocenico Atanekerdluk Groenlandiæ.

14. **Rhytismites ulmicola** Ettingsh., Foss. Fl. v. Leoben, Denkschr. k. 8343  
Ak. Wiss. LIV, Bd. I, Abth., Wien 1888, p. 269, t. II, f. 1', 1 a  
(*Rhytisma*). — Peritheciis minutis, 0,10 circ. mm. diam., punctiformibus, plerumque confluentibus, verrucosis, rimosis.

*Hab.* ad folia Ulmi Bronnii in argilla aquitaniana Münzenberg prope Leoben Steiermark. Sec. cl. Ettingsh. cum *Rh. Planeræ* Ettingsh. valde convenit, a quo propter perithecia minora distinguitur.

15. **Rhytismites Ulmi** Ludw. Palæontogr. vol. VIII, p. 56, tab. VIII, 8344  
fig. 5, Ettingsh. D. foss. Fl. d. ält. Braunkohlenf. d. Wett. Sitz. d. k. k. Ak. d. Wiss. 1868, pag. 814, Schimp. Tr. Pal. Vég. vol. I, p. 140. — Stromatibus orbiculatis planis haud raro confluentibus, versus medium rugulosis, 0,5-1 mm. diam. disco (fructu) papilloso margine granuloso elevato.

*Hab.* ad folia Ulmi Bronnii in lignite mayenciana Salzhausen in agro vogelsborgensi Hassia Darmst. Germ. centr. — Sec. cl. Ettingshausen species hæc potius ad genus *Sphæritem* pertinet.

16. **Rhytismites Planeræ** Ettingsh., Beitr. z. Kennt. d. foss. Fl. v. 8345  
Parschl. in Steierm. Denkschr, k. Ak. Wiss. Wien, XXXVIII Bd. I, Abth. pag. 88, t. IV, f. 1, 10 (*Rhytisma*). — Peritheciis minutis, rotundatis, 1-2 circ. mm. diam., sæpe confluentibus, verrucosis, rimosis.

*Hab.* ad folia Planeræ Ungeri in schisto margaceo tortoniano ad Parschlug Steiermark. — A *Rh. Feroniæ* Ett. propter peritheciolorum verrucositatem tantum distinctus.

17. **Rhytismites Feroniæ** Ettingsh. D. Foss. Fl. tert.-Beck. v. Bilin 8346  
Denkschr. k. Ak. Wiss. Wien, CLXXVI Bd. I, p. 11, t. II, f. 7-9  
(*Rhytisma*), Beitr. Kennt. Tertiärf. Steiermarks, Sitz. k. Ak. Wiss. LX Bd., I Abth., Wien 1869, p. 20, Foss. Fl. Leoben Denkschr. ibid. vol. LIV, I Abth. Wien 1888, p. 269, Schimp. Tr. Pal. Vég. vol. III, p. 433. — Peritheciis parvis, 0,25-2 mm. diam., irregulariter rotundatis, sæpe confluentibus, rimosis.

*Hab.* ad folia Fagi Feroniæ in argilla plastica mayenciana, Priesen prope Bilin Bohemiæ et in argilla miocenica media Moskenberg prope Leoben, Steiermark.



18. **Rhytismites Milleri** Ettingsh. Beitr. z. Tertiärfl. Steierm., Sitzugsb. 8347  
k. Ak. Wiss. LX, Band I, Abth. Wien 1869, pag. 36, t. I, f. 5,  
Foss. Fl. v. Leoben Denkschr. ibid. LIV, Band I, Abth. Wien  
1888, pag. 270 (*Rhytisma*). — Peritheciis rotundatis, 2-2,5 mm.  
latis, interdum confluentibus, squamoso-verrucosis rimosisque.  
*Hab.* ad folia Fagi Feroniæ in argilla aquitaniana Mosken-  
berg et Münzenberg prope Leoben Steiermark. Sec. cl. Ettingsh.  
*Rh. Feroniæ* Ettingsh. propter perithecia majora et prominula,  
a *Rhyt. Ungerii* Mesch. propter peritheciolorum formam distinguitur.
19. **Rhytismites Geinitzii** Ettingsh. Beitr. z. Tertiärfl. Steierm., Sit- 8348  
zungs b. k. Ak. Wiss. LX, Band I, Abth. Wien 1869, pag. 36, t. I,  
f. 4, Foss. Fl. v. Leoben Denkschr., ibid. LIV, Band I, Abth., Wien  
1888, p. 269 (*Rhytisma*). — Peritheciis parvis, 0,5-2 mm. diam.  
rotundatis sæpe confluentibus, verrucosis rimosisque.  
*Hab.* in argilla aquitaniana prope Leoben Steiermark ad folia  
Castaneæ ataviæ. — *Rhyt. Ungerii* Mesch. similis.
20. **Rhytismites sp.** Geyler Ueb. Tertiärfl. Stackeden-Elsheim., Jahresb. 8349  
Senckenberg naturf. Gesell. 1873-74, Frankfurt 1875, p. 107 (*Rhy-*  
*tisma*).  
*Hab.* ad folia Castaneæ in arena aquitaniana inferiori Sta-  
decken-Elsheim in Rheinhessen, Germ. centr. — Lata macula ad folii  
marginem sita totum inter nervos secundarios spatium detinens.
21. **Rhytismites grandis** Ettingsh. Foss. Fl. Sagor in Krain, Denkschr. 8350  
k. Ak. Wiss. L Band, I Abth. Wien 1885, p. 2, t. XXVIII, f. 1  
(*Rhytisma*). — Peritheciis magnis, rotundato-ovalibus, 3-5 mm.  
latis, 3-7 mm, longis, sinuosis, irregulariter dehiscentibus.  
*Hab.* ad folia dycotyledonea nondum determinata in marga  
aquitaniana pr. pagum Savine Carniolæ. — A *Rh. Ungerii* Mesch.  
paulo diversus.
22. **Rhytismites sp.** Geyler Foss. Pfl. Labuan Vega-exped. vetensk. Iakt- 8351  
tag. Bd. IV, Stockholm 1887, p. 488, t. XXXII, f. 4 (*Rhytismo-*  
*opsis*). — Peritheciis rotundatis circ. 1,5-2,5 mm. diam., seriatim  
aut irregulariter dispositis, nucleo centrali unico v. duplici præditis.  
*Hab.* ad folium indeterminatum in argilla formationis tertiariæ in-  
ferioris insulæ Labuan pr. Borneo. — *Rh. umbonato* Rabenh. similis.
23. **Rhytismites priscus** Ettingsh. et Garden Report an Phyto-Pal. 8352  
Invest. of the foss. Fl. of Alum. Bay, Proc. Roy. Soc. London vol.  
XXX, 1880, p. 231 (*Rhytisma*).  
*Hab.* in argilla alba formationis cocenicæ mediæ, Alum Bay  
ins. Wight Britannicæ austr. — Diagnosis desideratur.

Cohors 6. **Sphærosideæ.**

**DEPAZITES** Fr. (*Depazea*), Sacc. Syll. III, p. 62 sensu latiore, seu complectens fungillos maculicolas phyllogenos omnes (*Phyllosticta*, *Septoria*, *Ascochyta* etc.). Etiam genus ascophorum *Sphærella* sæpius eandem faciem induit.

1. **Depazites acericola** Sap. Ét. s. la végét. du Sud-est de la France 8353  
III, Ann. Sc. Nat., 5<sup>me</sup> sér. Bot. tome IX, 1868, pag. 16, tab. I, fig. 5 (*Depazea*). — Maculis pallidis, rotundatis, limbo nigrescente circumdatis, sparsim punctulatis, 2 circ. mm. diam.

*Hab.* ad folia *Aceris angustilobi* Heer, in argilla helvetiana in «bassin de Marseille» Gallia. — *Dep. picto* Heer affinis.

2. **Depazites pictus** Heer Fl. tert. Helv. I, p. 16, t. II, f. 6 (*Depazea*), 8354  
Ludw. Palæontographica VIII, p. 54, t. VIII, f. 8, Ettingsh. Foss. Fl. ält. Braunkohlenform. Wett. Sitz. k. Ak. Wiss. 1868, pag. 813, Schimp. Tr. pal. Vég. I, p. 136, t. I, f. 9, Engelh. Tertiärpfl. Leitm. Mittelg. Nova Acta Acad. Leop. Carol. XXXVIII, n. 4, pag. 366, t. XVIII, f. 14, Engelh. Tertiärfl. Jesuitengrabens Nova Acta Acad. Leop.-Carol XLVIII, n. 3, p. 310, t. VIII, f. 5, 7. — Maculis polygonis pallidis, limbo nigro circumdatis, sec. cl. Ludw. ad millimetrum metientibus, sec. Heer 6 mm. metientibus.

*Hab.* ad folia *Aceris trilobati* in calcareo tortoniano Cœnigen Helvetiæ et in argilla aquitaniana, Salzhausen Hassiæ Darmst. Germ. centr. et ad folia *Salicis mediæ*, Münzenberg prope Leoben, Steiermark, in argilla aquitaniana. Etiam ad folia *Salicis* in schisto bituminoso aquitaniano, Jesuitengrabens prope Kundratiz Bohemiæ bor. et in topho basaltico aquitaniano Holsaikluk, Leitmeritz Bohemiæ borealis. — A *Dep. Feroniæ* Ettingsh., maculis majoribus et regularioribus, limbo etiam distinctus.

3. **Depazites Andromedæ** Sap. Dernières adjonctions à la Fl. foss. d'Aix 8355  
en Provence Ann. Science nat., Botanique, 1808 p. 7, t. IX, f. 12 (*Depazea*). — Maculis irregulariter expansis, contermine polygonulis, pallide fuscis, in pagina foliis sparsis, tenuissime nigro-punctulatis.

*Hab.* ad folia *Andromedæ ataviæ* Sap. in calcareo liguriano Aix Narbonne Gallia.

4. **Depazites cinnamomeus** Sap. Ét. s. la végét. du Sud-est de la France 8356  
ce, III, Ann. Sc. nat. 5<sup>me</sup> sér. Bot. tome IX, 1868, p. 17, t. I, f. 6, t. V, f. 3 (*Depazea*). — Maculis orbiculatis, centro depres-

siusculis, linea marginali cinctis, receptaculis hypophyllis, dense confertis, punctiformibus, concavis, 2 mm. diam.

*Hab.* ad folia *Cinnamomi Buchii* et *C. polymorphi* in argilla helvetiana in «bassin de Marseille» Galliæ.

5. **Depazites priscus** Mass. Syll. pl. foss. p. 17 Mesch. et Squin. Fl. 8357 tert. it., p. 2 (*Spilosphærites*).

*Hab.* ad folia *Eugeniæ laurifoliæ* Mass., in calcareo eocenico «Monte Bolca» in agro veronensi Italiæ bor. — Diagnosis desideratur.

6. **Depazites oblongus** Mass. Lett. a Scarab. p. 9, n. 6 (*Spilosphærites*) 8358 Synops. Fl. Foss. Senog. p. 4, Fl. foss. Senig. t. I, fig. 6, 7, Mesch. et Squin.. Fl. tert., p. 1. — Maculis lineari-ellipticis, sparsis, solitariis, 5-9 mm. longis, 1-2 mm. latis.

*Hab.* ad folia *Myricæ Parlatorii* Mass., in marga gypsosa miocenica Senogallia in agro umbro, Ital. centr.

7. **Depazites Lomatiaë** Engelh. Tertiärpfl. a. d. Leitmer Mittelgebirge, 8359 Nova Acad. Leop.-Carol. vol. XXXVIII, n. 4, 1876, pag. 367, t. XVIII, f. 14 (*Depazea*). — Maculis irregulariter polygonis, nigris, medio pallidioribus, magnitudine variantibus inter 1-7 mm.

*Hab.* ad folia *Lomatiaë Heeri* Engelh. in topho basaltico aquitaniano Holoikluk, Leitmeritz, Bohemiæ borealis.

8. **Depazites increscens** (Al. Br.) Heer Fl. tert. Helv., vol. I, p. 16, 8360 t. I, f. 7 (*Depazea*), Schimp. Tr. pal. Vég. I, pag. 136, t. I, f. 4, Ettingsh. Beitr. z. Kennt. d. foss. Fl. v. Parschlug Denkschr. k. Ak. Wiss. Wien, XXXVIII Bd. I, Abth. p. 85, *Sphæria increscens* Al. Br. in Stizenb. Verz. p. 71. — Maculis rotundatis, 4-8 mm. diam., disco dense nigro-punctatis.

*Hab.* ad folia *Populi mutabilis* v. *ovalis* in calcareo tortoniano Cœningen Helvetiæ et in marga tortoniana Parschlug Steiermark. — *Sphæricæ tremulæcolæ* et *frondicolæ* Fries similis.

9. **Depazites Ulmi** Ettingsh. Foss. Fl. Tert. Beck, Bilin I, Denkschr. 8361 Ak. Wiss. Wien XXVI Bd., p. 85 (*Depazea*), Schimp. Tr. Pal. Vég. vol. III, p. 422 (ex err. sub *Depazea Ungerii*). — Maculis orbiculatis, 0,5-3 mm. diam. in ambitu nigris, medio pallidis, disco nigro-punctatis.

*Hab.* ad folia *Ulmi* in argilla plastica mayenciana, Priesen prope Bilin Bohemiæ.

10. **Depazites Feroniæ** Ettingsh. Die foss. Fl. d. Tert.-Beck. v. Bilin 8362 I, l. c. p. 85, t. I, f. 18, Foss. Fl. Leoben Denkschr. k. Ak. Wissensch. LIV Bd. I Abth. p. 267 (*Depazea*), Schimp. Tr. Pal. Vég. vol. III,

p. 432. — Maculis rotundatis vel irregulariter polygonatis, 0,25-2,5 mm. latis, pallidis, limbo fusco circumdatis.

*Hab.* ad folia Fagi Feroniæ in argilla plastica aquitaniana prope Leoben, Steiermark. — A *Depazite picto* Heer maculis irregulariter polygonatis et limbo pallidiore notatis distinctus.

11. **Depazites Palæo-Alni** Ettingsh. Foss. Fl. v. Leoben in Steierm. I, 8363  
Theil. Denksch. Ak. Wiss. LIV Band, I Abth. Wien 1888, p. 267, t. I, f. 11 (*Depazea*). — Maculis orbiculatis, medio pallidis, 1-2 mm. latis, limbo nigro tenui circumdatis.

*Hab.* in argilla miocenica media prope Leoben, Steiermark ad folia Alni Kefersteini et Juglandis sp. — Sec. cl. Ettingsh. a *Dep. groenlandico* Heer, limbo circumdante tenuiore tantum differt.

12. **Depazites groenlandicus** Heer Fl. Foss. Arct. vol. VII, pag. 48, 8364  
t. LXXXIII, f. 10 (*Depazea*). — Maculis orbiculatis, medio pallidis, 1 mm. latis, limbo nigro circumdatis.

*Hab.* ad folia Juglandis denticulatæ? Heer in marga argillosa brunnea miocenica, Atanekerdluk Groenlandiæ.

13. **Depazites Smilacis** Heer Fl. ter. Helv. vol. I, pag. 16, tab. II, 8365  
f. 5 (*Depazea*) Schimp. Tr. Pal. Vég. vol. I, p. 136. — Maculis orbicularibus in ambitu fusco-atris, in medio pallidis nigroque punctatis, 4 circ. mm. diam.

*Hab.* ad folia Smilacis sagittatæ Ung. in calcareo tortoniano Cœningen Helvetiæ. — *Dep. cruentæ* habitu valde similis.

14. **Depazites Rabenhorstii** Gein. D. Verstein. d. Steinkh. in Sachsen, 8366  
p. 3, t. XXV, f. 10, 10 a, A (*Depazea*). Schimp. Tr. pal. Vég. I, p. 142. — Ellipticus ad 4-5 mm. long., margine leniter annulato-elevato, disco concaviusculo, centro poro minuto rotundo pertuso.

*Hab.* ad folia Hymenophyllitis dichotomi Gutb. formationis carboniferæ, Oberhohndorf Saxoniae. — A cl. Rabenh. cum *Dep. smilacicola* Rab. et *Rhytis. Salicis* Fr. comparatus. Sec. cl. Schimp. ad genus *Excipula* potius referendus.

15. **Depazites maculans** Mass. Lett. a Scarab. p. 8, n. 5 (*Spilosphaerites*), 8367  
Synops. Fl. Foss. Senog. p. 4, Fl. foss. Senig. t. I, f. 2, 3, 13, 14, Mesq. et Squin., Fl. tert. it. p. 1. — Maculis irregularibus punctulatis, sparsis, solitariis aggregatisve, 1-5 mm. diam.

*Hab.* ad folia varia in marga gypsacea tortoniana Senogallia in agro Umbro, Ital. centr. — *Depazeæ vaganti* Fries habitu proximus.

16. **Depazites stilbosporoides** Mass. Lett. a Scarab. pag. 8, n. 4, (*Spi-* 8368

*losphærites*) Synops. Fl. Senog. p. 4, Fl. foss. Senig. t. I, f. 9-10, Sacco Piano Messiniano p. 386 (*Sphærites*), Mesch. et Squin., Fl. tert., it. p. 1 (*Spilosphærites*). — Peritheciis immersis, 1-3 mm. diam., convexis, rotundis, corneis, majusculis.

*Hab.* ad folia varia in marga gypsacea tortoniana, Senigallia in agro umbro Ital. med. in formatione pliocenica inferiori (Messiniano) Pedemontii. — *Sphæriis* et *Stilbosporis* viventibus habitu similis.

**EXCIPULITES** Fr. (*Excipula*), Sacc. Syll. III, p. 665, sensu latiore et quoad habitum.

1. **Excipulites Callipteridis** (Schimp.) Kid. Foss. Fl. of the Radstock 8369 Series, Trans. Roy. Soc. Edinburgh, vol. XXXIII, p. II, 1887, p. 339, *Excipula Callipteridis* Schimp. Tr. pal. Vég. I, p. 142, t. XXXII, fig. 6, 7, Weiss. Foss. Flora Jüng. Steink. Roth. in Saar-Rheing. p. 19, 78, Lesquer. Coal Fl. of Pennsylv. vol. I, p. 207, t. XXXVIII, Zeiller Bull. soc. géol. de France, 3<sup>a</sup> ser., vol. XII, p. 192. — Peritheciis rotundatis sparsis, medio ostiolatis, 1 circ. mm. diam.

*Hab.* ad foliola Callipteridis confertæ in formatione carbonifera, Saarbrücken Borussiae, et in eadem formatione ad pinnulas Sphenopteridis neuropteroidis, Radstock, Somerset Anglia. — Olim ut fructus filicum consideratus est. Ab *Exc. Neesii* Göpp. parum distinctus.

2. **Excipulites punctatus** Grand'Eury Mém. Fl. carb. Depart. Loire 8370 Mém. Acad. Sc. Inst. nat. France, Tome XXIV, n. 1, pag. 10. — Peritheciis lenticularibus facile collabentibus, numerosis, inæqualiter dispositis, ostiolo crateriformi pertusis.

*Hab.* ad pinnulas Pecopteridis Plukeneti in formatione carbonifera superioris Ligeris superioris Galliae. — *Exc. Neesii* Göpp. et Gein. habitu simillimus.

3. **Excipulites Neesii** Göpp. Foss. Farren p. 262, t. XXXVI, f. 3, 4, 8371 Gen. pl. foss. IV, t. V, f. 4, Ung. Gen. et Spec. p. 39, Geinitz Verstein. d. Steinkoh. in Sachsen p. 3, t. XXIII, f. 13, Roehl. foss. Flora Steinkoh. Westphal. Palæontographica, vol. XVIII, p. 7, Schimp., Tr. pal. Vég., I, p. 141, t. I, f. 19, Stur. Morph. Syst. Culm-u. Carbonfarne, Sitz. d. k. Ak. Wiss. LXXXVIII Bd. I Abth. Wien 1883, p. 831, Carbon-Flora Schatzlarer Schichten. Abhandl. d. k. k. Geol. Reichsanst., XI Bd., I Abth., p. 292. — Peritheciis subinnatis, demum exsertis, 1,5 mm. metientibus, subhemisphæricis, ostiolo rotundo margine inflexo.

*Hab.* ad pinnulas *Hymenophyllitis geniculati* Goëpp., *Sphenopteridis* et ad folia *Macrostachyæ infundibuliformis* (Gein.) Schimp. prope Waldenburg Silesiæ, Ibbenbüren Westfaliæ, in formatione carbonifera.

4. **Excipulites hymenomycetes** Göpp., Preisschr. Abhandl. eing. als 8372  
Antw. a. d. Preisfrage, Naturk. Verh. Holl. Maatsch. Haarlem,  
Tweede Verzamel. 4<sup>e</sup> Dell Haarlem, 1848, p. 81.

*Hab.* . . . . . (dignosis et locus mihi desiderantur).

### Cohors 7. **Hyphomyceteæ.**

**OIDITES** Link (*Oidium*), Sacc. Syll. IV, p. 40, sensu latiore.

1. **Oidites moniliformis** Menge u. Göpp. in Göpp. Ueb. die Bernstein- 8373  
flora, Monatsbericht kön. preuss. Ak. Wiss. Berlin 1853, p. 453  
(*Oidium*).

*Hab.* in succino Borussiae. — Loc. cit. nulla adest descriptio.

2. **Oidites thuigenus** Göpp. u. Menge in Göpp. Ueber die Bernstein- 8374  
flora, Monatsbericht kön. preuss. Ak. Wiss. Berlin 1853, pag. 453  
(*Oidium*).

*Hab.* in succino ad ramulum *Thuitis Kleiniani* (= *Thujæ occidentalis*) in Borussia. — Forma valde speciosa. Diagnosis desideratur.

**BOTRYTITES** Mich. (*Botrytis*), Sacc. Syll. IV, p. 116.

1. **Botrytites similis** Menge u. Göpp. in Göpp. Ueber die Bernsteinflo- 8375  
ra Monatsbericht kön. preuss. Ak. Wiss. Berlin 1853, p. 453 (*Bo-*  
*trytis*). Valde similis *Botr. Bassianæ* v. *Botr. tenellæ* (C. G. Carus,  
Beitrag zur. Geschichte der unter Massen von verwesenden Thier-  
körpern sich erzeugenden Schimmel oder Algengattungen. Nova  
Acta phys. med. Acad. Caes. Leopold.-Carol. N. Cur. tom. XI,  
Bonn 1832, p. 499, t. I, VIII, f. 15).

*Hab.* in succino ad corpus insecti cujusdam in Borussia. —  
Deest descriptio.

**PENICILLITES** Link (*Penicillium*), Sacc. Syll. IV. p. 78.

1. **Penicillites curtipes** Berkeley Mould Amber. East Prussia p. 13, 8376  
t. XI, f. 1 (*Penicillium*), Annals and Mag. of Nat. Hist. 1848, 2d.  
ser. II, p. 380, Göpp. Ueb. Bernsteinfl., Monatsber. kön. Ak. Wiss.  
Berlin 1853, p. 453, Ueb. Braunkohlenfl. Nordöst. Deutschl. Zeit-  
schr. Deutsch. geol. Gesell. Berlin, 1852, p. 488. — Candidus, my-

celio parco; ramulis subhorizontaliter laxe egredientibus, quadriarticulatis, demum divisis; conidiis ellipticis,  $2,5 \approx 2$ .

*Hab.* in succino Borussiæ orientalis. — *Penicillio sparso* affinis, sed stipitibus brevioribus diversus.

**SPOROTRICHITES** Link (*Sporotrichum*), Sacc. Syll. IV, p. 96, sensu latiore.

1. **Sporotrichites heterospermus** Göpp. in Berendt Die im Bernstein 8377 befindl. organ. Reste Vorwelt, t. VI, f. 42-46, Ueber Bernsteinflora Monatsbericht kön. preuss. Ak. Wissensch. Berlin 1853, p. 452, Ung. Gen. et Sp. pl. foss. p. 40, Göpp. Ueb. Braunkohlenfl. Nordöstl. Deutschl. Zeitschr. Deut. geol. Gesell. Berlin, 1852, pag. 488. — Floccis virgatis, ramosis, fastigiatis, ramis erectis, conidiis globosis inæqualibus biformibus obtectis.

*Hab.* ad insecta (Hymenoptera vel Diptera) succino inclusa ad mare Balticum. — Species Sporotrichis viventibus simillima.

2. **Sporotrichites densus** Göpp. u. Menge Ueb. d. Bernsteinflora, Monatsbericht k. Ak. Berlin 1853, p. 452. 8378

*Hab.* in succino Borussiæ. — In albo fragmento insectorum operculi magnus parvularum sporarum invenitur numerus identicarum vel similium illis *Sp. densi*, quod raro hodierna demortua insecta operit. — Diagnosis desideratur.

3. **Sporotrichites intricatus** Göppert u. Menge Ueber die Bernsteinflora Monatsber. kön. preuss. Ak. Wiss. Berlin 1853, p. 452. 8379

*Hab.* in succino Borussiæ. — Ubi diagnosis reperiatur, latet.

**STREPTOTRICHITES** Corda (*Streptothrix*), Sacc. Syll. IV, p. 282.

1. **Streptotrichites spiralis** Berkeley Mould Amber East Prussia p. 14, 8380 tab. XII, f. 1, 2, Annals and Mag. of Nat. Hist. 1848, 2d ser. II, pag. 380 (*Streptothrix*), Göpp. Ueb. Bernsteinfl. Monatsber. kön. Ak. Wiss. Berlin 1853, pag. 453, Ueb. Braunkohlenfl. Nordöst. Deutschl. Zeitschr. Deut. geol. Gesell. Berlin 1852, p. 488. — Floccis omnibus plus minus spiraliter convolutis, ramosis, fasciculatis; conidiis ellipticis  $2,5-3 \mu$ . diam., filamentis v. apice ramulorum exilissimorum brevium insertis.

*Hab.* in succino Borussiæ orientalis.

**BRACHYCLADITES** Berkeley Mould Amber East Prussia p. 14 (*Brachycladium*), The Annals and Mag. of Nat. Hist. 1848, 2<sup>d</sup> ser. II,

p. 380. — Receptaculum stipitifforme e fibris intricatis constipatum, sursum attenuatum sive laceratum, ramis brevibus fertilibus simplicibus hic illic sparsis; conidia elliptica, sessilia v. brevissime pedicellata.

1. **Brachycladites Thomasinus** Berk. loc. cit. t. XI, f. 2, *a, b*, Göpp. 8381  
Ueb. Bernsteinfl. Monatsbericht kön. Ak. Wiss. Berlin 1853, p. 453,  
Ueb. Braunkohlenfl. Nordöst. Deutschl., Zeitschr. Deut. geol. Gesell.  
Berlin 1852, p. 488. — Char. gen. Conidia  $1.7 \approx 1-1,2$ .

*Hab.* in succino Borussiae orientalis. — A typo generis Cordæano (subgeneris *Dendryphii* sec. Sacc.) deflectit hyphis fasciculatis, qua nota ad Stilbeas referri debet.

## APPENDIX

### MYCELIA

**XYLOMITES** Pers. (*Xyloma*). — Stroma discoideum, crassum, integrum vel emarginatum, superficie inæquale, in medium plus minus distincte umbonatum.

1. **Xylomites Cassiæ** Engelh. Ueb. Cypr. Nordböh. u. ihre Pfl. Einschl. Sitz. naturw. Ges. Isis, Jahrg. 1879, Hft. III, Dresden, 1879, p. 135, t. VII, f. 2. — Maculis planis, rotundatis seu quadrangularibus, 0,75-1 mm. diam.

*Hab.* ad folium Cassiæ Fischeri Heer in argilla tortoniana inf. Krottensee Bohemiæ.

2. **Xylomites protogæus** Heer Fl. tert. Helv. vol. I, p. 9, t. I, f. 12, 8383  
Schimp. Tr. Pal. Vég. vol. I, p. 138, Kaufmann Beitr. geol. Karte Schweiz, XXIV, Lief. I, Th. Bern 1886, pag. 503, *Hysterium protogæum* Heer Uebers. d. Tert. Pfl. d. Schw. p. 49. — Maculæ minutæ, nigræ, 0,25-0,5 mm. diam., disco albo nigro marginato.

*Hab.* ad folia Corni in marga mayenciana Eriz Helvetiæ.

3. **Xylomites Rhamni-Aizoonis** Ettingsh. Beitr. z. Kennt. d. foss. Fl. v. 8384  
Parschl. in Steierm. Denkschr. k. Ak. Wiss. Wien, XXXVIII Bd. I, Abth. pag. 86, tab. III, f. 9. — Peritheciis minutis 0,25-1 mm. diam., irregulariter rotundatis, disco tuberculato parum distincto.

*Hab.* ad folia Rhamni Aizoonis in schisto margaceo tortoniano ad Parschlug in Steiermark. — Sec. cl. Ettingshausen a X. *Liquidambaris* peritheciis minoribus et magis irregulariter dispositis distinctus.

4. **Xylomites Pistaciæ** Ettingsh., Beitr. z. Kennt. d. foss. Fl. v. Par- 8385



schl. in Steierm., l. c. p. 87, t. IV, f. 8. — Maculas rotundatas 1 circ. mm. latas, pallidas, medio puncto nigros notatas formans.

*Hab.* ad foliolum Pistaciæ lentiscoides Ung., in schisto margaceo tortoniano ad Parschlug Steiermark.

5. **Xylomites moskenbergensis** Ettingsh. Foss. Fl. v. Leoben, Denkschr. k. Ak. Wiss. LIV Bd., I Abth. Wien 1888, p. 268, t. I, f. 12. 8386  
— Maculas 2 mm. latas, rotundatas, fuscas formans, disco medio pallidiore indistincto.

*Hab.* ad folia Rhois moskenbergensis Ettingsh. in argilla miocenica media prope Leoben, Steiermark.

6. **Xylomites Aceris-decipientis** Ettingsh. Beitr. z. Kennt. d. foss. Fl. v. Parschl. in Steierm. Denkschr. k. Ak. Wiss. Wien, XXXVIII Bd. I. Abth. p. 88, t. IV, f. 11. — Maculas rotundatas, minutas 2 mm. et amplius latas, nigras, medio disco albo notatas formans. 8387

*Hab.* ad folia Aceris decipientis Al. Br. in schisto margaceo tortoniano ad Parschlug Steiermark. — A X. Aceris Heer parum diversus.

7. **Xylomites Aceris** Heer Fl. tert. Helv. vol. I, p. 20, tab. I, f. 10, Schimp. Tr. Pal. Vég. vol. I, p. 138. — Maculis circularibus fuscis 1-2 circ. mm. diam., medio puncto albo nigro-marginato notatis. 8388

*Hab.* ad folia Aceris integrifolii et Aceris tricuspидati in calcareo tortoniano, Cœningen Helvetiæ.

8. **Xylomites maculatus** Ung. Gen. et Spec. p. 38. — Perithecio innato subrotundo plano, disco centrali medio impresso. 8389

*Hab.* ad folia Ilicis? in marga tortoniana ad Parschlug Stiria.

9. **Xylomites Zizyphi** Ettingsh. Die tert. Fl. v. Haering p. 26, t. IV, f. 4-7, Abh. k. k. geol. Reichsanst. II Bd., 3 Abth., n. 2, Wien 1855, Staub. Med. Pfl. Baranyaer Com., Mitt. Jahrb. k. ung. geol. Anst. VI Bd., 2 Hft. Budapest 1882, p. 29, t. I, f. 2, 2 a. — Peritheciis transverso-ellipticis, 0,5-2 mm. diam., planis, habitu *Xylomatium*. 8390

*Hab.* ad folia Ceanothi zizyphoidis Ung. in marga bituminosa tongriana ad Haering Tirolia et ad folia Zizyphi paradisiaci (Ung.) Heer in formatione tertiaria Komlóthale in Comitatu Baranyensi Hungaria.

10. **Xylomites Santali** Ettingsh. Foss. Fl. Schöneegg, Denkschr. k. Ak. Wiss. Wien, LVII Bd., p. 6, t. I, f. 9-11. — Maculas rotundatas, 1,5-4 mm. diam., nigras formans, disco pallidiore. 8391

*Hab.* ad folia Santali styriaci Ettingsh. in argilla subflava Neu-Josephi-Tagbau, Johanni-Stollen, Maria-Stollen prope Wies,

Steiermark. — Sec. cl. Eittingshausen a *Xyl. vario* Heer forma et magnitudine ludibunda peritheciolorum diversus.

11. **Xylomites daphnogenes** Heer Fl. tert. Helv. I, p. 20, t. I, f. 11, 8392  
Ludw. Palæontographica, vol. VIII, pag. 56, t. XLII, f. 1, 6, Eittingsh. Braunkohlenform. d. Wetterau Sitz. k. Ak. Wiss. 1868, p. 814, Schimp. Tr. pal. Vég. I, p. 138, Eittingsh. Foss. Fl. Leoben Denkschr. k. Ak. Wiss. LIV, I Abth., p. 268, Sordelli Av. Vég. arg. pl. lomb. Atti Soc. It. Sc. nat. XVI, p. 387, t. f. 22, Mesch. et Squin. Fl. tert. ital. p. 7, n. 7. — Maculis rotundatis, fuscis, 1,5-2 mm. diam. metientibus, disco pallido indistincte limitato.

*Hab.* ad folia Cinnamomi polymorphi in calcareo tortoniano Æningen Helvetiæ, in argilla aquitaniana prope Leoben, Steiermark boreal., in argilla pliocenica «Folla d'Induno» Longobardiæ Italiæ borealis.

12. **Xylomites Perseæ** Engelh. Tertiärpfl. Leitm. Mittelgeb. Nova 8393  
acta Acad. Leop.-Carol. vol. XXXVIII, n. 4, Dresden 1876, p. 368, t. XIX, f. 3. — Maculis irregularibus, nigris (lentis ope) e punctis atris perexiguis formatis, secus nervos secundarios insidentibus, 1 mm. et amplius latis.

*Hab.* ad folia Perseæ speciosæ Heer in topho vulcanico aquitaniano Holoikluk Leitmeritz Bohemiæ borealis.

13. **Xylomites Lauri** Eittingsh. Beitr. z. Kennt. d. foss. Fl. v. Parschl. in Steierm. Denkschr. k. Ak. Wiss. Wien, XXXVIII Bd. I, Abth, p. 87, t. III, f. 6. — Peritheciis minutis circ. 1 mm. diam., rotundatis, disco umbilicato, medio elevato.

*Hab.* in foliis Lauri in schisto margaceo tortoniano ad Parschlug Steiermark. — A *Rhytismate Ungerii* Mesch. parum diversus.

14. **Xylomites? sp.** Geyler Ueb. foss. Pfl. obertert. Ablag. Sicil. Palæontogr. XXIII, Bd. Cassel 1876, p. 321, t. I, f. 1, Mesch. et Squin. Fl. tert. ital. p. 8.

*Hab.* ad folia Myricæ salicinæ Ung. in tripoli messiniano ad Calatanixetam insulæ Siciliæ. — Perithecia circ. 1 mm. diam.

15. **Xylomites lignitum** Eittingsh. Beitr. Tertiärfl. Steiermarks Sitzungsab. Ak. Wien vol. LX, I, p. 18, t. I, f. 1, Foss. Fl. Schönegg. Denkschr. k. Ak. Wiss. Wien, LVII Bd. p. 7. — Maculas parvas ellipticas circ. 0,5-1 mm. latas formans, disco pallidiore subrotundo vix distincto.

*Hab.* ad folia Myricæ lignitum in argilla subflava Neu-Josephi-Tagbau, Johanni-Stollen prope Wies Steiermark in eadem

specie ad Leoben, in argilla miocenica media et in marga miocenica superiori Parschlug, Steiermark. — A *X. vario* Heer v. *Salicis* propter macularum formam et earum marginem distinctus sec. cl. Ettingshausen.

16. **Xylomites sagorianus** Ettingsh. Foss. Fl. v. Sagor, Denkschr. k. 8397 Ak. Wiss. Wieu, Bd. XXXII, 1872 pag. 160, t. I, f. 7, 9, 10, 13, 14, Voss. Wilh. Mat. z. Pilzk. p. 248. — Maculas rotundatas nigras, sæpe vix distinctas formans, disco albo.

*Hab.* ad folia *Pisoniæ eocenicæ* et *Fici tenuinervis* Ett. in marga aquitaniana prope pagum Savine Carniolæ.

17. **Xylomites Aristolochiæ** Ettingsh., Beitr. z. Kennt. d. foss. Fl. v. 8398 Parschl. in Steierm. Denkschr. k. Ak. Wiss. Wien, XXXVIII Bd. I, Abth. p. 88, t. IV, f. 9. — Maculas circulares nigras, 0,5-1 mm. diam. medio disco minuto pallido notatas formans.

*Hab.* ad folium *Aristolochiæ parschlugianæ* Ettingsh. in schisto margaceo tortoniano ad Parschlug Steiermark.

18. **Xylomites maculifer** Heer Fl. tert. Helv. vol I, p. 19, t. I, f. 8, 8399 vol. III, pag. 148. — Maculas rotundatas, albas, 1-3 mm. latas formans.

*Hab.* ad folia *Grewiæ crenatæ* in marga aquitaniana Hohe Rhonen Helvetiæ et in argilla aquitaniana Bagnasco Pedemontii Italiæ borealis.

19. **Xylomites borealis** Heer Beitr. z. Mioc. Fl. v. Nord-Canada, p. 12, 8400 t. II, f. 1. — Peritheciis planis orbiculatis, 1½-2 mm. latis, congregatis, disco rimosis.

*Hab.* ad folia *Pterospermitis spectabilis* in argilla formationis miocenicæ, Nord-Canada, Amer. bor. — *Xyl. vario* Heer et *Xyl. Liquidambaris* Ettingsh. similis.

20. **Xylomites tuberculum** Fr. Br. ex parte, Flora 1847, Reihe V. 8401 Jahrg. vol. I, p. 82, Ung. Gen. et Spec. pag. 39 (falso sub nom. *X. tuberculosus*).

*Hab.* ad folia *Æthophylli* in formatione rhætica ad Veitlahm prope Culmbach Jägersburg. — Species hæc a cl. Schenk Foss. Fl. d. Grenzsichten des Keuper u. Lias Frankens p. 7, 8, partim ad *X. Zamitæ* Göpp., partim ad *X. asteriformem* Fr. Br. rejecta est.

21. **Xylomites stigmariæformis** Göpp. Tert. Fl. Ins. Java p. 34, t. IV, 8402 f. 27, Göpp. Gatt. foss. Pfl. pag. 109, Göpp. in Bronn's Ind. palæont. II, p. 5, Heer Foss. Pflanz. Sumatra pag. 10, t. III, f. 1. — Perithecio innato rotundo, disco umbilicato integro, medio elevato.

*Hab.* ad fragmentum folii indeterminati, *Fagraeæ morindæ*-foliæ simile, in formatione eocenica ripis rivi Gembong prope pagum Tandjung, Djampang insulæ Java et ad folia *Apocynophylli sumatrensis* formationis eocenicæ Padang Bovenland insulæ Sumatra.

22. **Xylomites Liquidambaris** Ettingsh. Beitr. z. Kennt. d. foss. Fl. 8403  
v. Parschl. in Steierm., Denkschr. k. Ak. Wiss. Wien, XXXVIII  
Bd. I, Abth. p. 86, t. II, f. 3-5, t. III, fig. 7. — Peritheciis ro-  
tundatis, immersis, limbo subtumido, nonnumquam pallido circum-  
datis, 1-2 mm. diam.

*Hab.* ad folia *Liquidambaris europæi* Al. Braun in schi-  
sto margaceo tortoniano ad Parschlug, Steiermark. Sec. cl. Ettings-  
hausen *Rhytismati Ungerii* Mesch. (*Xylomites umbilicatus*  
Ung.) habitu similis.

23. **Xylomites sp.** Boulay Not. s. la Fl. tert. d. env. de Privas, Ar- 8404  
dèche Bull. Soc. Bot. de France XXXIV, Paris 1887, pag. 236  
(*Xyloma*).

*Hab.* ad folia *Ulmi* in tripoli tortoniano Charay prope Privas  
Ardèche Galliæ austr.

24. **Xylomites ellipticus** Ettingsh. D. Kreidefl. v. Niedersch. in Sa- 8405  
chsen Sitz. d. k. k. Ak. d. Wiss. Wien 1867, pag. 243, t. I, f. 7.  
— Peritheciis ellipticis, 0,5-2 mm. diam., planis, disco centrali vix  
distinguendo.

*Hab.* ad folia *Fici Geinitzii* in schisto argilloso cenomania-  
no ad Niederschœna prope Freiberg Saxonix. — *Xyl. deformem*  
Ung. in mentem revocat.

25. **Xylomites deformis** Ung. Foss. Fl. v. Sotzka Denkschr. k. Ak. 8406  
Wien, II Bd., p. 155, t. XXIII, f. 2, Mass. Sop. Piante foss. vic.  
p. 57, Consp. Fl. tert. p. 10, Syll. pl. foss. p. 18, Mesch et Squin.  
Fl. tert. ital. p. 7, n. 26. — Perithecio rotundato irregulari plano  
circ. 1-2 mm. diam., disco centrali vix distinguendo.

*Hab.* ad folia *Fici degeneris* Ung. in formatione tongria-  
na ad Sotzka Stirix, ad folia varia in calcareo margaceo aquita-  
niano, Salcedo in agro vicetino Italiæ borealis.

26. **Xylomites ficicola** Ettingsh. Foss. Fl. Leoben, Denk. k. Ak. Wiss. 8407  
LIV, Bd. I Abth. Wien 1888, pag. 268, tab. I, f. 15. — Maculas  
2-6 mm. latas, rotundatas, fuscas, margine pallido latiore cinctas  
formans.

*Hab.* ad folia *Fici lanceolatae* Heer in argilla miocenica  
media prope Leoben Steiermark. — Sec. cl. Ettingshausen *X. borea-*

*li* Heer similis, a quo maculis majoribus, densioribus et prominulis distinguitur.

27. **Xylomites Alni** Ettingsh. Foss. Fl. Bilin, Denkschr. k. Ak. Wiss. 8408  
Wien. CLVXVI Bd. I, p. 10, tab. II, f. 3, Schimp. Tr. pal. Vég. III, p. 433, Ettingsh. Beitr. Kennt. Tertiärl. Steierm. Sitz. k. Ak. Wiss. CL, I Abth., Wien 1863, p. 35, Foss. Fl. v. Leoben Denkschr. ibid., LIV Band, I Abth., pag. 268, t. I, f. 14. — Maculas fuscas, 0,5–2,5 mm. diam., rotundatas formans, disco paullo pallidiore.

*Hab.* ad folia Alni gracilis in argilla plastica mayenciana Priesen prope Bilin, Bohemiæ in argilla miocenica media prope Leoben et Seegraben prope Unter-Buchwieser. — A *Xyl. daphnogene* Heer propter matricis diversitatem tantum distinctus.

28. **Xylomites confluens** Göpp. Ueb. Braunkolenfl. nordöst. Deutschl. 8409  
Zeitschr. Deutsch. geol. Gesell. Berlin 1852, pag. 488, Tertiärl. v. Schosnitz in Schles. pag. 3, t. I, f. 14, 15, Tertiärl. a. d. Insel Java p. 150. — Epiphyllus, accumulatissimus, rotundus, confluens, haud raro totam folii faciem obtegens, disco parum elevato, maculis 0,5–1 mm. fere diam.

*Hab.* ad folia Carpini ostryoidis Göpp. et Alni similis Göpp. in argilla tortoniana Schosnitz prope Canth ad Vratislaviam.

29. **Xylomites grandis** Etting. Beitr. Tertiärl. Steiermarks, Sitzungs- 8110  
k. Ak. Wissen. LX Bd., I Abth. Wien 1869, p. 36, t. I, f. 8, Foss. Fl. Leoben, Denkschr. ibid. LIV Bd., I Abth. p. 269, Wien 1888. — Maculas 3,5–5 mm. latas, fuscas, subrotundas, margine granuloso cinctas formans; disco medio pallido distincto.

*Hab.* ad folium indeterminatum in argilla miocenica media prope Leoben Steiermark et ad folia Alni gracilis prope Leoben, Steiermark.

30. **Xylomites Lonchitidis** Ettingsh. Beitr. Kennt. Tertiärl. Steierm. 8411  
Sitzungs- k. Ak. Wiss. CL Bd., I Abth., 1869, p. 35, t. I, f. 10, Foss. Fl. Leoben, Denk. k. Ak. Wiss. LIV, Bd., I Abth. Wien 1888, p. 268. — Maculas minutas rotundatas, 0,5–1 mm. latas, discum pallidum orbicularem includentes, formans.

*Hab.* ad folia Quercus Lonchitidis in argilla miocenica media prope Leoben Steiermark. — *X. vario* Heer similis.

31. **Xylomites Drymejæ** Ettingsh. Beitr. z. Kennt. d. foss. Fl. v. Par- 8412  
schl. in Steierm. Denkschr. k. Ak. Wiss. Wien, XXXVIII Bd. I, Abth, pag. 87, t. III, f. 10. — Peritheciis minutis, 0,5 circ. mm.

diam., planis, rotundatis, tuberculatis, interdum confluentibus, disco rimoso haud umbilicato.

*Hab.* ad folia *Quercus Drymejae* Ung. in schisto margaceo tortoniano ad Parschlug, Steiermark.

32. **Xylomites tuberculatus** Ung. Gen. et Spec. pag. 38. — Perithe- 8413  
cio innato oblongo rotundato, disco centrali irregulari rimoso.

*Hab.* ad folia *Quercus lignitum* in marga tortoniana ad Parschlug Stiriae.

33. **Xylomites Quercus-Serrae** Ettingsh. Beitr. z. Kennt. d. Foss. Fl. 8414  
v. Parsch. in Steierm. l. c. p. 86, t. IV, fig. 4, 7. — Peritheciis  
orbicularibus, 0,5-1 circ. mm. diam., tuberculatis, immersis, circuitu  
marginato, disco subrimoso.

*Hab.* ad folia *Quercus Serrae* in schisto margaceo tortonia-  
no ad Parschlug Stiriae.

34. **Xylomites Daphnes** Ettingsh. Beitr. z. Kennt. d. Foss. Fl. v. Parsch. 8415  
in Steierm. l. c. p. 86, t. III, f. 8, t. IV, f. 5. — Perithecio majusculo  
circulari 0,5-1 mm. diam., crasso, immerso, disco tuberculato, me-  
dio non elevato.

*Hab.* ad folia *Quercus Daphnes* Ung. in schisto margaceo  
tortoniano ad Parschlug Stiriae. — *Rhytisma Ungerii* Mesch. (*Xy-  
lomites umbilicatus* Ung.) propter umbilici elevationem ab hoc  
tantum distinguitur.

35. **Xylomites varius** Heer Fl. tert. Helv. vol. I, p. 19, t. I, f. 9, a, f, 8416  
Ettingsh. Foss. Fl. v. Köflach Jahrb. k. k. geol. Reichsanst. Bd.  
VIII, p. 9, t. I, f. 4, Denkschr. k. Ak. Wiss. Wien, CLXXVI Bd.  
I, D. foss. Pfl. Tert.-Beck Bilin pag. 10, t. I, f. 9, Beitr. Kennt.  
Foss. Pfl. Parschlug l. c. p. 87, Capellini, La form. gess. Castell.  
maritt. p. 38, Schimp. Tr. pal. Vég. vol. I, p. 138, Mesch. et Squin.,  
Fl. tert. it., p. 7, n. 25. — Perithecio minuto rotundato, circ. 0,5  
mm. diam., disco polymorfo, pallido.

*Hab.* ad folia *Populi ovalis*, *Salicis mediae* et *Podoc-  
carpi Kuorrii* in calcareo tortoniano Ceningen Helvetiae; ad fo-  
lia *Dryandroidis lignitum* Langangezd pr. Bilin, Bohemiae;  
ad folium *Sapotaceae* cujusdam in schisto margaceo tortoniano ad  
Parschlug Steiermark; ad folia *Quercus* in marga Cerretello Tu-  
sciae, Ital. centr. — Cl. Heer formas sequentes distinguit:

- a) **Xylomites varius Populi** Heer loc. cit. t. I, f. 9 a.

*Hab.* ad folia *Populi ovalis*. — Adsunt in uno ramo folia  
omnia maculata.

- b) **Xylomites varius Salicis** Heer loc. cit., t. I, f. 9, f, Beck Olig. 8417

v. Mittweida, Zeitschr. Deut. geol. Ges., XXXIV, p. 753, t. XXXI, fig. 3. -- Maculis depressis, magnitudinæ æquali, foliorum nervis interpositis centro pallido a margine nigro non bene limitato.

*Hab.* ad folia Salicis mediæ Al. Br. et Sal. variantis Göpp. in lignite aquitaniana Mittweida Saxoniae.

- c) **Xylomites varius Podocarpii** Heer loc. cit. — Maculis nigris, bene definitis intus pallidioribus, rotundis, magnitudinæ æquali, duabus tantum margine folii, aliis nervo medio, reliquis inter nervos secundarios insidentibus. 8418

*Hab.* ad folium Podocarpi Knorrii Al. Br. — Individuum ab Ettingshausen ad Dryandroidem lignitum repertum est proximum formæ *b* Heer.

36. **Xylomites ciliatus** Göpp. tert. Fl. Schossnitz in Schl. p. 3, t. I, f. 16, 17, tert. Fl. a. d. Insel Java p. 150. — Epiphyllus, frequens gregarius, rotundus, planiusculus, discretus, quasi emarginato-ciliatus, medio vix elevatus, maculis 0,5-1 mm. diam. 8419

*Hab.* ad folia Salicis et Platani in argilla tortoniana Schossnitz prope Canth ad Vratislaviam.

37. **Xylomites maculæformis** Göpp. Ueb. Braunkohlenfl. nordöst. Deutschl. Zeitschr. Deutschen geol. Gesell. Berlin 1852, pag. 488, Tertiärfl. v. Schossnitz in Schles. p. 3, t. I, f. 13, Tertiärfl. a. d. Insel Java p. 150. — Epiphyllus innatus, sparsus, rotundus, planiusculus, disco subelevato, maculæ 0,5-2 circ. mm. diam. 8420

*Hab.* ad folia Salicis et Quercus in argilla tortoniana Schossnitz prope Canth ad Vratislaviam.

38. **Xylomites Populi** Fr. (*Xyloma*) Goepp. Gen. pl. foss. fasc. 3 et 4, t. XIII, f. 6. 8421

*Hab.* ad folia fossilia Populi (ubi?).

39. **Xylomites Zamitæ** Göpp. Uebers. d. Arb. u. Ver. 1844, p. 123, Gatt. Foss. Pfl. pag. 109, t. XIII, f. 1, 5, Schenk Foss. Pfl. t. I, Schimp. Tr. pal. Vég. I, pag. 139, t. I, f. 20, Ung. Gen. et Spec. p. 38, Syn. pl. Foss. p. 18, Geinitz Ueb. Rhät. Pflanzen u. Thierr. Argent. Provinzen, Palæontographica, Suppl. III, Cassel 1876, t. II, f. 2. — Perithecio rotundato, circ. 3 mm. diam. regulari, subplano, disco orbiculari subintegro parum distincto. 8422

*Hab.* ad foliola Zamitis distantis Presl., Otozamitis brevifolii Al. Br. et Sagenopteridis rhoifoliæ Presl. in schisto arenaceo argilloso inter Lias et Keuper ad Bambergam et ad Veitlahm Vindelicæ, et in schisto arenaceo nigro formationis

rhæticae aut infraliasicae ad folia Tæniopteridis, Mareys, Provincia San Juan, Reipublicae Argentinae, Amer. austr.

40. **Xylomites intermedius** Nath. Om Fl. Skånes Kolf. Bildningar I, 8423  
Flora vid Bjuf, Sveriges Geologiska undersökning 1879, Ser. C, n. 33, N. Jahrb. f. Min. 1880, I, 2, p. 295-296, Bot. Centralbl. 1880, p. 366-368 Bot. Jahr. VII Jahrg. 1879, p. 147.

*Hab.* ad folia Podozamitis aut Phœnicopsis in formatione rhætica Bjuf supra Schonen.

41. **Xylomites polaris** Heer Beiträge z. foss. Pfl. Spitzbergens II, 8424  
Die Jura-Pfl. d. Cap. Boheman, pag. 28, t. VI, f. 16, 17, 17 b. — Peritheciis rotundatis, seriatis, 1 mm. latis.

*Hab.* ad folia Podozamitæ in arenaria barthoniana in Capite Boheman, Spitzberg. Dispositione et magnitudine perithecorum a *X. Zamitæ* diversus.

42. **Xylomites sp.** Fliche Note Fl. tert. env. Mulhouse Bull. soc. ind. 8425  
Mulhouse, tome LVI, Mulhouse, 1886, p. 353.

*Hab.* ad folia Monocotyledoneæ in marga aquitaniana inferiore Riedisheim pr. Mulhouse Alsatiæ. — Diagnosis desideratur.

43. **Xylomites sp.** Gein. Ueb. Rhät. Pfl.-und Thier. Argent. Prov. 8426  
Palæontographica 1876.

*Hab.* ad pinnulas Tæniopteridis in formatione rhætica reipublicae Argentinae Amer. austr.

44. **Xylomites radiatus** Schimp. Tr. pal. Vég. I, p. 139. — Sinubus 8427  
magis numerosis et minutis, 8-10 mm. diam. metientibus a *X. asteriformi* Fr. Br. diversus.

*Hab.* ad corticem Equiseti columnaris in lignite Baden Germaniæ.

45. **Xylomites asteriformis** Fr. Br. Weltrichia t. I, f. 5-7, Schenk 8428  
Foss. Pfl. t. II, f. 1, 2, Ung. Gen. et Spec. p. 38, Schimp. Tr. pal. Vég. I, p. 139, t. I, f. 21, *Xylomites tuberculum* Fr. Br. (ex parte), *Xyl. radiatus* cum varietatibus Fr. Br. et *Uromycetites concentricus* Fr. Br. D. Foss. Gew. Gränz. Weith. Flora XXX Jahrg, I Bd. Regensburg 1847, p. 82. — Perithecio juniore orbiculari, peltideo, in medio umbonato, seniore irregulariter sinuato-marginato, radiatim sulcato, umbonato.

*Hab.* ad folia Equiseti Münsteri et ad pinnulas Zamitis distantis et brevifolii Fr. Br. in stratis inter lias et keuper Veitlahm prope Culmbach Franconiæ.

46. **Xylomites granulifer** Etingsh. Beitr. Kennt. Tertiärl. Steierm. 8429  
Sitzungsb. k. Ak. Wiss. LX Bd., I Abth., f. 36, t. I, f. 9, Foss.