









P. A. SACCARDO

(n. 1845 - f. 1891)

*al carissimo amico
C. Spezzini
offre il suo vecchio
maestro Samr
1. 3. 902*

SYLLOGE
FUNGORUM

OMNIUM HUCUSQUE COGNITORUM.

DIGESSIT

P. A. SACCARDO

OPUS PRÆMIO REGIO LINCÆORUM ET BINIS AUREIS NUMMIS CORONATUM

Vol. X.

SUPPLEMENTUM UNIVERSALE

SISTENS GENERA ET SPECIES NUPERIUS EDITA

NEC NON EA IN SYLLOGES ADDITAMENTIS PRÆCEDENTIBUS JAM EVULGATA

NUNC UNA SYSTEMATICE DISPOSITA

Pars II. — DISCOMYCETEÆ - HYPHOMYCETEÆ

Additi sunt FUNGI FOSSILES auctore Doct. **A. Meschinelli**

Fol. 62 $\frac{1}{4}$ — Pretium it. lib. (*francs*) 48.

PATAVII

XXX JUNII MDCCCXCII

SUMPTIBUS AUCTORIS

TYPIS SEMINARIJ.

Mycologi v. Botanici qui, quocumque modo, Sylloges operi profuerunt *)

(Continuatio. Cfr. vol. VIII, pag. IX).

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*) Plurimi ex citatis botanicis opera vel opuscula mycologica benevole miserunt, quibus auctor quam maximas agit gratias.

burg). — L. KLEIN (*Freiburg i. B.*) — O. KUNTZE (*Friedenau b. Berlin*). — F. MOEWES (*Berlin*). — R. SADEBECK (*Hamburg*).

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A. BARCLAY † (*Simla, Bengala*).

De nominibus generum sec. cl. O. KUNTZE ex jure prioritatis reformandis.

Cl. doct. O. Kuntze librum nuper edidit (*Revisio generum plantarum*, Lipsiæ 1891) eruditissimum et ob multas plantas novas ibi descriptas perutilem atque egregium. Sed cl. Auctor, prioritatis juris nimio amore deceptus, tot nomina generum vetusta sed inepta resuscitavit, tot nomina ubique accepta futilibus rationibus rejicenda decrevit, tot nomina nova insolenti modo condita proposuit, ut si totas novitates Kuntzeanas acceperimus scientia nostra et confusione maxima periclitaretur et nominibus dissonis et insuetis obrueretur. Non negarem tamen opus Kuntzeanum in eo proficuum esse quod et nominum mutationes nonnullas vere necessarias proposuit et ad accuratiorem plantarum nomenclaturam botanicorum attentionem excitavit.

Ad fungos sermone restricto, sequentia observo et censeo, quæ fortasse et ceteris plantis referri possent.

1. Nomina generica antiqua *male* definita vel *insolenter* conscripta vel e *communi* usu, pro scientificè definitis, normaliter conditis et ubique receptis non restituenda videntur, nec ego pro mea Sylloge accipio. Hinc sequentia nomina antiquorum a Kuntzeo loc. cit. p. 658 et 840-877 in lucem remissa meo sensu rejicenda sunt:

Albugo pro *Cystopus* — *Acinophora* pro *Arachnion* — *Auricula* pro *Hirneola* — *Clathroidastrum* pro *Stemonites* — *Cyathoides* pro *Cyathus* — *Fungoidaster* pro *Leotia* — *Hydrogera* pro *Pilobolus* — *Lactifluus* pro *Lactarius* — *Lycoperdastrum* pro *Scleroderma* — *Lycoperdoides* pro *Polysaccum* — *Sesia* pro *Merulius* — *Merulius* pro *Cantharellus* — *Orcella* pro *Clitopilus* — *Trombetta* pro *Craterellus*.

2. Nomina generica, a semisæculo et ultra oblita, non perfecte definita, ad unam vel paucas species, sæpius heterogeneas, condita, pro generibus rite definitis et nunc specierum magna copia ditatis non reficienda videntur. Hinc innovationes Kuntzeanæ sequentes non approbandæ:

Burcardia pro *Bulgaria* — *Granularia* pro *Nidularia* — *Mastocephalus* pro *Lepiota* — *Gomphus* pro *Cortinarius* — *Mastoleucomyces* pro *Armillaria* — *Patila* pro *Auricularia* — *Phalloboletus* pro *Morchella* — *Pocillaria* pro *Lentinus* — *Pseudofarinaceus* pro *Amanitopsis* — *Striglia* pro *Dædalea*. — *Terana* pro *Corticium*.

Nec delendum est, ut proposuerat cl. Johanson, nomen generis distinctissimi et vastissimi *Sphærella* (Fr.) Ces. et De Not. (1849, 1863) pro *Sphærella*

Somm. (1824) genere algarum speciebus binis heterogeneis innixo et jam emortuo cum ill. Fries homonymon condidit (Cfr. Berl. et De-Toni in Att. Ist. Ven. 1887). Nec delerem nomen gen. *Tubercularia* Tode jam ab a. 1790 ubique acceptum ex eo quod extet homonymus lichen paullo antiquior Wiggersii (1780) qui vero jam ab anno 1794 sub titulo *Bæomyces* omnibus est notus (Cfr. quoque cl. Zahlbruckner in Hedwig. 1892, p. 34). Iisdem fere rationibus non sunt delenda nomina notissima *Erythrina* pro *Corallo dendron* et *Hymenula* pro *Hymenella* ab ipso auctore Frieso jamdiu rejecta.

3. Nomina generica quocumque modo etsi levissime, immo unica littera, a ceteris diversa non commendanda sunt sed quæ jam condita et recepta, sunt legitime servanda *). Si distinguo *Livius* a *Livia*, *Antonius* ab *Antonia*, *Grove* a *Groves*, *Curtis* a *Curtiss*, *Kuntze* a *Kunze* ita et distingui possunt et debent, invito Kuntzeo, sequentia nomina:

Anthurus ab *Anthurium* — *Stilbum* a *Stilbe* — *Lestadia* a *Laestadia* — *Cytosporium* a *Cytospora* — *Graphium* a *Graphis* — *Cyphella* a *Cyphelium* — *Coryne* a *Coryneum* — *Gonatobotryum* a *Gonatobotrys* — *Trichosporium* a *Trichospora* — *Cephalothecium* a *Cephalotheca* — *Cyathus* a *Cyathea* — *Henriquesia* ab *Henriquezia* — *Apiosporium* ab *Apiospora* — *Urospora* ab *Urosporium* — *Coccospora* a *Coccosporium* — *Macropodia* a *Macropodium* — *Dicoccia* a *Dicoccum* — *Acrotheca* ab *Acrothecium* — *Trichocladium* a *Trichocladus* — *Lasiosphæra* a *Lasiosphæria* — *Nolanea* a *Nolana* — *Leptotrichia* a *Leptotrichum* — *Sparassis* a *Sparaxis* — *Polytrichia* a *Polytrichum* — *Libertella* a *Libertiella* — *Omphalia* ab *Omphalea* — *Acetabula* ab *Acetabulum* — *Eriosphæra* ab *Eriosphæria* — *Achlya* ab *Achlys* — *Protoderma* a *Protodermium* — *Eurotium* ab *Eurotia* — *Scoria* a *Scorias* — *Lachnea* a *Lachnaea* — *Selinia* a *Selinum* — *Microglossum* a *Microglossa* — *Syncephalis* a *Syncephalum* — *Arthrobotryum* ab *Arthrobotrys* — *Orthotricha* ab *Orthotrichum* — *Xanthoglossum* ab *Xanthoglossis* — *Capnodium* a *Capnoides* — *Diplosporium* a *Diplospora* — *Dactylium* a *Dactylis*.

4. Nomina vero generica rite definita et bene conscripta restauranda sunt pro recentioribus æque valentibus, quæ ergo abolenda sunt. Ita ipse jam dolevi meum *Hippocrepidium* pro *Hirudinaria* Ces., *Morthiera* Fuck. pro *Entomosporium* Léw. etc. et multi multa alia. Ita et *Phallus* videtur restaurandus pro *Ithyphallus*.

5. Et necessario delenda sunt nomina generica, quæ exacte homonyma sint cum anterioribus aliter valentibus. Sub hoc titulo reapse accipienda sunt nomina nova (pauca fauste!) a cl. Kuntze proposita vel in usum revocata, nempe:

*) Ipse immerito (et me pœnitet!) jam ab anno 1872 ob antierius genus *Nitzschia* ex Algis, mutavi *Nitzschia* Fuckelii in *Coslosphæria*, sed revera suo loco *Nitzschkea* (nomine leviter correcto) est redintegranda. Gen. *Coslosphæria* vero, sensu cl. Ellisii non delendum est sed reservandum speciebus *Nitzschkeæ* peritheciis sparsis. Cfr. ejusdem egregium opus «North. Am. Pyr.» p. 246.

Broomeola O. K. loc. cit. pag. 845 pro *Endodesmia* B. et Br. (1871) nec Benth. (1862). Species: *B. glauca* (B. et Br.) O. K.

Clarkeinda O. K. loc. cit. pag. 848 pro *Chitonia* Fr. (1836), nec Moc. et Sessé (1824). Species: *C. Coprinus* (Fr.) O. K., *C. pedilia* (B. et Br.) O. K., *C. poderes* (B. et Br.) O. K. et *C. rubriceps* (C. et M.) O. K.

Cohnidonum O. K. loc. cit. p. 849 pro *Cladothrix* Cohn (1875), nec Moq. (1849). Species: *C. dichotomum* (Cohn) O. K.

Drudeola O. K. loc. cit. p. 851 pro *Peckia* Clint. (1875), nec Vellozo (1825). Species: *D. Sarraceniæ* (P. et C.) O. K. et *D. Clint mii* (Peck) O. K.

Halterophora Endl., O. K. loc. cit. p. 855 pro *Tipularia* Chev. (1822) nec Nutt. (1818). Species: *H. fulva* (Chev.) O. K.

Thozetella O. K. loc. cit. p. 873 pro *Thozetia* Berk. (1872) nec Benth. (1869). Species: *T. nivea* (Berk.) O. K.

Vogolinoana O. K. loc. cit. p. 874 pro *Cystophora* Rab. (1844) nec J. Ag. (1841). Species: *V. craterioidea* (Rab.) O. K. et *V. fruticulosa* (Link) O. K.

Willkommlangea O. K. loc. cit. p. 875 pro *Cienkowskia* Rost. (1873) nec Reg. et Rach. 1858. Species: *W. reticulata* (A. et S.) O. K.

Zukalina O. K. loc. cit. p. 875 pro *Gymnodiscus* Zuk. (1837) nec Less. (1831). Species: *Z. neglecta* (Zuk.) O. K., *Z. dura* (Zuk.) Sacc.

Quod ad *Trichosecypham* Cooke (1879) attinet, quam ob homonymam Hookeri (1862) cl. Kuntze in *Cookeinam* mutavit, monendum est genus Hookeri sec. Baill. Dict. Bot. IV, p. 217 esse synonymon *Sorindeiæ* et tunc genus Cookei esse servandum.

Ex iis quæ præcedunt fauste patet paucissimas ex permultis renovationibus Kuntzeanis esse, saltem meo sensu, adhibendas.

Profecto cl. Kuntze non dubitavit 75 genera et 2454 species fungorum nomine novo donare, dum ut visum est, vix 8 genera cum 14 speciebus oportet tantum nomine reformare. Nomina nova Kuntzeana pleraque, ut multi botanici jam notaverunt, omnino sunt ingrata et insueta (e. g. inter fungos *Cohnidonum*, *Clarkeinda*, *Vogolinoana*, *Willkommlangea*) sed ego ea certa non mutabo. Nimium, eheu nimium mutavit cl. Kuntze, sed ejus mutationes ut plurimum superfluas et noxias quis adhibere audebit? Meminerimus et in nomenclaturæ lege *summum jus esse summam injuriam*.

MUSEO INSTITUTO DE BOTANICA "SPEGAZZINI"	
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SEU CATALOGUS LIBRORUM QUI IN DIGERENDA SYLLOGE
PRÆSTO FUERUNT *)

SUPPLEMENTUM

(Cfr. vol. I, p. IX).

- Abbay R.* — Observations on Hemileia vastatrix. London 1878.
- Abromeit Dr.* — Fundorte von Bulgaria globosa. Berlin 1892.
- Adametz L.* — Untersuch. über die niederen Pilze de Ackerkrume. Leipzig 1886.
- Die Bacterien der Trink und Nutzwässer. Wien 1888.
- Allescher A.* — Verzeichniss in Südbayern beobachtet Pilze. München 1886-87. — I. II Nachtr. Landshut 1889.
- Verzeichniss für Südbayern neu aufgef. Pilze. Münch. 1891.
- Ueber einige aus dem südl. Deutschl. wenig bekannte Sphærospideen und Melancon. Cassel 1890.
- Einig. Südbay. Pilze. Cassel 1890.
- Ambrosi Fr.* — Un canestro d'Imenomiceti della valle di Sella. Padova 1884.
- Arcangeli G.* — Sopra alcuni funghi raccolti in Livorno. Livorno 1873.
- Sulla fermentazione panaria. Pisa 1888.
- Sul Saccharomyces minor. Fir. 1888.
- Sul Kefir. Firenze 1888.
- La fosforescenza del Pleurotus olearius. Roma 1888.
- Ricerche sulla fosforescenza del Pleurotus olearius. Roma 1889.
- Sopra due funghi raccolti nel Pisano. Firenze 1889.
- Arcangeli G.* — Sullo sviluppo di calore dovuto alla respirazione nei ricettacoli dei funghi. Firenze 1889.
- Arrhenius J. et Robinson W.* — Nordens Matswampar. Stockholm 1874.
- Arthur J. C.* — Description of Jowa Uromyces (Bull. Minnesot. Acad. 1883).
- The interpretation of Schweinitzian and other early descriptions (Am. Nat. 1883).
- Report of the Botanist to the New York Agricult. Stat. New York 1884.
- Preliminary List of Jowa Uredineæ and Ustilag. Geneva 1884.
- Report on botanical Work in Minnesota. St. Paul 1887.
- Report of the Botanist to the N. York Agricult. Station. Albany 1887.
- Smut of Whart and Oats. Lafayette Ind. 1889.
- Spotting of Peaches and Cucumbers. Lafayette Ind. 1889.
- d'Arbois A. et Vesque J.* — Les maladies des plantes cultivées. Paris 1878.
- Ascherson P.* — Ueber Speisetrüffel etc. Berlin 1880-1882.
- Beitrag zur Flora Ægyptens. Berlin 1879.
- Ascherson P. et Magnus P.* — Die weisse Heidelbeere. Berlin 1889.
- Die Verarbeitung der hellfrüchtige Spielarten der europ. Vaccin. Wien 1891.

*) Plurimæ quoque contributiones mycologicæ, quas contuli, reperiuntur in diariis v. actis Societatum e. g. Nuovo Giornale botanico italiano, Malpighia, Bollettino della Societa botanica italiana, Bulletin de la Soc. bot. de France, id. de Belgique, Annales de Sciences naturelles, Bot. Zeitung, Linnæa, Flora, Oesterr. bot. Zeits., Bericht der deut. bot. Gesellsch., Journal of Botany, Journ. Linn. Soc., Botan. Gazette, Bull. of Torr. bot. Club etc. etc.

Quod ad opuscula ex actis et diariis excerpta attinet, dolendum est quamplurima loco et anno impressionis carere, quo factum est ut sæpissime ad statuendam generum v. specierum prioritatem v. ad quascumque pleniores notitias assequendas longum tempus inquirendo amittamus. Cur auctores v. typhothetæ duo tantum verba sed perutilia (locum et annum) in extractis addere non curant?

- Atkinson G. F.* — *Sphærella gossypina* n. sp. (Bull. Torr. Cl. 1891).
 — Some Erysiphææ from Carolina and Alabama. Auburn 1891.
 — Some Cercosporæ from Alabama. Auburn 1892.
 — *Ravenelia cassiæcola* (Bot. Gaz. 1891).
 — Structur a. dimorphism of *Hypocrea tuberiformis* (Bot. Gaz. 1891).
- Atti della Società crittogamica italiana.* Milano 1878-1885.
- Audouin V.* — Nouvelles experiences sur la nature de la Muscardine. Paris 1837.
- Baccarini P.* — Intorno ad una malattia dei grappoli dell' uva. Milano 1886.
 — Sulla malattia dei grappoli. Avellino 1887.
 — Primo catalogo dei funghi dell' Avellinese. Firenze 1890.
 — e *Avetta C.* — Contribuzione allo studio della Micologia Romana. Roma 1885.
 — Note fito-patologiche. Firenze 1890.
 — Sullo sviluppo dei picnidii. Fir. 1890.
- Badham C. D. and Currey T.* — A Treatise on the esculent funguses. London 1863.
- Baglietto F.* — Primo censimento dei funghi della Liguria. Firenze 1886.
- Bail Th.* — Mykolog. Studien besond. üb. *Sphæria typhina*. Jena 1861.
 — *Heuflera Betulæ* (Oesterr. Bot. Zeit. 1860).
 — Hymenomyceten in Schlesien und der Niederlausitz. Breslau 1860.
 — Ueber Vorkomm. und Entwicklung einiger Pilzformen. Danzig 1867.
 — Ueber Krankh. der Insekten durch Pilze. Königsberg 1861.
- Bainier G.* — Nouvelles observations sur les zygosporées des Mucorinées. Paris 1884.
 — Sur les zygosporées des Mucorinées. Paris 1883.
 — Observations sur les Mucorinées. Paris 1883.
 — Étude sur les Mucorinées. Thèse. Paris 1882.
- Bambeke C.* — Morphologie du *Phallus impudicus*. Gand 1889.
 — Recherches sur les hyphes vasculaires des Agaricinés. Gand 1892.
- Barclay A.* — A descriptive List of the Uredineæ of Simla I-III. Calcutta 1888-1890.
 — Uredineæ (*Æcid. Thomsoni* et *Æc. Piceæ*) on *Abies Smithiana* I. II. Calcutta 1886.
 — A new species of Ured. on *Cedrus Deodara*. Calcutta 1886.
 — Description of *Æcid. esculentum*. Bombay 1890.
- Barclay A.* — *Æcidium Urticæ* v. *himalayense*. Calcutta 1890.
 — *Æcidium* on *Strobilanthes*. Calc. 1887.
 — *Cæoma* on *Smilax*. Calcutta 1889.
 — A Himalay Gymnosporangium. Calcutta 1890.
 — On two autœcious *Cæomata*. Calcutta 1891.
 — On a *Chrysomyxa* on *Rhododendron arbor.* Calcutta 1890.
 — A Uredine on *Rubia cordifolia*. Calcutta 1890.
 — *Rhododendron Uredineæ*. Calcutta 1891.
 — Life-history of *Puccinia Geranii* v. *himalensis*. London 1890.
 — Additional Uredineæ from Simla. Calcutta 1891.
 — On some Rusts and Mildews in India. London 1890.
- Barla J. B.* — Liste des Champignons nouv. observés dans le dép. des Alpes Maritimes. Poligny 1887.
 — Liste (II) des champign. nouvell. observés dans le départ. des Alpes Maritimes. Paris 1889.
 — Flore mycologique illustrée. Nice 1888-1890, I-V.
- de Bary A.* — Vergleichende Morphologie und Biologie der Pilze. Leipzig 1884.
 — et *Woronin M.* — Beitrag zur Kenntniss der Chytridieen. Freiburg 1863.
 — Beiträge zur Morph. und Phys. der Pilze. Frankfurt 1864-1882.
- Bäumler J. A.* — Beiträge zur Cryptogamen-Flora des Presburger Com. Presburg I, 1887; II, 1890.
 — Fungi Schemnitzenes. Wien I 1888, II 1890, III 1891.
 — Mykologische Notizen. Wien I 1889, II, III 1890.
- Blytt A.* — Norges Myxomyceter. Christiania 1892.
- Beck G.* — Itinera Princ. S. Coburgi. Pilze. Wien 1888.
 — Trichome in Trichomen. Wien 1889-
 — Ueber die Sporenbildung der Gatt. *Phlyctospora*. Berlin 1889.
 — Poroptychæ. Wien 1888.
 — Uebersicht der Kryptogamen Niederösterreichs. Wien 1887.
 — Zur Pilzflora Niederösterreichs. Wien I-V, 1883-1889.
- Bel J.* — Les champignon supér. du Tarn. Paris 1889.
- Berkeley M. J.* — On a peculiar mildew in onions London.
 — On the white rust of Cabbage, 1 et 2, London.
 — Observations on a form of white rust in pear trees. London.

- Berkeley M. J.* — On an edible fungus from Tierra del Fuego. London 1841.
- On *Agaricus crinitus*. London 1845.
- Notices of Fungi collected in Zanzibar in 1844 by Miss R. E. Berkeley. London 1885.
- Descriptions of new spec. of Fungi collect. in the vicin. of Cincinnati by T. G. Lea. II ed. Cincinnati 1882.
- Observations in fructification in *Chionyphe Carteri*. London 1864.
- Thread Blight of Tea. London (Quart. Journ. Micr. Science XV).
- On the fructification of the pileate and clavate tribes of Hymenomycetous Fungi. London 1838.
- Description of a new fungus of British Guiana. London 1843.
- On some new Fungi (Venezuela). London 1857.
- On two tuberiform Vegetable productions from Travancore. London 1860.
- and *Curtis*. — Unit. States Exped. Fungi Philadelphia 1862.
- and *Curtis*. — A Commentary on the Synopsis fungorum by L. D. de Schweinitz. London?
- and *Broome C. E.* — List of fungi from Brisbane. London I 1878. II, 1882, III, 1887.
- *Broome C. E.* — On some species of the gen. *Agaricus* von Ceylon. London 1868.
- Berlese A. N.* — Fungi moricolæ. Padova 1885-89.
- Ricerche intorno a *Leptosphaeria agnita* e *L. ogilviensis*. Padova 1885.
- Le malattie del gelso prodotte dai parassiti vegetali. Padova 1885.
- Sopra una specie di *Lophiostoma*. Firenze 1886.
- Le nouveau genre *Peltosphaeria*. Toulouse 1887.
- Monografia dei generi *Pleospora*, *Clathrospora* e *Pyrenophora*. Firenze 1888.
- Due parassiti della vite. Firenze 1888.
- Lo sviluppo dei parassiti veg. Padova 1888.
- Pugillo di funghi fiorentini. Pad. 1888.
- La famiglia delle *Lophiostomaceæ*. Genova 1890.
- Ancora sul *Polyporus hispidus* e sull' *Agaricum Gelsis* seu *Moris* etc. Genova 1890.
- Icones fungorum ad usum Sylloges Saccardianæ. Asculi Pic. 1890-92.
- Intorno ad un nuovo genere di *Pirenomic*. (*Protoventuria*). Padova 1886.
- Alcune idee sulla flora micologica del Gelso. Padova 1887.
- Intorno ad alcune specie poco note di *Leptosphaeria*. Padova 1887.
- Berlese A. N.* — Champignons nouveaux du Tonkin. Toulouse 1888.
- Sulla *Pleospora herbarum* e sulla *Pl. infectoria*. Genova 1889.
- Excursion mycologique dans le Frioul. Paris 1889.
- Sullo sviluppo di alcuni Ifomiceti. Genova 1889.
- Rivista delle Laboulbeniacee e descriz. d'una nuova specie. Gen. 1889.
- Illustrazione della *Discina venosa*. Padova 1889.
- e *F. Saccardo*. — Contributiones ad floram mycologicam Lusitaniæ. Ser. II. Toulouse 1889.
- e *Voglino*. — Funghi Anconitani. Padova 1888.
- Fungi Veneti novi v. critici. Messina 1888.
- Sopra un nuovo genere (*Macrophoma*). Padova 1886.
- e *De-Toni*. — Intorno al genere *Sphaerella* di de Notaris e di Sommerf. Venezia 1887.
- e *Bresadola*. — Micromycetes Tridentini. Rovereto 1888.
- Berlese A. N. e Berlese A.* — Rivista di Patologia vegetale. Padova 1892.
- Bernard G.* — Champignon de la Rochelle. La Rochelle 1882.
- Bessey C. E.* — Report of the botanist (Nebraska St. board Agricult. for 1889). Lincoln 1890.
- A new species (*Entomophthora Calopteni*) (Amer. Nat. 1883).
- Bessey C. E. et Arthur J. C.* — Preliminary Lists Cryptogams of Ames Flora (in Bull. Jowa Agric. Coll. Jowa 1884).
- Bizzozero G.* — Fungi Veneti novi v. critici. Venetiis 1885.
- Flora Veneta critt. I Funghi. Padova 1885.
- Blanchet R.* — Les champignons comestibles de la Suisse. Lausanne 1847.
- Blanchard R.* — Sur une remarq. dermatose causée chez le lézard par un *Selenosporium*. Paris 1890.
- Blytt A.* — Clastoderma De-Baryanum. Christiania 1882.
- Bolle G. e Thuemen F.* — Contribuzione allo studio dei funghi del Litorale Austriaco. Serie III. Trieste 1885.
- Bolley H. L.* — Potato Scab. etc. Fargo N. Dak. 1891.
- Wheat Rust. Lafayette Ind. 1889.
- The Heteræcismal Pucciniæ (Amer. microsp. Journ. 1889).
- Subepidermal Rust. (Bot. Gaz. 1889).

- Bommer E. et Rousseau M.* — Florule mycologique des environs de Bruxelles. Gand. 1885.
- Contributions à la flora mycologique de Belgique I-IV. Bruxelles 1885-1891.
- Bommer Ch.* — Sur les sclérotés du *Polyporus umbellatus*. Bruxelles 1891
- Bonorden H. F.* — Beobachtungen über den Bau der Agaricinen. Leipzig 1858.
- Borszczow E.* — Fungi ingrisci. Petropoli 1857.
- Borzi A.* — *Eremothecium Cymbalariae*. Firenze 1888.
- *Inzengæa*, ein neuer Askomycet (in *Pringsheim's Jahrb.* 1884).
- *Nowakowskia*, eine neue Chytridiee. Cassel 1885.
- *Protochytrium Spirogyrae*. Firenze 1884.
- Nuovi studi sulla sessualità degli Ascomiceti. Messina 1883.
- *Rhizomyxa*, nuovo ficomicete. Messina 1884.
- Boltshauser H.* — Eine Krankheit des Weizens. Thurgau 1890.
- Blattflecken der Bohne. Stuttgart 1891.
- Boudier E.* — Quelques espèces nouv. de Champignons. Paris 1878.
- Considérations sur l'étude microscopique des champignons. Autun 1886.
- Développement gemell. du *Phallus impudicus*. Toulouse 1887.
- Des paraphyses, leur rôle et rapports. Sons-le-Saunier 1890.
- Sur une nouvelle espèce d'Helvelle. Paris 1887.
- Description de deux nouv. esp. de *Ptychogaster*. Paris 1887.
- Note sur *Tremella fimetaria*. Paris 1887.
- Champignons nouveaux ou rares de France. Poligny 1887.
- Nouvelle classification naturelle des Discomycètes charnus. Epinel 1885.
- Bowman J. E.* — Account of a new plant of *Gasteromyc.* London 1823
- Boyer G.* — Le *Cyloconium oleaginum*. Montpellier 1891.
- Brefeld O.* — Neue Untersuch. über die Brandpilze etc. Berlin 1888.
- *Dictyostelium mucoroides*. Frankfurt 1869.
- Botanische Untersuchungen über die Pilze. Leipzig und Münster I-IX, 1872-1891.
- Bresadola G.* — *Schulzeria*. Trento 1886.
- Di due nuove specie di Imenomiceti. Firenze 1891.
- Champignons de la Hongrie récoltés par M. Greschik. Toulouse 1891.
- Fungi Kamerunenses a cl. J. Braun lecti. Lons-le-Saunier 1890.
- *Corticium Martellianum*. Fir. 1890.
- Nouvelles contribut. à la flore mycol. des îles St. Thomé et des Princes. Toulouse 1890.
- Bresadola G.* — Fungi Lusitani. Coimbra 1891.
- Contributions à la Flore mycologique de l'île de St. Thomé. Toulouse 1891.
- Briard M.* — Florule cryptogamique de l'Aube Troyes 1888. — Supplement 1891.
- Champignons nouveaux de l'Aube. I et II. Toulouse. 1885-1886.
- Champignons nouveaux. Toul. 1890.
- Briosi G. e Cavara F.* — I funghi parassiti delle piante coltivate od utili. Pavia 1890-92.
- Rassegne crittog. Roma 1890-92.
- Britzelmayr M.* — Die Hymenomyceten Augsburg und seiner Umgebung. Augsburg 1879-1888.
- Brondeau L.* — Recueil de plantes cryptogames de l'Agenais. Agen 1828-30.
- Brongniart A.* — Essai d'une classification naturelle des champignons. Paris 1825.
- Brongniart Ch.* — Champign. parasites des criquets pèlerins. Paris 1891.
- Brunaud P.* — Nouveaux fragments mycologiques I série. La Rochette 1886.
- Fragments mycol. Herbor. 1884-1885. La Rochette 1885.
- Flore mycol. de Saintes. Agaricinées leucospores. Bordeaux 1885.
- Liste des Discomyc. et de Cortinarius de Saintes. Bordeaux 1885-6.
- Supplém. à la liste des Sphæroidées. Toulouse 1887.
- Liste des Sphæropsidées trouvés à Saintes. Bordeaux 1886.
- Champignons novell. observés aux env. de Saintes. Bordeaux I-VII 1886-1889.
- Sphæropsidées nouv. Bord. 1886.
- Champignons à ajouter à la flore mycol. des environs de Saintes, 3 sér. Paris 1887-1889.
- Miscellanées mycol. Bordeaux I 1889, II 1891.
- Hymenomycètes à ajouter à la flore mycol. de Saintes. Paris 1882.
- Nouv. fragments mycologiques, 2 série. Bordeaux 1888.
- Agaricinées chromospores de Saintes. Toulouse 1887.
- Espec. et var. de Sphæropsid. (Journ. de Botanique 1889).
- Liste des Hymenomycètes de la Charante infér. Bordeaux 1890.
- Liste des Discomycètes, Sphæropsidées etc. Bordeaux 1886.
- Matériaux pour la flore mycologiq. de Saintes. Bordeaux (1887?).
- Contributions à la flore mycol. de l'Ouest-Melanconiées. Caen 1882.
- Contribution à la flore mycolog. de l'O-

- uest. Pyrénomycètes. La Rochelle 1884. Discomycètes. Bordeaux 1886.
- Brunaud P.* — Gymnoascacées. Bordeaux 1884.
- Contributione à la Flore mycologique de l'Ouest. Tremellinées, Myxomycètes, Phycomycètes, Ascomycètes. Bordeaux 1884, La Rochelle 1882, Caen 1883.
- Contributions à la flore mycol. de l'Ouest. Uredinées-Ustilaginées. Bord. 1885.
- Bucknall C.* — The fungi of the Bristol District. Bristol I 1878, II 1879. III 1880, IV 1881, V 1881, VI 1882, VII 1883. VIII 1884, IX 1885, X 1887, XI 1888.
- Bulletin de la Société mycologique. Epinal, Paris, Lons-le-Saunier 1885-1892.
- Burrill T. I.* — Bacterial disease of corn. Champaign Ill. 1889.
- Parasitic Fungi of Illinois. Peoria Ill. 1885.
- Camus J.* — *Phyllosticta Camusiana* Sacc. Modena 1888.
- de Candolle P.* — Mémoire sur les Rhizoctones. Paris 1813.
- Mémoire sur les Sclerotium. Paris 1813.
- Canestrini R.* — Uno sguardo attraverso i microbi. Padova 1887.
- Canestrini R. e Morpurgo.* — Resistenza del Bacillus Komma. Venezia 1887.
- Castagne L.* — Observation sur quelques plantes acotyledonées. Marseille 1842.
- Catalogue des plantes qui croissent naturellement aux environs de Marseille. Aix 1845. Supplement Aix 1851.
- Cavalier A. et Sechier P.* — Description d'une nouv. espèce de Champignon (*Colus hirus-dinosus*). Paris 1835.
- Cavara F.* — Sulla vera causa della malattia dei vigneti di Ovada. Milano 1887.
- Intorno al disseccamento dei grappoli. Milano 1888.
- Appunti di Patologia Vegetale. Milano 1888.
- Sul fungo che è causa del Bitter Rot. Pavia 1888.
- Materiaux de Mycologie lombarde. Toulouse 1889.
- *Macrosporium sarcinæforme* Cav. Milano 1890.
- Contributo alla conosc. dei funghi pomicoli. Firenze 1890.
- Fungi Longobardiæ exsiccati. Pavia 1892.
- Contribuzione alla Micologia Lombarda. Milano 1892.
- Celotti L.* — Miceti del parco e dintorni di Montpellier. Conegliano 1887.
- Contribuzione alla Micologia Romana. Cent. I. Firenze 1889.
- Cienkowski L.* — Die Pilze der Kahmhaut. St. Petersburg. 1872.
- Cobelli R.* — Elenco sistematico degli Imenodisco- Gastero- Mixomiceti e Tuberacei della valle Lagarina. Rovereto 1885.
- Contribuzione alla Flora micologica della Valle Lagarina. Wien 1891.
- Cocconi G.* — Sullo sviluppo di tre piccoli funghi. Bologna 1891.
- Cocconi e Morini.* — Ricerche e consid. sulla simbiosi dei funghi. Bologna 1886.
- La sistemazione delle Puccinie. Bologna 1882.
- Enumerazione dei funghi della provincia di Bologna Cent. I-IV. Bologna 1882-1887.
- Coëmans E.* — Recherches sur la genèse et la métamorph. de la *Peziza sclerotiorum*. Bruxelles 18....
- Notice sur quelq. crypt. critiques de la flora belge. Bruxelles 1858.
- Notice sur le *Pilobolus* cryst. Bruxelles 1859.
- Cohn F.* — Untersuchungen über die Entwicklungsgeschichte der microsc. Algen und Pilze. Bonn 1853.
- Colpi G. B.* — Il bacillo e la fermentazione dell'Jequirity. Milano 1888.
- Comes O.* — Le crittogame parassite dell'Ulivo. Firenze 1890.
- Reliquie micologiche Notarisiane. Napoli 1883.
- Crittogamia agraria. Napoli 1891.
- Le Crittogame parassite delle piante agrarie. Napoli 1882 (autogr.).
- Una rivendicazione di priorità sulla malattia del sorgo saccarino. Napoli 1889.
- Intorno ad una malattia del Carrubo. Napoli 1884.
- Sulla malattia del pomodoro. Napoli 1886.
- Sulla *Rhizomorpha necatrix*. Nap. 1886.
- Il mal nero della vite. Portici 1882.
- Comes O. e Palmeri.* — Notizie prelim. sulla fermentaz. del sorgo saccarino. Napoli 1883.
- Cooke M. C.* — Genus *Lophiostoma*. London 1867-1868.
- *Grevillea*. London 1872-1882.
- *Discomycetes* of the Edinburgh University. Herbarium 1875.
- Illustrations of British Fungi. London 1881-1891.
- The genus *Ravenelia*. London 1880.
- Fungi australiani. London et Melbourne 1883.
- Some remarkable Moulds. London 1885.
- Cooke and Maseë.* — A new development of *Ephelis*. London 1889.
- *Glæosporium pestiferum* (Gardn. Chron. Lond. 1891).

- Corda A. J. C.* — Prachtflora Europ. Schimmelp. Leipzig 1839.
- Cordier F. S.* — Les Champignons de la France. Paris 1870.
- Cornu M.* — Monographie des Saprolegniées. Paris 1872.
- Le Peronospora des vignes. Paris 1882.
- Le Mildew. Paris 1882.
- Costantin J.* — Les Mucédinées simples. Paris 1882.
- Costantin J. et Dufour L.* — Nouvelle Flore des Champignons. Paris 1891.
- Cragin F. W.* — First Contrib. to the Catal. of Hymen. and Gasteromyc. of Kansas. Topeka 1885.
- A contribution to the knowl. of the lower Fungi Kans. Topeka 1885.
- Cramer C.* — Eine neue Fadenpilzgatt. Sterigmatocystis. Zürich 1859.
- Sterigmatocystis antacustica. Zür. 1860.
- Cuboni G.* — Micromiceti delle cariossidi di granoturco. Conegliano e Torino 1882.
- Sulla probabile origine dei Saccaromiceti. Conegliano 1885.
- Intorno agli studi bacteriologici sulla pellagra. Roma 1886.
- La Peronospora dei grappoli. Varese 1887.
- I fermenti del vino. 1889.
- La Peronospora della Vite. Roma 1890.
- La Peronospora della vite nelle gemme. Roma 1891.
- Cuboni J. et Mancini V.* — Synopsis Mycologiae Venetæ. Patavii 1886.
- Cugini G.* — Intorno ad alcune malattie comparse nel 1884 su varie piante coltivate. Firenze 1884.
- Il carbone del granoturco. Modena 1891.
- Cunningham D. D.* — On Mycoidea parasitica. London 1877.
- On the occurrence of conidial fructification in the Mucorini illustrated by Choanephora. London 1878.
- Currey F.* — On the fructification of certain Sphaeriaceous fungi. London 1857.
- On a collection of fungi made by Mr. S. Kurz curator of the Bot. Garden Calcutta. London 1874.
- On a new genus in the Order Mucedines. London 1872.
- Currey F. and Hanbury D.* — Sclerotium stipitatum and Pachyma Cocos. London 1860.
- Czernaiew B. M.* — Cryptogames de l'Ukraine. Moscou 1845.
- Delacroix G.* — Contrib. à la Mycologie du dép. Saone-et-Loire. Autun 1892.
- Le Hanneton et sa larve, la moisissure parasite. Paris 1891.
- Delogne C. H.* — Genre Coprinus. Analyse des espèces de Belgique. Bruxelles 1890.
- Les Lactario-Russulés. Bruxelles 1891.
- Les Bolétés. Bruxelles 1891.
- Dietel P.* — Ueber eine neue aus Euphorbia dulcis Melampsora. Berl. 1889.
- Ueber einige auf Compositen Rostpilze. Dresden 1888.
- Zweierlei Teleutosp. bei Gymnosporangium. Dresden 1889.
- Beschreib. eines neuen Phragmidium. Dresden 1890.
- Puccinia perplexans in Deutschl. Dresd. 1889.
- Aecidien von Melampsora Euphorbiæ dulcis und Pucc. silvatica. Wien 1889.
- Verzeichniss der in d. Umgeb. Leipzig beob. Uredineen. Leipzig 1889.
- Ueber die Gatt. Pileolaria. Jena 1890.
- Verzeichniss sämtlicher Uredineen. Leipzig 1888.
- Ueber Pleomorphismus einiger Uredineen. Berlin 1889.
- Ueber einige in- und ausländische Rostpilze. Dresden 1889.
- Ueber Rostpilze, deren Teleutosporen kurz nach Reife keimen. Cassel 1889.
- Zur Beurtheilung der Gatt. Diorchidium. Berlin 1892.
- Die auf Saxifragaceen vorkomm. Puccinia-Arten. Berlin 1891.
- Doassans E. et Patouillard N.* — Les Champignons fig. et desséc. Paris 1882.
- Dozy F. et Molkenboer J. H.* — Nova fungorum species in Belgio septentr. Lugduni-Batavorum 1846.
- Duby J. E.* — Note sur une maladie des feuilles de la vigne. Genève 1835.
- Note sur une espèce de Dothidea. Genève 1858.
- Dufour L.* — Une nouv. espèce de Chanterelle et de Psathyrella. Paris 1889.
- Earle F. S.* — Note on the North American forms of Podosphæra. 1883 (Bot. Gaz.).
- Eeden F. W.* — Geaster coliformis. Haarlem 1868.
- Ehrenberg C. G.* — Sylvæ mycologicae berolinenses. Berolini 1818.
- Ellis J. B. et Martin G.* — New species of North American Fungi (Am. Nat. 1884).
- North Amer. Fungi Cent. I-XXVIII. Newfield 1878-1892.
- North Amer. Pyrenomycetes. Newfield 1892.
- Ellis J. B. et Everhart B. M.* — New species of fungi. Bull. Torr. Bot. Club 1883 et seq. et in American Natural. 1883 et seq.
- New species of Fungi from Washington

- territory. Topeka 1884 (Bull. Washburn Labor.).
- Ellis J. B. et Everhart B. M.* — New North American Fungi. Philadelphia 1890-91.
- Ellis J. B. and Martin G.* — New Florida Fungi (Amer. Nat. 1883-1884).
- Ellis J. B. and Anderson F. W.* — New species of Montana Fungi (Bot. Gaz. 1891).
- Engler A.* — Ueber die Pilz-Vegetation des weissen oder todten Grundes in der Kieler Bucht. Kiel 1883.
- Eriksson J.* Om Oer-rag (Cladosp. herbarum). Stockholm 1883.
- Bidrag till Känn. om vara odlade växters Sjukdomar. Stockh. 1885.
- Errera L.* — L'épithème des Ascomycètes. Bruxelles 1882.
- Sur les glycogène chez les Mucorinées. Bruxelles 1882.
- Fabre J. H.* — Essai sur les Sphériacées du département de Vaucluse (II). Paris 1882.
- Fairman C. E.* — Contributions to the Mycology of Western New York. Rochester 1890.
- Famintzin A. und Woronin M.* — Ceratium hydroides et porioides. St. Petersburg 1873.
- Farlow W. G.* — Notes on some Ustilagineæ of the United States. 1883.
- Notes on some spec. in the third and eleventh Centuries of Ellis. 1883.
- Notes on a fungus parasitic on species of Potamogeton. Ottawa 1883.
- The Synchrony of the United States. (Bot. Gaz. 1885).
- Note on the Cryptogamic Flora of the White Mountains (From Appalachia 1884).
- Enumeration of the Peronosporæ of the United States (Bot. Gaz. 1885)
- Notes on some species of Gymnosporangium (Amer. Acad. 1883).
- Development of the Gymnosporangia of U. S. (Bot. Gaz. 1886).
- Vegetable parasite of Codfish. New York 1886.
- Notes on some injurious Fungi of California (Bot. Gaz. 1885).
- Farlow W. G. and Trelease W.* — A List of works on North American Fungi. Cambridge Mass. 1887.
- Farlow W. G. and Seymour A. B.* — A provisional host-index of the Fungi of the Unit. Stat. Cambridge, I 1888, II 1890, III 1890.
- De Faveri S.* — La Polenta rossa. Udine 1883.
- Fayod V.* — Prodrome d'une histoire naturelle des Agaricinés. Paris 1889.
- Fawcett W.* — An Entomogenous fungus. London 1886.
- Fée A.* — Note sur trois espèces nouv. de Sphæria exotiq. S. l. et a.
- Ferry R.* — Espèces acicoles et follicoles. Toulouse 1886.
- Feuilleaubeis.* — Sur le *Peronospora pulveracea* et *Morchella Finoti*. Toulouse 1885.
- Le Phallus impudicus. Paris 1886.
- Fisch C.* — Beiträge zur Kenntniss der Chytridiaceen. Erlangen 1884.
- Fischer A.* — Phycomycètes Deutschlands, Oesterreichs und der Schweiz. Leipzig 1892.
- Fischer Ed.* — *Lycogalopsis Solmsii*. Berlin 1886.
- Versuch einer system. Uebers. Phalloid. Berlin 1886.
- Hypocrea Solmsii. Leide 1887.
- Bemerkungen über den Streckung. d. Phalloideen-Recept. Bern 1887.
- Untersuchungen zur vergleich. Entwickl. im Systematik der Phalloideen. Zürich 1890.
- Beiträge zur Kenntniss exot. Pilze (Trichocoma). Dresden 1890.
- Gymnosporangium fuscum et G. confusum. Bern 1891.
- Beiträge zur Kenntniss exotischer Pilze. (Pachyma etc.). Dresden 1891.
- Flügge C.* — Les microorganismes. Traduct du Doct. Henrijean. Bruxelles 1887.
- Flageolet J.* — Contributions à la Flore mycol. du dép. de Saone-et-Loire. Autun 1891.
- Forquignon L.* — Les champignons supérieurs. Paris 1886.
- Fournel et Haro.* — Tableau des champignons des env. de Metz. s. l. et a.
- Frank A. B.* — Die Krankheiten der Pflanzen. Breslau 1880.
- Frankland G. C. and P. F.* — Studies on some new microorganismes obtained from air. London 1887.
- Fries E. M.* — Observationes mycologicae. Havniæ 1815-1818.
- Plantæ homonemæ. Lundæ 1825.
- Fungi ex «Lehmann Plantæ Preissianæ vol. II». Hamb. 1847.
- Novarum symbolarum mantissa. Upsaliæ 1851.
- Reliquiæ Afzelianæ. Upsaliæ 1860.
- Monographia Hymenomycetum Succinæ. Upsaliæ 1857-1863.
- Fries E. P.* — Note sur la distribution géographique des champign. Paris 1861.
- Fries R. B.* — Synopsis Hymenomycetum regionis Gothoburgensis. Gothob. 1888.
- Gachet H.* — Description d'une espèce inédite de Peziza. Bordeaux 1829.
- Gadeau de Kerville H.* — Espèce nouv. de champignon entomogène. Rouen 1884.
- Gaillard A.* — Observation d'un retour à l'état

- végétatif des périthèces du *Meliola*. Lons-le-Saunier 1891.
- Gaillard A.* — Hyphopodies mycél. des *Meliola*. Lons-le-Saunier 1891.
- Le genre *Meliola*. Paris 1892.
- Galloway B. F.* — Reports of the chief of the divis. of vegetable pathology. Washington 1889, 1890, 1891.
- Garcke A.* — Flora von Halle. Berlin 1856.
- Garovaglio S. e Cattaneo A.* — Archivio del Laboratorio di Botanica crittogamica. Pavia 1874-1882.
- Gasperini G.* — La biologia e più specialmente il polimorfismo di varie specie d'Ifomiceti. Pisa 1887.
- Sopra un nuovo morbo che attacca i limoni. Pisa 1887.
- Il Leghbi o vino di palme. Firenze 1888.
- Recherches sur le *Streptothrix Försteri*. Paris 1890.
- Nuova specie del gen. *Streptothrix*. Pisa 1891.
- Giard A.* — Note sur deux types d'Entomophthorées. Paris 1888.
- Sur la castration parasitaire du *Lychnis dioica* par l'*Ustilago antherarum*. Paris 1888.
- Sur les *Nephromyces* g. n. Paris 1888.
- Types remarquables de champ. entomophytes. Paris 1889.
- Sur la castration parasitaire du *Melandryum*. Paris 1889.
- Analyse: de insectorum morbis qui fungis etc. par J. Krassiltschik Paris 1889.
- Nouvelles recherches sur les Bactéries lumineuses pathogènes. Paris 1890.
- Sur un *Isaria* parasite du ver blanc. Paris 1891.
- Sur les *Cladosporiées* entomophytes. Paris 1891.
- L'*Isaria* parasite de la larve du hanneton. Paris 1891.
- Giard et Sorokin.* — Sur *Sorospora Agrotidis*. Paris 1889.
- Gibelli G.* — Nuovi studi sulla malattia detta dell'inchiostrato nel Castagno. Bologna 1883.
- Gilkinet Alfr.* — Mémoire sur le polymorphisme des Champign. Bruxelles 1875.
- Gillet C. C.* — Tableaux analytiques des Hymenomycètes. Alençon 1884.
- Gillot F. X.* — Herborisations dans le Morvan. 1891.
- Gillot F. X. et Lucand L.* — Catalogue raisonné des Champignons supérieurs. Autun 1891.
- Gleditsch J. G.* — Methodus fungorum. Berolini 1753.
- Gluge T. et D'Udekem J.* — De quelques parasites végét. Bruxelles 1850.
- Gobi Christoph.* — Ueber die *Tubercularia persicina*. St. Petersburg 1835.
- Godey.* — Quelques jalons pour une flore mycologique normande. Caen 1871.
- Godfrin J.* — Contrib. à la flore mycologique de Nancy. Lons-le-Saun. 1891.
- Sur l'*Urocystis primulicola*. Nancy 1891.
- Goebel K.* — Pleospora conglutinata als Ursache der Erkrankung und Nadelschütte von *Juniperus*. Würzburg 1879.
- Greville R. K.* — Some account of a collect. of Cryptog. from the Jonian Islands. London 1826.
- Grove W. B.* — Some account of *Polystigma rubrum*. London 1884.
- New or noteworthy Fungi. London 1884.
- A Sycomore fungus; a nettle fungus; *Haplographium* (In *Hardwicke's Science-gossip* 1885-86).
- Monograph of the *Pilobolidæ*. Birmingham 1884.
- New or noteworthy Fungi. Part II. London 1885.
- Guillaud, Forquignon et Merlet* — Catalogue des Champignons du Sud-Ouest. Bordeaux 1884.
- Hallier E.* — Phytopathologie. Leipzig 1868.
- Zeitschrift für Parasitenkunde. Jena 1872.
- Halsted B. D.* — Bulletin of the Iowa Agricult. College. Cedar Rapids Iowa 1887.
- Bulletin from the bot. Depart. of the Agric. College. Ames Iowa 1888.
- Some fungous Diseases of the Cranberry. New Brunswick 1889.
- Some fungous Diseases of the Spinach. New Brunswick 1890.
- Some fungous diseases of the sweet potato. New Brunswick 1890.
- Report of the bot. Depart. New Jersey Agr. st. 1892.
- Hansen E. C.* — Contributions à la connaissance des organismes qui peuvent se trouver dans la bière. Copenhague 1879.
- Recherches sur la physiol. et morphol. des ferments alcooliques. Copenhague 1, 1881, 2, 1883.
- Recherches sur les organismes qui se trouvent dans l'air à Carlsberg. Copenhague 1882.
- Hariot P.* — Champignons de la mission scientif. du Cap Horn. Paris 1888.
- Harkness H. W.* — Pacific Coast Fungi. S. Francisco I-V, 1885-87.
- New species of Californian Fungi. S. Francisco 1884.
- Hartig R.* — Lehrbuch der Baumkrankheiten. Berlin 1882.

- Hartig R.* — Ueber *Trametes radiciperda* und *Herpotrichia nigra*. Cassel 1890.
- Harvey F. L.* — Annual Report of the Maine State College, Agricult. Exp. Stat. Bangor 1890.
- Harz C. O.* — Bergwerkspilze. Cassel 1890.
- Harzer C. A. F.* — Naturgetreue Abbild. d. Pilze. Dresden 1842.
- Hazslinszky Fr.* — A Szölő Oebölye. Budapest 1876.
- Uj Adatok Magyarhon Gombaviranyahoz. Budapest 1878.
- Rendhagyó Köggombak. Budapest 1881.
- Eine anti-jordanische species. Wien 1880.
- Magyarhon Myxogasterei. Eperies 1877.
- Elömunkalatok Magyarhon Gombaviranyahoz Budapest 1885.
- A Gombak Jelleme. Budapest 1873.
- Uj Adatok Magyarhon Kryptogam Viranyahoz. Budapest 1879.
- Einige neue oder wenig bekannte Arten der Pilzflora Ungarns. Wien 1873.
- *Polyactis infestans*. London 1877.
- Beiträge zur Kenntniss der ungarischen Pilzflora. Wien 1875.
- Bemerkungen zu den deutschen und ungarischen Geaster-Arten. Berlin 1882.
- Magyarhon es Tars. Szab Discomyc. Budapest 1885
- Einige neue oder wenig bekannte Discomyceten. Wien 1887.
- Commentarius in icones select. Hymenomycetum Hungariæ. Eperies 1884.
- Heese H.* — Die Anatomie der Lamellen und ihre Bedeutung für die Systemat. der Agarici-
neen. Berlin 1883.
- Heimerl A.* — Die niederösterr. Ascoboleen. Sechshaus 1889.
- Henning E.* — Bidrag till svampfloran i Norges. Stockholm 1885.
- Ueber zwei weniger bekannte Hymenomyceten. Cassel 1886.
- Hennings P.* — Ueber *Oligoporus rubescens* (Boud.) Bref. Berlin 1888.
- Die in der Umgeb. Berlins bisher beob. Hymenomyceten. Berl. 1889.
- Mykologische aus Congogebiet. Berl. 1887.
- Ueber das Ge- und Erfrieren fleisch. Hutpilze etc. Berlin 1887.
- *Fungi africani*. Leipzig 1891.
- *Fungi novo-guineenses*. Berlin 1892.
- Bericht über eine krypt. Forschungsreise in Kr. Schwetz. Danzig 1892.
- Ueber abnorm. Pilzentwickl. etc. Berlin 1892.
- Beiträge zur Pilzflora von Schleswig-Holstein. 1892.
- Pilze von der Insel Sybt. Schlesw. 1892.
- *Fungi brasilienses*. Leipzig 1892.
- Herpell G.* — Das Präpariren und Einlegen der Hutpilze. Berlin 1888.
- Hesse R.* — Keimung der Sporen von *Cyathus striatus*. Berlin.
- *Sphærosoma fragile*. — *Octaviana lutea* — *Cryptica* — *Hysterangium rubricatum*. — *Leucogaster* — (In Pringsh. Jahrb. XIII). Berlin s. a.
- Mikroskop. Unterscheid. der Lycoperda-
ceen-genera. Berlin.
- Entwicklungsges. der Tuberaceen und Elaphomyceten. Cassel 1889.
- Entwick. der Hypogæen. Cassel 1890.
- Die Hypogæen Deutschlands. Halle 1891.
- Hildebrand F.* — Ueber einige neue Saprolegnien. Bonn 1867.
- Hisinger E.* — Recherches sur les tubercules du *Ruppia* et *Zanichellia* provoqués par *Tetramyxa*. Helsingfors 1887.
- *Aecidium conorum-abietis* in Finland. (Bot. Not. 1876).
- *Puccinia Malvacearum* in Finland (Bot. Not. 1891).
- Hoffmann G. F.* — Nomenclator fungorum. Berlin 1789-1790.
- H. Mykologische Berichte. Giessen 1870-1872.
- Sylloge der Pilze d. Grossherz. Hessen. Leipzig 1863.
- Icones analyticae fungorum. Giessen 1861-1865.
- Hogg J.* — Mycetoma. London 1871.
- Observations on the vegetable parasites. London 1866.
- Holmskjöld Th.* — Beata ruris otia Fungis Dani-
cis impensa. Havnæ 1799.
- Howse T.* — Cryptogamic Flora of Kent. Fungi S. 1. et a.
- Humphrey J. E.* — Notes on various diseases (of plants) from Rep. Massachus. Agr. Stat. 1890.
- Johanson C. J.* — Svampar fran Island. Stockholm 1884.
- Om svampslägtet *Taphrina*. Stockholm 1885.
- Ueber Peronospor. Ustilag. und Uredineen Jämtlands und Härjedalens. Cassel 1886.
- Studier öf. *Taphrina*. Stockholm 1887.
- Johnson A. E.* — The mycological Flora of Minnesota. Minneapolis 1877-78 (Bull. Minnes. Acad. N. S.).
- Jönsson B.* — Entstehung schwefel. Celkörper in *Penicillium glaucum*. Cassel 1887.
- Johow F.* — Ueber westindische Hymenolichenen. Berlin 1884.

- Kalchbrenner C.* — Adatok a szepesseg viranyahoz. Pest 1863.
- A szepesi Gombak Jepyzeke. Pest 1865 et 1868.
- Fungi Macowaniani. London 1882 (Grev. X.).
- Sziberiai es Delamerikai Gombak. Budapest 1878.
- Fungi Remyani. Toulouse 1882.
- Phalloidei novi v. minus cogniti Budapest 1880.
- Gasteromycetes novi v. minus cogniti. Budapest 1884.
- Kalchbrenner et Thuemen.* — Fungorum in Itinere Mongolico a Potanin et in China boreali a Bretschneider lect. enumeratio. St Petersburg 1880.
- *C. et Schulzer S.* — Icones selectæ Hymenomyces. Hung. Pest 1873.
- Kampmann M. F. E.* — Matériaux pour une flore crypt. de l'Alsace. Champignons. Strasbourg 1870.
- Karsten P. A.* — Mycol. Fennica. Helsingfors 1871-1878.
- Fungi in insulis Spetsbergen et Beeren Eiland. Stockholm 1872.
- Fungi novi v. minus cogniti Fenniae et Galliae. Toulouse 1887.
- Rysslands, Finlands Hattsvampar. Helsingf. 1879-82.
- Finlands Rost- och Brandsvampar. Helsingfors 1884.
- Kritisk Ofvers. of Finlands Basidsvampar. Helsingfors 1889.
- Sphærospideæ hucusque in Fennia observatæ. Helsingfors 1890.
- et *Roumeguère.* — Champignons nouv. du Tonkin rec. par Balansa. Toulouse 1890.
- Fungi novi v. minus bene cogniti. Toulouse 1890.
- et *Hariot.* — Fungi novi. Toulouse 1890.
- Icones selectæ Hymenomycetum nondum delineatorum. Helsingforsiae I-III, 1885-1889.
- Diagnoses fungorum nonnullorum nov. Fenniae. Toulouse 1888.
- Revisio monographica atque Synopsis Ascomycetum in Fennia hucusque detect. Helsingfors 1885.
- Fungi aliquot novi in Brasilia a Doct. E. Wainio. Dresden 1889.
- Fungi quidam novi. Toulouse 1889.
- Aliquot species novæ fung. Toul. 1889.
- Symbolæ ad Mycologiam Fennicam. IX-XXXI. Helsingf. 1882-1892.
- Fragmenta mycologica. Dresden IV-XXXIV, 1883-1892.
- Fungi rariores Fennici atque nonnulli Sibirici a Doct. E. Wainio lecti. Dresd. 1884.
- Kellerman W. A.* — Preliminary Report on smut in Oats (Bull. Kans. Agr. Coll.). Topeka 1889.
- Partial List of the Kansas paras. fungi. Topeka 1885.
- and *Swingle* — Sorghum blight and branch knot of the Hackberry. Manhattan 1888.
- Fungicid for stinking Smut of Wheat. Topeka 1890.
- Report on the loose smuts of Cereals. Topeka 1890.
- *Galloway B. T.* — The Journal of Mycology. Manhattan, Washington, I-VII, 1885-1891.
- Kickx J.* — Note sur une nouvelle esp. exotique de Polyporus. Bruxelles s. a.
- Notice sur quelques champignons du Mexique. Bruxelles s. a.
- Kirchner O.* — Ueber einen in Mohnöl lebenden Pilz. Berlin 1888.
- Beschreibung einiger neuer in südl. Bndweis. Pilze. Prag 1856.
- Klein J.* — Mykologische Mittheilungen. Wien 1870.
- Klotzsch J. F.* — Fungi exotici e collectionibus Britannorum. Berlin 1883.
- Krüger W.* — Ueber Krankheiten und Feinde des Zuckerrohrs in Java. Dresden 1890.
- Krupa.* — Zapiski Mykologiczne. Kracow 1887.
- Kühn J.* — Die Krankheiten der Kulturgewächse. Berlin 1858.
- Lanzi M.* — I funghi della prov. di Roma. Roma 1883 (III).
- L'Agaricus tumescens. Roma 1881.
- Fungi in ditone Floræ romanæ enumerati. Roma 1884.
- I Funghi commestibili e l'igiene. Roma 1888.
- Lagerheim O.* — Algologiska och mykologiska Lapmark. Stockh. 1884.
- Mykologiska Bidrag. Lund 1884.
- Mykologiska Bidrag. Stokholm 1887.
- Mykologiska Bidrag. Bot. Not. 1888.
- Eine neue Entorrhiza. Dresden 1888.
- Neue Beiträge zur Pilzflora von Freiburg und Umgebung. Freiburg I-III, 1888-1889.
- Ueber einige neue od. bemerk. Uredineen. Dresden 1889.
- Revision des Exsicc. Kryptog. Badens von Jack etc. Freiburg 1888.
- Genre nouveau de Chytridiacées. Paris 1888.
- Mykologisches aus dem Schwarzwald. Freiburg 1888.

- Lagerheim O.* — Ueber eine neue Peronospora-Art. aus Schwedisch-Lappland. Stockholm 1888.
- Ueber eine neue grasbewohnende Puccinia. Berlin 1888.
- Un nouveau genre d'Uredinées (Rostrupia). Paris 1889.
- Puccinia Bäumléri n. sp. Wien 1890.
- Revision des Ustilaginées et Uredinées de l'herbier de Welwitsch. Coimbra 1889.
- Ein neuer phosphoresc. Polyporus aus Angola. Coimbra. 1890.
- Sur un nouv. paras. de la vigne, Uredo. Vialæ. Paris 1890.
- Lambotte E.* — La flore mycol. de la Belgique. Suppl. I. et II. Bruxelles 1887-1889.
- Etude comparative sur le mycelium de Sphærotheca et de Pleospora et ses protospores. Toul. 1891.
- Lamy E.* — Simple aperçu sur les plantes cryptogames de la Haute Vienne. Limoges 1860.
- Langlois A. B.* — Catalogue de plantes phan. et cryptog. de la basse Louisiana. Pointe-à-la-hâche 1887.
- Laurent L.* — Recherches sur le polymorphisme du Cladosporium herbarum. Sceeux 1888.
- Le Breton A.* — Mélanges mycologiques. Rouen 1884.
- Essai sur quelques especes critiq. de Pleospora. Rouen 1887.
- Une variété probable du Polyporus obducens. Rouen 1887.
- Notes mycol. diverses. Rouen 1886-1892.
- et *Malbranche A.* — Excursion cryptogamiques (envir. de Rouen). Rouen 1884.
- Lebert H.* — Pilzkrankheit der Fliegen. Zürich 1856.
- Lecaille Alf.* — Enumeration des champignons sur les feuilles des végétaux du Havre. Rouen 1879.
- Lehmann Friedr.* — Systematische Bearbeitung der Gatt. Lophiostoma. Halle 1886.
- Leitgeb M. H.* — Completoria complens. Wien 1881.
- Lenz H. und Wünsche O.* — Nützliche schädliche au verdächtige Schwämme. Gotha 1879.
- Lett H. W.* — The fungi of the North of Ireland. Belfast 1886.
- Léveillé J. H.* — Lettre sur la maladie des cerises. Paris s. a.
- Recherches sur le développement des Uredinées. Paris 1837.
- Description de quelques espèces nouv. de Champignons. Paris 1841.
- Observations sur quelques champign. de la Flore des env. de Paris. Paris 1843.
- Fungi in Demidoff Voyage dans la Russie mérid. et la Crimée etc. Paris 1842.
- Description des champignons de l'herbier du Museum de Paris. Paris 1846.
- Léveillé J. H.* — Description du Pleuropus eleutherophyllus. Paris 1825.
- Considérations mycologiques. Paris 1846.
- Note sur le genre Dictyophora et memoir sur l'Ergot. s. a.
- Recherches sur l'hymenium des champignons. Paris 1837.
- et *Persoon.* — Fungi in Gaudichaud Botanique de l'Uranie etc. Paris 1826.
- et *Montagne.* — Fungi in Voyage de la Bonite. Paris 1839-46.
- Sur la disposition méthodique des Uredinées. Paris 1847.
- Uredinées, Tubercacées, Agaric. (extr. du Dict. univ. d'hist. nat.). Paris 1840.
- Fungi novo-granatenses. Paris 1863.
- Remarques sur l'amadou. Paris 1854.
- Libert M. A.* — Memoire concernant les plantes cryptogam. (Ascoxytacei). Lille 1831.
- Liboschitz J.* — Beschreibung eines neuentd. Pilzes (*Dendromyces*). Wien 1814.
- Licopoli G.* — Osserv. della vegetaz. dell' Uredo Ruborum. Napoli 1871.
- Limminghe A. (de).* — Flore mycologique de Gentinnes. Namur 1857.
- Lindau G.* — Ueber die Anlage und Entwickl. einiger Flechtenapothecien. Regensburg 1888.
- Lindblad M. A.* — Synopsis Hydnaceorum in Suecia nascentium. Upsaliæ 1853.
- Lindsay L.* — Enumeration of Micro-lichens parasitic on other. Lichens (London) 1869.
- Observations on new Lichens and Fungi collected in Otago New Zealand. Edinburgh 1866.
- Observations on new lichenicolous Microfungi. Edinburgh 1869.
- Lindstedt K.* — Synopsis der Saprolegniaceen. Berlin 1872.
- Lindt W.* — Ueber einige neue pathogene Schimmelpilze. Bern 1886.
- List A.* — Untersuchung über die nied. Pilze in u. auf d. Körper des gesunden Schefes. Leipzig 1885.
- Lister A.* — Notes on Mycetozoa. London (Journ. of Bot. 1891).
- Læw E.* — Ueber zwei kritische Hyphomyceten. Berlin 1874.
- Ueber Dematium pullulans. Leipzig 1868.
- Zur Physiologie niederen Pilze. Wien 1867.
- Lohde G.* — Insectenepidemien welche durch Pilze etc. Berlin 1872.
- Lucand L.* — Figures peintes de Champignons de la France. Autun 1881 et seq.
- Ludwig F.* — Der braune Schleimfluss. Cassel 1888.
- Ueber Puccinia Saccardoi. Dresden 1889.
- Ueber einige neue Pilze aus Australien. Cassel 1889.

- Ludwig F.* — Ueber *Phragmidium albidum*. Cassel 1889.
 — Der Milch- und Rothfluss der Bäume. Cassel 1891.
- Lund N.* — Conspectus Hymenomycetum circa Holmiam crescentium. Christianiæ 1846.
- Lundström A. W.* — On mycodomatier pa papilionaceernas rötter (Bot. Not. 1887).
- Macbride J.* — Some account of the *Lycoperdon solidum*. London 1817.
- Macbride J. H.* — The saprophytic fungi of eastern Jowa. Jowa city 1888.
 — The saprophytic. fungi of eastern Jowa. Jowa City 1890.
 — Common species of edible fungi. Jowa City 1890.
- Macchiati L.* — Malattie delle piante prodotte da cause non perfett. note. Modena 1890.
 — Contribuzione alla biologia dei batteri dei bachi. Roma 1891.
 — Notizie intorno agli insetti, acari e parassiti vegetali. Modena 1891.
 — Biologia del *Bacillus Cubonianus* sp. n. Genova 1892.
- Magnin A.* — Castration androgène du *Muscari comosum*. Lyon 1891.
- Magnus P.* — Ueber eine durch das Mycel von *Polyporus Schweinizii* getödtete Weymouth-Kiefer. Berlin 1882.
 — Kurze Notiz über Hexenbesen. Berlin 1886.
 — *Melasmia Empetri*. Berlin 1886.
 — Beobachtung des Auftretens zweier Pilzarten die Champignonkulturen bei Berlin beeinträchtigen. Berlin 1887.
 — Ueber einige Arten der Gattung *Schinzia*. Berlin 1888.
 — *Peronospora effusa*. Berlin 1887.
 — Die bisher in bot. Garten zu Berlin Uredineen und *Ustilag*. Berlin 1887.
 — Epidem. Auftreten einer *Urophlyctis*. 1888.
 — Verzeichniss der bei Fürstenwalde gesamm. Pilze. Berlin 1889.
 — Bemerk. zu der von Dietel auf *Euphorbia* entdeckten *Melampsora*. Dresden 1889.
 — Einfluss der Lage des Substrats auf die Ausbildung d. *Polypor*. 1888.
 — Epidemische Erkrankung der Gartennelken 1883.
 — Ueber die Benennung zweier *Taphrina* etc. Dresden 1890.
 — Ueber eine neue *Puccinia* auf *Anemone ranunculoides*. Berlin 1890.
 — Ein neues *Exobasidium* aus der Schweiz. Zürich 1891.
- Magnus P.* — Ueber das Auftreten der Stylosporen bei den Uredineen. Berlin 1891.
 — Ueber den Rost von *Pinus Strobus*. Berlin 1891.
 — Verzeichniss der bei Oranienburg beob. Pilze. Berlin 1891.
 — Beitrag zur Kenntniss einer Oesterr. *Ustilaginee*. Wien 1892.
 — Erstes Verzeichniss der aus Kant. Graubünden herb. Pilze etc Chur 1890.
 — Verzeichniss der bei Tangermünde beob. Pilze. Berlin 1889.
 — System. Stellung von *Hydnocystis*. Dresden 1890.
 — Vorkomm der *Puccinia singularis*. Berlin 1890.
 — Verzeichniss der bei Freienwalde beob. Pilze. Berlin 1890.
 — Ein bemerk. Auftret. d. *Merulius lacrimans* in Freien. Dresden 1890.
 — Ueber *Uromyces* auf *Glycyrrhiza*. Berlin 1890.
 — Einige Beobacht. zur nähren Kenntniss der Art. *Diorchidium* und *Triphragmium*. Berlin 1891.
 — Ein Beitrag zur Beleuchtung der Gatt. *Diorchidium*. Berlin 1891.
 — Bemerk. gegen Herrn Raciborski über *Uredo excavata*. Dresden 1891.
 — Ueber einige von Herrn Schweinfurth in Eritrea gesamm. Uredineen. Berlin 1892.
 — Klein. Beitr. zur Kenntniss der paras. Pilze Kleinasiens. Leipz. 1891.
 — Zwei neue Uredineen. Berlin 1891.
 — Zue Umgrenzung d. Gatt. *Diorchidium* und Uebers. d. *Uropyxis*. Berlin 1892.
 — Zur Kennt. d. Verbreit. einiger Pilze. Berlin 1892.
- Malbranche A.* — Les microbes. Rouen 1884.
 — et *Letendre.* — Champignons nouveaux de Normandie. Rouen 1883.
 — et *Letendre.* — Champignons nouveaux de Normandie. Rouen 1884.
 — et *Letendre.* — Champignons nouv. on peu connus de Normand. Rouen 1887.
 — et *Niel E.* — Essai monogr. sur les *Ophiobolus* de Normandie. Rouen 1890.
- Mangin L.* — Sur le structure des *Peronosporées*. Paris 1890.
 — Sur la callose. Paris 1890.
 — *Peronosporées* récoltées aux env. de Paris en 1890.
- Marchal E.* — Champignons coprophiles de la Belgique. Bruxelles I-VI, 1885-1891.
 — *Pyrénomycètes coprophiles* nouveaux pour la Flore Belge. Bruxelles 1883.
 — *Bommerella*, nouv. genr. de *Pyrenomyc.* Bruxelles 1885.

- Marchal E.* — Diagnoses de trois esp. nouv. d'Ascomycèt. coproph. Bruxelles 1886.
- Martelli U.* — Gli Agaricini del Micheli. Firenze 1884.
- Florula Bogosensis. Firenze 1886.
 - Due funghi nuovi dell'agro bellunese. Firenze 1888.
 - Nota sopra una forma singolare di Agaricus. Firenze 1888.
 - Fosforescenza dell'Agaricus olearius. Firenze 1889.
 - Sul Polyporus Gelsorum Firenze 1889.
 - Sulla Torula spongicola. Fir. 1890.
 - Sulla Taphrina deformans. Fir. 1889.
 - Black-Rot sulle viti presso Firenze. Fir. 1891.
- Martius C. Ph.* — Decas plantarum mycetoidearum Brasil. Monachii 1821.
- Marzell H.* — Ueber einige durch Pilze verursachte Zersetzungsprozesse des Holzes München 1882.
- Massalongo C.* — Uredineæ veronenses. Verona 1883.
- Sull'alterazione di colore dell'Ameranth. infetto da oospore di Cystop. Bliti. Firenze 1891.
 - Sulla Taphrina campestris. Fir. 1891.
 - Ueber einige neue Micromycetes. Cassel 1889.
 - Nuovi miceti dell'agro Veronese. Firenze 1889.
 - Contribuzione alla Micologia Veronese. Verona 1889.
 - Osservazione sulla Taphrina Umbelliferarum. Firenze 1889.
 - Nova species e gen. Taphrina. Firenze 1889.
 - Sulli scopazzi di Alnus causati dalla Taphrina epiphylla. Firenze 1891.
 - Sulla Taphrina polyspora v. Pseudoplatani. Firenze 1892.
- Massee G.* — A monograph of the genus Lycoperdon. London 1887.
- Description and Live-history of a new fungus *Milowia nivea*. London 1884.
 - New British Micro-fungi. London 1885.
 - Remarks on the disease of Colocasia in Jamaica. London 1887.
 - A Monograph of the genus Calostoma. London 1888.
 - On the presence of sexual organs in *Æcidium*. London 1888.
 - A Revision of the genus Bovista. London 1888.
 - On the type of new order of fungi (Mata). London 1888.
 - A Monograph of the Thelephoreæ. London, I, 1888, II, 1889.
- Massee G.* — Revision of the Trichiaceæ. London 1889.
- A Monograph of the British Gasteromycetes. London 1889.
 - A Monograph of the gen. Podaxis. London 1890.
 - British Fungi. Phycomycetes and Ustilagineæ. London 1891.
 - A Monograph of the Myxogastres. London 1892.
- Mattei E. E.* — I Batterioceci. Bologna 1887.
- Mattirolo O.* — Contribuzione allo studio del genere Cora. Firenze 1881.
- Sullo sviluppo di due nuovi Hypocreaeci. Firenze 1886.
 - Illustrazione della Cyphella endophila. Torino 1887.
 - Sul parassitismo dei Tartufi e sulla questione delle Mycorrhizæ. Messina 1887.
 - Illustrazione di tre nuove specie di Tuberacee italiane. Torino 1887.
 - Intorno al valore specifico di Pleospora Sarcinulæ e P. Alternariæ. Torino 1888.
 - Contribuz. alla biologia del genere Epicoccum. Genova 1889.
 - Sul polimorfismo della Pleospora herbarum etc. Genova 1889.
 - e *Buscalioni*. — Si contengono bacteri nei tuberc. delle Legum?. Messina 1887.
 - e *Buscalioni*. — Ancora sui bacteroidi delle Leguminose. Messina 1887.
- Ménier Ch.* — Note sur deux nouvelles Lépiotes. Lons-le-Saunier 1890.
- Mérat F. V.* — Nouvelle Flore des environs de Paris. Bruxelles 1837.
- Meschinelli L.* — Di un probabile Agaricino miocenico. Padova 1891.
- Minks A.* — Symbolæ licheno-mycologicæ. Cassel 1881-1882.
- Miquel F. A. G.* — Fungorum aliquot exoticorum recensio. Amsterdam 1852.
- Mix G. L.* — On a Kephirlike yeast found in the United-States. New York 1891.
- Möller Alfr.* — Ueber die Cultur flechtenbildender Ascomyceten. Münster 1887.
- Montagne C.* — Notice sur les plantes crypt. récemm. découv. en France. Paris I-VI, 1834-1837.
- Bosquejo organogr. y fisiológico de los Hongos. Paris 1844.
 - Phytographia canariensis. Plantæ cellulares. Paris 1840.
 - Cryptogamia Cubensis. Paris 1842.
 - Cryptogamæ Nilgherienses. Paris 1842.
 - Enumeratio fungorum a cl. Drège in Africa merid. etc. Paris 1847.
 - Flora chilena. Plantæ cellulares. Paris 1854.

- Montagne C.* — *Cryptogamia Guyanensis*. Paris 1855.
- Mouton V.* *Ascomycètes des envir. de Llège*. Bruxell. I, 1886, II, 1886.
- *Notice sur quelques Ascomyc.* Bruxell. 1889.
- Morgan A. P.* — *The Mycologic Flora of the Miami Valley*. Hymenomyc. Cincinnati. 1883-88.
- *The North American Geasters*. (Amer. Nat. 1884).
- *Lewis De Schweinitz* (Bot. Gaz. 1884).
- *North Amer. Agarics (Amanita)*. Manhattan 1887.
- *The genus Geaster* (Amer. Nat. 1887).
- *North Amer. Fungi. Cincinnati, I-IV* 1888-1891.
- Mori A.* — *Enumerazione dei funghi della provincia di Modena e Reggio*. Firenze, I 1886, II 1889.
- Morini F.* — *Alcune considerazioni sugli Schizomiceti*. Milano 1882.
- *Gli Schizomiceti*. Milano 1883.
- *Alcune osservazioni sul Mucor racemosus*. Bologna 1883.
- *Il carbone delle piante*. Milano 1884.
- *Saggio di una disposizione sistematica dei funghi viventi negli animali*. Bologna 1884.
- *Di una nuova Ustilaginea*. Bologna 1884.
- *Ancora sulla questione della sessualità nelle Ustilaginee*. Bologna 1885.
- *Oss. su una nuova malattia del frumento*. Firenze 1886.
- *Prime fasi evolutive di Lachnea theleboloides*. Bologna 1887.
- *Sulla germinaz. delle spore dell'Ustilago Vaillantii*. Bologna 1886.
- *Ricerche sopra una Chitridiacea*. Bologna 1887.
- *Biografia degli apotecii della Lachnea theleboloides*. Bologna 1889.
- *La sessualità nel regno vegetabile*. Sassari 1889.
- *Ricerche sopra una nuova Gimnoascacea*. Bologna 1889.
- *Sviluppo di Thecaph. aterrimum e Urocystis primulicola*. Bologna 1890.
- Morren C.* — *Notice l'histologie de l'Agaricus epixylon*. Bruxelles (Bull. Ac. Roy. Belg. VI.).
- Müller C.* — *Meine Stellung zur Frage von den Spermamöben der Saprolegnien*. Cassel 1883.
- Müller F.* — *Notes on Victorian Fungi*. Melbourne 1885.
- *Further Additions to the Census of the genera austral.* Sydney 1886.
- Munkert J. C.* — *Beitrag zur Augsburger Pilzflora*. Augsburg 1869.
- Murray G.* — *On two new Species of Lentinus*. London 1886.
- Nees ab Esenbeck.* — *Plantarum nonnull. mycetoidearum in horto bonnensi evolutio etc.* Bonn 1821.
- Neubner Ed.* — *Beiträge zur Kenntniss der Calicieen* Regensburg 1883.
- v. Niessl G.* — *Contributiones ad Floram mycologicam Lusitanicam. Ser. IV. Conimbriæ* 1883.
- Nylander W.* — *Observationes circa Pezizas fennicas*. Helsingfors 1861.
- Ersted A. S.* — *Nouvelles observations sur un Champignon parasite*. Copenhague 1866.
- *Nouveaux essais de ssmis faits avec champ. paras.* Copenhague 1867.
- Oltmanns F.* — *Ueber die Entwicklung der Peritheci. d. Chætomium*. Lipzig 1887.
- Opatowski F.* — *Commentatio de familia fungorum Boletoidorum*. Berolini 1836.
- Opiz M.* — *Deutschlands erypt. Gewächse nach Standorten*. Prag 1817.
- Otto J. G.* — *Versuch einer auf die Ordnung der Lamellen Anordnung der Agaricorum*. Leipzig 1816.
- Oudemans C. A. J. A.* — *Notiz über einige neue Fungi coprophili*. Dresden 1882.
- *Zwei neue schädliche Pilze Coryneum et Discella*. Dresden 1883.
- *Identität von Oidium monosporium, Peronospora obliqua et Ramularia obovata*. Dresden 1883.
- *Bijdrage tot de Flora mycol. van Nederland, IX.* 1883.
- *Zwei neue Pilze*. Dresden 1883.
- *Revisio Pyrenomycetum in Regno Bataavorum hucusque detectorum*. Amsterdam 1884.
- *Pleospora gummipara*. Dresden 1883.
- *Aanwisten voor de Flora mycologica van Nederland, I-X.* Amsterdam 1872-1885.
- *Contributions à la Flore mycol. des Paysbas I-XIII.* Amsterdam 1876-1889.
- *Contributions à la Flore mycologique de Nowaja Semlja*. Amsterdam 1885.
- *Micromycetes nouveaux*. Amsterdam 1890.
- *Observations sur quelques Spheropsidées du Dianthus*. Amsterdam 1890.
- *Eine Rectification*. Dresden 1890.
- *Trichophila*. Dresden 1890.
- *Eine Rectification über Cæoma nitens*. Dresden 1891.

- Paoletti G.* — Revisione del gen. Tubercularia. Padova 1887.
- Saggio di una Monografia del genere *Eurypa* (sub prelo).
- Parker G. H.* — Morphology of *Ravenelia*. New York 1886.
- Passerini G.* — La nebbia dei gelsi. Parma 1884.
- Ancora della nebbia dei gelsi. Parma 1884.
- Fungi gallici novi. Bordeaux 1885.
- Un'altra nebbia del frumento (Gibellina). Parma 1886.
- *Pyrenomycetes novi aliquot in Camellia japonica*. Toul. 1887.
- La nebbia del pomodoro. Parma 1889.
- Sopra alcune *Phoma*. Fir. 1890.
- Diagnosi di Funghi nuovi I-V. Roma 1887-1891.
- et *Beltrani*. — Fungi siculi novi. Roma 1882.
- *Thümen, Brunaud*. — Fungi gallici novi. Bordeaux 1885.
- Patouillard N.* — *Tabulæ analyticæ fungorum*. Paris 1883-89.
- Champignons de la Chine récoltés par M. Delavay. Toulouse 1886.
- Champignons parasites exotiq. Toulouse 1886.
- Les Hymenomycètes d'Europe. Anat. génér. Paris 1887.
- Champignons de la Nouvelle-Caledonie. Poligny 1887.
- Sur quelques espèces de *Meliola*. Toulouse 1883.
- Fragments mycologiques. Paris 1890.
- Le genre *Ganoderma*. Lens-le-Saunier 1889.
- Quelques champ. de Chine récol. par M. Delavay. Toulouse 1890.
- Le genre *Podaxon*. Lons-le-Saunier 1890.
- Une *Clavariée* entomogène. Toulouse 1892.
- *Septobasidium*. Paris 1892.
- *Podaxon squamosus*. Lons-le-Saunier 1891.
- Organism. de quelq. Champign. exot. Lons-le-Saunier 1891.
- Paulet et Léveillé*. — *Iconographie des Champignons*. Paris 1855.
- Pazschke O.* — Diagnoses spec. nov. in *Fungi Eur. Cent.* 37-38. Dresd. 1890-91.
- Peck C. H.* — New species of fungi. Bull. Torr. Bot. Cl. 1883 et seq.
- A new genus of Sphæriaceous Fung. (*Neopeckia* Sacc.) (Bull. Torr. bot. Cl. 1883).
- New species of Fungi-Myriadoporus (Bull. Torr. bot. Cl. 1884).
- New species of Fungi (Bull. Torr. bot. Cl. New York 1885).
- Peck C. H.* — Bulletin of the New York State Mus. I, 2. Albany 1887.
- Annual Reports of the state botanist of the St. Museum. N. York, 32-44. Albany 1879-1891.
- Boleti of the United States, Albany 1889.
- Peirce G. J.* — Notes on *Corticium Oakesii* and *Michenera Artocr.* (Torr. Cl. 1890).
- Penzig O.* — Note micologiche I-III. Venezia 1884.
- Studi botanici sugli Agrumi. Roma 1887.
- Persoon C. H.* — *Icones pictæ rariorum fungorum*. Parisiis 1803-1806.
- Peyritsch J.* — Ueber einige Pilze aus der Familie der Laboulbenien. Wien I, 1871, II, 1873, III. 1875.
- Pichi P.* — Alcune osservazioni sui tuberculi delle Leguminose. Pisa 1888.
- *Peronospora* nel peduncolo dei grappoli Conegliano 1890.
- Sopra l'azione dei sali di rame nel mosto d'uva sul *Saccharomyces ellipsoideus*. Conegliano 1891.
- Pirotta R.* — *La Peronospora viticola*. Milano 1881.
- Primi studi sul mal nero nelle viti. Alba 1882.
- Sulla malattia dei grappoli (*Coniothyrium Diplodiella*). Alba 1887.
- Ancora sul *Coniothyrium*. Roma 1887.
- Sulla *Puccinia Gladioli*. Firenze 1891.
- *Urocystis primulicola*. Fir. 1891.
- e *Riboni G.* — *Studii sul latte*. Milano 1879.
- Phillips W.* — *New British Discomycetes*. London
- *Monstrosities in fungi*. London.
- *The Luminosity of fungi*. Lond. 1881.
- *A Revision of the genus Vibrissea*. London 1881.
- and *Plowright C. B.* — *New and rare British Fungi*. London 1885.
- *A manual of the British Discomycetes*. London 1887.
- and *Harkness H. W.* — *Fungi of California*. S. Francisco 1884.
- Planchon L.* — *Cas d'empoisonnement par l'Ananita citrina*. Lons-le-Saunier 1891.
- Plowright C. B.* — *On the fungoid Diseases of the Tomato*. Lond. 1881.
- *Faune and Flora of Norfolk* (Addit.). Norfolk 1884.
- *The Fungi of Norfolk*. Norfolk 1884.
- *A monograph of British Uredineæ and Ustilagineæ*. London 1889.
- and *Wilson*. — *On Barya aurantiaca*. London 1884.
- Pochettino G.* — *I microbii*. Roma 1885.
- Poetsch J. S. und Schiedermayer K. B.* — *Syst. Aufzählung d. in Erzherzogth. Oesterr. samenlösen Pflanzen*. Wien 1872.

- Prillieux et Delacroix*. — Le Champignon parasite de la larve du hanneton. Paris 1891.
- Pulteney B.* — A minute epiphyllous Lycoperdon. London 1792.
- Quélet L.* — Quelques espèces de Champignons ou Suppléments aux Champignons du Jura et des Vosges, I-XVII. Paris 1877-1889.
- Sur la saveur et l'odeur des Champignons. Autun 1886.
- Flore mycologique de la France. Paris 1888.
- Enchiridion fungorum. Lutetiæ 1886.
- Rabenhorst, Winter, Prantl.* — Hedwigia. Dresden 1852-1892.
- Raciborski M.* — Sluzowce. Krakowie 1884.
- Przyczynek do Znajomosci Sluzowcow. Krakow 1884.
- Bemerkungen über einige beschrieb. Myxomyceten. Dresden 1887.
- Materyjaly (Uredineæ). Krakow 1886.
- Ráthay E.* — Ueber die von Exoascus Arten Degeneration etc. Wien 1878.
- Raunkier C.* — Myxomycetes Daniæ. Copenhagen 1888. — Description in English. Copenh. 1889.
- Rees M.* — Die Rostpilzformen der deutschen Coniferen. Halle 1869.
- Botanische Untersuchungen über die Alkoholgährungspilze. Leipzig 1870.
- Befruchtungsvorgang bei den Basidiomyceten. Erlangen 1875.
- Rehm H.* — Ascomycetes Lojkani lecti in Hungaria, Transsylvan. et Galicia. Buda-Pest 1882.
- Bemerkungen über Ascomyceten. I-IV. Dresden 1882.
- Ascomyc fasc. XIV-XXI. Dresden 1882-1891.
- Revision der Hysterineen in herb. Duby. Dresden 1886.
- Exotische Ascomyceten. Dresden 1889.
- Die Discomyceten-Gattung Ahlesia. Dresden 1891.
- Reichardt H. W.* — Helminthosporium rhizoctonium in Nieder Oesterreich. Wien 1864.
- Diagnosen der neuen Arten von Pilzen der Novara-Expedition. Wien 1866.
- *Æcidium anisotomes*. Wien 1865.
- Beiträge zur Flora der Hawaiischen Inseln. Wien 1878.
- Reinke J. und Berthold G.* — Die Zersetzung der Kartoffel durch Pilze. Berlin 1879.
- Reissek S.* — Ueber Entophyten der Pflanzenzelle. Wien 1846.
- Rex G. A.* — Description of three new spec. of Myxomycetes etc. Philadelphia 1890.
- Richards H. M.* — The Uredo-stage of Gymnosporangium. (Bot. Gaz. 1889).
- Richon Ch.* — Description et dessin de plantes cryptogames nouvelles. Vitry 1879.
- De l'Hydnum Erinaceus et quelq. esp. de Nectria. Paris 1881.
- Sur le Vibriesea hypogæa et le Godronia Muhlenbeckii. Paris 1882.
- Notice sur le Dilophospora graminis. Vitry-le-françois 1882.
- Catalogue raisonné des champignons du dép. de la Maine. Vitry 1889.
- et *Roze E.* — Atlas des Champignons. Paris 1888.
- Richter H. E.* — Die neueren Kenntnisse von der krankmachenden Schmarotzerpilze. Leipzig I-V, 1867-1875.
- Robinson B. L.* — Notes on the genus Taphrina (Annals of Botany 1887).
- Röll J.* — Unsere essbaren Pilze. Tübingen 1889.
- Rolland L.* — Trois nouvelles espèce. de Discomyc. Poligny 1888.
- Une nouv. espèce de Bolet. Paris 1889.
- Excursion a Zermatt (5 champ. nouveaux). Sons-le-Saunier 1890.
- Une nouvelle espèce de Stysanus. Lons-le-Saunier 1890.
- Une visite au Musée Barla. Lons-le-Saunier 1891.
- Essai d'un calendrier des champignons comest. Lons-le-Saunier 1891.
- Excurs. mycol. dans les Pyrénées et les Alpes-mar. Lons-le-Saun. 1891.
- Quelques champignons nouveaux du golfe Juan. Lons-le-Saunier 1892.
- Romell L.* — Fungi aliquot novi in Suecia lecti (Bot. Not. 1889).
- Observationes mycologicæ. I. De Russula. Stockh. 1891.
- Rosenvinge L. K.* — Sur le noyaux des Hyménomycètes. Paris 188....
- Rossi-Doria T.* — Alcune specie di Streptothrix dell'aria. Roma 1892.
- Rostafinski J.* — Sluzowce (Mycetozoa). Paris 1875-1876.
- Rostrup E.* — Studier i Chr. Fried. Schumachers efterladte Svampesamlingen. Kopenhagen 1885.
- Islands Svampe. Kopenhag. 1885.
- Svampe fra Finmarken samlende 1885 af prof. Warming. Copenh. 1886.
- Recherches sur le genre Rhizoctonia. Copenhag. 1886.
- Fungi Groenlandia. Copenhagen 1888.
- Mykologiske Maddelelser. Copenhagen 1888.
- Rustsvampe. Copenhagen 1889.
- Ustilagineæ Daniæ. Copenhagen 1890.

- Rostrup E.* — Taphrinaceæ Daniæ. Copenhague 1890.
- Tillæg til Groenlands Svampe. Copenhague 1891.
- Ascomyceter fra Dovre Norges. Kristiania 1891.
- Roumeguère C.* — Revue Mycologique Toulouse 1883-1892.
- Rousseau M.* — Notice sur Persoon (traduite de l'italien d'après le Doct. Fée). Bruxell. 1891.
- Saccardo P. A.* — Una nuova crittogama nei geli. Padova 1884.
- Conspectus generum Discomycetum. Cassel 1884.
- Miscellanea mycologica. Series I. Venezia 1884. Series II. Venezia 1885 (collaborante A. N. Berlese).
- Fungi Algerienses. Toulouse 1886.
- Fungi Brasilienses a cl. Balansa lecti. Toulouse 1885.
- Fungi Algerienses, Tahitenses et Gallici. Toulouse 1885.
- Funghi delle Ardenne contenuti nelle Crypt. Arduenn. d. Mad. Libert. Messina 1888.
- Un nouveau genre de Pyrenomycètes sphériacés. Toulouse 1888.
- Mycetes Sibirici (Adjuvantibus cl. Berlese, De-Toni, Paoletti et F. Saccardo). Bruxelles 1889.
- Mycetes aliquot Australienses. Dresden. I. 1889, II. 1890.
- Notes mycologiques. Lons-le-Saunier 1890.
- Fungi aliquot mycologiæ romanæ addendi. Romæ 1890.
- Fungi Abyssinici. Genova 1891.
- Pour les phytographes, particulièrement cryptogamistes, Recommandations. Padova 1891.
- Suggestions to Phytographists (Amer. Nat. 1891). — Rathschläge für die Phytographen (Hedw. 1891).
- et *Malbranche A.* — Fungi gallici Ser. V. Venezia 1883.
- et *Berlese A. N.* — Catalogo dei funghi italiani. Varese 1884.
- et *Berlese A. N.* — Fungi Australienses. Toulouse 1885.
- et *Berlese A. N.* — Mycetes aliquot guineenses. Toulouse 1889.
- et *Paoletti G.* — Mycetes Malacenses. Venetiis 1888.
- et *Roumeguère.* — Reliquiæ mycologiæ Libertianæ. Toulouse Ser. II. 1881. Ser. III. 1883. Ser. IV. 1884.
- Saccardo P. A. e D'Ancona N.* — I funghi mangerecci. Padova 1890.
- et *Bresadola J.* — Pugillus Mycetum austriacensium. Genova 1890.
- et *Schulzer.* — Micromycetes slavonici. Toulouse 1884.
- et *Marchal.* — Reliquiæ mycologiæ Westendorpianæ. Toulouse 1885.
- Sadebeck R.* — Kritische Untersuchungen über Taphrina-Arten. Hamburg 1890.
- Untersuchungen über die Pilzgatt. Exoascus. Hamburg 1884.
- Saunders W., Smith W., Bennett A.* — Mycological Illustrations. London 1871.
- Sauter A. E.* — Flora des Herz. Salzburg. Die Pilze. Salzburg 1878.
- Schlitzberger S.* — Standpunkt und Fortschritt der Wissenschaft in der Mykologie. Berlin 1881.
- Schröter J.* — Bericht über Vergiftungen durch Pilze in Schlesien. Breslau 1883.
- Ueber die Beziehungen der Pilze zum Obst- und Gartenbau. Breslau 1882.
- Ueber einige von R. Fritze auf Madeira und Teneriffa gesammelte Pilze. Breslau 1883.
- Mykol. Ergebn. einer Reise nach Norwegen. Breslau 1885.
- Essbare Pilze und Pilzculturen in Japan. Breslau 1885.
- Beiträge zur Kenntniss der Nordischen Pilze. Breslau 1887.
- Die Pilze Schlesiens. Breslau 1885-1889 (I).
- Schulzer v. Muggenburg S.* — Noch einmal über J. v. Lerchenfeld. Mycol. Bemerk. Hermannstadt 1884.
- Einige neue Pilz-Species und Variet. aus Slavonien. Dresden 1885.
- Unbefangene Revision der «Magyarhon gombaviranyahoz Hazslinzsky» (in Mitth. Siebenbürg. Vereins 1885).
- Einige Worte über die Magyarhon Myxog. Agram 1886.
- Schumacher C. T.* — Enumeratio plant. Sællandiæ. Cryptogamæ. Hafniæ 1883.
- Schumann K. und Hollrug M.* — Die Flora von Kaiser Wilhelm Land. — Fungi von Cooke u. Hennings. Berlin 1889.
- Scribner F. Lamson.* — Report on the fungus diseases of the grapevine. Washington 1886.
- Report of the chief of vegetable Pathology. Washingt. 1888.
- de Seynes J.* — Recherches pour servir à l'hist.

- nat. des végétaux inférieurs, II-III. Paris 1886-88.
- Setchell W. A.* — Preliminary notes on the species of *Doassansia* (and *Burrillia* and *Cornuella*). New York 1891.
- An examination of the Species of the genus *Doassansia*. London 1892.
- Seymour A. B.* — Distribution of *Puccinia heterospora* (Journ. Myc. 1885).
- Character of the injuries produced by paras. Fung. Cambridge 1887.
- List of fungi coll. in 1884 along the North. Pacific Rail road Boston 1889.
- Siebenmann F.* — Die Fadenpilze. Wiesbaden 1883.
- Slack H. J.* — The supposed fungus on *Coleus* leaves and also notes on *Podisoma fuscum* et *P. Juniperi*. London 1872.
- Smith J. E.* — Account of *Rhizomorpha medullaris*. London 1817.
- Smith W. G.* — New Species of Hymenomycetous fungi (of Stove). London 1873.
- Outlines of British Fungology (Supplement to Berk. Outl.). London 1891.
- de Soland Aimé.* — Étude sur les champignons de Maine et Loire. Angers 1867.
- Solla R. F.* — Bericht über einen Ausflug nach d. südl. I. Istrien. Wien 1891.
- Solms Laubach H.* — *Penicillioptosis clavariæformis*. Leide 1886.
- Sorauer P.* — Krankheit. der Tazetten und Hyacinthen. Oppeln 1876.
- Handbuch der Pflanzenkrankheiten. 2. Aufl. Berlin 1886.
- Zeitschrift für Pflanzenkrankheiten. Stuttgart 1891.
- Sorokin N.* — Mycologica. Kazan 1872 (rossice).
- Syphomycetes. Kazan 1874
- Aperçu systematique des Chytridiacées recoltées en Russie et dans l'Asie centr. Paris 1882.
- Material. Mycol. Asiat. Mosquæ 1884 (rossice).
- Ueber einige Krankh. der Kulturpflanzen. Kazan 1890.
- Spegazzini C.* — Fungi Guaranitici. Pug. I. Buenos-Aires 1883, II. 1888.
- Fungi Guaranitici nonnulli novi v. critici. Buenos-Aires 1891.
- Fungi Fuegiani. Buenos-Aires 1887.
- Las Faloideas argentinas. Buenos-Aires 1887.
- Fungi Patagonici. Buenos-Aires 1887.
- Fungi Puiggariani. Buenos-Aires 1889.
- Stapf O.* — Polak'sche Exped. nach Persien. Fungi auct. Wettstein. Wien 1884.
- Starbäck K.* — Bidrag till Sveriges Ascomycetflora (Bot. Not. 1887).
- Starbäck K.* — Nagra Skandinav. Pyrenomyceter. Stockholm 1889.
- Ascomyceter fran Oeland och Oestergoetland. Stokholm 1889,
- Nagra mykol. Notiser (Bot. Nat. 1890).
- Bidrag till Känn. om Sveriges Ascomycetenflora. Stokholm 1890.
- Stein F.* — Ueber zwei Schmarotzerpilze im Innern der Fichtennadeln. Leipzig 1853.
- Steinhaus J.* — Analytische Agariceen-Studien. Dresden 1888.
- Fungi nonnulli novi. Dresden 1887.
- Materialien zu Kryptogamenflora von Polen. Warschau 1887.
- Steinheim C.* — Ueber *Dædalea pleuropus* (Isis 1831).
- v. Sterbeek F.* — Theatrum fungorum. Antwerpen 1675.
- Stevenson J.* — Mycologia Scotica. Edinburgh 1879.
- Hymenomycetes britannici. Edinburgh 1886.
- and *Trail*. Mycologia Scotica. Supplem. (Scott. Nat. 1885).
- and *Paul D.* — Hymenomycetes of Inveraray. Perth 1889.
- Strauss F.* — Verzeichniss der in Bayern bis jetzt gefundenen Pilze. Regensb. 1850.
- Studer B.* — Beiträge zur Kenntniss der Schweizerischen Pilze. Bern 1890.
- Swingle W. T.* — A List of the Kansas species of Peronosporæ. Manhattan 1889.
- Tassi T.* — Le malattie degli olivi. Siena 1889.
- v. Tavel F.* — Beiträge zur Entwicklungsgesch. der Pyrenomyceten. Leipzig 1886.
- Das System der Pilze in Lichte der neuesten Forschungen. Zürich 1892.
- Taylor T.* — Certain Fungi parasitic on Plants. London 1875.
- Microscopic Investigations. Washington 1876.
- Tenison-Woods J. E.* and *Bailey F. M.* — On some of the fungi of New South Wales and Queensland. Sydney 1880.
- Thaxter R.* — Cert. cultures of Gymnosporangium. New York 1886.
- The Entomophthoræ of the United States. Boston 1888.
- Notes on cultures of Gymnosporangium (Bot. Gaz. 1889).
- On some N. Am. species of Laboulbeniaceæ. New York 1890.
- Report of the Mycologist Connect. Agric. Stat. New Haven 1890,
- The Potato Scab. New Haven 1890.
- On certain new or peculiar N. Am. Hyphomycetes (Bot. Gaz. 1891).

- Thaxter E.* — Supplementary note of N. Amer. Laboulbeniaceæ. New York 1891.
 — Report of the Mycologist (Connect. Agr. Stat.). New Haven 1890.
 — The Connecticut species of Gymnosporangium. New Haven 1891.
- Thomas Fr.* — Synchytrium und Anguillula auf Dryas. Cassel 1880.
 — Synchytrium pilificum. Berlin 1883.
 — Synchytrium cupulatum n. sp. Cassel 1887.
 — Synchytrium alpinum. Berlin 1889.
- v. Thuemen F.* — Ueber den Wurzelschimmel der Weinreben. Klosterneuburg 1882.
 — Die Blattfleckenkrankheit der Zuckerrüben (*Cercospora beticola*). Klosterneuburg 1882.
 — Beitr. zur Kenntn. der auf Pinus austriaca vorkommenden Pilze. Wien 1883.
 — Der Pilz-Grind der Weinreben. Klosterneuburg 1884.
 — Die Lederbeeren. Kloster. 1884.
 — Die Pilze des Eilbaumes. Wien 1884.
 — Die Phoma-Krankheit der Weinreben. Klosterneuburg 1886.
 — Die Pilze der Obstgewächse. Wien 1887.
 — Die Pilze des Aprikosenbaumes. Klosterneub. 1888.
 — Die Pilze der Reispflanzen. Klosterneuburg 1889.
 — Russthan und Schwärze, Klosterneub. 1890.
 — Pilze der Forschungsreise der Gazelle. Wien 1889 (?).
 — Die Pilze der Weinreben. Wien 1891.
 — Krankheiten der Apfelbaumblätter. Klosterneub. 1890.
 — Ein weing gekannter Apfelbaum-Schödling (*Hydnum Schiedermayeri*). Stuttgart 1891.
 — Die Black-rot-Krankheit der Weinreben. Wien 1891.
- Tichomirow W.* — *Peziza Kauffmanniana*. Moscou 1868.
- van Tieghem Ph. et Lemonnier G.* — Recherches sur les Mucorinées. Paris I 1873, II 1875, III 1878.
- Tillet de Clermont.* — Notice sur le *Dacryomyces* et sur le *Peziza fusarioides*. Abbeville 1840.
- de-Toni G. B.* — Revision of the genus *Doassansia*. Manhattan 1888.
 — Revisio monogr. generis *Geasteris*. Toulouse 1887.
 — Le malattie delle piante del Tabacco. Siena 1891.
- Trabut L.* — Les champignons parasites du criquet pèlerin. Paris 1892.
- Tracy S. M. and Galloway B. T.* — *Uncinula polychæta* (Bot. Gaz. 1888).
 — and *Galloway*. — Notes on West. Erysipheæ and Peronosporæ. Manhattan 1888.
- Trail J. W. H.* — Revision of Scotch Sphæropsideæ and Melanconieæ (Scott. Nat. 1887-88).
 — Revision of the Scotch Peronosporæ and New Scotch Microfungi. Perth 1887.
 — Report for 1885, 1887 and 1888 on the fungi East Scotland (Scot. Nat. 1887 and 1888).
 — Enumeration of Fungi coll. in Hardanger (Norway) in 1887. Perth 1889.
 — Revision of the Scotch Peronosporæ. Glasgow 1889.
 — *Micromycetes* of Inveraray. Perth 1889.
 — Revision of Scotch *Discomycetes*. Perth 1889.
 — Revision of the Uredineæ and Ustilagineæ of Scotland. Perth 1891.
 — Additions to list of Scotch *Discomycetes*. Perth 1890.
- Trelease W.* — Preliminary List of the parasitic fungi of Wisconsin. Madison 1884.
 — Notes on the relations of two *Cecidomyias* to Fungi. Madison 1884.
 — Observ. on several zooglœæ (Stud. Biol. Labor. of the I. Hopkins Univers. 1885).
 — The grape rot. Wiscons. 1885.
 — The genus *Cintractia* (Bull. Torr. Club, New York July 1885).
 — The spot disease of strawberry leaves (Rep. Wiscons. 1885).
 — Fungi injurious to grasses and clovers. Lansing N. Y. 1887.
 — Morels and Puff-balls of Madison, 1888.
- Trevisan V.* — I generi e le specie delle Batteriacee. Milano 1889.
 — Sui batteri spettanti al gen. *Klebsiella*. Milano 1889.
- Trog J. G.* — Verzeichniss schweizerischer Schwämme. Bern 1844.
 — Tabula analytica fungorum. Bernæ 1846.
- Tubeuf C.* — Beiträge zur Kenntniss der Baumkrankheiten. Berlin 1888.
- Viala P.* — Le Black Rot et le *Coniothyrium Diplodiella*. Paris 1888.
 — Les maladies de la vigne. Montpellier 1885.
 — 2 édit. 1889.
- Voglino P.* — Catalogo dei funghi parassiti dei cereali. Padova 1885.
 — Sul genere *Pestalozzia*. Padova 1885.
 — Observationes analyticæ in fungos agaricinos Italiae super. I Venezia 1886, II Firenze 1887.
 — Illustrazione di due Agaricini italiani. Torino 1888.

- Vogolino P.* — I funghi più dannosi alle piante coltivate. Casale 1891-92, I-VII.
- Voss W.* — Einiges z. Kenntn. der Rostpilze. Wien 1885.
- Ueber *Boletus strobilaceus*. Wien 1885.
 - Mycologia carniolica. Berlin I 1889, II 1890, III 1891, IV 1892.
 - Ueber Hacquet's *Clathrus hydriensis*. Wien 1882.
 - Matertalien zur Pilzkunde Krains. Wien III 1882, IV 1883, V 1887.
- Vuillemin P.* — Étude biologique sur les champignons. Nancy 1887.
- L'Ascospora *Beijerinckii* I-II. Paris 1884.
 - Sur les Pèzizes des chançres des Conifères. Paris 1888.
 - *Piptocephalis corymbifera*. Poligny 1887.
 - Sur les polymorphisme des Pezizes. Nancy 1886.
 - Les tubercules radicaux des Légumineuses. Nancy 1888.
 - La maladie du Peuplier pyr. Paris 1889.
 - Antibiose et symbiose (Olpidiée, Bactériées). Paris 1891.
 - Notes mycologiques. Nancy 1890
 - Mycorrhizes de l'Orchis mascula. Nancy 1889.
- Wahrlich W.* — Beitrag zur Kenntniss der Orchideenwurzelpilze. Leipzig 1886.
- Ward M.* — Morphol. and Development of the perithecium of *Meliola*, London 1882.
- On the tubercular swellings on the roots of *Vicia Faba*. London 1887.
 - Structure and life-history of *Entyloma Ranunculi*. London 1887.
 - A lily-disease. London 1884.
- Webber A. J.* — Catalogue of the Flora of Nebraska. Fungi etc. Lincoln 1890.
- Appendix to the Catalogue of the Flora of Nebraska. St. Louis 1892.
- Westendorp* — Description de quelq. cryptog. inédites ou nouv. de Flandre. Notice I-IX. Bruxelles. 1851-1866.
- Weltstein.* — Beiträge zur Pilzflora Niederösterreichs. Wien 1883.
- Untersuch. über einen neuen Paras. des menschl. Körpers. Wien 1885.
 - *Anthopeziza* nov. gen. *Discomycetum*. Wien 1885.
 - Vorarbeiten zu einer Pilzflora der Steiermark. Wien, I 1885, II 1887.
 - Fungi novi austriaci, I. Wien 1886.
 - Beitrag zur Pilzflora der Bergwerke. Wien 1885.
 - Zwei wenig gekannte Ascomyceten. Wien 1887.
- Wierzejski A.* — Note préliminaire sur le *Blanchardia cypericola*. Paris 1890.
- de Wildeman E.* — Chytridiacées de Belgique. Bruxelles 1890.
- Weinmann C. A.* — Hymeno- et Gasteromycetes Imper. Rossici. Petropoli 1836.
- Winter G.* — New North American Fungi (Bull. Torr. Cl. 1883.
- Exotische Pilze. Dresden, I 1883, II 1885.
 - Contributiones ad Floram Mycologicam Lusitanicam. Series VI. Conimbricæ 1885.
 - Ueber die Gattung *Corynelia*. Berlin 1884.
 - Exotische Pilze (Flora 1884).
 - Contributiones ad Floram mycologicam Lusitanicam. Series V. Conimbricæ 1884.
 - Nonnulli fungi paraguayenses a Balansa lecti. Toulouse 1885.
 - New N. American Fungi (Journ. Myc. 1885).
 - Fungi australienses. Toulouse 1886.
 - Die Pilze Deutschlands, Oesterreichs und der Schweiz. Leipzig 1884-1887.
 - Uebersicht ueber Pilz-Systematik. Leipzig 1887.
 - Fungi australienses.. Toul. 1886.
 - Contribuções para o estudo da flora d'Africa. Coimbra 1886
- Wünsche O.* — Die Pilze. Leipzig 1877. Traduct. par J. L. Lanessan. Paris 1883.
- Zalewski A.* — Przyczynki do Zycioznawstwa grzybow. Krakow 1888.
- Zollinger H.* — Observationes phytograph. Fungi (Javanici) Regensb. 1847 (ex Flora).
- System. Verzeichniss der in indischen Archipel und aus Japan empfangenen Pflanzen. Zürich 1854.
- Zopf W.* — Die Conidienfrüchte von *Fumago*. Halle 1878.
- Zur Morphologie und Biologie der niederen Pilzthiere. Leipzig 1885.
 - Die Spaltpilze. Breslau 1883.
 - Die Pilzthiere. Breslau 1885.
 - Die Pilze. Breslau 1890.
- Zukal H.* — Ueber einige neue Pilze, Myxom. und Bakter. Wien 1885.
- Mycologische Untersuchungen. Wien 1885.
 - Ueber das Vorkommen von Reservestoffbehältern bei Kalchflechten. Leipzig 1886.
 - Untersuchungen über Pilzbulbillen. Wien 1886.
 - Ueber einige neue Ascomye. Wien 1889.
 - *Penicillium crustaceum* und *Ascobolus*. Wien 1887.
 - Entwicklungsg. Untersuch. aus dem Gabierte der Ascomyceten. Wien 1889.
 - Ueber den Zellinhalt der Schizophyten. Wien 1892.

DISCOMYCETÆ Fr. — Syll. VIII, p. 3*).

Fam. 1. **Helvellaceæ** SWARTZ.

Sect. 1. **Hyalosporæ.**

MORCHELLA Dill. — Syll. VIII, p. 8.

1. **Morchella Finoti** Sarr. et Feuill. Rev. mycol. 1885, pag. 151. — 4464

Pileo conico, tenui, costis verticalibus horizontalibusque alveolos inæquales sordide fulvescentes formantibus, margine nigricantibus; stipite albo-pruinoso, continuo fragili, apice dilatato, basi attenuato dein subbulboso; ascis cylindraceutis; sporidiis subglobosis, flavicantibus; paraphysibus linearibus æqualibus.

Hab. in umbrosis silvaticis pr. Fontainebleau Galliæ, majo-junio (Cap. FINOT). — Affinis *M. conicæ*.

UNDERWOODIA Peck 43 Rep. p. 32, t. IV, (1890) [Etym. a cl. prof. L. M. UNDERWOOD). — Ascoma carnosum, plus minus elongatum, columnare, sessile, extus longitudinaliter sulcato-costatum v. lacunosum, ubique ascigerum, intus excavatum, lacunoso-fistulosum v. cavitates plures longitudinales continens. Asci teretes, octospori, paraphysati. Sporidia ellipsoidea, continua, hyalina. — Indoles *Helvellæ* et *Morchellæ*, sed forma omnino peculiaris.

1. **Underwoodia columnaris** Peck 43 Rep. p. 32, t. IV, fig. 1-4. — 4465

Ascomate conico-columnari, sessili, recto v. curvulo, extus leviter sulcato-costato, albido v. brunneolo, intus albo, longit. pluri-lacunoso; ascis cylindraceutis, 70-80 \approx 6, octosporis; sporidiis monostichis ellipsoideis, verruculosis, 8-9 \approx 5, hyalinis, 1-nucleatis.

Hab. inter folia dejecta, Kirkville, Onondaga county Amer. bor. (J. T. FISCHER). — Fungus 10-15 cm. alt., 1,6-2,5 cm. lat.

MITRULA Fr. — Syll. VIII, p. 32.

1. **Mitrula luteola** Ell. Am. Nat. 1883, pag. 192. — Tota 1,5-3 cm. 4466

*) Cl. Rehm in suo eximio opere «Deutschl. Discom.» plura genera et species inter Discomycetes descripsit, quæ hucusque inter Lichenes enumerabantur. Has formas egomet ipse hic retuli, sed diagnoses maxime breviavi, ita ut opus Rehmianum, ceterum cuique mycologo necessarium, ad tutiores obtinendas determinaciones sit jugiter conferendum.

alta; capitulo plerumque compresso, 0,5-0,7 cm. lato, subplicato, læte flavo; stipite capitulo brevior et pallidior, tomentosus, sæpe subcavo; ascis angustis, deorsum attenuatis, 90-100 \approx 5-6, aparamphysatis; sporidiis monostichis, ellipsoideis, subinde inæquilateris, tenuiter 1-2-nucleatis, luteolis (supra chartam elapsis), 6-7 \approx 2,5-3,2.

Hab. ad terram inter acus pineos in silvis, Newfield N. J. Amer. bor.

MICROGLOSSUM Sacc. — Syll. VIII, p. 39.

1. **Microglossum partitum** Pat. Rev. myc. 1890, p. 135, t. 107^{bis} f. II. 4467

— Globosum, nigrum, coriaceo-gelatinosum, clavula linguiformi, 15 mm. long., 6-8 mm. lat. sæpius longitr. fissa apiceque incisa; hymenio amphigeno; ascis elongatis, 130 \approx 10, obtusis, jodo cærulescentibus, 8-sporis; sporidiis distichis, oblongo-fusoideis, 20-30 \approx 3-6, rectis v. curvulis, continuis, hyalinis; paraphysibus linearibus, apice cum ascis materie brunnea concretis.

Hab. ad terram Tsang-chan supra Ta-li Sinarum (DELAVAY). — Stipes 2-5 cm. long., 3 mm. cr., gracilis, glaber. Affine *M. Hookeri*.

HEMIGLOSSUM Pat. in Rev. myc. 1890, p. 135 (Etym. *hemi* dimidium, quasi *Geoglossum* dimidiatum). — Ascoma gelatinoso-coriaceum, simplex v. ramosum, linguiforme v. convolutum, stipitatum; hymenium unilaterale. Asci elongati poro dehiscentes, octospori. Sporidia ovoidea v. fusoidea, hyalina, minuta. Paraphyses lineares.

1. **Hemiglossum yunnanense** Pat. loc. cit. t. 107^{bis}, f. 1. — Clavulis 4468

simplicibus v. ramosis, incisus v. lobatis, margine revolutis, 1 mm. cr., 10-15 mm. long., 4-8 mm. lat., fulvis, facie sterili interiori pallidiori, ob cellulas ovoideas brunneas acervulatas furfuracea; ascis elongatis, stipitatis apice obtusis, 55-60 \approx 4, octosporis, circa porum jodo cærulescentibus; sporidiis monostichis, fusoideis, hyalinis, utrinque acutis, 2-guttulatis, 6-7 \approx 1,5-2; paraphysibus simplicibus, filiformibus, hyalinis.

Hab. ad terram (?), Tsang-chan supra Ta-li Sinarum (DELAVAY). — Stipes rigidus, brunneo-fulvus, 1-2 cm. long., 2-4 mm. cr.

Sect. 2. Phragmosporæ.

GEOGLOSSUM Pers. — Syll. VIII, p. 42.

1. **Geoglossum pumilum** Winter Grev. XV, p. 91. — Parvum, nigri- 4469

cans; clavula ovata vel subdifformi, capitata, distincta, parum et irregulariter compressa, glaberrima (!), usque 3 mm. longa, ut videtur, viscosa; stipite subcylindrico, sæpe parum compresso et sulcato, usque 6 mm. long., fasciculis pilorum fuscidulis, squarrosis obsito; ascis cylindraceo-clavatis, sessilibus, 8-sporis, $230-255 \approx 25-27$, paraphysibus filiformibus, sursum in clavam crassam, fuscidulam, usque 10μ . latam, incrassatis, interdum apicem versus articulatis, rectis; sporidiis cylindricis, utrinque parum angustatis rotundatisque, subcurvatis, plerumque 15-septatis, ad septa perparum constrictis, fuscis, $94-110 \approx 7$.

Hab. in terra argillacea, Sao-Francisco in Brasilia (ULE).

Fam. 2. **Pezizaceæ** FR.

Sect. 1. **Hyalosporæ.**

GEOPYXIS Pers. — Syll. VIII, p. 63.

1. **Geopyxis insolita** (Cooke) Sacc., *Peziza insolita* Cooke Mycogr. 4470 f. 375. — Stipitata, carnosissima, fragilis, albida, clavata, dein piriformis, demum cyathiformis, 2,5 cm. alt., 1,5 cm. v. ultra diam.; stipite crasso, attenuato; hymenio ochraceo-albo; ascis cylindraceis; sporidiis ellipticis, hyalinis, $22-25 \approx 10-12$; paraphysibus filiformibus, brevibus, septatis.

Hab. ad terram inter folia, in Scotia (REV. JOHN STEVENSON).

PEZIZA Dill. — Syll. VIII, p. 73.

1. **Peziza guaranitica** Speg. Guar. I, p. 135. — Ascomatibus carnosissimis, 20-30 mm. diam., basi breviter conico-stipitatis, supra dilatato-orbicularibus v. subdimidiato-expansis, globosis, levibus, tactu tamen velutino-asperulis; ad pedicellum tantum vix rugulosis, margine acuto integroque præditis, extus aurantiis, intus carneis vel violascenti-olivaceis, planissimis v. vix undulatis; ascis cylindraceis, antice acutiuscule rotundatis, postice attenuato-pedicellatis, p. sp. $50-65 \approx 5-7$, pedicello $25-40 \approx 3,5$, octosporis; paraphysibus filiformibus, apice rectis et non incrassatis; sporidiis recte v. oblique monostichis, rarius apice distichis, ellipticis, rectis vel sæpe inæquilateralibus vel subcymbiformibus, utrinque obtuse acutatis, $7-10 \approx 3$, non v. grosse 2-guttulatis, hyalinis.

Hab. ad truncos dejectos putrescentes in silvis prope Guarapi Brasiliæ.

2. **Peziza coriacella** Speg. F. Puigg. n. 386. — Ascomatibus disco- 4472
deo-turbinatis, sessilibus, marginatis, integris, 1-3 mm. diam., ex-
tus glabris olivaceis, disco albo-pallescente; ascis clavulatis, octo-
sporis, $70 \approx 7$, obturaculo jodi ope cærulescente; paraphysibus fili-
formibus capitulatis; sporidiis fusoideo-navicularibus, utrinque acu-
tiusculis, hyalinis, $10-12 \approx 3$.

Hab. in disco truncorum putrescentium in silvis prope Apiahy
Brasiliæ.

OTIDEA Pers. — Syll. VIII, p. 94.

1. **Otidea darjeelensis** Cooke Myc. f. 215 (*Peziza*). — Cupulis ex- 4473
pansis, subcochleatis, umbrinis, extus pallidis, furfuraceis, 5 cm. vel
ultra lat.; ascis cylindraceutis; sporidiis minoribus, scabro-punctatis,
endosporio simplici, $15 \approx 8$; paraphysibus linearibus.

Hab. ad terram, Darjeeling Indiæ.

DISCINA Fr. — Syll. VIII, p. 99.

1. **Discina Martinicæ** Pat. Journ. Bot. 1890, p. 199. — Ascomatibus 4474
expansis orbicularibus, marginatis, 25 mm. lat., extus glabris et
fulvis, 4-6 mm. cr., tuberculo stipitiformi brevi, disco plano vi-
noso-rufescente, 0,3 mm. cr., carne alba firmula; ascis opercula-
tis, cylindraceutis, longis, $300-350 \approx 15$, jodo non cærulescentibus,
octosporis; sporidiis monostichis ovoideis, obtusis, subinæquilateris,
 $20-22 \approx 10-12$, biguttatis v. granulosis, hyalinis; paraphysibus li-
nearibus, æqualibus, granulosis.

Hab. ad ligna putrida, Martinica (P. Duss).

HUMARIA Fr. — Syll. VIII, p. 118.

1. **Humaria hæmatochlora** Sp. F. Arg. IV, n. 216. — Syll. VIII, p. 147. 4475
— Var. **microspora** Speg. Guar. I, p. 136. — Ascomatum epithe-
cio sanguineo, papilloso; contextu corticis denso, sublateritio, in-
distincto, papillarum grosse laxèque celluloso, fulvo-rubro; carne
alba, e fibris hyalinis, tenuibus, $2-3 \mu$. cr., dense strigoseque con-
textis formata; ascis cylindraceutis, antice rotundatis, postice atte-
nuato-pedicellatis, 8-sporis, $55-58 \approx 5$; paraphysibus paullo longio-
ribus, $62-70 \approx 2-2,5$, apice incrassatis acuteque productis; sporidiis
ellipsoideis, suballantoideis, obtusiusculis, $6-8 \approx 1,5-2$.

Hab. ad corticem truncorum putrescentium Citri Aurantii
in hortis pr. Guarapí Brasiliæ.

2. **Humaria tristis** Bomm. Rouss. Sacc. Contr. Myc. Belg. IV, p. 14. — 4476

Ascomatibus sessilibus, congregatis, 0,7-1 mm. diam., ovoideo-hemisphæricis, fibrillis brunneolis, appressis extus conspersis, disco concavo, dein convexo, brunneo-livido; ascis cylindræis, 190-195 \approx 10-12; paraphysibus excedentibus, linearibus, simplicibus; sporidiis monostichis, ellipsoideis, levibus, 13-15 \approx 9.

Hab. ad terram ustam Groenendael in Belgio. — Affinis *H. rufescenti*.

3. **Humaria stromella** Cooke et Phil. Grev. XIX, p. 106, *Helotium* 4477 *strumellum* Cooke et Phil. in Herb. Kew. — Gregaria, sessilis v. subsessilis, plana, stromate pallide flavo, submembranaceo insidens, disco immarginato, sulphureo, extus minute granulosa, saturatior; ascis cylindræis, octosporis, 180 \approx 10; sporidiis fusoido-ellipsoideis, 15-19 \approx 8-9; paraphysibus copiosis, filiformibus, apice curvis et subinde furcatis.

Hab. in muscis emortuis, foliis, frustulis, Winton Novæ Zelandiæ. — Ascomata 1-2 mm. lat. Quoad stroma tenue species *H. carbonigenam* in memoriam revocat.

BARLÆA Sacc. — Syll. VIII, p. 111.

1. **Barlæa ? Archeri** (Berk.) Sacc. *Peziza* Berk. in Hook. Fl. Tasm. II, 4478 p. 274, t. XVIII, f. 72. — Sessilis, cinnabarina, primo concava, demum expansa, undulata, 6 mm. lat., deorsum pallidior et leviter tomentella; margine libero; ascis cylindricis; sporidiis globosis, 7-7,5 μ . diam., grosse 1-nucleatis.

Hab. in foliis emortuis plantæ succulentæ cujusdam, Tasmania. — Cl. Cooke monet in litt. in herb. Berkeley nunc tantum adesse exemplar Myxomycetis immaturi collapsi, nec *Pezizæ*.

LACHNEA Fr. — Syll. VIII, p. 166.

1. **Lachnea pinguis** Bull. t. 396, f. 1 (*Pez.*), *Lachnea carnosæ* Quél. 4479 XVI Suppl. p. 5, f. 15. — Ascomatibus urceolatis, dein cupularibus, 5-7 mm. lat., crassissimis, floccosis, albo-niveis; contextu albo, roseo-rufo-maculato; hymenio cavo, roseo-incarnato; sporidiis fusoido-ellipsoideis, 15-18 μ . long., roseis, 2-guttatis.

Hab. ad lignum putridum in Alpibus Tirolis (BRESADOLA). — *L. leucotrichæ* affinis.

2. **Lachnea Balansæ** Speg. Guar. I, p. 136 (*Peziza*). — Ascomatibus 4480 sessilibus, applanato-cupulatis, orbicularibus, 4-5 mm. cr., extus sordide olivascenti-fuscis, furfuraceis, disco plano v. concavo, levi, aureo v. aurantiaco, marginatis, dense longeque setulosis, setulis

rectis, cylindraneo-fusoideis v. cylindraneo-subclavulatis, apice attenuato-acutatis, basi leniter attenuatis, 2-5-septatis, 100-500 \approx 20-25; ascis cylindraceis, truncato-subrotundis, basi attenuato-pedicellatis, p. sp. 125-135 \approx 11-12, pedic. 75-85 \approx 5, octosporis; paraphysibus filiformi-clavatis, 10-15 \approx 5-8; sporidiis ellipsoideis, utrinque obtusiusculis, 16-18 \approx 10-11, hyalinis, eguttulatis, dense leniterque verruculosus.

Hab. ad cortices dejectos putrescentes in silvis prope Guarapî Brasilæ.

3. **Lachnea brasiliensis** (Wint.) Sacc. *Peziza brasiliensis* Winter 4481
Grev. XV, p. 91. — Ascomatibus sparsis, sessilibus, carnosus, primo hemisphæricis, demum magis explanatis, disciformibus, marginatis, usque 8 mm. latis, disco plano, aurantiaco-rubro, margine erecto vel incurvo, setis rigidis, longis, fuscis, crassis, septatis ob-
sito cinctis, extus pallidioribus; ascis elongato-cylindraceis, deorsum longe attenuatis, vertice fere truncatis, 8-sporis, 260-280 \approx 18; sporidiis monostichis, ellipsoideis, utrinque late rotundatis, hyalinis, dense grosseque reticulatis, 25-27 \approx 14; paraphysibus ascos subæquantibus filiformibus, apicem versus clavæformibus, usque 9 μ . crass.

Hab. ad terram humidam, in quisquiliis putridis, Sao-Francisco in Brasilæ (ULE).

SCLEROTINIA Fuck. — Syll. VIII, p. 195.

1. **Sclerotinia mycetophila** (Fayod) Sacc. *Peziza* Fayod in Vuill. Etud. 4482
biol. s. l. Champ. — Ascomatibus rubro-aurantiacis, stipite brevissimo, a disco parum distincto suffultis, disco pallidissime roseo-aurantiaco, usque ad 3-4 mm. lat., gibberulo, centro subconcavo; ascis basi contortis, apice operculatis, paraphysatis; sporidiis ellipsoideis, levibus, 12 \approx 8, biguttatis.

Hab. in mycelio *Sclerotii*, interdum etiam ab eo remota, in Gallia.

HELOTIUM Fr. ex p. — Syll. VIII, p. 210.

1. **Helotium gregarium** Boud. in Har. Champ. Cap Horn p. 192. — 4483
Stipitatum, 1 mm. alt., 0,5 lat., luteo-sordidum aut fulvescens; pedicello ad basin brunneo; cupulis planiusculis, extus fulvo-fibrillosis, hymenio ochraceo; ascis cylindraceis, clavatis, 8-sporis, 110-115 \approx 12; paraphysibus tenuibus, ad apicem sæpe capitatis, capitu-

lo 5-8 μ . cr.; sporidiis oblongis, intus granulosis et sæpius centro 1-guttatis, continuis, 10-12 \times 3,5-4.

Hab. gregarium in foliis Fagi betuloidis in insula Clarence Patagoniæ austr. (HARIOT).

2. **Helotium Boudieri** Sacc., *Helotium ochraceum* Boud. in Hariot 4484 Champ. Cap Horn p. 192, nec Grev. — Sordide ochraceum, stipitatum, 1,5 mm. alt., 0,8 mm. alt.; cupulis planiusculis aut convexis, extus leviusculis; ascis subclavatis, 8-sporis, 140-150 \approx 12; paraphysibus cylindræis, simplicibus aut ad basin divisis; sporidiis oblongo-fusoideis, hyalinis, continuis, intus non granulosis, 17-23 \times 6-6,5.

Hab. in foliis siccis Fagi betuloidis in sinu Orange Patagoniæ austr.

3. **Helotium Harioti** Boud. in Har. Champ. Cap Horn pag. 191 (*Calycella?*) 4485 — Luteum, breviter stipitatum aut turbinatum, 2-4 mm. lat.; cupulis concavis, extus pruinosis, marginatis, margine subtiliter crenulatis; ascis clavatis, 8-sporis, 120-125 \approx 7-8; paraphysibus linearibus; sporidiis hyalinis, oblongo-fusoideis, intus granulosis, 12-13 \times 3-4, continuis.

Hab. gregarium ad folia et ramos ligni putris in sinibus Saint-Martin et Orange Patagoniæ austr. (HARIOT).

4. **Helotium purpuratum** Kalchbr. in Thuem. M. N. n. 1614 et Diagn. 4486 p. 2. — Ceraceo-carneum, firmum; cupulis subgregariis, sparsis, subsessilibus aut in stipitem brevem, obconicum attenuatis, 4-8 mm. lat., planiusculis, marginatis, orbicularibus vel leviter repandis, late purpureo-kermesinis, extus cum stipite albo-luteis; ascis cylindræis, 8-sporis; sporidiis ellipticis, 2-guttulatis, hyalinis, 3-4 \times 1,5; paraphysibus creberrimis, linearibus, strictis.

Hab. in ramulis dejectis putrescentibusque, Somerset-East ad Caput Bonæ Spei (prof. P. MAC-OWAN).

5. **Helotium montaniense** Ell. et Anders. Bot. Gaz. 1891, p. 45 cum 4487 ic. 1-7. — Substipitatum, pallide carneum, 1-1,5 mm. lat., concavum, margine repando-lobato vel undulato, extus pallidius, glabrum et subplicatum, in stipitem 1 mm. long. alternatum v. subsessile; ascis tereti-clavatis, 60-65 \approx 6-7, octosporis; sporidiis monostichis, ellipsoideis v. ovato-ellipsoideis, hyalinis, subinæquilatis, 8-10 \times 3-4, biguttatis; paraphysibus filiformi-clavulatis.

Hab. in fragmentis ligneis putridis, Sand Coulee, Montana Amer. bor. (ANDERSON).

6. **Helotium venezuelianum** (Klot.) Phil. Grev. XIX, pag. 72, *Peziza* 4488

Klotzsch in herb. Kew. — Gregarium, cupulatum, demum planum v. repandum, umbilicatum, glabrum, 2 mm. lat. stipiteque flexuoso, ascoma æquante, flavo-brunneis; ascis clavatis 60 \approx 7, octosporis, oblongis vel oblongo-fusoideis, 8-10 \approx 2-3; paraphysibus filiformibus.

Hab. in lignis decorticatis, Venezuela.

7. **Helotium episphæricum** Peck 40 Rep. p. 66. — Ascomatibus minutis, $\frac{1}{3}$ - $\frac{1}{2}$ mm. lat., gregariis, subsessilibus, primo subhyalinis, dein rubescenti-flavis; disco subplano; ascis subcylindræis; sporidiis oblongis v. lanceolatis, 5-6,5 \approx 2,5-3. 4489

Hab. in Hypoxylo Morsei vetusto, Elizabethtown Amer. bor. — Habitus *H. citrini* sed multo minus.

8. **Helotium mycetophilum** Peck 43 Rep. p. 33. — Ascomatibus gregariis, minutis, 250-350 μ . lat., sessilibus vel stipite brevissimo suffultis, planis vel convexis, vix marginatis, extus flavidis; hymenio aurantiaco; ascis oblanceolatis, 75 \approx 10; paraphysibus filiformibus; sporidiis oblongo-ellipsoideis, continuis, endochromate interdum diviso, 15-17,5 \approx 7,5-9. 4490

Hab. in Fomite fomentario vetusto, Rainbow Amer. bor. — *H. citrino* et *E. episphærico* subaffine.

9. **Helotium aurantiacum** Cooke Grev. XIX, p. 106. — Sessile vel subsessile, planum, disco aurantio, margine tenui, erecto; ascis tereti-clavatis, 80-100 \approx 7-9, 6-8-sporis; sporidiis fusoideis rectis v. curvulis, 2-5-guttatis, demum pseudo-septatis, 14-18 \approx 4-5; paraphysibus simplicibus, copiosis, filiformibus. 4491

Hab. in pag. inf. foliorum emortuorum, in America boreali (J. B. ELLIS). — Ascomata 2-4 mm. lat.

10. **Helotium scutellatum** Kalch. et Cooke Grev. XIX, p. 72. — Sparsum, sessile vel subsessile, 2 mm. diam., planum carnosulum, umbilicatum, margine obtusum, extus furfuraceum; disco concolore; ascis tereti-clavatis, 101 \approx 11, octosporis; sporidiis oblongo-ellipsoideis, brunneolis, 16-19 \approx 5, pseudoseptatis; paraphysibus filiformibus. 4492

Hab. in foliis coriaceis emortuis in Capite Bonæ Spei (MAC-OWAN). — Fungilli color idem ac folii quo innascitur.

11. **Helotium acicularum** (Roll.) Sacc. *Calycella* Roll. in Bull. Soc. Myc. V, p. 170, t. XV, f. 3. — Carnoso-ceraceum, crassum, primitus turbiniforme, dein applanatum, plus minus regulare, margine leviter prominente, 2-3 mm. lat. extus albido-flavum; disco vitellino, carne alba; ascis oblongo-clavatis. marginato-dehiscenti- 4493

bus et sursum jodo cærulescentibus, octosporis, $160 \approx 10-12$; sporidiis amygdaliformibus, $10-12 \approx 5-8$, hyalinis, aliquando granulosis; paraphysibus filiformibus.

Hab. in acubus *Laricum*, Zermatt Helvetiæ.

12. **Helotium discedens** Karst. Hedw. 1889, p. 191. — Ascomatibus 4494
sparsis, sessilibus, firmis, concavis vel planiusculis, margine prominente, disco flavente-luteo, extus dilutioribus, glabris, latit. 1. mm. lat.; ascis cylindraceo-clavatis, 8-sporis, $50-60 \approx 5-6$; sporidiis distichis, cylindraceis, rectis vel curvulis, 3-5-guttulatis, hyalinis vel flavente-hyalinis, $6-9 \approx 1$; paraphysibus filiformibus 0,5. μ . cr.

Hab. ad corticem arborum frondosarum in Minas Geraes, Sitio Brasilæ — Ascomata demum membranacea, tenuissima, alba, hymenio destituta sæpissime inveniuntur.

13. **Helotium pezizoideum** Cooke Phil. Grev. XIX, p. 72. — Sparsum, 4495
sessile, cupulatum, demum planum, repandulum, disco aurantio-flavo; extus album v. pallidum; ascis tereti-clavatis, $70 \approx 7$, octosporis, sporidiis fusoideis v. oblongo-fusoideis, rectis v. curvulis, $7-12 \approx 2$; paraphysibus filiformibus.

Hab. in ligno emortuo, inter muscos, Waitaki Novæ Zelandiæ.

14. **Helotium amœnum** Fautrey Rev. Myc. 1891. p. 124. — Ascomatibus 4496
subsessilibus, copiosissimis, stipatis, albidis v. viridulis, disco plano-convexo, margine acuto; ascis clavatis, $80 \approx 10$, 4-8-sporis; sporidiis subdistichis in asci apice sitis, fusoideis, continuis, curvulis, hyalinis, 4-guttatis, $13-15 \approx 3$.

Hab. in *Aspidio Filice-mare* in silvis Côte-d'or Galliæ.

PHIALEA Fr. — Syll. VIII, p. 251.

1. **Phialea flexipes** (C. et Ph.) Sacc. *Hymenoscypha flexipes* Cooke 4497
et Phil. Grev. XIX, p. 106. — Sparsa v. cæspitosa, stipitata, piriformis dein infundibuliformis 1-2 mm. long., 0,5-1,5 mm. lat., margine integro, inflexo, extus granulosa, pallide alutacea, disco saturatiore; stipite longo, flexuoso; ascis anguste clavatis, $35 \approx 3$, octosporis; sporidiis fusoideis, $4-6 \approx 1$; paraphysibus filiformibus.

Hab. in ligno decorticato in Britannia? (in herb. Kew.)

2. **Phialea Delavayi** Pat. Rev. Myc. 1890, p. 136. — Ascomatibus 4498
orbicularibus, concavis, minutis, intus e brunneo subfulvis, extus pallidis, glabris; stipite brevi, rufo-pallido; ascis cylindraceis, $80 \approx 4-5$, octosporis; sporidiis monostichis; ovoideis, utrinque obtusis, hyalinis, $6-7 \approx 2$, 2-guttulatis; paraphysibus filiformibus.

- Hab.* gregatim in ligno putri, Yunnan Sinarum (DELAVAY). — Fungillus 2-3 mm. lat., 1-2 mm. altus; affinis *Ph. Scutulæ*.
3. **Phialea Carmichaelii** (Berk.) Sacc. *Hymenoscypha Carmichaelii* 4499 Berk., Phil. Grev. XIX, p. 106, *Peziza* Berk. in herb.? — Sparsa v. cæspitosa, stipitata, demum plana, 1 mm. lat., margine emergente, integro; disco fuligineo; stipite longiusculo, 2 mm. longo, brunneo, basi tomentoso; ascis clavatis, 8-sporis, $90 \approx 9$; sporidiis fusoides v. clavato-fusoides, guttatis, $25 \approx 5$; paraphysibus filiformibus, copiosis.
- Hab.* in ligno dejecto in Scotia (?) (CARMICHAEL). — Affinis *Ph. Scutulæ*.
4. **Phialea furfuripes** (Berk. et Curt.) Phil. Grev. XIX, p. 73 (*Peziza*) 4500 Berk. et Curt. in herb. Berk. — Cæspitosa v. solitaria, stipitata, cupulata, 1,5 mm. lat., 2 mm. alt. brunnea, glabra; stipite pilis fasciculatis brevibus consperso; ascis cylindræis, basin versus attenuatis, $80 \approx 8$, octosporis; sporidiis sphaerico-ellipsoideis, $5-6 \approx 4$; paraphysibus filiformibus.
- Hab.* in ligno putri, Venezuela (herb. BERKELEY). — *Phialea appendiculata* Oudem. Microm. nouv. I, p. 2. tab. II, f. 6-8 ad *Ciboriam ciliatosporam* videtur spectare.
5. **Phialea? coccinella** (Fr.) Sacc. *Peziza* Fr. S. M. II, p. 125, *Fungoides* etc. Mich. gen. p. 205. t. 86. f. 12. *P. nutans* Batsch, *P. cernua* Pers. — Tenuis, coccinea, cupulis infundibuliformibus, cernuis, stipite tenui longiusculo.
- Hab.* ad ramenta in Italia media. — Cupula cernua, in variis observata, a loco pendet et vix nota huic propria. Videtur affinis *Ph. cyathoides*.

PEZIZELLA Fuck. — Syll. VIII, p. 275.

1. **Pezizella Clematidis** Fautrey in Rev. Myc. 1890, p. 161. — Per- 4502
exigua, rosea; ascis teretiusculis in stipitem attenuatis, $30-40 \approx 4,5$; sporidiis elongatis, hyalinis, 2-guttatis, $6 \approx 1,5$; paraphysibus ramosis.
- Hab.* in sarmentis Clematidis Vitalbæ pr. Noidan, Côte-d'Or Galliæ.
2. **Pezizella dilutelloides** Rehm in Hedw. 1891, p. 151. — Ascoma- 4503
tibus gregariis, sessilibus, primo globosis, clausis, demum patellatis, planis extus glabris, albo-flavidulis, siccis sæpe complicatis, plus minusve margine involutis, disco fusco-flavidulo, ceraceis, 0,5-2 mm. lat., parenchymatico-contextis; ascis cylindrico-clavatis,

apice rotundatis, jodo cærulescentibus, 60-70 \approx 5, octosporis; sporidiis oblongis, rectis v. subcurvatis, continuis, hyalinis, 6-8 \times 1,5; paraphysibus filiformibus, hyalinis.

Hab. ad petiolos putridos Robiniæ Pseudacaciæ Lichterfelde pr. Berlin Germaniæ (SYDOW).

CYATHICULA De Not. — Syll. VIII. p. 304.

1. **Cyathicula serrata** (Hoffm.) Sacc. *Peziza serrata* Hoffm. Crypt. II, 4504 p. 26, t. VII, f. 4, *Cistella* Quél. Ench. p. 320. — Ascomatibus globoso-cupularibus, substipitatis, minutis, tenuissime pubescentibus, albo-hyalinis, margine denticulato; disco carneo; sporidiis teretifusoidis.

Hab. in lignis putrescentibus in Germania et Gallia. — Ascomata caput aciculæ æquantia.

ALLOPHYLARIA Karst. — Syll. VIII, p. 308.

1. **Allophylaria terrigena** Karst. in Rev. Mycol. 1889. — Ascomatibus 4505 sparsis, primitus obconice elongatis, demum stipitatis, lutescentipallidis, 0,2 mm. alt.; cupulis convexis, subimmarginatis, 0,1-0,2 mm. lat.; stipite breviusculo, sensim in cupulam dilatato; ascis clavatis, octosporis jodo vinose fulvescentibus, membrana crassa, obtusissimis, 67-75 \times 13-14; sporidiis subtristichis, oblongato vel elongato-subfusoidis, continuis, dein 1-septatis, eguttulatis, hyalinis, 12-17 \times 3-4; paraphysibus ascos vix superantibus, haud numerosis, laxe cohærentibus, filiformibus, ramosis, 0,5-1 μ . crassis.

Hab. ad terram in Minas Geraes, Sitio Brasiliæ (D.^r EDW. WAINIO).

PEZICULA Tul. — Syll. VIII, p. 310.

1. **Pezicula acerina** (Fr.?) Karst. et Har. Rev. Myc. 1890 Oct. — 4506 Ascomatibus gregariis, in series lineares contiguas, per rimas corticis erumpentibus, sessilibus vel stipite brevissimo, crasso in cortice latente, planiusculis, subcoriaceis, humectatis mollioribus, circ. 1 mm. lat.; ascis 100 \times 20; sporidiis oblongatis, rectis, vulgo inæqualibus, endochromate granuloso, subhyalinis, continuis, 36-40 \times 10-12.

Hab. ad ramos Aceris Pseudoplatani, Villebon Galliæ (TULASNE). — Specimina ita vetusta et obsoleta, ut definitionem meliorem dare non possimus. Fortasse sit *Cenangium? acerinum* Fr. Summa veg. Sueciæ p. 364, quod descriptum nullibi visum.

2. **Pezicula cinereo-fusca** (Schw.) Sacc. *Peziza* Schw., *Lachnella* 4507
Sacc. Syll. VIII, p. 399, *Velutaria* Voss Myc. Carn. III, p. 210.
— Ascomatibus gregariis, sessilibus, globosis dein patellaribus, orbiculato-ellipsoideis, sæpe plicatis, margine incurvatis, ceraceis extus cinereis, farinaceis, 0,5-2,5 mm. diam., disco concavo, fusco; ascis cylindraceutis, stipitatis, apice rotundatis, 8-sporis, 110-112 \approx 9-10; sporidiis recte monostichis, late ellipsoideis, hyalinis, 1-nucleatis, 10-12 \approx 8-9; paraphysibus ascos superantibus, clavua viridula 4 μ . cr.

Hab. in ramis siccis Aceris, Berberidis, Carpini, Coryli, Cratægi, Pruni, Quercus, Rosæ, Cercidis in Carniola et Tirolia cisalpina. — Ob sporidia continua meo sensu non *Valusaricæ* species.

3. **Pezicula guttiformis** Speg. F. Puigg. n. 387. — Ascomatibus gregariis vel sparsis, lenticularibus, 180-250 μ . diam., disco coccineo, extus pallidioribus non vel vix subpruinulosis; ascis clavulatis, paraphysatis, 50 \approx 8, octosporis; sporidiis ellipsoideis hyalinis, oblique monostichis vel distichis, 10 \approx 4. 4508

Hab. ad folia viva Galii speciei cujusdam prope Apiahy Brasiliæ. — Iodi ops nulla. Inter ascomata subiculum mucedineum tenuissimum heterogeneousum (*Aspergilli* cujusdam?) sæpe adest!

CHLOROSPENIUM Fr. — Syll. VIII, p. 315.

1. **Chlorosplenium tuberosum** Karst. et Har. Rev. Myc. 1890 Oct. — 4509
Ascomatibus e tubere communi per corticem erumpente, crasso circ. 2-3 mm., ærugineo-atro, difformi enatis, sessilibus vel breviter stipitatis, concavis, obtuse marginatis, disco e cellulis filiformibus, simplicibus, raro ramosis dilutissime ferrugineis (paraphysibus?) composito; ascis.....

Hab. ad Caput Horn ins. L'Hermite (P. HARIOT). — Lignum, cui innascitur, colore ærugineo tingit.

MOLLISIA Fr. — Syll. VIII, p. 321.

1. **Mollisia Knautiæ** Briard et Hariot Rev. Myc. 1890 Oct. — Asco- 4510
matibus erumpentibus, carnosulis v. ceraceis, brunneis, patellaribus, sessilibus, leniter depressis vel subplanis, 1 mm. diam.; ascis cylindraceutis, breviter stipitatis vel sessilibus, octosporis, 56-60 \approx 8; paraphysibus filiformibus; sporidiis monostichis, oblique piriformibus, basim versus attenuatis, hyalinis, 1-2-guttulatis, 12 \approx 5-6.

Hab. in caulibus emortuis *Knautiæ longifoliæ* pr. Chermont-Ferrand Galliæ (Frère HÉRIBAUD).

2. **Mollisia Adenostylidis** Rehm Disc. p. 526. — Ascomatibus grega- 4511
riis, late sessilibus, dein applanato-patelliformibus, extus brunneis, siccis incurvis, 0,2-1,5 mm. lat., ceraceo-mollibus; disco sæpe arcuato, e griseo-cærulescente brunneo-violaceo, tenuiter marginato; contextu e cellulis rotundis constituto, brunneo; ascis clavatis, supra rotundatis, 45-50 \approx 5; sporidiis octonis, distichis, anguste fusoides, acutiusculis, rectis v. subincurvis, 9-12 \approx 1,5; paraphysibus filiformibus, ascos subsuperantibus, hyalinis, usque ad 2,5 μ . lat.

Hab. in caulibus siccis *Adenostylidis alpinae* et *albi-frontis*, Bauernalpkopf in Algäu (BRITZELMAYR).

3. **Mollisia hamulata** Rehm Disc. p. 534. — Ascomatibus plerumque 4512
sparsis, dein cyathiformibus, tandem applanato-patelliformibus, extus levibus, flavidis v. pallide carneis, siccis profunde patelliformibus et arcuatis, carneo-rubentibus v. vitellinis, margine pallidiore 0,3-1,2 mm. lat., coriaceo-mollibus; disco demum subconvexo, margine pallidiore e tenui; contextu minute parenchymatico, hyalino; ascis clavatis, supra obtuse acuminatis et incrassatis, 60-80 \approx 8-9; sporidiis octonis, oblique distichis, fusoides, rectis v. subincurvis, 2-guttatis, 12-15 \approx 3; paraphysibus filiformibus, 1,5 μ . lat., septatis, supra piriformibus, hyalinis.

Hab. ad caules *Cirsii spinosissimi* et *Aconiti Napelli* pr. Taschach-Gletscher, Tiroliae (Pitzthal) et *Senecionis Jacquini* prope St.-Moritz in Engadin (WINTER).

4. **Mollisia oxyparaphysata** Rehm Disc. p. 535. — Ascomatibus gre- 4513
gariis, basi angustatis, dein cyathiformibus, demum applanato-patelliformibus, extus brunneolis, subasperis, siccis involutis, saturate rubenti-brunneis, subrugosis, 0,2-0,4 mm. lat., ceraceo-mollibus; disco demum convexo, pallide brunneolo-flavo, margine brunneolo et fibrilloso; contextu minute parenchymatico, brunneo, margine fibrillis brunneis, septatis, obtusis, usque ad 50 μ . long., 4 μ . lat. instructis; ascis clavatis, supra rotundatis, 35-45 \approx 5-6; sporidiis octonis, distichis, elongato-clavatis vel fusoides, rectis vel subincurvis, 7-10 \approx 2; paraphysibus partim lanceolato-acutis, 4-5 μ . lat., partim filiformibus, 2 μ . lat., demum ascos longe superantibus, hyalinis.

Hab. ad caules siccos *Compositarum*, Schlappolt-Eck in Algäu (BRITZELMAYR).

5. **Mollisia Cynoglossi** Oud. Contr. Mycol. XIII, p. 23, t. 8, f. 5. — 4514

Sparsa vel plus minus aggregata, diu infra epidermidem occultata, postremo per ejus fissuras erumpens, humectata $\frac{1}{3}$ -1 mm. diam., breve crasseque stipitata, mollis, orbicularis, extus glaberrima, nigra, siccitate spurie bivalvis v. varie sinuata; hymenio humectato plumbeo, arescendo pallide carneo atque subtilissime papilloso; contextu filamentoso; ascis clavatis, 50-60 \approx 6,5; paraphysibus numerosissimis, filiformibus; sporidiis octonis, subtus monostichis, supra distichis, oblongis, rectis v. curvulis, 11-14 \approx 2,5-3, eguttatis.

Hab. in caulibus siccis *Cynoglossi officinalis*, Loosduinen Nederlandiæ (Domina DESTREE).

6. **Mollisia complicatula** Rehm Disc. p. 520. — Ascomatibus gregariis, erumpentibus, sessilibus vel subtus attenuatis, primo globosoclausis, dein cyathiformibus, extus brunneis, asperis, siccis convolutis et minute rugosis, atro-brunneis, 0,3-1 mm. lat., ceraceo-mollibus; disco albo-griseo, margine minute fibrilloso; contextu margine fibrilloso-parenchymatico et saturatius colorato, basi parenchymatico, brunneo et hyphis cæspitosis, subramosis, brevibus, brunneis, 3-4 μ . lat. prædito; ascis globosis, supra obtuse acuminatis, 8-sporis, 60-65 \approx 6-7; sporidiis distichis, elongato-fusoideis, obtusiusculis, rectis, utrinque 1-guttatis, 9-12 \approx 2,5; paraphysibus ramosis, circ. 2 μ . lat.

Hab. in ramis siccis *Loniceræ cæruleæ*, Oetzthal supra Vent Tirolia. — *M. complicatæ* et *M. Myricariæ* affinis.

7. **Mollisia encælioides** Rehm Disc. p. 522. — Ascomatibus gregariis, basi subangustatis, primo globosoclausis, dein applanato-patelliformibus, extus pallide brunneolo-flavidis, levibus, siccis plerumque plicatis et contortis, extus brunneolis et subasperis, 0,3-1,2 mm. lat. ceraceo-mollibus; disco dein arcuato, pallide alutaceo, margine tenui, plerumque subsaturatius colorato; contextu parenchymatico, brunneolo, marginem versus cellulis elongatis prædito; ascis clavatis, supra rotundatis, 8-sporis, 30-35 \approx 5; sporidiis distichis, cylindraceis, rectis v. subcurvis, 5-6 \approx 1,5; paraphysibus filiformibus, 2,5 μ . lat., supra usque ad 5 μ . incrassatis, dilute brunneolis.

Hab. in ramulis decorticatis *Salicis caprææ* pr. Königstein (KRIEGER). — Habitus *M. complicatæ* et *M. Myricariæ*.

8. **Mollisia chlorosticta** E. P. Fries in Grev. XIX, p. 107. — Sparsa v. gregaria, minuta, cupulata, sessilis, glabra, flavo-virens, margine prominente integro v. subflexuoso, concolore; ascis clavatis 30-45 \approx 6-8, 8-sporis; sporidiis oblongis 2-3 \approx 1; paraphysibus filiformibus.

Hab. in cortice interiore Ulmi montanæ et Aceris, Upsala Sueciæ (E. P. FRIES et L. ROMELL).

9. **Mollisia cinerescens** Rehm Disc. p. 518. — Ascomatibus gregariis, 4518
dein rotundato-patelliformibus, demum applanato-expansis, levibus,
siccis convexis et albo-flavidis, 0,1-1,5 mm. lat., tenuissimis, cera-
ceo-mollibus; disco margine minute et pluries inciso, albido-cine-
reo; contextu minute parenchymatico, basi subbrunneo; ascis
clavatis, supra obtuse acuminatis, 45-60 \times 8-9, octosporis; para-
physibus filiformibus, supra septatis et usque ad 3 μ . lat., hyalinis;
sporidiis distichis, elongato-cylindræis, obtusis, rectis v. subincur-
vatis, 15-18 \approx 2,5.

Hab. in ligno pineo, Coerhaide pr. Münster (v. TAVEL).

10. **Mollisia crumenuloides** Rehm Disc. p. 521. — Ascomatibus gre- 4519
gariis, primo globoso-clausis, dein applanato-patelliformibus, extus
brunneis, levibus, siccis involutis et convexis, subinde tenuiter al-
bido-marginatis, nigro-brunneis, asperis, 0,2-1 mm. lat. ceraceo-
mollibus; disco albido-luteolo, margine tenui et inciso; contextu
basi parenchymatico, brunneo, margine tenuiter fibrilloso.

Hab. in cortice abietino in silva prope Sugenheim in Fran-
conia et ad Coerhaide pr. Münster (v. TAVEL). — *M. complicatæ*
affinis.

11. **Mollisia trabincola** Rehm Disc. p. 521. — Ascomatibus minute 4520
gregariis, maculis decoloratis insidentibus, primo globoso-clausis,
dein rotundato-cyathiformibus, extus nigrescenti-brunneis, levibus,
siccis brunneo-nigris, incurvatis subinde hysteroideo-involutis et
minute rugosis, 0,3-0,4 mm. long. v. lat., ceraceo-mollibus; disco
dein subplano, nigro-griseo, tenuiter subinciso-marginato; contextu
parenchymatico, brunneo, margine cellulis elongatis prædito; ascis
clavatis, supra rotundatis, 36-45 \times 6-8, octosporis; sporidiis disti-
chis, ellipsoideis, obtusis, rectis v. subincurvis, 5-8 \times 3; paraphysi-
bus filiformibus, supra usque ad 3 μ . lat., hyalinis.

Hab. in ligno Pini Cembræ inter Gomagoi et Sulden ad Ort-
ler Tirolia et ligno decorticato Coniferæ cujusdam, Neuchâtel
Helvetiæ.

12. **Mollisia crassa** Boud. in Har. Champ. Cap Horn p. 193. — Minu- 4521
ta, sessilis $\frac{1}{2}$ mm. cr., pallida, extus fuliginea; cupulis axplanatis
v. undulatis, spissis, sæpe umbilicatis; ascis clavatis, 120-130 \times 10,
hyalinis, 8-sporis; paraphysibus linearibus, sæpe divisis; sporidiis
fusoideo-elongatis, subclavatis et sæpe curvulis, intus granulosis,
18-20 \approx 3-4.

Hab. in ligno putri, in sinu Saint-Martin Patagoniæ austr. (HARIOT).

13. **Mollisia Passerinii** Sacc. *Mollisia juncina* Pass. in Brun. Mat. 4522

Myc. Saint. p. 16, nec Rehm. — Ascomatibus erumpentibus, sparsis, minutis, demum liberis, discoideis, brunneis, disco plano; margine non vel vix prominulo; ascis clavatis, basi tenuatis, octosporis, 65-70 \times 18-20, jodo cœrulescentibus; paraphysibus filiformibus, apice brunneolis; sporidiis di-tristichis vel inordinatis, oblongo-ovoideis, continuis, hyalinis, utrinque guttulatis, 18-20 \times 4-5.

Hab. in calamis exsiccatis Junci conglomerati, Rochefort Galliæ. — Affinis *M. juncisedæ*.

14. **Mollisia caricina** Fautrey Rev. Myc. 1891, p. 124. — Ascomati- 4523

bus perexiguis, copiosis, albis, margine involutis, dein expansis, disco griseo; ascis teretibus 20-25 \times 4-5; sporidiis cylindræis, curvulis, 4-6 \times 1.

Hab. in Carice hirta, Noidan Côte-d'Or Galliæ.

15. **Mollisia poëoides** Rehm Disc. p. 544. — Ascomatibus gregariis, 4524

primo immersis, dein cyathiformibus, demum applanato-patelliformibus, extus brunneis, levibus, siccis convexis, subrugosis, brunneis v. nigro-brunneis, 0,2-0,4 mm., ceraceo-mollibus, disco pallide griseo, margine tenui et saturatius colorato; contextu parenchymatico, brunneo; ascis clavatis, supra obtuse acuminatis, 8-sporis, 40-50 \times 6-8; sporidiis distichis, fusoideis, rectis v. subincurvis, minute guttulatis, 7-10 \times 2-2,5; paraphysibus filiformibus, supra 2,5 μ . lat., hyalinis.

Hab. ad culmos et folia Graminacearum Tirolæ et Psammæ arenariæ in Grunewald prope Berlin (SYDOW). — Habitus *Mollisicæ* Poæ.

16. **Mollisia hiemalis** Rehm Disc. p. 544. — Ascomatibus plerumque 4525

sparsis, dein cyathiformibus, extus olivaceo-brunneis, levibus, siccis involutis et margine tenuiter albido-fibrillosis, extus brunneis vel brunneo-viridibus, 0,1-0,4 mm. lat., molliter ceraceis; disco margine tenui, griseo; contextu parenchymatico, brunneolo, marginem versum cellulis subhyalinis valde elongatis prædito; ascis clavatis, supra rotundatis, 36-40 \times 4; sporidiis filiformibus, rectis vel subincurvatis, 6-8 \times 1; paraphysibus filiformibus, hyalinis, 1,5 μ . lat.

Hab. ad culmos Graminacearum supra Grampenhöfe, Ortler Tirolæ. — Habitus *Pyrenopezizæ* Karstenii.

17. **Mollisia leucosphæria** Rehm Disc. p. 545. — Ascomatibus gre- 4526

gariis, dein applanato-patelliformibus, extus brunneolis, siccis subglobosis et brunneis, levibus, 0,1-0,25 mm. lat., molliter ceraceis; disco pallide griseo, margine tenui et subinde albido; contextu parenchymatico, brunneo; ascis clavatis, supra rotundatis, 8-sporis, 36-40 \approx 4-5; sporidiis oblique distichis, linearibus, rectis v. subincurvis, 6-8 \approx 1,5; paraphysibus filiformibus, paucis, 1 μ . lat., hyalinis.

Hab. ad culmos Graminacearum ad Selden-Gletscher, Ortler Tirolia.

18. **Mollisia dactyligluma** Cooke Grev. XIX, p. 86. — Ascomatibus 4527 molliusculis, carnosulis, concavis dein applanatis, 0,2-0,5 mm. diam., albis, cinereis vel lividis, margine pallidioribus, sessilibus, levibus; ascis cylindraceutis; sporidiis teretibus, utrinque rotundatis, subrectis, hyalinis, 10 \approx 1,5.

Hab. in glumis Dactylidis glomeratae, Lynn Britannia.

PYRENOPEZIZA Fuck. — Syll. VIII, p. 354.

1. **Pyrenopeziza atrata** (Pers.) Fuck. — Syll. VIII, p. 354 — f. **macrospora** Fautrey Rev. Myc. Oct. 1891. — Ascomatibus in pilis matricis sæpius latentibus, typo similibus; sporidiis majoribus, 13 \approx 3. 4528

Hab. in caulibus siccis Verbasci Thapsi in silva Charny, Côte-d'Or Gallia.

2. **Pyrenopeziza obtrita** (Pers.) Sacc. *Peziza* Pers. M. E. I, p. 308, 4529 *Mollisia* Quél. XI Suppl. pag. 22, t. XII, f. 11, vix *Phacidium fimbriiferum* Fr. (Syll. VIII, p. 719). — Ascomatibus urceolatis, 0,2-0,3 mm. lat., ceraceis, diaphanis, puberulis, crenulatis, atroviridibus; hymenio concavo, fuligineo v. olivaceo; sporidiis cuneiformibus, 6 μ . long., hyalinis.

Hab. gregaria in caulibus plantarum majorum, e. g. Angelicæ in Gallia. — Sec. Pers. loc. cit.: sparsa, tenuis, orbicularis, depressa, nigra, exsiccata crispa, irrigata distincte pezizoidea.

3. **Pyrenopeziza yogoensis** (E. et G.) Sacc. *Peziza yogoensis* Ell. et 4530 Gall. Journ. Myc. 1889, p. 65. — Erumpens, fibroso-contexta. 200 μ . diam., margine fimbriato et incurvo, olivaceo, disco pallido; ascis oblongis, 50-60 \approx 15-18, sessilibus, paraphysibus obtusis ascos subæquantibus, paucis; sporidiis obliquis vel distichis, oblongis, rectis, hic rotundatis, hinc leniter acutatis, 2-nucleatis, hyalinis, 13-15 \approx 4-5.

Hab. in foliis emortuis Caricis, Yogo Montana Amer. bor. (WILLIAMSON).

TAPESIA Pers. — Syll. VIII, p. 371.1. **Tapesia undulata** Bomm. Rouss. Sacc. Contr. Myc. Belg. IV, p. 17. 4531

— Ascomatibus aggregatis, albo-cinereis v. flavido-tinctis, dein fulvis, demum nigricantibus, subiculo pannoso, brunneo-flamentoso, sæpius parco insidentibus; disco pruinoso, concavo dein convexo-plano, margine distincto, pallidiore, undulato-inflexo, ob hyphas mycelicas albas ambientes simulate villosis; ascis cylindræo-clavatis, subsessilibus, 36-48 \times 5-6; sporidiis distichis, lanceolatis, rectis, hyalinis, 6-7 \times 1,5; paraphysibus linearibus, continuis, granulosis ascos æquantibus.

Hab. in ramulis emortuis *Myricæ* Gales, Westmalle Belgii.
— *Moll. Ricciæ* subaffinis.

2. **Tapesia melaleucoides** Rehm Disc. p. 578. — Ascomatibus gre- 4532

gariis, subiculo effuso, pannoso, ex hyphis ramulosis, brunneis, 4-5 μ . lat., prope ascomatum basin subinde hyalinis efformato, insidentibus, primo globosis, clausis, dein apertis, cyathiformibus, subtus subangustatis, extus brunneis, levibus, siccis margine involuto, atrobunneis, subasperis, 0,3-0,4 mm. lat., molliter ceraceis; disco margine crasso et brunneo, demum subdilatato, stellatim v. irregulariter contorto, flavo-albido, sicco sordide albo; contextu parenchymatico, brunneo, margine cellulis elongato-fibrosis prædito; ascis clavatis, obtusis, supra rotundatis, 8-sporis, 45-50 \times 5-6; sporidiis submonostichis elongatis, obtusis, rectis vel subincurvis 7-9 \times 2,5-3; paraphysibus paucis, filiformibus, 2,5 μ . lat., hyalinis.

Hab. ad ramos *Coryli Avellanæ*, *Pini Cembræ*, *Rosæ*, *Rhododendri ferruginei*, *Rubi fruticosi* et *Callunæ* ad radices arborum pr. Augsburg, Franken, Ortler et Waldrast Tirolia, Borussia rhenana, Arlberg, Lohr et Königstein.

3. **Tapesia toruloides** Rehm Disc. p. 583. — Ascomatibus gregariis, 4533

subiculo nigro vel nigro-brunneo, expanso, ex hyphis longis, septatis, plerumque simplicibus brunneis, circ. 5 μ . cr. efformato, insidentibus, primo globosis, clausis, dein apertis, subpatelliformibus, extus levibus, basin versus brunneis, siccis subinvolutis et arcuatis, 0,2-1 mm. lat., ceraceis; contextu parenchymatico, brunneo; disco applanato, tenuiter marginato, subniveo; ascis clavatis supra obtuse acuminatis, 75-90 \times 9-10; paraphysibus ramosis, 2 μ . lat., hyalinis; sporidiis octonis, distichis, fusoides, rectis v. subcurvatis, crasse 2-6-guttatis, 15-24 \times 4-5.

Hab. in ramulis siccis *Syringæ vulgaris* pr. Herculesbad, Siebenbürgen.

4. **Tapesia pseudosanguinea** (Rehm) Sacc., *Patellea* Rehm Disc. p. 284. 4534

— Ascomatibus plerumque dense gregariis, subiculo purpureo, ex hyphis circ. 4 μ . lat. formato, impositis, primo globosis, clausis, subtus turbinatis, usque ad 0,4 mm. long., dein cyathiformibus, tandem applanato-patelliformibus, tenuiter et pallidius marginatis, discum initio atro-griseum, demum nigrum, opacum aperientibus, 0,2-0,8 mm. lat., siccis corrugatis, membranaceis; contextu tenuiter prosenchymatico, brunneolo; ascis clavatis, supra rotundatis, 30-35 \approx 6, octosporis; sporidiis ovoideis, 3 \approx 2,5, distichis; paraphysibus filiformibus, hyalinis, circ. 1,5 μ . lat., supra parum dilatatis.

Hab. in trunco decorticato *Betulæ*, Coerhaide prope Münster Germaniæ (VON TAVEL). — Habitus *T. sanguineæ*.

5. **Tapesia Rehmiana** Sacc. Bomm. Rouss. Contr. Myc. Belg. II, p. 3. 4535

— Sessilis, sparsa vel plus minus gregaria, subiculo crasso, e filamentis dematiaceis, erectis formato, imposita; cupulis minutissimis, 175-226 μ . lat., olivaceis, pilosis, pilis brevibus, concoloribus, discum olivaceo-lividum, vix concavum, pallidius leniter superantibus; ascis sessilibus, 29-36 \approx 5-6, anguste clavatis, 8-sporis; paraphysibus simplicibus, filiformibus, ascos æquantibus v. paullo excedentibus; sporidiis oblique monostichis, ellipsoideis, sæpe subcurvulis, utrinque 1-guttatis.

Hab. ad *Quercum* putrem decorticatam, Boitsfort Belgii.

PIROTTÆA Sacc. — Syll. VIII, p. 386.

1. **Pirottæa microspora** Bomm. Rouss. Sacc. Contr. Myc. Belg. IV, 4536

p. 18. — Ascomatibus dense gregatis, sessilibus, subhemisphæricis, concavis, ob pressionem sæpe undulatis, atro viridi-fuligineis, 0,3-0,5 mm. diam., extus sericeo-flocculosis, margine subcinereo, dein virente, cellulis excipuli marginalibus in pilos 4-cellulares, 60-90 \approx 5 abeuntibus; disco fuligineo; ascis clavatis vel oblongis, sessilibus, 24-27 \approx 6, octosporis; sporidiis cylindræo-ellipsoideis, oblique 1-stichis, 2-guttatis, 4-6 \approx 2,5-3.

Hab. in fragmentis ligneis *Fagi silvaticæ*, Groenendael Belgii. — Ob ascomata confertissima habitus speciei fere dematieus.

LACHNELLA Fr. — Syll. VIII, p. 391.

1. **Lachnella? pruinosa** (Ces.) Sacc., *Cenangium* Ces. Hedw. I, p. 43, 4537

t. VIII, f. 1. — Cupulis e corticis rimis erumpentibus seu sub epi-

dermide nidulantibus, interdum petiolorum cicatricibus, hinc sub ramulorum basi, impositis, diu clausis, velo flocculoso, albido obtectis, serius turbinatis, discum virentem, mox brunneum, dein nigrescentem, postremo ex ascis erumpentibus albo-pruinoseum revelantibus et tunc sat explanatis; hymenio sat tenui; ascis tenuibus, linearibus, cito evanescentibus; paraphysibus numerosis, filiformibus, apice paullisper incrassatis; sporidiis monostichis, ovalibus, coloratis, centro guttiferis, fere nudis, concatenatis.

Hab. ad caules annotinos exsiccatos Hyperici perforati, Vercelli Ital. bor. (CESATI).

2. **Lachnella Juniperi** Rich. Cat. Champ. Marn. n. 988 (nomen). 4538

Hab. in ramis Juniperi communis in silva Aulnay-l'Aître, Marne Galliæ.

3. **Lachnella nilgherrensis** Cooke Grev. XIX, p. 73. — Sparsa, mi- 4539

nuta, sessilis vel subsessilis, patelliformis, 0,5 mm. lata, extus alba, pilis tenuibus, brevibus, septatis, hyalinis conspersa; disco albido-flavo; ascis lineari-fusoideis, 70-80 \approx 6, octosporis; sporidiis linearibus, acutis, rectis vel curvulis, 26-35 \approx 3, 3-5-pseudo-septatis; paraphysibus filiformibus.

Hab. in caulibus herbaceis in India orient. (herb. BERKELEY).

TRICHOPEZIZA Fuck. — Syll. VIII, p. 401.

1. **Trichopeziza Sphærula** Sacc. in Hedw. 1890, p. 155. — Ascoma- 4540

tibus sparsis, minutis, vix $\frac{1}{2}$ mm. diam., sessilibus, globulosis, vertice ægre minuteque dehiscentibus, amœne citrino-sulphureis, pilis divergentibus, asperulis, clavulatis, simplicibus conspersis; ascis cylindræis breve stipitatis apice obtusulis, 80-98 \approx 6-7,5, octosporis; sporidiis oblique monostichis ellipsoideo-oblongis, utrinque rotundatis, 10 \approx 3,5, biguttatis, hyalinis; paraphysibus filiformibus.

Hab. in cortice emortuo Casuarinæ, Williamstown S. Australiæ. — *T. chrysotrichæ*, ut videtur, affinis.

2. **Trichopeziza perpusilla** Sacc. Bomm. Rouss. Contr. Myc. Belg. III, 4541

p. 4 (*Peziza*). — Ascomatibus gregariis, minusculis, $\frac{1}{10}$ - $\frac{1}{8}$ mm. diam., sessilibus, primo clausis, dein apertis, griseolo-albis, margine pallidioribus, extus velutinis, filamentis dematioideis insidentibus; ascis clavatis, 24-30 \approx 5-7; sporidiis distichis, rectis, hyalinis, 5-6 \approx 1-2; paraphysibusasco longioribus, gracilibus, hyalinis.

Hab. ad caules emortuos Epilobii hirsuti, Groenendael Belgii.

3. **Trichopeziza asema** (Phill.) Sacc. *Lachnella asema* Phil. Grev. 4542

XIX, p. 73. — Sparsa, minuta, sessilis, globosa, dein expansa patelliformis, alba v. sordide alba, pilis brevibus, hyalinis, obtusis, septatis (per lentem vix visibilibus) conspersa; ascis late clavatis, acutis v. obtusis, $40 \approx 7$, octosporis; sporidiis fusoides v. clavatis, $10 \approx 3$; paraphysibus filiformibus.

Hab. in foliis emortuis Caricis, Berrington Salop Britanniaë. — Cupulæ 300 μ . diam.

DASYSCYPHA (Fr.) Fuck. — Syll. VIII, p. 432.

1. **Dasyscypha hispanica** (C. et Ph.) Sacc. *Lachnella hispanica* Cooke 4543

et Phil. Grev. XIX, p. 73. — Sparsa, stipitata, cupulata, alba, pilis longis, flexuosis, hyalinis, subinde nodulos oxalati calcici gerentibus conspersa; disco pallide flavo; ascis tereti-clavatis, octosporis; sporidiis anguste fusoides 10-13 \approx 2-2,5; paraphysibus acicularibus, asci latitudinem æquantibus sed longioribus.

Hab. in caule emortuo Rumicis suffruticosi, Pico de Cancellas Hispaniaë. — Ab affini *L. patula* differt sporidiis et paraphysibus crassioribus.

2. **Dasyscypha Morthieri** (Cooke) Sacc. *Lachnella Morthieri* Cooke 4544

Grev. XIX, p. 73. — Sparsa, stipitata, urceolata dein cupulata, pallide flava, pilis brevibus, septatis, hyalinis capitulatis conspersa; ascis clavatis, 25-30 \approx 3, octosporis; sporidiis fusoides 5 \approx 1; paraphysibus non visis.

Hab. in caule emortuo Senecionis Fuchsii in Helvetia (MORTHIER). — Cupula 300 μ . lata, stipes 150 μ . long.

3. **Dasyscypha conformis** (Cooke) Sacc. *Lachnella conformis* Cooke 4545

Grev. XIX, p. 107. — Sparsa, minuta, breviter stipitata v. sessilis, subcupulata, dein plana, pilis brevibus, hyalinis, obtusis conspersa; disco pallide cervino; ascis cylindræo-clavatis, octosporis; sporidiis anguste lanceolatis, 10 \approx 1; paraphysibus acicularibus ascos excedentibus.

Hab. in Juncis, Darenth Britanniaë. — Ab affini *L. hapala* differt sporidiis multo brevioribus. — *Das. luzulina* (Phill.) Sacc. ex sphalmate typi in Syll. VIII, sub nomine *D. hyalinæ* occurrit, quod corrigendum.

4. **Dasyscypha stigmella** (Cooke) Sacc. *Lachnella stigmella* Cooke 4546

Grev. XIX, p. 86. — Ascomate breve stipitato, albo v. pallide carneo, pilis tenuibus flexuosis consperso, 0,1 mm. diam., disco concolore; ascis cylindræis; sporidiis teretiusculis, 8-10 \approx 1; paraphysibus fusoides.

Hab. in Juncis, Norfolk Britannia.

5. **Dasyscypha Emerici** (Berk. et Phill.) Sacc. *Lachnella Emerici* 4547
Berk. et Phil. Grev. XIX, p. 74. — Sparsa, stipitata v. turbinato-
stipitata, brunnea v. rufa, cupulata, 1 mm. diam., pilis longis,
flexuosis, brunneis, sæpe capitellatis, asperulis conspersa; ascis te-
reti-clavatis, $60 \approx 4$, octosporis; sporidiis lineari-fusoideis, rectis,
 $18-25 \approx 2$, pseudo-1-septatis, hyalinis; paraphysibus acicularibus ascos
excedentibus.

Hab. in ramis Neilgherries Indiæ or. (Herb. BERKELEY).

6. **Dasyscypha gallica** (Karst. et Har.) Sacc., *Lachnella gallica* 4548
Karst. et Har. Rev. Myc. 1890, Oct. — Ascomatibus sparsis stipi-
tatis, albo-villosis; cupula expansa, sicca, concava, disco aurantia-
co-luteo, 2-3 mm. lat.; stipite brevi in cupulam dilatato; ascis
cylindraco-clavatis, iodo non cœrulescentibus, $95-110 \approx 9-10$, octo-
sporibus; sporidiis monostichis, late ellipsoideis, eguttulatis, $10-12 \approx$
 $6-7$; paraphysibus filiformibus, sursum vix vel leniter incrassa-
tulis, $1-1,5 \mu$. cr.

Hab. in ramis siccis arborum acerosarum, in Arvernua Gallia
(HÉRIBAUD). — Ab affini *D. Abietis* sporidiis latioribus, eguttulatis
statim dignoscenda.

7. **Dasyscypha brachytricha** (C. et Ph.) Sacc. *Lachnella brachytricha* 4549
Cooke et Phil. Grev. XIX, p. 73. — Sparsa, stipitata, 0,5-1 mm.
lat., primitus fere clausa, dein expansa cupulata, pallide brunnea,
pilis brevissimis subinde inæqualiter inflatis conspersa; stipite in
cupulam dilatato, sæpe curvo 0,5-1 mm. long.; ascis cylindracois
vel clavatis subinde inæqualiter ventricosis octosporis; sporidiis
tereti-fusoideis, $10-13 \approx 2$; paraphysibus filiformibus.

Hab. in ramis decorticatis (in Britannia?).

8. **Dasyscypha albo-pileata** (Cooke) Sacc. Syll. VIII, pag. 445. — 4550
Var. **subaurata** Ellis in Grev. XIX, p. 107. — A typo differt pi-
lis apice succum flavum in globulum abeuntem scatentibus, spo-
ridiis $5-6 \approx 1$ (nec $6-8 \approx 1,5$).

Hab. in utraque pag. foliorum Clethræ alnifoliae, Newfield
N. J. Amer. bor. (ELLIS).

9. **Dasyscypha Patena** (Lév.) Sacc. *Peziza Lév.* Fungi Novo-Gran. 4551
p. 9. — Ascomatibus gregariis, pateniformibus, albo-tomentosis,
stipite crasso, albo-tomentoso, vix 1 mm. cr. præditis, margine
obtusis; disco levi, fulvo-aurantiaco; ascis fusiformi-clavatis, 8-spo-
ris; paraphysibus filiformibus, simplicibus, continuis; sporidiis li-
neari-acicularibus, longissimis, continuis, hyalinis.

Hab. ad cortices, in Tequendama et Canoas Novæ Granatæ.

10. **Dasyscypha Hippocastani** Rich. Cat. Champ. Marn n. 985 (nomen). 4552

Hab. in facie interiore pericarpium *Æsculi Hippocastani* dejecti in silva St.-Lumier-en-Champagne, Marne Galliæ.

BIATORELLA De Not. in Giorn. bot. it. 1846, pag. 192, Rehm Disc. p. 303. Ita nominandum posterius genus *Tromera* Mass. (1858). — Syll. VIII, p. 469. — Cl. Rehm. l. c. sequentes species enumerat, Syllogi deficientes, a plerisque auctoribus Lichenibus adscriptas.

a) Ligni-truncicolæ.

1. **Biatorella pinicola** (Mass.) Th. Fr. Lich. Arct. p. 200, Rehm Disc. 4553 p. 303, *Sarcogyne* Mass. — Ascomatibus pallide brunneis, 0,2-0,5 mm. diam.; ascis (ut omnium specierum) polysporis, 50-60 \approx 21-24; sporidiis sphaericis 3 μ . diam.; paraphysibus supra dilute brunneis.

Hab. in cortice Pinorum in Italia, Germania, Helvetia.

2. **Biatorella delitescens** Arnold Flora 1876, pag. 566, Rehm Disc. 4554 p. 301. — Ascomatibus flavido-viridulis v. brunneolis, 0,2-0,7 mm. diam.; ascis 45-50 \approx 21-24; sporidiis globosis 3-4. μ . diam.

Hab. in truncis Ulmi in Bavaria. — Ascomata in areis dealbatis sessilia.

3. **Biatorella moriformis** (Ach.) Th. Fr. Lich. Scand. p. 401, Rehm. 4555 Disc. p. 305, *Arthonia* Ach. — Ascomatibus nitide brunneo-nigricantibus, 0,4-0,6 mm. diam.; ascis 45 \approx 15-18; sporidiis sphaericis, 3 μ . diam.; paraphysibus supra smaragdinis.

Hab. in truncis decorticatis Pinorum in Silesia et Guestphalia. — Var. **improvisa** (Nyl.) Rehm. l. c. paraphysibus viridi-brunneolis. — Cum typo.

b) Terri-rupicolæ, raro lignicolæ.

4. **Biatorella geophana** (Nyl.) Rehm Disc. p. 307, *Agyrium sexdecimsporium* Fuck., Sacc. Syll. VIII, p. 636.

5. **Biatorella campestris** (Fr.) Th. Fr. Lich. Scand. p. 398, Rehm 4556 Disc. p. 308, *Biatora* Fr. — Ascomatibus carneo-rubentibus, 0,2-0,4 mm. diam.; ascis 90-120 \approx 15-18; sporidiis ellipsoideo-oblongis, 7-8 \approx 3; paraphysibus subhyalinis (etiam apice).

Hab. ad Muscos et Nostoc ad terram et in ligno Pini Cembrae in Germania, Helvetia.

6. **Biatorella germanica** Mass. Flora 1858, pag. 507, Rehm Disc. 4557 p. 309. — Ascomatibus brunneo-rubellis, 0,2-1 mm. diam.; ascis

70-75-15 \approx 18; sporidiis globosis, 3 μ . diam.; paraphysibus subhyalinis (etiam apice).

Hab. in rupibus calcareis Jura Franconiæ (ARNOLD).

7. **Biatorella fossarum** (Duf.) Rehm Disc. p. 310. *Lecidea* Duf. in 4558
Fr. Lich. europ. p. 264. — Ascomatibus croceis v. cinnabarino-brunneis, 0,3-1 mm. diam.; ascis 70-90 \approx 20-25; sporidiis oblongo-cylindræis, 6-8 \approx 3-4; paraphysibus supra sæpe luteolis.

Hab. in rupibus et muscis in Franconia, Guestphalia, Algeria. — Var. **hemisphærica** Anzi Cat. Lich. Sondr. p. 78, Rehm l. c.: ascomatibus hemisphæricis, atro-rubris. Ad terram et muscos in Germania, Helvetia, Italia.

Sect. 2. Phæosporæ.

PHÆOPEZIA Sacc. — Syll. VIII, p. 471.

1. **Phæopezia orientalis** Pat. Journ. Bot. 1890, p. 59. — Cupulifor- 4559
mis, glabra, tenuis, 2 cm. diam., demum expansa, fulvo-brunnea; margine integro; ascis clavatis, 160 \approx 20, octosporis; sporidiis monostichis exacte ovoideis 20 \approx 10, levibus, crasse tunicatis, eguttatis, hyalinis dein rufis.

Hab. in fimo vaccino Pu-Phap Tonkin (DELAVAY). — Subaffinis *Ascobolis* sed major, sporidiis numquam violaceis etc.

Sect. 3. Didymosporæ.

LANZIA Sacc. — Syll. VIII, p. 479.

1. **Lanzia longiasca** (Cav.) Sacc. *Pyrenopeziza* Cav. Mat. Lomb. p. 8, 4560
t. I, f. 1. — Ascomatibus gregariis, breve stipitatis, nigris, verticaliter eximie rugoso-plicatis, $\frac{3}{4}$ mm. latis, poro exiguo dein amplo dehiscentibus, disco concavo albido; ascis elongatis, gracilibus, cylindræis 100 \approx 3-4, basi leviter constrictis, apice obtusis, octosporis; sporidiis tereti-ellipsoideis, obtusiusculis, 1-septatis, 2-guttulatis, 10-12 \approx 2-3; paraphysibus filiformibus, continuis.

Hab. in ramis emortuis Rosæ spinosissimæ, M. Lesima in Apennino editiore (R. FARNETI). — Excipulum nigricans, introrsum virescens. Ob colorem atrum a typo generis aliquid desciscit.

NIPTERA Fr. em. — Syll. VIII, p. 480.

1. **Niptera perpusilla** Bomm. Rouss. Sacc. Contr. Myc. Belg. IV, p. 20. 4561

— Ascomatibus sessilibus, hemisphæricis, glabris, pallide lignicoloribus, margine crassiusculo; disco concolore, concavo; ascis cylindraceis, octosporis, $60-63 \approx 6-7$; sporidiis oblique monostichis, rarius distichis, fusoides, utrinque rotundatis, hyalinis, 1-septatis, subinde 2-guttatis, $12-15 \approx 3,5$; paraphysibus ascos paullo excedentibus, gracilibus, flexuosis clavula brevi terminatis.

Hab. in ramis Buxi sempervirentis, Tervueren Belgii. — Species minutissima, vitro tantum detegenda.

2. **Niptera? melioloides** Speg. F. Puigg. n. 390. — Ascomatibus orbicularibus minutis, $200-250 \mu$. diam., tenuiter carnosulis, atris, glabris, disco pallidiore cerino-olivaceo; ascis cylindraceis paraphysatis, $40 \approx 8-10$; sporidiis clavulatis, didymis, dein constrictulis, hyalinis, $10-11 \approx 3-4$. 4562

Hab. ad folia Ipomeæ in subiculo Asterinæ pseudopelliculosæ parasitans, in dumetis prope Apiahy Brasilæ. — Jodi ops nulla.

3. **Niptera submelæna** Rehm Disc. p. 559. — Ascomatibus gregariis, primo punctiformibus, globoso-clausis, patelliformibus, extus nigro-brunneis, levibus, siccis angulosis v. longitudinaliter plicatis, nigrescentibus, $0,2-0,4$ mm. lat., molliter ceraceis; disco griseo-albo, tenuiter marginato; contextu minute parenchymatico, brunneo; ascis clavatis, 8-sporis, $40-50 \approx 6-7$; sporidiis distichis, fusoides, 1-septatis, rectis, $9-10 \approx 2-2,5$; paraphysibus filiformibus, supra sensim usque 3μ . lat., hyalinis. 4563

Hab. ad calamos siccos Junci effusi pr. Königstein (KRIEGER). — Habitus *Mollisiæ melatephræ*.

4. **Niptera melanophæa** Rehm Disc. p. 558. — Ascomatibus gregariis, dein cyathiformibus, raro patelliformibus, extus brunneis, levibus, siccis involutis, nigro-brunneis, $0,2-0,3$ mm. lat., molliter ceraceis; disco albo-flavido, margine tenui et albido; contextu parenchymatico, brunneo, marginem versus cellulis valde elongatis, pallidis prædito; ascis clavatis, late sessilibus, supra subapplanatis, 8-sporis, $60-70 \approx 12-15$; sporidiis distichis, elongatis, rotundatis, loculis 1-guttatis, membrana crassa, $15-17 \approx 6$; paraphysibus furcato-ramosis, septatis, 1μ . lat., supra non incrassatis sed leniter brunneolis. 4564

Hab. ad folia sicca Caricis ligericæ, Grunewald pr. Berlin (SYDOW).

SCUTULA Tul. — Syll. VIII, p. 486.

1. **Scutula Aspiciliæ** (Muell. Arg.) Rehm Disc. pag. 326, *Patellaria* 4565

(Calillaria) *Aspiciliæ* Muell. Arg. Flora 1872, p. 488. — Ascomatibus sparsis, nigris, 0,3-0,5 mm. lat., disco patelliformi, brunneo v. brunneo-violaceo, rotundato, primo crasse obtuseque marginato, dein applanato v. subconvexo, omnino immarginato; contextu primo brunneolo, dein subhyalino; ascis elongato-ovoideis, apice valide incrassato præditis, 8-sporis; sporidiis bilocularibus, medio constrictis, hyalinis, 10-14 \approx 4-4,5; paraphysibus coalitis, 2-3-septatis, 2 μ . lat., supra usque ad 6 μ . crass. dilatatis et brunneolis.

Hab. in thallo *Aspiciliæ* calcareæ var. depressæ prope Bovernier in Wallis.

2. **Scutula fusco-purpurea** (Tul.) Rehm Disc. p. 325, *Celidium fusco-purpureum* Tul. Mem. lich. p. 121, t. 14, f. 9-13. — Ascomatibus in greges densos, rotundos, demum confluentes gregariis, primo globosis, dein applanato-apertis, nigris v. nigro-brunneolis, 0,2-0,4 mm. lat.; disco demum subconvexo, plerumque omnino immarginato; ascis ovoideo-clavatis, apice incrassatis, 6-8-sporis, 45-50 \approx 10-12; sporidiis distichis, elongato-ovoideis, rarius ellipsoideis, utrinque obtusis, primo continuis, dein 1-septatis, guttatis, 10-15 \approx 3-3,5; paraphysibus filiformibus, septatis, 2-3 μ . lat., coadunatis, supra dilatatis e cyaneo viridulis.

Hab. ad superficiem superiorem thalli *Peltigeræ* horizontalis et *P. caninæ*. — Ascomata areolis decoloratis rotundis 0,5-2 mm. lat. insidentia.

3. **Scutula aggregata** Bagl. et Car. Cat. Lich. Vales. p. 404, Rehm Disc. p. 327. — Ascomatibus maculiformiter gregariis, primo terreis, dein atro-brunneis vel nigris, minutis; disco applanato, margine erecto; sporidiis lineari-ellipsoideis, 9-11 \approx 3.

Hab. in thallo *Peltigeræ* caninæ et *P. horizontalis* in Valesia It. bor., Wallis Helvetiæ et Riva Tirolia australis.

Sect. 4. Phragmosporæ.

BELONIUM Sacc. — Syll. VIII, p. 492.

1. **Belonium guestphalicum** Rehm Disc. p. 591 (*Trichobelonium*). — Ascomatibus solitariis, subiculo ex hyphis tenuibus, longis, simplicibus, septatis, brunneis, 5-6 μ . lat. constituto insidentibus, basi subangustatis, cyathiformibus, mox applanatis, extus brunneo-nigris, levibus, siccis plerumque involutis, rugosis, nigris, 0,5-1,2 mm. lat., gelatinoso-mollibus; disco demum subconvexo, tenuiter et inæqualiter marginato, griseo-brunneolo; contextu minute parenchymatico,

brunneo, marginem versus cellulis elongatis prædito; ascis elongato-clavatis, supra rotundatis et incrassatis, 8-sporis, 130-150 \approx 8-10; sporidiis distichis, acicularibus, supra obtusis subtus acutis, rectis v. subincurvis, 3-septatis, hyalinis, 26-40 \approx 3-5; paraphysibus subtus repetite divisis, septatis, supra usque ad 2 μ . lat. tenuiterque brunneolis.

Hab. ad calamos siccos Junci effusi in Coerhaide pr. Münster (v. TAVEL).

BELONIDIUM Mont. — Syll. VIII, p. 496.

1. **Belonidium imperspicuum** Bomm. Rouss. Sacc. Contr. Mycol. Belg. 4569 IV, p. 22. — Ascomatibus perexiguus, sparsis, sessilibus, glabris, hemisphæricis, griseo-fuscis, disco sordide griseo-plumbeo, initio concavo; ascis clavatis, substipitatis, 8-sporis, 75-80 \approx 11; paraphysibus filiformibus copiosis, simplicibus v. breve ramosis, ascos paullo superantibus; sporidiis 2-3-seriatis, subfusoideis, hyalinis, 5-7-septatis, 21 \approx 3-4.

Hab. in ligno Carpini Betuli putrescente, Boitsfort Belgii.

2. **Belonidium Marchalianum** Sacc. Bomm. et Rouss. Contr. Myc. Belg. 4570 III, p. 5. — Ascomatibus sessilibus, glabris, primitus clausis dein apertis, 0,5-0,7 mm. diam., planis, vivis cæsiis demum melleis; ascis tereti-clavatis, 120-165 \approx 10-14; sporidiis distichis, vermicularibus, 3-7-septatis, granulosis, 33-42 \approx 6.

Hab. in ligno fagineo putrido, inter hyphas *Helminthosporii apiculati*, Groenendael Belgii.

3. **Belonidium citrinellum** Bomm. Rouss. Sacc. Contr. Myc. Belg. IV, 4571 p. 21. — Ascomatibus sessilibus, patelliformibus, ceraceo-mollibus, 90-120 μ . diam., disco pruinoso, udo albo-flavido, sicco amœne citrino; ascis clavatis, brevissime stipitatis, 8-sporis, 60-72 \approx 8,5-9; paraphysibus filiformibus, simplicibus, ascos æquantibus; sporidiis distichis anguste fusoideis, 3-4-septatis (sæpius 3-septatis) 15-21 \approx 3-4, curvulis, 4-guttatis, hyalinis.

Hab. in cortice interiori Platani orientalis, Groenendael Belgii.

4. **Belonidium macrosporum** (Boud.) Sacc. ? *Niptera* Boud. in Har. 4572 Champ. Cap Horn p. 193. — Album, sessile, regulare aut undulatum, hymenio spisso, pallido, cupula 0,5-1 mm. lat., extus tomentosum, albidum, hymenio depresso aut tumidulo, colore sordido; ascis maximis, clavatis, basi attenuatis, 8-sporis, 260-300 \approx 20-25; paraphysibus linearibus, tenuibus, sæpius divisis, non ad apicem

incrassatis, numerosis; sporidiis majoribus, 5-7- v. pluri-septatis, hyalinis, oblongo-fusiformibus, intus non granulosis, 40-45 \approx 10.

Hab. in ligno putrescente in sinibus Saint-Martin (HARIOT) et Orange (Doct. HYADES) Patagoniæ austr.

5. **Belonidium caulicolum** Oud. Contr. Mycol. XIII, p. 21, t. 8. f. 3. — 4573
Ascomatibus $\frac{1}{3}$ - $\frac{1}{2}$ mm. lat., primo subepidermicis, dein per sulcos caulis arescentis gregatim erumpentibus, ceraceis, nigris, applanato-orbicularibus, centro depressis, versus ambitum autem tumescentibus; ascis clavatis, sessilibus, 50 \approx 14; paraphysibus numerosissimis, filiformibus, ramosis; sporidiis octonis, distichis, fusoido-clavatis, utrinque obtusissimis, 3-septatis, ad septa manifeste constrictis, 18-21 \approx 6-7.

Hab. in caulibus siccis denudatis Senecionis Jacobææ, Loosduinen Nederlandiæ (Domina DESTRÉE).

6. **Belonidium rhenopalaticum** Rehm Disc. pag. 565. — Ascomatibus 4574
gregariis, cyathiformibus, demum applanato-patelliformibus, extus brunneis, levibus, siccis brunneo-flavis, 0,2-3 mm., molliter ceraceis; disco pallide v. griseo-flavido, primo margine tenui, brunneolo prædito, demum immarginato; contextu exili, basi late parenchymatico, dilute flavido v. brunneolo; ascis clavatis, supra acuminatis, 8-sporis, 75-80 \approx 9-10; sporidiis distichis, elongatis, clavatis vel fusoidis, supra sæpe obtusis, rectis v. subincurvis, dein 1-5-septatis, hyalinis, 18-24 \approx 3; paraphysibus filiformibus tenuibus, circ. 1,5 μ . lat., hyalinis.

Hab. ad culmos siccos Arundinis pr. Zweibrücken et Strassburg (MOUG. et NESTL. Stirp. n. 983, sub *Eustegia arundinacea*).

7. **Belonidium subnivale** Rehm Disc. pag. 567. — Ascomatibus spar- 4575
sis, subiculo minutissimo, nigrescente insidentibus, dein plano-patelliformibus, albido-griseis, extus basi brunneolis, levibus, siccis junioribusque involutis, extus brunneolis, 0,2-0,5 mm. lat., molliter ceraceis; disco tenuiter marginato; contextu basi parenchymatico, brunneo, marginem versus cellulis elongatis, hyalinis prædito; ascis clavatis, supra obtuse acuminatis, 8-sporis, 60-70 \approx 9-10; sporidiis polystichis, anguste fusoidis, acutis, plerumque rectis, 1-3-septatis, hyalinis, 25-27 \approx 3; paraphysibus filiformibus, septatis, usque 3. μ . lat., hyalinis.

Hab. in culmis siccis Sulden-Gletscher ad Ortler Tirolæ.

8. **Belonidium caricincolum** Rehm Disc. p. 564. — Ascomatibus gre- 4576
gariis, late sessilibus, dein applanato-patelliformibus, extus nigro-brunneis, levibus, siccis subinvolutis, nigris, 0,2-1 mm. lat., molli-

ter ceraceis; disco griseo v. griseo-flavido v. atro-olivaceo, tenuiter marginato; contextu parenchymatico, brunneo; ascis clavatis, supra obtuse acuminatis, 8-sporis, 60-70 \approx 7-8; sporidiis distichis, elongatis, subfusoides, obtusiusculis, rectis v. subincurvis, primo continuis, minute 2-4-guttatis, demum 3-septatis?, hyalinis, 18-24 \approx 3; paraphysibus filiformibus, supra 3 μ . lat., hyalinis.

Hab. ad folia putrescentia Caricis, rarius Graminacearum in paludosis Grunewald pr. Berlin (SYDOW).

9. **Belonidium aurantiacum** Rehm Disc. p. 564. — Ascomatibus sparsis v. gregariis, late sessilibus, dein applanato-patelliformibus, extus aurantiacis, levibus, siccis involutis et fusco-aurantiacis, 0,1-0,4 mm. lat., molliter ceraceis; disco dilute aurantiaco, margine pallidiore et tenui; contextu parenchymatico, flavido, marginem versus cellularis elongatis prædito; ascis clavatis, supra rotundatis, 8-sporis, 60-70 \approx 8; sporidiis distichis, anguste fusoides, acutiusculis, rectis v. subincurvis, primo continuis, dein 1-3-septatis, hyalinis, 10-15 \approx 1,5; paraphysibus filiformibus, hyalinis, supra usque ad 3 μ . lat.

Hab. in foliis siccis Caricis acutiformis, Paulsborn pr. Berlin (SYDOW). — Habitus *Mollisiæ* Poæ, sed *Bel. juncisedo* vere affine.

11. **Belonidium Laschii** Rehm Disc. p. 570. — Ascomatibus gregariis, late insidentibus, dein applanato-patelliformibus, extus nigro-brunneis, levibus, siccis subinvolutis, extus nigris 0,2-0,4 mm. lat., molliter ceraceis; disco griseo-flavido v. flavo, margine tenui, nigrescente; contextu parenchymatico, brunneo, marginem versus in series cellularum fibroideas, 6 μ . lat. abeunte; ascis ellipsoideo-clavatis, breve stipitatis, apice obtuse acuminatis et incrassatis, 8-sporis, 70-80 \approx 12-15; sporidiis subparallelis, elongatis, subacuminatis, rectis v. subincurvis, 7-15-septatis, hyalinis v. dilute flaveolis, 36-45 \approx 4,5; paraphysibus supra furcato-ramosis, hyalinis, 1,5 μ . cr.

Hab. ad calamos siccos Junci conglomerati prope Driesen in Neumarck (LASCH).

12. **Belonidium subcarneum** Rehm Disc. p. 563. — Ascomatibus gregariis, basi angustatis, dein applanato-cyathiformibus, expansis, levibus, siccis involutis et convexis, 0,3-1 mm. lat., molliter ceraceis; disco roseo v. flavo-rubente v. flavo-brunneolo, margine tenui, albedo et minute lanuginoso; contextu basi tenuiter parenchymatico, pallide brunneolo; ascis clavatis, supra obtuse acuminatis, 85-90 \approx 9, octosporis; sporidiis distichis, elongato-fusoides, acutis, rectis

v. subincurvis, primo continuis 2-guttatis, demum 3-septatis, loculis mediis 1-guttatis, hyalinis, 12-17 \approx 4-4,5; paraphysibus filiformibus minute guttuligeris, hyalinis, circ. 2. μ . lat.

Hab. in charta putri, Grunewald pr. Berlin (SYDOW).

Sect. 5. Scolecosporæ.

GORGONICEPS Karst. — Syll. VIII, p. 504.

1. **Gorgoniceps leucophæa** Speg. Fung. Puigg. n. 391. — Ascomati- 4580
bus sessilibus, discoideo-cupulatis, aggregatis v. subsparsis, extus
aterrimis, 1-3 mm. d., disco albo; ascis cylindraceo-subclavulatis
parce paraphysatis, 200 \approx 8, jodo immutatis; sporidiis lineari-fusoi-
deis, continuis, hyalinis, 150-160 \approx 1,5-2.

Hab. ad corticem putrescentem truncorum in silvis pr. Apiahy
Brasiliæ.

ERINELLA Sacc. — Syll. VIII, p. 507.

1. **Erinella hyalopoda** Cooke et Mass. Grev. XIX, p. 48. — Stipitata, 4581
gregaria v. sparsa, alba; cupula cyathiformi, 1-1½ mm. alt., ½ mm.
lat. tenui, pilis deciduis brevibus, flaccidis ornata, stipite gracili,
elongato, hyalino, ad basim incrassato, sæpe sursum furcato; ascis
cylindraceo-clavatis, 150 \approx 10; sporidiis inordinatis, bacillaribus
multinucleatis 35 \approx 2-3, paraphysibus sursum acutis.

Hab. in *Phormio* putri in Nova Zelandia (T. KIRK).

2. **Erinella guaranitica** Speg. Guar: I, p. 137 (*Helot.*). — Ascomatibus 4582
sparsis, sordide lutescenti-ceraceis, minutis, pedicello longiusculo,
gracili, 300-500 \approx 80-90; cupulis turbinato-concavis, 200-500 \approx 150-
200, crassiusculis, carnosulo-tenacellis, intus glabris, extus et præ-
cipue ad marginem albo-puberulis vel minutissime puberulo-papil-
losis; ascis cylindraceo-clavulatis, sursum plus minus abrupte acu-
tatis vel obtusatis, deorsum breviter attenuato-pedicellatis, 48-52
 \approx 5-7, 8-sporis; paraphysibus crassiusculis, ad apicem præcipue
granulosis, 60 \approx 1-2, parcis; sporidiis acicularibus, utrinque acu-
tiusculis, 32-38 \approx 1, guttulatis, hyalinis.

Hab. ad folia dejecta putrescentia Laurinææ cujusdam in
silvis pr. Guarapí Brasiliæ. — Species habitu media inter *Helotium*
et *Trichopezizam* sed sporidiis acicularibus ab utroque di-
versa.

Fam. 3. Ascobolaceæ BOUD.**Sect. 1. Phæosporæ.****ASCOBOLUS** Pers. — Syll. VIII, p. 514.1. **Ascobolus aglaosporus** Heim. *Æsterr. Ascob.* pag. 14, f. IV. — 4583

Ascomatibus parvis, 0,5 mm. lat., planiusculis, disciformibus, margine, furfure pilisque omnino deficientibus, pulchre albido-lilacinis, tenuiter punctulatis; ascis numerosis, 146-166 \times 26-27, oblongo-clavatis, superne attenuatis apice rotundatis, basi stipitiformi-angustatis; sporidiis distichis, ellipsoideis, pulcherrime lilaceo-violaceis, mox brunneolis, 15-18,5 \times 8,5-10, densissime minutissimeque granulosi; paraphysibus gracilibus, 2-3 μ . lat., apice obtusis, indistincte septatis, hyalinis, gelatina omnino deficientibus.

Hab. in stercore putrido cervino in ditione Presslau Austriæ infer. — *A. brunneo* et *A. amæno* affinis.

SACCOBOLUS Boud. — Syll. VIII, p. 524.1. **Saccobolus pseudoviolaceus** Heim. *Æsterr. Ascob.* p. 19, f. VII. 4584

— Minutus, 0,5 mm. lat., sparsus v. confertus, aquoso-violaceus; disco convexo, apicibus ascorum distincte et sparse sub lente nigro-punctato; ascis oblongo-clavatis, late breviterque stipitatis, 131-150 \times 28-37; sporidiorum glomerulo ellipsoideo, 35-41 \times 14,5-17,5; sporidiis octonis, quorum 6 distichis, late ellipsoideis, uno latere incurvatis, utrinque subobtusatis, episporio parcissime asperopunctato, 13,5-14,5 \times 7-8; paraphysibus filiformibus, 3 μ . lat., hyalinis, non clavatis, septatis, plus minus ramosis.

Hab. raro in stercore cuniculino in montibus Geissberge Austriæ infer. — *S. Boudieri* affinis.

2. **Saccobolus Beckii** Heim. *Æsterr. Ascob.* p. 18, f. VIII. — Spar- 4585

sus, 0,5-1 mm. lat.; disco primo hyalino, demum ob ascos sub lente distincte punctato; ascis breviter et latiuscule clavatis, stipitatis, 85-113 \times 23-25; sporidiorum glomerulo oblongo-elliptico, 49,5 \times 18-23; sporidiis octonis, quorum 6 distichis, atris, episporio grosse verrucoso v. subgibboso, 17-21 \times 9-10, gelatina unilaterali 8-9 μ . cr. instructis; paraphysibus paullum ramosis, hyalinis, 3 μ . cr., apice vix aut distinctius clavulatis, septatis.

Hab. in stercore cervino, Pressbaum Austriæ infer., socio Saccobolo neglecto. — *S. neglecto* valde affinis, sed ascomatibus sporidiisque majoribus diversus.

Sect. 2. Hyalosporæ.

ASCOPHANUS Boud. — Syll. VIII, p. 528.

1. **Ascophanus flavus** Karst. Symb. Fenn. XXIX, p. 105. — Asco- 4586
matibus gregariis vel confertis, superficialibus, ovoideis, dein ver-
tice applanatis, tenuiterque marginatis, glabris, flavis, 0,5-1,5 mm.
lat.; ascis cylindræis, octosporis, circiter 210 \approx 12-14, jodo non
cœrulescentibus; sporidiis monostichis, ellipsoideis, levibus, eguttu-
latis, 18-20 \approx 9-10, paraphysibus filiformibus, apicem versus ali-
quanto incrassatis, deorsum fulvis, remote articulatis, 2-4 μ . cr.

Hab. in stercore vacciao ad Mustiala Fenniae.

2. **Ascophanus subiculosus** Pat. Bull. Soc. Myc. 1891, p. 171. — Gre- 4587
garius 300 μ . diam., sessilis, subglobosus vel cylindræus, apice
truncatus leniterque depressus, initio pallide brunneus, dein nigre-
scens, glaber, mycelio arachnoideo albido-flavescente filamentoso
insitus; ascis clavatis 210 \approx 15, octosporis, jodo cœrulescentibus;
paraphysibus gracilibus, filiformibus, apice subincrassatis, jodo in-
tense cœrulescentibus; sporidiis monostichis ovoideis, levibus 22 \approx
9-10.

Hab. ad fimum asininum, Egido prope Quito Æquatoriae. —
Paraphysibus copiosissimis et mycelio matricem totam obtegente
facile dignoscitur.

3. **Ascophanus elegans** J. Klein Mykol. Mittheil. p. 566, t. X, f. 18-20 4588
(*Ascobolus*). — Ascomatibus obturbinatis, subsessilibus, margine
crenatis, extus brunneis, disco flavo-viridulo; ascis erumpenti-
bus, tereti-clavatis, amplis, octosporis, paraphysibus filiformibus
brevioribus obvallatis; sporidiis oblique monostichis, ellipsoideis,
55-60 \approx 30, initio strato hyalino cinctis, levibus, sordide albis.

Hab. in fimo equino, in laboratorio cultus, in Hungaria. —
Asci et sporidia subinde multo minora manent.

4. **Ascophanus patagonicus** Speg. F. Pat. n. 161. — Ascomatibus 4589
sparsis vel hinc inde laxè gregariis, rubescenti vel flavescenti-ce-
rinis, hemisphæricis, 0,5-1 mm. diam., superne applanato-concavis,
margine integris, extus glaberrimis; ascis clavulato-saccatis 20 \approx
8, sessilibus, jodi ope immutatis, paraphysatis, octosporis; sporidiis
inordinate di-tristichis, ellipticis, nonnihil inæquilateralibus, utrin-
que obtusiusculis, 7-9 \approx 3, hyalinis.

Hab. in fimo Aucheniæ Guanaco in meseta secus Rio S.
Cruz Patagoniæ.

5. **Ascophanus brunnescens** Karst. Symb. Myc. Fenn. XXIX, p. 104. 4590

— Ascomatibus sparsis, superficialibus, rotundatis, glabris, pallide brunneis vel sordide fulvescentibus, 0,2–0,3 mm. latis; ascis cylindraceo-clavatis, octosporis, 48–53 \times 10; sporidiis distichis ellipsoideis, eguttulatis, levibus, hyalinis, 7–8 \times 3–3,5 μ . cr.; paraphysibus 1 apice clavulatis et flavo-chlorinis.

Hab. in stercore vaccino ad Mustiala Fennicæ.

6. **Ascophanus spadiceo-niger** Rich. Cat. Champ. Marn. n. 925. — 4591

Granuliformis, sphaericus, atro-brunneus, fructificatione *A. ochracei* sed paraphysibus apice non inflatis et sporidiis tandem brunneolinctis.

Hab. in fimo Cuniculorum in hortis St. Amand Gallicæ.

RHYPAROBIUS Boud. — Syll. VIII, p. 539.1. **Rhyparobius tenacellus** Phil. Grev. XIX, p. 74. — Sparsus, minu- 4592

tus, initio cylindræus, dein hemisphaericus, immarginatus, albus, glaber, excipulo molliusculo, submembranaceo, disco plano v. subconvexo; ascis late clavatis, 70–80 \times 27–30; sporidiis 36 in quoque asco, ellipsoideis, hyalinis, 12 \times 8; paraphysibus sursum obtusis incrassatis, 6 μ . cr. guttulatis, dein pseudoseptatis.

Hab. in stercore Cuniculorum, Shropshire Britannicæ. — Cellulæ excipuli 10 μ . diam., arcte cohærentes. Affinis *R. albido* sed asci et sporidia majora et totus albus.

2. **Rhyparobius ascophanoides** Sacc. *Ascophanus rhyparobioides* Heim. 4593

(Æsterr. Ascob. p. 22, f. XI. — Minutissimus, vix 300 μ . lat., albidohyalinus, convexus, subgranuliformis; disco valde conspicue papillato; ascis paucis (6–8), late v. latissime obovato-clavatis, stipitatis, 120–174 \times 50–73, polysporis (non raro circ. 32-sporis); sporidiis inordinate dispositis, ellipsoideis, hyalinis, 14,5–17,5 \times 7–8,5; paraphysibus numerosissimis 2 μ . cr., tenuiter filiformibus, simplicibus, apice non incrassatis, septatis, hyalinis.

Hab. raro in stercore putrido cervino in ditone Pressbaum Austriæ infer. — *A. sexdecimsporo* affinis.

3. **Rhyparobius oligoascus** (Heim.) Sacc. *Ascophanus oligoascos* Heim. 4594

(Æsterr. Ascob. p. 27, f. I. — Ascomatibus 200 μ . lat., ovoideis v. ovoideo-conicis, infra glabris, junioribus superne cellulis elongato-clavatis, luteis quasi coronatis, dein irregulariter ruptis; ascis plerumque 2, uno ad sporidiorum evolutionem parato, altero laterali nondum evoluto, oblongo-ovatis, tenuiter annulatis, 150 \times 60, polysporis; sporidiis in asco conglobatis, ellipsoideis vel subfusoides,

4,5-5,5 \approx 3; paraphysibus exterioribus apice clavulatis, interioribus linearibus, septatis, hyalinis.

Hab. in fimo cervino putrido ad Pressbaum Austriæ infer.

STREPTOTHECA Vuill. in Journ. de Bot. Mars 1887, p. 33 c. icon. (Etym. *streptos* torquis, collare et *thece* ascus). — Ascomata perexigua, subsessilia, e cylindræo expansa, excipulo peripherico brevissimo tenui, pilis delicatis fimbriato. Asci tereti-clavati, breve stipitati, 32-spori, zona annulari sub vertice intus præditi, operculo minuto dehiscentes. Sporidia fusoidæ, continua, hyalina. Paraphyses parvæ, asco breviores.

1. **Streptotheca Boudieri** Vuill. loc. cit. — Exigua, albo-diaphana, 4595
 $\frac{1}{5}$ - $\frac{1}{4}$ mm. diam.; ascis 120 \approx 22; sporidiis 12,6 \approx 3; cetera generis.

Hab. in stercore vulpino in silva de Haye prope Nancy Galliæ. — Cfr. cum *Rhyparobio Crouani* (Renny) Phill. — Syll. VIII, pag. 543.

THELEBOLUS Tode Meckl. I, pag. 41, Zukal. Denksch. Akad. Wien 1885, p. 1-6, t. I, Heim. Ascob. p. 28. — Ascomata exigua, primo subsphærica, dein ovata, omnino clausa, demum vertice irregulariter vel circumscisse dehiscentia, ascum unicum proportionem maximum gerentia. Ascus subovatus, myriosporus, demum emergens, sæpius sub vertice bilabiato vel lacerato dehiscente annulato-zonatus. Sporidia ovato-oblonga, continua, hyalina. Paraphyses tenues, copiosæ, hyalinæ. — Genus hoc in vol. VII, Syll. p. 44, ut auctores omnes ante Zukalium, inter Nidulariaceas locaveramus. Cl. Brefeld (Untersuch. fasc. IX) locat inter suos Hemiascos.

1. *Eu-Thelebolus*. Ascomata glabra.

1. **Thelebolus stercoreus** Tode, Zuk. Denksch. Akad. Wien 1885, 4696
p. 1-6, t. I, Heim. Ascob. p. 28. — Ascomatibus primo subsphæricis, demum late ovatis, circ. 300-400 μ . alt., extus glabris ochraceis; asco late ovoideo, 200-260 \approx 150-175, distincte annulato; sporidiis oblongis, homogenis, indistincte nucleatis, 5,8-7 \approx 3,5; paraphysibus ramosis, septatis.

Hab. in stercore humano, cuniculino, leporino, cervino, capreolino et vaccino, in Europa et America.

2. **Thelebolus nanus** Heim. Œsterr. Ascob. p. 30, f. II. — Ascomatibus minutissimis, circ. 130 μ . lat., ellipsoideis, hyalinis; ascis ellipsoideis, annulatis, sub apice basique lenissime constrictis, 140 μ

80; sporiidis ellipsoideis, hyalinis, inconspicue 1-guttatis, $5-6 \times 3$; paraphysibus non remotis, tenuissime septatis, 3μ . cr., hyalinis.

Hab. in stercore leporino, rarissime, socio *Thelebolo stercoreo*, cui affinis, Pressbaum Austriæ infer.

2. *Trichobolus* Sacc. Ascomata setigera.

3. **Thelebolus Zukalii** Heim. *Æsterr. Ascob.* p. 30, f. III. — Ascomatibus 4598
 primum subsphæricis, dein late ovatis, circ. 0,5 mm. lat., pallide ochraceis, imprimis in superiore parte setis rigido patentibus septatis, atque ad 300μ . long., acutissimis, obsitis; ascis latissime ovatis, exannulatis, circ. 375×245 ; sporidiis subsphæricis, hyalinis, distincte 1-guttatis, $8,5-11,5 \times 7,5-9$; paraphysibus gracillimis, ramosis, 2μ . hyalinis, septatis.

Hab. in stercore putrido cervino, Pressbaum Austriæ infer. — *Th. stercoreo* affinis, sed setulis prædistinctus.

GYMNODISCUS Zuk. — Syll. VIII, p. 545.

1. **Gymnodiscus durus** Zuk. *Berichte d. deutsch. bot. Gesell.* 1890, 4599
 p. 295. t. XVII, f. 1-4 et 9. — Ascomatibus globosis, 1-1,5 mm. albidis vel brunneolis, solitariis vel in pseudostroma arcte connexis; excipulo ex hyphis densis contexto, fere trigono, circ. 140μ . cr.; ascis globulosis, racemosis $5-7 \times 5-6$, octosporis, subsessilibus, hyphis ramosis septatis fultis; sporidiis conglobatis ellipsoideo-cylindræis, subangulosis, $3-4,5 \times 2,5$, flavidis, tunica crassiuscula levi.

Hab. in subere in extracto gallarum natante, cultus Wien Austriæ.

APHANOASCUS Zuk. *Berichte d. deutsch. bot. Gesell.* 1890, p. 295.

— Ascomata globulosa, excipulo initio gymnoascaceo (albo), dein pseudoparenchymatico (rubro) pilis septatis parce cincto. Asci piri-formi-ellipsoidei, 8-spori, hyphis longis ramosis glomeratim inserti. Sporidia ellipsoideo-globulosa, muricata. — Status conidicus sistit formam, *Sporotricho vellereo* Sacc. et Sp. F. it. n. 741 valde similem.

1. **Aphanoascus cinnabarinus** Zuk. loc. cit. t. XVII, f. 5-7. — Asco- 4600
 matibus maturis cinnabarinis, 1-2 mm. diam.; hyphis ascogenis $1,5-2 \mu$. cr.; ascis subsessilibus, demum rubentibus, $13-14 \times 12-15$; sporidiis $5,5 \times 5$, conglobatis, rubentibus, episporio spinuloso.

Hab. in fimo crocodylino, cultus, Wien Austriæ. — Sec.

auctoris sententiam fungillus medium tenet inter *Gymnoascum* et *Eurotium*.

Fam. 4. **Dermateaceæ** FR.

Sect. 1. *Hyalosporæ*.

CENANGIUM Fr. — Syll. VIII, p. 556.

1. **Cenangium hypochlorum** Berk. et Curt. in Grev. XIX, p. 107 (*En-* 4601
cœlia). — Sparsum, sessile, cupulatum, firmum, subcoriaceum,
1-2 mm. diam., flavo-viridulum, furfuraceum; disco sordide ochra-
ceo; ascis anguste clavatis, octosporis, 60-65 \approx 5-6; sporidiis fu-
soideis, vel oblongo-fusoideis, rectis vel curvulis, 10-12 \approx 2-2,5; pa-
raphysibus filiformibus.

Hab. in cortice emortuo in insula Cuba.

2. **Cenangium Labiatarum** Ces. Flora 1853, p. 201, Klotzsch H. M. 4602
n. 1731. — Erumpens, sparsum, extus nigrum, glabrum, disco pri-
mitus pruinoso, demum pallide helvolo, margine in adultis (sem-
per?) laciniato.

Hab. ad caules exsiccatos *Labiatarum*, imprimis *Menthæ*
rotundifoliæ et *Lycopi*, Vercelli Ital. bor. — *Cenangium*
chlorellum Fr. — Syll. VIII, p. 576, III, p. 172 — est, teste Tul.
Carp. *Nectria chlorella* (Fr.) Tul. appellandum.

TYMPANIS Tode. — Syll. VIII, p. 578.

1. **Tympanis? toomensis** B. et Br. Brisb. III, p. 222, t. 29, f. 18-21. 4603
— Gregaria, primo farinosa, sphaeriæformis, dein stipite circ. 4 mm.
alt. suffulta, margine incurvo, disco aperto cretaceo, extus tomen-
to sordide albo vestita; ascis sporidiisque..... nondum maturis.

Hab. ad fructum *Banksiæ* ad ripas fluvii Tooma Australiae
(F. CAMPBELL). — Species quoad habitum ad *Tympanidem* accedens
sed dubia quia ascis sporidiisque adhuc immaturis.

2. **Tympanis Cratægi** Lasch in Bot. Zeit. 1861, p. 295. — Erumpens, 4604
simplex vel subcæspitosa, turbinata, pallide fusca, intus obscure
flava, disco, subviridi-nigrescente; ascis clavatis; sporidiis oblongo-
ovoideis.

Hab. in ramis *Cratægi* in Borussia. — An diversa a *Pezi-*
cula Cratægi?

*Sect. 2. Didymosporæ.***CENANGELLA** Sacc. — Syll. VIII, p. 587.

1. **Cenangella Carpini** (Hazsl.) Sacc. Syll. VIII, p. 589, Bomm. Rouss. 4605
 Contr. Myc. Belg. IV, p. 24. — Asci clavati, 90-120 \times 13-15, basi
 nodulosi; paraphyses filiformes guttulatæ; sporidia fusoides, cur-
 vula, 1-septata, 39-57 \times 6, hyalino-nubilosa, demum olivacea, 2-3-
 sticha. Nascitur quoque in ramis Carpini Betuli, Groenendael
 Belgii. — **Cenangella Pinastri** (Tul.) Sacc. Syll. VIII, p. 588, te-
 ste Hazsl., Magyar. Szab. Disc. t. XI, f. 12, demum præbet spori-
 dia fusca. An diversa a specie Tulasneana?

*Sect. 3. Phragmosporæ.***SCLERODERRIS** Fr. — Syll. VIII, p. 594.

1. **Scleroderris congesta** (Mass.) Sacc., *Cenangium* Masee Journ. of 4606
 Bot. 1891, p. 1, t. 300, f. 1-6. — Ascomatibus stromate tenui in-
 sidentibus, cæspitulos albidos, irregulares, 0,5-1 cm. diam. efforman-
 tibus, sessilibus, corneis, circularibus v. e mutua pressione irregula-
 ribus, sphærico-depressis, primo clausis irregulariter ruptis, extus
 brunneis, dense pruinosis, disco concavo, pallido; ascis cylindra-
 ceis, basi attenuatis, 8-sporis; sporidiis monostichis, ellipsoideo-fu-
 siformibus, 3-septatis, levibus, hyalinis, 16-18 \times 8; paraphysibus
 numerosis, filiformibus, septatis, ascis æquilongis, 1,5-2 μ . diam.
Hab. ad corticem in insula Madagascarensi (BARON).

*Sect. 4. Scolecosporæ.***GODRONIA** Mong. — Syll. VIII, p. 601.

1. **Godronia splendida** Speg. Fung. Puigg. pag. 208. — Ascomatibus 4607
 sparsis, erumpenti-superficialibus, scutellato-discoideis, 2-3 mm.
 diam., marginatis, carnosos-coriacellis, extus atris, glabris, rugulo-
 sis, disco levissimo pulchre aurantiaco; ascis cylindræis, 200-300
 \times 10, apice subtruncatis, deorsum longe attenuato-stipitatis, octo-
 sporis; sporidiis filiformibus, 150-180 \times 1, hyalinis, continuis; pa-
 raphysibus dense filiformibus, hyalinis, apice ramulosis, aurantiaco-
 granulosis, dense mucoso-coalescentibus.

Hab. ad ramos corticatos emortuos in silvis pr. Apiahy Bra-
 silis (PUIGGARI).

CRINULA Fr. — Syll. VIII, p. 606.

1. **Crinula caliciiformis** Fr. — Syll. VIII, p. 607. — Var. **sorbicola** 4608
Karst. Symb. Myc. Fenn. XXVI, p. 31 (forma conidica). — Stipitibus scabrosis, glabris, deorsum tomentosus, atro-olivaceis, ex hyphis fuligineis subhyalinisque fasciculatis compositis; conidiis ex hypharum apice angustissimo, hyalino catenulatim oriundis, mox secedentibus, oblongatis vel ellipsoideo-oblongatis, rectis, eguttulatis, hyalinis, 2-3 = 1-1,5.

Hab. in cortice emortuo Sorbi Aucupariæ in Mustiala Fennicæ.

Fam. 5. **Bulgariaceæ** FR.

Sect. 1. **Hyalosporæ.**

PULPARIA Karst. — Syll. VIII, p. 612.

1. **Pulparia australis** Speg. Guar. I, p. 136. — Ascomatibus hinc inde 4609
pauci-aggregatis, sæpe subfasciculatis, breviter pedicellatis, turbinato-expansis, 1-1,5 mm. diam., membranaceo-carnosulis, tenacellis, cinerellis, extus vix obscurioribus, glabris, sub lente valide pruinosis, in disco pallidioribus, margine acutis, integris, udis planis, siccis, undulato-involutis, contextu indistincto, coriacellis; ascis clavatis, sursum acutato-obtusatis, deorsum attenuato-stipitatis, 8-sporis, 38-40 = 5; sporidiis globosis, 3-3,5 μ . diam., levibus, grosse guttulatis v. granulosis, hyalinis; paraphysibus ascis vix longioribus, antice incrassatis, hyalinis, simplicibus.

Hab. ad truncos cariosos putrescentes in silvis subvirgineis pr. Carapeguá Brasiliæ. — Species habitu inter *Helotium* et *Chlorosplenium* media.

OMBROPHILA Fr. — Syll. VIII, p. 613.

1. **Ombrophila albiceps** Peck 42 Rep. p. 34, t. II, f. 1-5. — Asco- 4610
matibus hemisphæricis v. convexis, tenacibus, albidis vel interdum dilute incarnatis, 4-8 mm. lat.; stipite æquali v. basi crassiusculo, tenaci, farcto, udo subglutinoso, pallido vel rubenti-brunneo, 8-16 mm. long., 2-9 mm. cr.; ascis anguste cylindræis, 8-sporis, 40-50 = 5-6,5, paraphysatis; sporidiis minutis, ellipsoideis, 5 = 3.

Hab. in ligno dejecto arborum deciduarum, North Elba Amer. bor. — Habitus *Leotiæ*.

2. **Ombrophila aurata** (Berk. et Rav.) Phil. Grev. XIX, p. 74, *Peziza* 4611
aurata Berk. et Rav. in Ravenel's Exs. Fasc. III, n. 37. — Solitaria v. conferta, initio clausa dein concava, 2-6 mm. lat., demum expansa, convexa, margine undulata, 12 mm. lat. extus primo viridulo-flava, disco atro-virenti, demum fusca, deorsum venosa; ascis clavatis, 30 \approx 4, 6-8-sporis; sporidiis fusoides, hyalinis, 5 \approx 2; paraphysibus parcis.

Hab. in ligno emortuo Aceris in Carolina inf. Amer. bor.

3. **Ombrophila bulgarioides** Sacc. Myc. Austral. n. 78, f. 4. — Asco- 4612
 matibus gelatinoso-induratis in cæspitulos congestis, initio suburceolatis sessilibus, dein breve stipitatis, scutellatis, extus nitide ochraceo-lutescentibus, leviusculis; disco planiusculo, mox undulato-contorto, 5-6 mm. diam., rufo-fusco; ascis teretibus, brevissime stipitatis, octosporis, apice rotundatis, 35-10 \approx 3,5-4 paraphysibusque bacillaribus gelatina fulva simul conglutinatis, sporidiis oblongis, rectis vel leniter curvis, 6-7 \approx 2, hyalinis, continuis.

Hab. in ligno emortuo, Gracemere Australiæ, rarius. — Peraffinis *O. collemoidi* (Rehm) Sacc. Syll. VIII. pag. 618, a qua colore ascomatis, ascis sporidiisque longioribus differre videtur.

4. **Ombrophila subvillosula** Rehm Disc. p. 479. — Ascomatibus soli- 4613
 tariis, dein cyathiformibus, 0,3-1,2 mm. lat., basi stipite cylindraceo, subrecto v. arcuato, 1-3 cm. long., 0,2-0,4 mm. cr. præditis, brunneolis, extus et præcipue ad marginem ob pilos simplices, vix septatos, obtusos, rectos, primo hyalinos, dein dilute brunneolos, 30-120 \approx 3, albo-pannosis, gelatinoso-ceraceis; disco tenuiter marginato; contextu prosenchymatico, brunneo; ascis clavatis, supra rotundatis, 8-sporis, 90-100 \approx 9-12; sporidiis oblique distichis, fusoides, supra sublatioribus, non vere acutis, rectis, utrinque minute 1-guttatis, 12-20 \approx 4-5; paraphysibus subramosis, hyalinis, circ. 1,5 μ . lat.

Hab. ad folia pinea in silva pr. Königstein (KRIEGER). — *O. Morthierianæ* valde affinis; ab ea differt ascomatibus margine tenuiter ciliatis.

5. **Ombrophila firmula** (Roll.) Sacc. *Coryne* Roll. in Bull. Soc. Myc. 4614
 V, pag. 169, t. XV, f. 2. — Gelatinosa, firma, elastica, primitus clausa, turbinata, dein patens, margine orbiculata v. flexuosa, 2-3 mm. diam.; disco supra glauco-viridi, tum convexo, tum concavo-depresso, margine tumente opalino-hyalino cincto, in roseum vergente tandemque pallescente; contextu hyalino; ascis clavatis, stipitatis, 8-sporis, 80-90 \approx 7-8; sporidiis fusoides, sæpe 2-3-gutta-

tis, 6-7 \approx 2-3; paraphysibus filiformibus, continuis, prominentibus, sursum virescentibus.

Hab. in Polyporo Schweinizii vetusto, Zermatt Tiroliaë.

ORBILIA Fr. — Syll. VIII, p. 621.

1. **Orbilia fugax** Bomm. Rouss. Sacc. Contr. Myc. Belg. IV, p. 26. — 4615

Ascomatibus sparsis, sessilibus, concavis, subdiaphanis, glabris, inter nervos foliorum sitis, 36-45 μ . lat., margine albo; ascis oblongis vel clavatis, basi curvis, sessilibus, 18-21 \approx 5-6, octosporis; paraphysibus filiformibus, parvis, simplicibus ascos subæquantibus; sporidiis oblique 1-stichis vel 2-stichis, oblongis, 4-5 \approx 0,7-1, hyalinis.

Hab. in culmis Calamagrostidis silvaticæ vel arundinaceæ, Poix Galliaë.

2. **Orbilia brasiliensis** (Speg.) Sacc. *Calloria brasiliensis* Speg. F. 4616

Puigg. n. 393. — Ascomatibus orbiculari-effusis mediocribus rubro-aurantiis, 2-5 mm. diam. glaberrimis, tenuibus; ascis cylindraceo-clavulatis parce paraphysatis, 45-50 \approx 4, octosporis; paraphysibus parvis, filiformibus; sporidiis elliptico-fusoideis, utrinque acutis, hyalinis, 5 \approx 1-1,5.

Hab. in tela dejecta putrescente in hortis prope Apiahy Brasiliaë. — Iodi ops nulla.

HÆMATOMYCES B. et Br. — Syll. VIII, p. 633.

1. **Hæmatomyces fagineus** Peck 43 Rep. pag. 33, t. IV, f. 5-7. — 4617

Tremelloides, cerebriformis, 2,5-5 cm. diam., gyroso-lobata, glabra, nitens, extus intusque rubra (*raisin color*); ascis subcylindræis, 8-sporis, 60 \approx 7,5; paraphysibus gracilibus, supra lenissime incrassatis; sporidiis plerumque monostichis, anguste ellipsoideis, 7,5 \approx 3,5-5.

Hab. ad truncos Fagi ferrugineæ, Rainbow Amer. bor. — *Habitus Tremellæ.*

AGYRIUM Fr. — Syll. VIII, p. 634.

1. **Agyrium flavidulum** Rehm Disc. p. 452. — Ascomatibus sparsis, 4618

sessilibus, rotundis vel elongatis, plerumque confluentibus, plus minus valde convexis, griseo-flavidis vel pallide succineis, levibus, siccis flavo-brunneolis, 0,3-1,2 mm. lat., gelatinoso-ceraceis; excipulo nullo; ascis clavatis, supra rotundatis, 8-sporis, 75-90 \approx 6-7; sporidiis distichis ellipsoideis, obtusis, rectis, plerumque 2-guttatis,

9-10 \approx 3; paraphysibus filiformibus, supra usque ad 2 μ . lat., hyalinis.

Hab. in pericarpio Fagi in silva pr. Sugenheim in Franken.

GLÆOPEZIZA Zukal in Flora 1891, p. 100 (Etym. *glæos* gluten et *Peziza*). — Ascomata submicroscopica, peripherice involucre e paraphysibus mutatis constituto, supra massa gelatinosa cupuliformi limitata. Excipulum parenchymaticum deficiens. Asci clavati, 8-spori, paraphysati. Sporidia continua, ovato-ellipsoidea, hyalina, levia.

1. **Glæopeziza Rehmii** Zukal loc. cit. t. III, fig. 14-25. — Ascomata 4619
tibus circ. 100-150 μ . alt., 200 μ . lat., mollibus, dilute et translucide rubentibus, involucre e paraphysibus mutatis constituto, cinctis, ecorticatis, initio massa gelatinosa, clara inclusis; ascis clavatis, supra sensim rotundatis, apice subincrassatis, rectis curvulisve, egregie stipitatis, circ. 84-90 \approx 8-10 (p. sp.), 8-sporis; sporidiis oblique monostichis, ellipsoideis, subovoideis, levibus, hyalinis, circ. 10-12 \approx 6-8; paraphysibus simplicibus, supra leniter clavato-incrassatis, strato gelatinoso, tenuissimo cinctis.

Hab. in Jungermannia trichophylla, Wechselgebiet Austriæ infer. (M. HEER).

Sect. 2. Phæosporæ.

BULGARIA Fr. — Syll. VIII, p. 636.

1. **Bulgaria trichophora** Masee Journ. of Bot. 1891, pag. 2, t. 300, 4620
f. 7-10. — Solitaria, sessilis, subgelatinosa, suborbicularis, 3,5-5 cm. diam., margine dein involuto et tenui, atro-brunneis, extus pilis longissimis, cylindræis, septatis, sinuatis, atro-brunneis, 7-8 μ . diam. obtectis, disco convexo, regularibus; ascis cylindræis, basi abrupte attenuatis, 8-sporis; sporidiis atro-brunneis, anguste ellipsoideis, levibus, 42-45 \approx 12-14; paraphysibus numerosis, cylindræis, apice subincrassatis, guttulis brunneis farctis, septatis, 4-5 μ . cr.

Hab. in ligno in insula Madagascar (BARON).

2. **Bulgaria chalybea** (Berk. in Herb.) Cooke et Mass. Grev. XIX, 4621
p. 74, *Bulgaria inquinans* var. *chalybea* Berk. Indian Fungi. — Cæspitosa, substipitata, demum aperta, turbinata, dein obconica extus rugulosa, umbrina, 2½-5 cm. diam., subfurfuracea, disco concavo, chalybeo, margine acuto; ascis clavatis, tetrasporis; sporidiis

monostichis ellipsoideis, fuscis inæquilateralibus, 25-27 \approx 10; paraphysibus linearibus, hyalinis.

Hab. ad ligna Darjeeling Indiæ orientalis.

3. **Bulgaria globosa** (Schm.) Fr. — Syll. VIII, pag. 636. — Sec. cl. Karst. in Hedw. 1891, p. 247, species rarissima lecta fuit in palude prope Viburgum a cl. ARTH. THESLEFF et præbet ascos cylindræcos longissime stipitados; sporidia sphæroideo-ellipsoidea, 8-10 \approx 5-6, monosticha, hyalino-flavescentia; paraphyses articulatas, apice subincrassatas, 2-3 μ . cr. Vix ergo comparanda species cum gen. *Sarcosomate*, de quo infra. Cfr. Rehm Disc. p. 497.
4. **Bulgaria Agaves** Rabenh. in Kl. H. M. n. 1223, Bot. Zeit. 1849, 4622 p. 293 (nomen).

Hab. in Agave in Germania. — E loco vix hujus generis.

SARCOSOMA Casp. in Rehm Disc. p. 497 (Etym. *sarx* caro et *soma* corpus). — Ascomata maxima, sessilia, carnosogelatinosa, globosotruncata, extus brunnea. Asci cylindræci longissimi, octospori. Sporidia ellipsoidea, monosticha, intus granulosa, subhyalina. Paraphyses filiformes, ramosæ, septatæ, hyalinæ.

1. **Sarcosoma Platydiscus** Casp. in Rehm loc. cit. fig. pag. 474 (ut 4623 var. *S. globosi*). — Ascomatibus globosotruncatis, extus atrobrunneis, 4-7 cm. alt., 4-9 cm. lat., disco scutellato-truncato, marginato; ascis 300-400 \approx 19, octosporis; sporidiis continuis, granulosis, 30-39 \approx 12-14.

Hab. pr. Königsberg Germaniæ (CASPARY). — Cum *Bulg. globosa*, teste Karst., non comparanda species.

Sect. 3. Didymosporæ.

SOROKINA Sacc. nov. gen. (Etym. a cl. N. W. SOROKIN in Univers. Kazan Bot. prof.). — Ascomata subturbinata, sessilia, gelatinosa. Asci tereti-clavati, paraphysati. Sporidia ellipsoideo-oblonga, 1-septata, brunnea.

1. **Sorokina microspora** (Berk.) Sacc., *Bulgaria microspora* Berk. in 4624 Grev. XIX, pag. 74. — Conferta v. sparsa, sessilis, subturbinata, dein expansa, disco plano v. concavo, umbilicato, ruguloso, nitido, purpureo-brunneo, sicco nigro; substantia gelatinosa, rugosa; ascis tereti-clavatis; sporidiis ellipsoideis, utrinque acutatis, brunneis, 1-septatis, 6 \approx 3; paraphysibus filiformibus.

Hab. ad ligna, Venezuela.

PARYPHEDRIA Zukal in Flora 1891, p. 98 (Etym. *paryphe* collare et *dria* urna, hinc non *Parüphädria* ut habet Zuk., nec *Paryphy-dria* ut Rehm Disc. p. 484). — Ascoma cartilagineo-gelatinosum, siccum carneum, nigricans, urceolato-urniforme, clausum, dein poro sensim ampliato pertusum, late marginatum. Asci clavati, octospori. Sporidia oblonga, 1-septata, subhyalina. Paraphyses apice capitato-gelatinosæ. — Sec. cl. Zukal fungus in algis (*Palmella*, *Glæocapsa*) parasitatur.

1. **Paryphedria Heimerlii** Zukal loc. cit. t. III, f. 1-13. — Ascomate 4625
1-2 mm. lat., diu urniformi, pertuso dein explanato, convexo, diaphane brunneo, margine lato, plano; ascis clavatis, stipitatis, 45-50 = 8-11 p. sp.; sporidiis octonis oblique monostichis, breve clavulato-oblongis, constricto-1-septatis, 15-18 = 4-5, ex hyalino brunneolis; paraphysibus articulatis, apice capitulo mucoso brunneolo terminatis.

Hab. in foliis *Jungermannia* quinquedentatæ aliarumque pr. Aspang Austriæ inf. (M. HEEG).

Sect. 4. Phragmosporæ.

CORYNE Tul. — Syll. VIII, p. 641.

1. **Coryne sarcoides** (Jacq.) Tul. — Syll. VIII, p. 642. — Var. **Winteri** Rehm Disc. p. 492. — Ascomatibus sessilibus, brunneo-purpureis, infra sæpe succineis; ascis 124-135 = 10-13; sporidiis 6-guttatis, dein pluriseptatis, 16-18 = 4. In truncis *Pini silvestris* in Helvetia (WINTER). — Var. **viridescens** Rehm Disc. p. 492: ascomatibus atro-viridibus, siccis læte viridi pruinosis, contractis; ascis 110-120 = 6; sporidiis 10-12 = 3-3,5, 2-4-cellularibus. In ligno *Tilia* in Carniolia (Voss).
2. **Coryne solitaria** Rehm Disc. pag. 488. — Ascomatibus solitariis, 4626
sessilibus, primo turbinatis, dein cyathiformibus, tandem applanato-caliciformibus, 2-7 mm. lat., extus levibus, basi rugosis, stipite usque ad 1 mm. alt., 0,3-0,5 mm. cr. suffultis, ceraceo-gelatinosis, siccis extus saturatius brunneis et corneis, disco initio tenuiter membranaceo, dein irregulariter convexo, dilute brunneo; ascis clavatis, supra rotundatis, 100-120 = 9-11; sporidiis octonis, distichis, elongato-fusoideis, obtusis, rectis v. incurvis, primo 1- dein 2-ocularibus, contentu granuloso, viridulò, 12-15 = 4-4,5; paraphysibus filiformibus, 1 μ . cr., hyalinis.

Hab. ad lignum querneum prope Münster (v. TAVEL). — *C. striata* affinis.

3. **Coryne pallidula** Rehm Disc. pag. 488. — Ascomatibus gregariis, 4627
 primo globoso-clausis et sessilibus, dein cyathiformibus, usque ad $\frac{1}{2}$ mm. long., longe crasseque stipitatis, demum applanato-patelliformibus, extus brunneo-nigris, siccis rugosis et sæpe pulvere dilute albido tectis, 0,2-1,5 mm. lat., gelatinoso-ceraceis; disco pallido, margine tenui et albido; contextu prosenchymatico; ascis clavatis, supra obtuse acuminatis, 8-sporis, 60-65 \approx 8-9; sporidiis elongato-fusoideis, obtusis, rectis, primo continuis, dein 1-septatis, utrinque 1-guttatis, 7-10 \approx 3; paraphysibus filiformibus, circ. 1,5 μ . lat., supra non incrassatis, hyalinis.

Hab. in trunco decorticato querneo pr. Münster (v. TAVEL). — *C. stemmatæ* affinis.

Sect. 5. Dictyosporæ.

SARCOMYCES Masee Journ. Myc. 1891, p. 178, t. VII, f. 1-3 (Etym. *sarx* caro et *myces*). — Ascomata subgelatinosa, subsessilia, erumpentia, basi coarctatâ insidentia; discus seu hymenium convexum, leve, margine acuto. Asci cylindræci. Sporidia monosticha, muriformia colorata. Paraphyses copiosæ. — *Hæmatomyxæ* affinis, sed hymenium leve, marginatum.

1. **Sarcomyces vinosus** Masee l. c., *Tremella vinosa* Berk. et Curt. 4628
 herb. — Erumpens, substipitata, in discum carnosum subcircularem planum vel convexum, acute marginatum dilatata, glabra, purpureo-brunnea; ascis cylindræcis, deorsum incurvo-tenuatis, 4-sporis; sporidiis monostichis, oblongis, subacutis, 21-24 \approx 8-10, tri-septatis, dein muriformibus, ad septa vix constrictis, pallide brunneis; paraphysibus linearibus, hyalinis, continuis, copiosis, 2-5 μ . cr.

Hab. ad ligna in Venezuela et Carolina inf. — Habitus *Bulgariæ inquinantis*.

Fam. 6. Stictidaceæ FR.

Sect. 1. Hyalosporæ.

PROPOLIS Fr. — Syll. VIII, p. 648.

1. **Propolis Betulæ** Fuck. Syll. VIII, p. 650. — Var. **Callunæ** Bomm. 4629
 Rouss. Contr. Myc. Belg. IV, p. 28. — Ascomatibus flavo-cervinis,

intus alutaceis, furfuraceis; ascis clavatis, sessilibus, 90-200 \times 16-21, filiformi-paraphysatis; sporidiis oblongis, curvis, distichis, 34-36 \times 9-10, bi-pluriguttatis.

Hab. in trunculis *Callunæ vulgaris*, Nonceveux Belgii. — Affinis *P. rhodoleucæ*.

OCELLARIA Tul. — Syll. VIII, p. 654.

1. **Ocellaria Pulicariæ** Passer. Diagn. F. N. V, n. 22. — Ascomatibus 4630 sparsis, gregariis, parvulis, subdiscoideis, ceraceis, epidermide denticulata cinctis, excipuli contextu parenchymatico, cinereo-fusco; ascis clavatis; paraphysibus filiformibus subæquilongis fultis, 8-sporis, 37-50 \times 5-7; sporidiis oblique monostichis, subfusiformibus, hyalinis, integris 8-10 \times 12.

Hab. in caulibus siccis *Pulicariæ viscosæ*, Vigheffio pr. Parma Ital. bor.

NÆVIA Fr. — Syll. VIII, p. 658.

1. **Nævia Vincæ** Fautrey in Rev. Myc. 1890, p. 161. — Ascomatibus 4631 roseis, hysteroideis, dein cupularibus; paraphysibus numerosis; ascis brevioribus, apice incrassatis; sporidiis oblongis, rotundatis, 8 \times 3,4.

Hab. in caulibus subsiccis *Viciæ Craccæ*, Noidan, Côte-d'Or Galliæ.

XYLOGRAPHA Fr. — Syll. VIII, p. 664.

1. **Xylographa hydrophila** Bomm. Rouss. Sacc. sp. n. — Ascomatibus 4632 subsparsis, longitudinalibus, erumpentibus, linearibus, nigris, 0,5-0,7, mm. long., 0,1 mm. lat., hymenio elongato griseo-atro, margine brunneo; ascis clavatis, basi nodulosis, 90-110 \times 11-14; sporidiis distichis, ellipsoideo-acutis, 18-24 \times 4,7, hyalinis, guttulatis.

Hab. in calamis *Scirpi lacustris*, Dohan Belgii.

Sect. 2. Didymosporæ.

COCCOPEZIZA Karst. in Rev. Myc. 1890, n. 47. — Ascomata matrice innata, crassiuscula, ceracea, applanata vel lentiformia, immarginata, epidermide nigrificata mox disparente tecta. Asci obovoidei, octospori. Sporidia conglobata, obovoideo-oblongata, uni-septata, hyalina. Paraphyses nullæ. — A *Propolidio* Sacc. præceteris defectu paraphysum diversa.

1. **Coccopeziza ootheca** Karst. l. c. — Ascomatibus matrice innatis, 4633

pellicula peridermii nigrificata mox disparente, tectis, applanatis vel lentiformibus, orbiculatis vel oblongis, sæpe inæqualibus, disco mox nudato flavido-pallente, circiter 0,1 mm. lat.; ascis ovoideis, 30-37 \approx 28-29; sporidiis oblongato-ovoideis, uniseptatis, ad septum non constrictis, rectis, eguttulatis, 16-18 \approx 6.

Hab. in cortice levi Populi albæ in Gallia (P. HARIOT).

Sect. 3. Phragmosporæ.

ODONTOTREMA Nyl. — Syll. VIII, p. 679.

1. **Odontotrema inclusum** (Pers.) Karst. — Syll. VIII, p. 680. — *O. 4634
affine Bomm. Rouss. Sacc. — A typo recedit disco subolivaceo; ascis tereti-clavatis, 75-120 \approx 12-15; sporidiis triseptatis, 18 \approx 7, loculo secundo inflatulo.

Hab. in fragmentis ligneis Fagi silvaticæ, Poix Galliæ.

Sect. 4. Scolecosporæ.

STICTIS Pers. — Syll. VIII, p. 681.

1. **Stictis emarginata** Cooke et Mass. Grev. XVIII, p. 7. — Minutis- 4635
 sima, gregaria, epiphylla; ascomatibus immersis, erumpentibus, poro pertusis, excipulo vero destitutis; ascis clavato-cylindricis, sessilibus; sporidiis filiformibus, continuis, hyalinis, ascos æquantibus, 70-75 \approx 2.

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

2. **Stictis hypodermia** Bres. Rev. Myc. 1891, p. 21, t. 114, f. III. — 4636
 Ascomatibus subsolitariis v. 3-4-gregariis, profunde immersis, bene evolutis, urceolatis, extus nigris, disco cinereo, limbo elevato, candido, tomentoso cincto, circ. $\frac{3}{4}$ mm. lat.; ascis cylindræis, substipitatis, 8-sporis, 400-600 \approx 8-11; sporidiis hyalinis, filiformibus, flexuosis, pluriguttatis,asco fere æquilongis, 1-1,5 μ . lat.; paraphysibus filiformibus, ascos superantibus, ramulosis, 1-1,5 μ . lat.

Hab. ad ramos Ulmi campestris pr. stroma Cryptosporæ hypodermiæ, Leutschau Hungariæ (V. GRESCHIK). — *St. radiatæ* affinis, margine integro, disco albido et sporidiis duplo longioribus diversa.

3. **Stictis dryophila** C. et Ell. Grev. V, p. 33, t. 75, f. 6. — Sparsa, 4637
 pallida, extus pruinosa, margine primum dentata; disco plano; ascis cylindræis; sporidiis distichis, cylindræis, utrinque subattenua-

tis, obtusis, multiguttatis, $180 \approx 12$; paraphysibus filiformibus, copiosis, flexuosis.

Hab. ad ramulos querneos, New Jersey Amer. bor.

4. **Stictis parasitica** E. et E. Journ. Myc. 1888. p. 54. — *Erum-* 4638
pens, minuta, $\frac{1}{6}$ mm, diam., margine sordide albo, fimbriato-scutato, tandem expanso; ascis clavato-cylindraceutis, substipitatis, $25-30 \approx 5-6$, copiose paraphysatis; sporidiis distichis, oblongo-ellipsoideis, hyalinis, continuis, $6-8 \approx 2,5$.

Hab. in stromate *Diatrypes tremellophoræ*, Newfield New-Jersey Amer. bor. — *Stroma Diatrypes* cum cortice adiacente pilis erectis, fragilibus, $250-300 \mu$. long. obsitum.

SCHIZOXYLON Pers. — Syll. VIII, p. 697.

1. **Schizoxylon tuberculatum** Schw. Syn. Am. bor. n. 2172. — *Spar-* 4639
sum, in tuberculis ligneis valde elevatis, circumcirca cinerentibus situm; ascomatibus tuberculis immersis, aterrimis; disco demum rotundo aperto; sporidiis v. ascis mox profluentibus.

Hab. in palis ex ligno Robiniæ factis, non raro Bethlehem Amer. bor. — Ascomata demum secedentia, foveolam in tuberculo relinquunt.

NEMACYCLUS Fuck. — Syll. VIII, p. 701.

1. **Nemacyclus hysteroideus** Bomm. Rouss. Sacc. Contr. Myc. Belg. 4640
IV, p. 29. — Ascomatibus sparsis, cupuliformibus, initio subclausis, dein convexis, nigricantibus, intus albo-hyalinis, suborbiculatis dein hysteroideo-dehiscentibus, margine flavo-viridi zonato; ascis anguste clavatis, basi nodulosis, apice angustatis, octosporis, $145-180 \approx 15$; sporidiis filiformibus initio strato tenui mucoso obvolutis, $135-160 \approx 3$, parallelis, mox spiraliter contortis, subcontinuis.

Hab. in squamis strobilorum Pini silvestris, Bois de la Cambre et Groenandael Belgii. — Affinis *N. griseo* et *N. niveo*.

2. **Nemacyclus fimbriatulus** Sacc. Bomm. Rouss. Contr. Myc. Belg. 4941
III, p. 7. — Ascomatibus sordide albis, subcarnosis, innatis, dein superficialibus, dense gregariis, planiusculis, $\frac{1}{2}$ mm. diam., margine inæquali, leniter albo-fimbriato; ascis cylindraceutis, breviter stipitatis, apice rotundatis, $120-130 \approx 10$; paraphysibus filiformibus, guttulatis cinctis; sporidiis bacillaribus, supra rotundatis, basi angustioribus, sæpe curvulis, $90-100 \approx 1,7-2$, pluriguttatis.

Hab. in ligno putrido Abietis, Westmalle Belgii. — Species, quoad ascomata dein subsurfacealia, *Gorgonicipiti* affinis.

Fam. **Phacidiaceæ** FR.Sect. 1. *Hyalosporæ*.

CRYPTOMYCES Grev. — Syll. VIII, p. 707.

1. **Cryptomyces? disciformis** Fr. Summa p. 372, *Tremella disciformis* Fr. S. M. II, p. 216. — Erumpens, plana, subrotunda, levis, albida, demum nigrescens; ascis amplis paraphysatis. 4642

Hab. ad ramos tenuiores *Tiliæ* in Suecia. — Epidermidem laceratam cingentem non superat, 1 mm. cr. glaber, albido-subincarnatus demum nigrescens, subrugosus. « Quid sit non satis patet ».

PHACIDIUM Gr. — Syll. VIII, p. 709.

1. **Phacidium verecundum** Bomm. Rouss. Sacc. Contr. Myc. Belg. IV, p. 233. — Ascomatibus laxè gregariis, subepidermicis, erumpentibus, diu clausis, hemisphærico-discoideis, subcoriaceis, 0,5-0,7 mm. lat., atris, margine subangulosis, demum fatiscentibus et discum planiusculum sordide griseo-carneum ostendentibus; ascis clavatis; longe stipitatis, apice rotundatis, 8-sporis, 150-160 \approx 12-14, p. spor. 75-90 μ . long.; sporidiis oblique monostichis, ovoideo-oblongis, hyalinis, 2-guttatis, 15-22 \approx 7-9; paraphysibus filiformibus, hyalinis. 4643

Hab. in ramulis emortuis *Cratægi Oxycanthæ*, Groenedael Belgii. — Affine *Ph. salicino* et *pusillo*.

2. **Phacidium luridum** (Berk. et Curt.) Phil. Grev. XIX, p. 75, *Patellaria* B. et C. in herb. Berkel. — Congregatum, sæpe contiguum, epidermide tectum dein erumpens, orbiculare, nigrum, rugosum, demum vertice irregulariter dehiscens; disco concavo, cinereo; ascis clavatis, 90 \approx 5, octosporis; sporidiis oblongo-ovatis, continuis, 10-14 \approx 4; paraphysibus filiformibus. 4644

Hab. in ramis in Pennsylvania (Doct. MICHENER). — Ascoma superne cum epidermide non vere concretum.

3. **Phacidium Phillyreæ** Pass. F. N. IV. n. 34. — Hypophyllum, orbiculatum, nigricans, in lacinias tres-sex dehiscens; ascis tubulosis basi breviter attenuatis, paraphysibus filiformibus subæquantibus, inferne pallidis, superne cinnamomeis obvallatis, 8-sporis, 52-62 \approx 7; sporidiis subfusiformibus, integris, hyalinis, oblique monostichis, 10 \approx 2,5-3. 4645

Hab. in foliis dejectis *Phillyreæ variabilis*, Porto di Veruda Istriæ merid. (SOLLA)

4. **Phacidium verrucosum** (Wallr.) Sacc. Syll. VIII, p. 717, Bomm. Rouss. Contr. Myc. Belg. IV, p. 31. — Asci cylindræo-subclavati, sessiles, 50-60 \times 5-6; sporidia hyalina, ellipsoidea, subinde apicibus angustata, 6-7 \times 2,5-3, obsolete 2-guttata. — Nascitur quoque in caulibus Galii et Asperulæ odoratæ, Poix Galliæ.
5. **Phacidium multivalve** K. et S. — Syll. VIII, p. 710, Bomm. Rouss. Contr. Myc. Belg. IV, p. 31. — Sporidia subfusoidea, 12 \times 5, hyalina dein brunnea et eguttata. — Nascitur quoque in foliis Ilicis Aquifolii, Stoumont Belgii.
6. **Phacidium mirabile** Cooke Grev. XIX, p. 75. — Sparsum, subsu- 4646
perficiale, 0,5-1,5 mm. d. initio lentiforme, clausum, demum inæqualiter dehiscens et discum atro-brunneum ostendens; excipulo submembranaceo; ascis clavatis, apice acutatis, octosporis, 95 \times 10; sporidiis linearibus, acutis, rectis curvulisve, hyalinis, 2-8-guttulatis, 35-50 \times 3-4; paraphysibus filiformibus, apice paullo crassioribus.

Hab. in charta vetusta herbarii «Cryptogamas Lugdunenses» sistens (J. J. THERRY). — «An hujus generis?».

7. **Phacidium pusillum** Lib. — Syll. VIII, p. 716. — Oudem. in Hedw. 4647
1891, p. 248, *Cryptodiscus pusillus* (Lib.) Rehm in Hedw. 1891, p. 252, *Cr. cæruleo-viridis* Rehm in Bref. Unters. X, p. 280, t. X, f. 19-20. — Species adhuc disputata vel duplex. Cl. Oudem. l. c. describit inter Phacidiaceas sporidiis continuis, epithecio non sed matrice virente; cl. Rehm l. c. e contra habet ut Stictidaceam sporidiis 1-septatis, epithecio et matrice virente. Ubi characteres postremi occurrant, species, meo sensu, *Propolidium pusillum* nuncupanda.

TROCHILA Fr. — Syll. VIII, p. 728.

1. **Trochila Laurocerasi** (Desm.) Fr. — Syll. VIII, p. 729. — ? Var. 4648
punctiformis (Wallr.) *Phacidium punctiforme* Wallr. Crypt. n. 2303. — Ascomatibus innatis, orbiculatis, punctiformibus, minutissimis, gregariis, rugulosis, nigris, dein verticem scissum abjicientibus discumque hyalino-viridulum planum, limbo nigro crenulato cinctum recludentibus.

Hab. ad inferiorem Pruni Padi foliorum languidorum paginam in Germania.

Sect. 2. Didymosporæ.

KEITHIA Sacc. nov. gen. (Etym. a rev. Dr. KEITH mycologo anglico).

— Ascomata erumpentia, in lacinias 3-4 fissa, disco nigro. Asci clavati, 4-spori, paraphysati. Sporidia prope basin 1-septata, ellipsoideo-ovata, brunnea. — Est *Phacidium* phæodidymum.

1. **Keithia tetraspora** (Phill.) Sacc. *Phacidium* Phill. Disc. p. 388. 4649

— Epiphylla, erumpens, orbicularis v. oblonga, convexa, 1. mm. lat., cinerea, macula flavo-brunneola insidens, in lacinias 3-4 irregulariter fissa; disco extus nigro, intus flavo-brunneolo; ascis late clavatis, 4-sporis; sporidiis ellipsoideo-ovatis, prope basin 1-septatis, sæpe papilla præditis, 25-28 = 17, brunneis; paraphysibus numerosis, filiformibus, apice piriformibus brunneisque, septatis.

Hab. in foliis vivis Juniperi, Forres Britannicæ (Rev. Dr. KEITH).

FABRÆA Sacc. — Syll. VIII, p. 735.

1. **Fabræa Rousseauana** Sacc. et Bomm. Contr. Myc. Belg. III, p. 6. 4650

— Ascomatibus carneo-roseis, dein brunneis, sessilibus, $\frac{1}{3}$ mm. diam., amphigenis, macula albo-griseola insidentibus; ascis breve stipitatis, clavatis, 51 = 15; sporidiis 1-2-stichis, ellipsoideis, hyalinis, sæpe 2-guttatis, 18 = 6-8; paraphysibus numerosis, gracilibus; ascis longioribus, septatis, leniter flexuosis.

Hab. ad folia viva Calthæ palustris, Ottignies in Belgio.

2. **Fabræa rhytismoides** (C. et M.) Sacc. *Phacidium rhytismoideum* 4651

Cooke et Mass. Grev. XVIII, p. 81. — Ascomatibus pseudostromate gregatim insertis, sæpe senis octonisve, minutis, extus atro-brunneis, disco pallide cinereo, siccis subclausis, demum totis piceo-brunneis et tunc *Rhytisma* æmulantibus; ascis clavatis, copiose paraphysatis; sporidiis cylindræis, utrinque obtusis, 1-septatis, hyalinis, 16-18 = 3-4.

Hab. in foliis viventibus Cotulæ, Macedon Australiæ (Mrs. MARTIN).

COCCONIA Sacc. — Syll. VIII, p. 738.

1. **Cocconia discoidea** Cooke et Mass. Sacc. *Rhytisma* C. et M. Grev. 4652

XIX, p. 48. — Orbicularis, convexa 1-1½ mm. diam, atra, glabra, subnitida, intus olivacea; ascis clavatis, subsessilibus, octosporis; sporidiis oblongis, uniseptatis, medio leniter constrictis, dilute olivaceis, 22 = 5.

Hab. in foliis Veronicæ ellipticæ in Nova Zelandia (KIRK).

Sect. 3. Scolecosporæ.

COCCOMYCES De Not. — Syll. VIII, p. 744.

1. **Coccomyces viridis** (Rich.) Sacc. *Phacidium viride* Rich. Cat. 4653
Champ. Marn. n. 1041. — Ascomatibus primo clausis, dein in laciniis 4-5 dehiscentibus, extus pallide brunneis, 1-2 mm. lat.; disco atro-viridi; ascis clavatis, 8-sporis; sporidiis acicularibus, guttulatibus, 40 μ . long.; paraphysibus simplicibus, hyalinis, asco sublongioribus, superne epithecio brunneolo tectis.

Hab. in ramulis denudatis Populi, St.-Amand Galliæ.

2. **Coccomyces leptosporus** Speg. Guar. I. p. 138. — Maculis sordide albis v. fuscescenti-pallidis, irregulariter expansis, linea tenuissima, nigra, dense sinuosula limitatis, majusculis, subconfluentibus ac sæpe folium totum occupantibus; ascomatibus atris, in macula sparsis, tri-tetragonis, 400-600 μ . diam., primo clausis, subhemisphæricis, dein 4-laciniato-fissis, apertis; disco sordide ceraceo-flavescente, contextu minute parenchymatico, atro-fuligineo; ascis cylindræo-clavulatis, apice subcuneatis, crassiuscule tunicatis, basi attenuatis, brevissime crassissimeque pedicellatis, 75-80 \approx 5; sporidiis octonis, ascorum longitudine, filiformibus, utrinque obtusiuscule acutatis, multiguttulatis, hyalinis, 70 \approx 1.

Hab. ad folia emortua putrescentia Laurinææ cujusdam in silvis pr. Guarapî Brasilæ.

RHYTISMA Fr. — Syll. VIII, p. 752.

1. **Rhytisma hypoxanthum** B. et Br. Fung. Brisb. II, p. 71. — Forma stylosporica; maculis irregularibus, nitenti-nigris, margine distincte definitis, hinc illinc subgranulosis, e folio uniformiter incrassato, flaccido oriundis; basidiis in interiore parte granulorum insertis, brevibus, filiformibus; sporulis oblongis, 7,5 μ . long.

Hab. in foliis quibusdam, Brisbane Australiæ (F. M. BAILEY).

DUPLICARIA Fuck. — Syll. VIII, p. 764.

1. **Duplicaria cochinchinensis** Karst. et Harv. Rev. Myc. 1890 Oct. — 4656
Ascomatibus convexulis subdimidiatis disco, cum epidermide matricis tegente late nigro-maculata concreto, confluentibus, crustulam carbonaceam, nigram, nitidam, suborbiculatam, 2-3 mm. latam constituentibus, demum ore apertis vel sinuoso-dehiscentibus; ascis subclavato-cylindræis, sessilibus, octosporis, membrana crassa,

circ. 120 \approx 18-20; sporidiis distichis, oblongatis, utrinque obtusis, rectis, subinde medio constrictis vel inæquilateralibus, guttulis minutissimis repletis, hyalinis, 18-21 \approx 7; paraphysibus gracillimis, ramosis.

Hab. in foliis coriaceis, Laos Cochinchinæ (GODEFROY-LEBEUF).

Fam. 8. Patellariaceæ

Sect. 1. Hyalosporæ

PATINELLA Sacc. — Syll. VIII, p. 769.

1. **Patinella punctiformis** Rehm Disc. p. 311. — Gregaria, dein cya- 4657
thiformis, nigra, ceracea, sicca dura, subrugosa, margine aspera-
ta, 0,2-0,4 mm. lat.; ascis 6-8-sporis, 60-70 \approx 15-20; sporidiis
ellipsoideis, membrana crassa, 12-15 \approx 5-6; paraphysibus supra
usque ad 5 μ . lat. et brunneis.

Hab. ad corticem Pinus in Franconia.

2. **Patinella atro-viridis** Rehm Disc. p. 312. — Ascomatibus spar- 4658
sis, raro gregariis, dein applanato-patelliformibus, demum disco
gibberulis, nitenti-nigris, 0,3-1,2 mm. lat., firme corneis; ascis 40-
45 \approx 6-7; sporidiis elongatis, obtusis, 6-8 \approx 2-2,5; paraphysibus su-
pra usque ad 5 μ . lat., brunneo-viridulis.

Hab. in trunco decorticato Pini Cembræ, Ortler supra Sul-
den Tirolia.

3. **Patinella incerta** (Mass.) Rehm Disc. p. 314, *Xylographa* Mass. 4659
Miscell. lich. p. 17. — Ascomatibus thallo tenuissimo albido insertis,
linearibus, rectis, rimose, dehiscentibus, udis convexis, castaneo-
atris, siccis nigris, disco farinoso-verruculoso; ascis clavatis, octo-
sporibus; sporidiis ovoideis, continuis, granulosis, 12 \approx 6; paraphysibus
supra brunneis.

Hab. in ligno vetusto in Italia et Germania. — Ob ascoma li-
neare vix, meo sensu, *Patinellæ* species. Teste Rehm loc. cit. ve-
risimiliter huc spectat *Xylogr. laricicola* Nyl. Fl. 1865, pag. 13,
ex Scotia.

4. **Patinella xenophona** (Körb.) Rehm Disc. pag. 315, *Placographa* 4660
Körb. Par. p. 464. — Ascomatibus acervulatis, subinde confluen-
tibus, sessilibus, subrotundo-ellipsoideis, rarius linearibus, crasse
marginatis, disco rivuloso v. plano, nigris 0,1-0,3 mm. long., 0,1
mm. cr.; ascis late clavatis, octosporis; sporidiis ellipsoideis, con-

tinuis, hyalinis, 12-16 \approx 5-7; paraphysibus coalitis, supra olivaceo-brunneis.

Hab. in thallo Lecideæ in rupibus graniticis Risengebirge.

STARBAECKIA Rehm in Starb. Bidr. Sver. Ascom. p. 11, t. I, f. 10 *a-f* (Etym. a cl. mycologo STARBAECK). — Ascomata erumpenti-sessilia, primitus clausa, marginibus deinde ruguloso-gibberis patescencia. Asci cylindranei. Sporidia continua hyalina. Paraphyses ramosæ ascos superantes. — Hinc *Hehriquesia*, illinc *Pseudophacidio* affine genus.

1. **Starbaeckia pseudotryblidioides** Rehm loc. cit. — Ascomatibus 4661 sparsim gregariis interdum 2-3 confertis, e ligno denudato erumpentibus, sessilibus, atris, oblongo-vel orbiculari-disciformibus, primitus clausis, deinde marginibus gibberis et rugosis apertis, $\frac{1}{2}$ -1 mm. diam.; ascis cylindraneo-subclavatis, sursum obtusis, deorsum angustatis, subsessilibus, 8-sporis, 80-100 \approx 4-5,5; sporidiis monostichis interdum superne subdistichis, ellipsoideo-fusiformibus, rectis vel leniter curvulis, hyalinis, endoplasmate grumuloso, utrinque obtusiusculis, 9-15 \approx 2,5-3,5; paraphysibus numerosissimis, gracilibus, flexuosis, ramosissimis, hyalinis, agglutinatione autem olivascentibus et supra ascos epithecium sub lente olivaceo-fuscum formantibus.

Hab. ad lignum pineum induratum ad Dufhult, par. Simonstorp, Oestergötland (leg. HAGLUND).

NESOLECHIA Mass. Misc. lich. p. 13, Rehm Disc. pag. 315 (Etym. *nesos* insula et *lechos* lectus, thallus). — Ascomata parasitica, primo innata, dein erumpentia, vel ab initio sessilia, nigra, firme ceracea, disco patellato, dein subconvexo. Asci clavati, supra rotundati, 8-spori, paraphysati. Sporidia clavata, ovoidea vel fusoidea, continua, hyalina.

1. **Nesolechia oxyspora** (Tul.) Mass. l. c. p. 13, Rehm l. c. — Ascomatibus 4662 applanatis v. convexis, circularibus, nigris opacis, 0,2-0,3 mm. diam.; ascis clavulato-ovatis, 40-65 \approx 14-18; sporidiis distichis, ellipsoideis, rectis, continuis, 2-guttatis, hyalino-flavidulis, 15-22 \approx 5-7; paraphysibus ramosis, apice læte brunneis.

Hab. in thallo *Platysmatis*, *Imbricariæ*, *Everniæ* in Germania, Italia, Fennia, etc.

2. **Nesolechia oxysporella** (Nyl.) Rehm loc. cit. p. 316, *Lecidea* Nyl. 4663 Eu. lich. p. 127. — Ascomatibus applanato-patelliformibus, 200-

250 μ . diam.; ascis crasse tunicatis, 25-40 \approx 9; sporidiis distichis, elongato-fusoideis, rectis, 1-2-guttulatis, 6-8 \approx 2; paraphysibus ramosis, supra usque ad 3 μ . incrassatis.

Hab. in thallo Cladoniæ in Germania et Italia bor.

3. **Nesolechia thallicola** (Mass.) Rehm loc. cit. p. 317, *Lecidea* Mass. 4664
Ricerch. p. 78, f. 157. — Ascomatibus applanato-patelliformibus, dein subconvexis, disco minute verrucosis, nigris v. nigro-brunneis, 200-300 μ . lat.; ascis ovoideo-clavatis, crasse tunicatis, 36-40 \approx 18; sporidiis distichis ellipsoideo-ovoideis, 6-9 \approx 5; paraphysibus supra incrassatis.

Hab. in thallo Imbricariæ in Silesia.

4. **Nesolechia vermicularis** Arnold Flor. 1874, p. 100. — Ascomati- 4665
bus initio nodulos flavidos in thallo formantibus, immersis, dein disco applanato v. subconvexo, 80-100 μ . lat.; ascis cylindraceo-clavatis, crasse tunicatis, 70 μ . long.; sporidiis monostichis, ex ovato ellipsoideis, sæpe obtuse fusoideis, 4,8-11 \approx 3-5; paraphysibus filiformibus, hyalinis; epithecio nullo, hypothecio tenui, flavido.

Hab. in Thamnolia vermiculari in Tirolia.

5. **Nesolechia supersparsa** (Nyl.) Rehm loc. cit. p. 318, *Lecidea* 4666
Nyl. Flor. 1865, p. 7. — Ascomatibus gregariis, applanato-patelliformibus, cæruleo-nigris, 300-500 μ . lat.; ascis clavatis, crasse tunicatis, 45-50 \approx 15; sporidiis distichis rhomboideo-ellipsoideis, uno apice v. utrinque subacuminatis, centro sæpe ample 1-guttulatis, 10-12 \approx 5-7; paraphysibus ramosis, supra usque ad 6 μ . cr., cærulescentibus.

Hab. in thallo et apotheciis Lecanoræ in Helvetia, Tirolia et Algau.

6. **Nesolechia aggregatula** (Müll.) Rehm loc. cit. p. 318, *Lecidea* 4667
Müll. Arg. Flor. 1874, p. 533. — Ascomatibus aggregatis v. sparsis, convexulis, tenui-marginatis, nigris, opacis, 0,2-0,4 mm d.; ascis ovato-oblongis, rotundatis, 4-8-sporis; sporidiis distichis oblongis, obtusis, hyalinis, continuis, 10-12 \approx 3-4; paraphysibus concretis, supra brunneis v. virentibus.

Hab. in thallo Lecanoræ et Placodii in Helvetia, Tirolia.

7. **Nesolechia vitellinaria** (Nyl.) Rehm Disc. pag. 319, *Lecidea* Nyl. 4668
Bot. Not. 1852, p. 177. — Ascomatibus gregariis, convexulis, tenui-marginatis, atro-nitidulis 0,2-0,7 mm. diam.; ascis crasse tunicatis, clavatis, 40-50 \approx 18-20, octosporis; sporidiis distichis ellipsoideis, 7-10 \approx 5-6, hyalinis, 1-guttatis; paraphysibus coalitis supra cyanescentibus.

Hab. in thallo *Candelariæ* in Germania, Helvetia et Tirolia.

8. **Nesolechia inquinans** (Tul.) Mass. Misc. lich. pag. 13, Rehm Disc. 4669
p. 320, *Abrothallus* Tul. Mem. lichen. p. 117, t. 14, f. 4. — Ascomatibus sparsis v. confluentibus, convexulis immarginatis, 0,3 mm. lat.; ascis clavatis 40-45 \approx 11-13, 4-8-sporis; sporidiis distichis ovato-ellipsoideis, hyalinis, continuis, pluriguttatis 9-12 \approx 4-6; paraphysibus coalitis supra atro-brunneis.

Hab. in thallo sterili *Bæomycetis* in Germania et Gallia.

9. **Nesolechia Bruniana** Müll. Arg. Flora 1875, p. 62, Rehm Disc. 4670
p. 320. — Ascomatibus convexulis, rugulosis, brunneo-nigris, 0,2-0,3 mm. lat.; ascis subovatis, obtusis 40 μ . long., 6-8-sporis; sporidiis ellipsoideis, obtusis, hyalinis, 10-12 \approx 6-8; paraphysibus simplicibus v. furcatis supra cyanescentibus.

Hab. in verrucis thallinis *Thalloidimatis* in Helvetia. — Forte ad hoc genus spectat quoque *Lecidea intumescens* Flörke. Cfr. Rehm Disc. p. 321.

Sect. 2. Phæosporæ.

LAGERHEIMA Sacc. nov. gen. (Etym. a cl. G. LAGERHEIM, suecico, nunc in Univers. Quitensi Æquatoriæ Bot. prof.) — Ascomata patellata, marginata, sessilia, atra. Asci octospori, paraphysati. Sporidia e sphæroideo ellipsoidea, continua, brunnea. — Est *Patinella phæospora*.

1. **Lagerheima sphærospora** (B. et C.) Sacc., *Patellaria sphærospora* 4671
B. et C. Phill. in Grev. XVIII, p. 85, Sacc. Syll. VIII. pag. 790 (nomen). — Sparsa v. conferta, applauata, marginata, atra, tenuis, 1-2 mm. lata; ascis tereti-clavatis, octosporis; sporidiis subsphæroideis v. ellipsoideis v. subpiriformibus, brunneis, 1-guttatis, 7-9 μ . diam., v. 10 \approx 6; paraphysibus filiformibus.

Hab. in ligno putri in Carolina infer. Amer. bor. (CURTIS) et New Forest, Hampshire Britannicæ (Miss BEATRICE TAYLOR).

2. **Lagerheima Carteri** (Berk.) Sacc. *Patellaria Carteri* (Berk.) Phil. 4672
Grev. XIX, p. 75 ex herb. Berk. — Conferta, difformis, patellata, 2-4 mm. lata; disco nigro, margine involuto, brunneo-nigro, substantia concolore; ascis cylindræis, basi attenuatis, octosporis; sporidiis ellipsoideis, brunneis, 10 \approx 5; paraphysibus filiformibus, sursum incrassatis cohærentibusque.

Hab. in ligno decorticato emortuo, Bombay Indiæ (H. J. CARTER).

Sect. 3. Didymosporæ.

KARSCHIA Körb. — Syll. VIII, p. 779.

1. **Karschia melaspileoides** Rehm Disc. p. 347. — Ascomatibus sparsis, mox plano-scutellatis, crasse marginatis, nigro-purpureis, siccis contractis nigris 0,2-0,4 mm. diam.; ascis clavatis, 50-60 \approx 15-18, octosporis; sporidiis distichis clavato-ellipsoideis, 1-septatis, leniter constrictis, 2-guttatis, brunneis, 15-17 \approx 5-6; paraphysibus ramosis, 3 μ . cr., supra flavidis. 4673

Hab. in cortice quercino pr. Sugenheim Germaniæ.

2. **Karschia craticola** Rehm Disc. p. 348. — Ascomatibus in maculis dilatatis, albidis sparsis, cyathiformibus, tenuiter marginatis, 0,15-0,3 mm. lat.; ascis ovoideis, 4-6-sporis, circ. 60 \approx 36; sporidiis polystichis, ellipsoideo-clavatis, obtusis, medio subconstrictis, 30-36 \approx 10-14; paraphysibus circ. 1,5 μ . lat., epithecium brunneolum efformantibus. 4674

Hab. in ligno salicino pr. Burgdorf in Helvetia (WEGELIN).

3. **Karschia perexigua** Bomm. Rouss. Sacc. Contr. Myc. Belg. IV, p. 235. — Ascomatibus sparsis, sessilibus, concavis, nigro-opacis, 0,4-0,6 mm. diam., margine inflexis, inter fibras matricis dispositis; ascis clavatis v. oblongis, 4-8-sporis, 30-45 \approx 10-15; paraphysibus filiformibus apice capitulo demum viridi-fuligineo terminatis; sporidiis distichis v. conglobatis, ellipsoideis, subinde curvulis, 1-septatis, non constrictis, 8-12 \approx 5,5-6, brunneis, non guttulatis. 4675

Hab. inter fibras foliorum *Ammophilæ arenariæ*, Knocke Ostende Belgii.

4. **Karschia Urceolariae** (Nyl.) Rehm Disc. p. 356, *Lecidea* Nyl. Flora 1873, p. 298. — Ascomatibus gregariis, erumpentibus, demum patelliformibus, margine crasso et inciso, nigris, non nitentibus, 0,2-0,5 mm. lat.; ascis ovoideis, apice valde incrassatis, 60 \approx 15; sporidiis ovoideis v. ellipsoideis, obtusis, medio plerumque valde constrictis, brunneis, 12-18 \approx 5-7; paraphysibus 3 μ . lat., supra atro-brunneis et 6 μ . cr. 4676

Hab. in thallo *Urceolariae* pr. Silz Tiroliae (prof. LOJKA).

5. **Karschia allothallina** (Nyl.) Rehm Disc. p. 351, *Lecidea* Nyl. Flora 1881, p. 188. — Ascomatibus gregariis, cyathiformibus, demum appanato-patelliformibus, tenuiter marginatis, 0,3-1 mm. lat.; ascis 45-50 \approx 10-12; sporidiis elongatis, obtusis, rectis, medio sæpe con-

strictis, nigrescenti-brunneis, 8-14 \approx 3-5; paraphysibus supra 5 μ . cr., epithecium crassum, flavo-brunneum efformantibus.

Hab. in crusta Bæomycetis in Germania et Helvetia.

6. **Karschia rimulicola** (Müll. Arg.) Rehm Disc. p. 352, *Lecidea* 4678
Müll. Arg. Flora 1872, p. 500. — Ascomatibus applanato-patelli-
formibus, distincte crasseque marginatis, non nitentibus, 0,25-0,5
mm. cr.; ascis elongato-ovoideis, supra obtusatis, 35 μ . long.; spo-
ridiis æqualiter bilocularibus, septo mediocriter constrictis, brunneis,
6-10 \approx 3-5; paraphysibus epithecium crassum, brunneum efforman-
tibus.

Hab. in protothallo Pertusariæ in Helvetia (MUELLER).

7. **Karschia vagans** (Muell. Arg.) Rehm Disc. p. 352, *Lecidea* Muell. 4679
Arg. Flora 1872, p. 501. — Ascomatibus valde convexis v. hemi-
sphæricis, margine initio distincto, dein nullo, ceruleo- vel gri-
seo-nigris, non nitentibus, 0,2-0,25 mm. lat.; ascis ovoideis, 45-50
 μ . long.; sporidiis omnino obtusis, medio constrictis, brunneis, 9-
10 \approx 5-7; paraphysibus filiformibus, epithecium nigro-brunneum
efformantibus.

Hab. in thallo et apotheciis Lecanoræ in Helvetia (MUELLER).

8. **Karschia saxatilis** (Schær.) Rehm Disc. p. 350, *Calicium* Schær. 4680
Enum. lich. pag. 166. — Ascomatibus sparsis v. gregariis, erum-
pentibus, cyathiformibus, dein applanatis, crasse marginatis, sub-
nitenti-nigris, 0,2-0,7 mm. lat.; ascis 45-50 \approx 10-12; sporidiis elon-
gatis v. clavatis, obtusis, rectis, 10-12 \approx 4-5, brunneis; paraphy-
sibus laxis, circ. 3 μ . lat., supra brunneo-viridibus et 6 μ . cr.

Hab. in thallo Aspiciliæ et Placodii in Helvetia et Tirolia.

9. **Karschia thallophila** (Ohlert) Rehm Disc. p. 353, *Lecidella* Ohlert 4681
Lich. Preuss. p. 48. — Ascomatibus sessilibus, convexis, margina-
tis demum immarginatis, nigricantibus, 1 mm. diam.; ascis anguste
clavatis; sporidiis 1-septatis, obtusis, brunneis, 12-15 \approx 6-8; para-
physibus laxis, supra brunneis.

Hab. in thallo Physciæ ad Tiliam in Borussia.

10. **Karschia leptolepis** (Bagl.) Muell. Arg. in Flora 1872, pag. 500, 4682
Rehm Disc. p. 354 *Buellia* Bagl. et Car. in Comm. critt. it. II,
p. 83. — Ascomatibus nitidulis, 0,3-0,4 mm. lat.; sporidiis globo-
so-ellipsoideis, utrinque obtusis, 6-9 \approx 4-6; paraphysibus coalitis
apice epithecium atro-brunneum formantibus.

Hab. in thallo Placodii in M. Rosa Ital. bor. (DE CANDOLLE).

11. **Karschia scabrosa** (Ach.) Rehm Disc. pag. 350, *Lecidea* Ach. 4683
Meth. lich. p. 48. — Ascomatibus sæpe conferte gregariis, thallo

crustaceo maculas 1-2 cm. lat., flavidas v. viridulas efformante, insidentibus, initio subcavo et tenuiter marginatis, dein convexis et immarginatis, nigrescentibus, 0,2-0,7 mm. lat.; ascis 45-50 = 15-17; sporidiis elongatis, obtusis, medio sæpe constrictis, brunneis, 9-12 = 4-5; paraphysibus supra 5 μ . lat. et viridulis.

Hab. in Sphyridio et Bæomycete in Germania et Helvetia.

12. **Karschia Sphyridii** Stein in Rehm Disc. p. 355. — Ascomatibus 4684
crassis, applanatis, marginatis, atro-nitidis, minutis; ascis clavatis, 8-sporis; sporidiis biscociformibus, 1-septatis, brunneis, 9-10 = 4-5; paraphysibus filiformibus.

Hab. in thallo Sphyridii in Silesia. — Var. **epiconcolor** Bagl. et Car. Anacr. Vals. p. 288, t. III, f. 47 (*Buellia*): ascomatibus convexis, nigris; sporidiis soleiformibus utrinque obtusis, brunneolis, 10-14 = 5-6; paraphysibus concretis. In thallo Placodii pr. Riva Tiroliae.

13. **Karschia Bayerhofferi** (Schær.) Rehm Disc. p. 354, *Lecidea ba-* 4685
dia var. *Bayerhofferi* Schær. Enum. lich. p. 324. — Ascomatibus sparsis v. gregariis, innato-erumpentibus dein superficialibus, 0,3-0,8 mm. lat., patellatis, tenui-marginatis, demum convexis, nigris, nitidulis; ascis clavatis, 50-60 = 15, octosporis; sporidiis distichis, oblongis obtusis, 1-septatis, sæpe 2-guttatis, brunneis, 10-12 = 5-6; paraphysibus concretis, septatis supra flavo-brunneis.

Hab. in thallo Imbricariæ in Germania, Bohemia, Tirolia.

MELASPILEA Nyl. Prodr. Lich. p. 170, Rehm Disc. pag. 362 (Etym. *melas* niger et *spilos* macula). — Ascomata innato-superficialia, sessilia, initio globulosa, clausa, mox inæqualiter elongata v. elliptica, plana marginata, dein convexa immarginata. Asci crassi, octospori. Sporidia ovata v. clavulata, 1-septata ex hyalino brunneola.

1. **Melaspilea arthonioides** (Fée) Nyl. Prodr. pag. 170. Rehm Disc. 4686
p. 362, *Lecidea* Fée Ess. p. 107, *Buellia* et *Abrothallus Ricasolii* Mass. — Ascomatibus in areis albidis sparsis, sessilibus, planoconvexulis, tenui-marginatis, rugulosis, 0,5-3 mm. lat., nigris; ascis clavatis, 60 = 18-20, octosporis; sporidiis clavatis, obtusis, 1-septatis, constrictis, 15-18 = 6-7, demum brunneis, paraphysibus coalitis, septatis, supra ramosis, brunneis.

Hab. in cortice *Quercus*, *Ulmi* in Helvetia, Germania, Italia.

2. **Melaspilea megalyna** (Ach.) Rehm Disc. p. 365, *Opegrapha ver-* 4687
rucarioides β . *megalyna* Ach. Lich. un. p. 244. — Ascomatibus in areis albo-nitentibus gregariis v. acervatis, globoso-clausis, dein

varie elongatis, applanatis, brunneo-nigris, 0,1-0,5 mm. lat.; ascis ovatis, 45-50 = 18-20, octosporis; sporidiis distichis clavato-ellipsoideis, æqualiter constricto-1-septatis, 2-guttatis, ex hyalino brunneolis, 15-18 = 5-6; paraphysibus laxiusculis, ramulosis supra rubro-brunneis.

Hab. in cortice levigato Juglandis, Quercus, Fagi, Fraxini etc. in Germania, Suecia, Helvetia.

3. **Melaspilea Rhododendri** (Arn. et. Rehm) Almq. Arthon. pag. 44, 4688
Rehm Disc. p. 365, *Arthonia* Arn. et Rehm. — Ascomatibus areis pallentibus insertis, globosis clausis, mox lirelliformibus v. ramulosis, rimosis, nigris, 0,3-2 mm. long., 0,2 mm. lat.; ascis clavatis, apice rotundatis 30-40 = 12-18, octosporis; sporidiis distichis ovoideis, bilocularibus, 2-guttatis, subinde 3-septatis, constrictis, 12-18 = 6-7, hyalinis dein brunneolis; paraphysibus concretis supra brunneo-virentibus.

Hab. in thallo Buelliæ ad ramos Rhododendri et Callunæ in Germania, Carniola et Tirolia.

4. **Melaspilea emergens** (Fr.) Rehm Disc. pag. 363, *Hysterium* Fr. *Glonium* Duby Hyst. p. 36, Sacc. Syll. II, p. 734.
5. **Melaspilea proximella** Nyl. Norl. Torn. p. 349, Rehm Disc. p. 364, *Celidium* Karst. Sacc. Syll. VIII, p. 744.
6. **Melaspilea diaphorella** Nyl. Flora 1874, p. 316, Rehm Disc. p. 366. 4689
— Ascomatibus areis dealbatis insidentibus, oblongis v. triangularibus 2-3 mm. lat., concavis v. rimosis; ascis superne octosporis; sporidiis ovoideis, bilocularibus, hyalinis, 11-17 = 6-8.

Hab. in ligno fagineo in Borussia. — Dubia species.

7. **Melaspilea mycetoides** (Anz.) Nyl. Flora 1881, pag. 188, Rehm 4690
Disc. p. 366, *Buellia* Anz. Anal. p. 10 — Ascomatibus concavis, prominulo-marginatis, nigris; ascis late ellipsoideis v. clavatis, 6-sporis; sporidiis ellipsoideis, inæqualiter 2-locularibus, constrictis, hyalinis, 12-13 = 6-7; paraphysibus gelatinoso concretis.

Hab. in cortice Abietis pr. Bormio Ital. bor.

Sect. 4. Phragmosporæ.

DURELLA Tul. — Syll. VIII, p. 790.

1. **Durella connexa** Rehm Disc. p. 289. — Ascomatibus elongato-linearibus, rectis v. curvis, longitudinaliter rimosis, siccis margine involutis; ascis supra rotundatis, 70-80 = 12-15; sporidiis polysti-

chis, elongatis, 3-7-septatis, hyalinis, 25-36 \approx 5-6; paraphysibus brunneis v. viridi-brunneis, supra usque ad 6 μ . cr.

Hab. in ligno fagineo pr. Oberstaufer in Algäu.

LECANIDION Rab. — Syll. VIII, p. 795.

1. **Lecanidion Dermatella** Bomm. Rouss. Sacc. Contr. Myc. Belg. IV, p. 33. 4692

— Ascomatibus gregariis, erumpentibus, sessilibus v. subsessilibus, 1-1,5 mm. diam., primitus obconicis dein subhemisphæricis margine prominulo obtusis, glabris, extus brunneo-nigricantibus, disco plano brunneo-olivaceo; ascis anguste clavatis, basi nodulosis, 96-105 \approx 10-12; paraphysibus filiformibus, guttulatis, æqualibus; sporidiis distichis, fusoides, sæpe curvulis, 3-4-septatis (sæpius 3-septatis) 20-27 \approx 5, hyalinis, dein brunneolis.

Hab. in ramis Pruni spinosæ v. Cratægi Oxyacanthæ Laeken Begii. — Affine *L. fusco-atro* et *L. proximo*.

MYCOBILIMBIA Rehm Disc. p. 327 (Etym. quasi *Bilimbia* fungina).

Ascomata parasitica, gregaria, sessilia, pallida v. nigra, firme ceracea, disco primo plano, marginato, dein convexo et immarginato. Asci clavati, supra rotundati, 8-spori, paraphysati. Sporidia disticha, ellipsoidea v. fusoides, transverse 3-7-septata, hyalina. — Est quasi *Lecanidion* parasiticum.

1. **Mycobilimbia Killiasii** (Hepp) Rehm Disc. pag. 327, *Biatora* Hepp 4693

Jahresb. Ges. Büud. 1860, p. 246. — Ascomatibus confertis, convexis, immarginatis, rubido-flavis v. griseo-atris, intus albis, 0,5 mm. lat.; ascis tate clavatis, 60-90 \approx 16, octosporis; sporidiis polystichis, fusoides, 3-7-septatis, hyalinis, 18-40 \approx 5-8; paraphysibus coalitis supra brunneo-flavis.

Hab. in thallo Peltigeræ in Germania.

2. **Mycobilimbia obscurata** (Somm.) Rehm Disc. p. 328, *Lecidea sphæ-* 4694

roides b. *obscurata* Somm. Suppl. p. 165. — Ascomatibus concavis, marginatis, demum convexis immarginatis, carneis, sæpe atro-rubris, 0,8-1,5 mm. lat.; ascis clavatis, 50-85 \approx 15, octosporis; sporidiis distichis elliptico-fusoides, 3-5-septatis, hyalinis, 15-30 \approx 5-8; paraphysibus coalitis supra brunneis.

Hab. in thallo Peltigeræ in Germania et Tirolia.

3. **Mycobilimbia Subfuscæ** (Arnold) Rehm Disc. pag. 329, *Celidium* 4695

Arnold Flor. 1864, pag. 87. — Ascomatibus gregariis, globulosis, demum leniter convexis, tenui-marginatis, opace nigris, 0,2-0,7 mm. diam.; ascis clavatis 45-50 \approx 15, octosporis; sporidiis distichis

ellipsoideo-oblongis, 3-septatis, hyalinis 12-16 \approx 3,5-4; paraphysibus filiformibus, liberis supra incrassatis, cyaneis.

Hab. in thallo Lecanoræ subfuscae in Germania.

PATELLARIA Wahl. — Syll. VIII, p. 786.

1. **Patellaria lata** (Berk.) Phil. Grev. XIX, p. 75 ex herb. Berk. — 4696
Sparsa, plana v. subconcava, superficialis, 1 mm. lat., disco atrobrunneo, margine distincto pallidiore; ascis clavato-fusoideis, octosporis; sporidiis fusoideis 4-5-guttatis, brunneo tinctis, 25-30 \approx 5; paraphysibus copiosis, filamentosis.

Hab. in ramis arborum in ins. Java (herb. BERK.). — Ascomatibus brunneis.

LECIOGRAPHA Mass. Gen. p. 14 (1854) Rehm Disc. p. 372 (Etym. quasi media inter *Lecideam* et *Graphen*), *Dactylospora* Körb. — Ascomata superficialia rotunda, sæpe elongata vel torta, clausa, dein aperta, applanata, marginata, nigra, ceraceo-firma. Asci clavati octospori, concreto-paraphysati. Sporidia oblonga v. clavata 3- rarius 5-7-septata, hyalina, dein brunnea.

1. *Mycolecidea* Karst. Saprophyticæ.

1. **Leciographa lecideina** Rehm Disc. p. 372. — Ascomatibus sparsis, patellatis, tenue acuteque marginatis, atro-nitidulis, 0,3-1 mm. diam.; ascis ellipsoideo-oblongis, 45-48 \approx 10-12, octosporis; sporidiis distichis, cylindraceis, obtusis, 3-septatis, leniter constrictis, 9-10 \approx 4; paraphysibus superne epithecium brunneum formantibus.

Hab. in trunco decorticato Juniperi supra Franzenhöhe Tirolæ.

2. **Leciographa parasemoides** Rehm Disc. p. 373. — Ascomatibus gregariis erumpenti-liberis, plano scutellatis, dein convexis, nigricantibus, 0,2-1,2 mm. diam.; ascis clavatis, rotundatis, 50-60 \approx 9-10, octosporis; sporidiis distichis ellipsoideis, 3-septatis, brunneis, 10-12 \approx 4-5; paraphysibus supra brunneis.

Hab. in ramulis putridis Rhododendri ferruginei, Ortler Tirolæ.

3. **Leciographa allotria** Rehm Disc. p. 373. — Ascomatibus sæpius 2-4 acervulatis, brevissime stipitatis, scutellatis, raro convexis, marginatis, 0,5-1 mm. diam., sordide nigris, udis subgelatinosis; ascis clavato-ovatis, 54-50 \approx 12-15, octosporis; sporidiis distichis elon-

gatis, obtusis, 3-septatis, constrictulis 4-guttatis, 10-15 \times 5,6, brunneolis; paraphysibus supra incrassatis, brunneis.

Hab. in ramis quercinis, Sugenheim Germaniæ.

4. **Leciographa franconica** Rehm Disc. p. 373. — Ascomatibus gregariis, plano-scutellatis, tenui-marginatis, demum convexulis nitido-atris, 0,1-0,4 mm.; ascis clavatis, 40-45 \times 10-12; sporidiis distichis elongatis v. subellipsoideis, 3-septatis, constrictulis, 10-12 \times 4-5; paraphysibus furcatis, supra incrassatis brunneis.

Hab. in ramis decorticatis Sambuci, Sugenheim Germaniæ.

2. *Dactylospora* Körb. Parasiticæ.

5. **Leciographa inspersa** (Tul.) Rehm Disc. p. 374, *Lecidea* Tul. Mem. lich. p. 118. — Ascomatibus gregariis, erumpentibus, applanato-patelliformibus, crasse immarginatis, dein subconvexis margineque revoluto, nigris, primo nitentibus, siccis sæpe subrugosis, 0,2-0,5 mm. lat.; ascis clavato-ovoideis, 40-45 \times 9-10; sporidiis distichis, elongato-cylindræis, obtusis, 1- sæpius 3-septatis, sæpe 2-4-guttulatis, brunneis, 9-10 \times 3-3,5; paraphysibus supra 3 μ . crass. et brunneis.

Hab. in thallo Lichenum crustaceorum, præcipue *Pertusariæ*, *Ochrolechiæ* etc., in Germania.

6. **Leciographa Zwackhii** Mass. Catagr. p. 679, Rehm Disc. p. 375. — Ascomatibus gregariis, erumpentibus, applanato-expansis, siccis tenuiter marginatis, subinde subpulverulentis, nigris v. nigro-rubentibus 0,2-0,5 mm. lat.; ascis 50-80 \times 18-25; sporidiis distichis, elongatis v. subclavatis, utrinque obtusis, rectis, 3- raro 4-5-septatis, ad septa subconstrictis, 15-25 \times 5-7; paraphysibus supra 5 μ . cr. et brunneis v. brunneo-viridibus, epithecium crassum efformantibus.

Hab. in thallo *Phlyctidis argenæ* in Germania.

7. **Leciographa maculans** Arnold Zool.-bot. Verh. 1887, p. 126, Rehm Disc. p. 375. — Ascomatibus dense gregariis, lenticularibus, maculas rotundas, 0,5-1 cm. diam. efformantibus, erumpentibus, applanato-patelliformibus, margine tenui sæpeque inciso, nigris, non nitentibus, 0,5-1 mm. lat.; ascis clavatis, 70-90 \times 21-24; sporidiis polystichis, elongato-clavatis, obtusis, rectis, 3-septatis, plerumque 4-guttulatis, 21-22 \times 7-8; paraphysibus supra 5 μ . cr. et brunneis; epithecio crasso.

Hab. in thallo *Lecanoræ* in Tirolia australi (ARNOLD).

8. **Leciographa attendenda** (Nyl.) Karst. Rev. Mon. p. 155, Rehm 4704
Disc. pag. 376. — Ascomatibus sparsis, applanato-patelliformibus,
tenuiter marginatis, 0,15-0,3 mm. lat.; ascis circ. 50 × 15; spori-
diis distichis elongatis v. elongato-ellipsoideis, 3-5-septatis, brun-
neo-nigris, 10-16 × 4; paraphysibus supra 4 μ . cr. et brunneis.

Hab. in thallo Pilophori in Tirolia austr. (ARNOLD).

9. **Leciographa urceolata** (Th. Fr.) Rehm Disc. p. 376, *Buellia* Th. 4705
Fr. Lich. Arct. p. 233. — Ascomatibus erumpentibus, cyathifor-
mibus, raro applanato-expansis, crassiuscule marginatis, 0,2-0,5
mm. lat.; ascis 40-45 × 15-17; sporidiis distichis, elongatis, obtu-
sis, 3-5- raro 6-7-septatis, sæpe 4-8-guttulatis, brunneis, 15-23 ×
5-6; paraphysibus supra dilute brunneolis.

Hab. in thallo Microglænæ, Lopadii, Rinodinæ, Ochro-
lechiae, Blasteniæ, Biatoræ in alpinis Tiroliae.

10. **Leciographa Stigma** Rehm Disc. p. 377. — Ascomatibus grega- 4706
riis, erumpentibus, applanato-patelliformibus, tenuiter marginatis,
0,1-0,3 mm. lat.; ascis 30-36 × 10-12; sporidiis polystichis, elonga-
tis, rectis v. raro incurvis, 1- dein 3-septatis, brunneolis, 6-10 ×
3-4; paraphysibus supra 6 μ . cr. et brunneis; epithecio crasso,

Hab. in thallo Lecideæ, Algäu Germaniæ.

11. **Leciographa Rhyparizæ** (Arnold) Rehm Disc. pag. 378, *Dactylo-* 4707
spora Arn. Flora 1874, p. 108, t. II, f. 3. — Ascomatibus appla-
nato-patelliformibus, margine elevato cinctis, minutis; ascis clava-
tis; sporidiis distichis, elongato-ovoideis, obtusis, 1- dein 3-septa-
tis, 4-guttulatis, medio subconstrictis, dein brunneis, 12-14 × 6-8;
paraphysibus epithecium brunneum efformantibus.

Hab. in disco Lecanoræ, Brenner Tiroliae.

12. **Leciographa parasitaster** (Nyl.) Arn. Bot.-Zool. Verh. 1875, p. 480, 4708
Rehm Disc. p. 378, *Lecidea* Nyl. Flora 1875, p. 105. — Ascoma-
tibus sparsis, vix erumpentibus, applanatis, nec cyathiformibus, ni-
grescentibus, circ. 0,3 mm. lat.; ascis clavatis, paraphysatis; spo-
ridiis elongatis, utrinque obtusis, raro subacuminatis, 3- raro 5-7-
septatis, sæpe guttatis, ad septa non constrictis, brunneis, 15-18 ×
5-6; epithecio rubro-brunneolo.

Hab. in thallo Bilimbiae in Tirolia (ARNOLD).

13. **Leciographa Muscigenæ** (Anzi) Rehm Disc. pag. 379, *Celidium* 4709
Anzi Symb. lich. p. 27. — Ascomatibus gregariis, erumpentibus,
applanato-patelliformibus, tenuissime marginatis, disco subinde al-
bido-pulvereo, subnitentibus, nigris; ascis 55-65 × 15-20; spori-
diis distichis, elongato-ellipsoideis, obtusis, 1- dein 3-septatis, sæpe

4-guttulatis, ad septa non constrictis, brunneis, 18-23 \approx 7-9; paraphysibus supra 6 μ . lat. et brunneis.

Hab. in parte superiore thalli *Parmeliæ* in Germania et Tirolia.

14. **Lecio-grapha dubia** Rehm Disc. p. 379. — Ascomatibus minutis, 4710 patelliformibus, marginatis; ascis 8-sporis; sporidiis rectis v. rarius leniter curvulis, obtusis, 1-raro 2-3-septatis, medio lenissime constrictis, brunneis, 12-14 \approx 5; paraphysibus brunneis; epithecio brunneolo.

Hab. in thallo *Lecanoræ* in Tirolia (ARNOLD).

15. **Lecio-grapha Nephromatis** Stein Zool.-bot. Verh. 1870, p. 480, 4711 Rehm Disc. pag. 380. — Ascomatibus erumpentibus, subsessilibus, minutissimis; disco primitus rotundo, dein lyriformi; ascis clavatis; sporidiis ellipsoideis, 3-septatis, dilute brunneolis, 16-17 \approx 4,8-5; epithecio nigro-brunneo.

Hab. in thallo *Nephromatis* in montibus Carpathicis.

16. **Lecio-grapha monspeliensis** (Nyl.) Müll. Flora 1872, p. 502, Rehm 4712 Disc. p. 380. — Ascomatibus solitariis v. 2-3-gregariis, erumpentibus, elongato-ellipsoideis, raro rotundis, dein stellatim v. furcatim ramosis, subconvexis, subnitentibus, 0,5-1 mm. long., 0,2-0,5 mm. lat.; disco applanato, crasse marginato; ascis 45-60 \approx 15-18, paraphysatis; sporidiis distichis, elongato-ovoideis, raro ellipsoideis, obtusis, rectis, 3-septatis, ad septa subinde subconstrictis, brunneis, 15-20 \approx 7-9; epithecio brunneo-flavo.

Hab. in crusta *Aspiciliæ* in Tirolia.

17. **Lecio-grapha Arnoldi** Rehm Disc. p. 382. — Ascomatibus leci- 4713 deinis, minutissimis, nigris, applanatis; sporidiis elongatis, obtusiusculis, 3-septatis, sæpe 4-guttulatis, brunneis, 18-22 \approx 5-6; epithecio brunneo.

Hab. in *Barbula* pr. Eichstädt in Bavaria Germaniæ.

18. **Lecio-grapha centrifuga** (Mass.) Rehm Disc. p. 381, *Opegrapha* 4714 Mass. Misc. p. 18. — Ascomatibus areis griseis v. cyaneo-griseis, pruinosis insertis, aggregatis, orbicularibus vel oblongo-ellipticis, subinde furcato-triangulis, atro-nitidis, 0,2-0,5 mm. long., 0,2 mm. lat.; ascis clavatis 60-65 \approx 17, octosporis; sporidiis 2-3-stichis oblongo-ovatis, 3-septatis, 15-16 \approx 5-6, demum brunneis; paraphysibus septatis, ramosis, supra olivaceo-brunneis.

Hab. in thallo *Verrucariæ*, *Aspiciliæ*, *Callopismatis* in Italia, Helvetia, Germania.

PSEUDOTRYBLIDIUM Rehm Disc. pug. 370 (Etym. *pseudēs* falsus et *Tryblidium*). — Ascomata erumpenti-superficialia, initio globoso-clausa, dein crasse breve stipitata, applanato-convexula, vix marginata, sordide nigra, sicca rugulosa, firme ceracea. Asci elliptico-clavati, 4-8-spori, ramoso-paraphysati. Sporidia ovato-fusoidea, 2-4-ocularia, ex hyalino brunnea.

1. **Pseudotryblidium Neesii** (Flot.) Rehm l. c. *Peziza* Flot. in Kl. H. 4715 M. n. 1419. — Ascomatibus sparsis v. gregariis, 0,5-1 mm. lat., atro-brunneis; ascis 75-80 \approx 15-18, 4-8-sporis; sporidiis distichis continuis dein 1-3-septatis, ovato-fusoideis, brunneis, 15-18 \approx 6-8.

Hab. in cortice levigato Abietis pectinatæ in Alpibus Germaniæ, Italiæ, Helvetiæ.

RHYTIDOPEZIZA Speg. F. Guar. I, p. 138 (Etym. *rhytis* plica et *Peziza*). — Ascomata erumpenti-superficialia, sessilia, cupulata, cornea v. subcarbonacea, atra, margine integro involuto, minute ac dense costato-rugoso. Asci cylindranei, 8-spori, dense paraphysati. Sporidia 3-septata, opace fuliginea. — Genus cum *Tryblidiella* comparandum.

1. **Rhytidopeziza nigro-cinnabarina** (Schw.) Sacc. *Patellaria* Schw. 4716 Syn. Amer. bor. n. 1950, Sacc. F. Abyss. n. 29, f. 10, *Blitrydium* Sacc. Syll. VIII, pag. 805,

Hab. præter loca indicata, ad ramulos putres in Abyssinia pr. Ghinda (PENZIG). — Sporidia 3-septato-constrictula, fuliginea, 18-20 \approx 6, initio 4-guttata (numquam muriformia, uti describit cl. Minks). — ***Rhyt. Balansæ** Speg. l. c.: paullo major; ascomatibus 1,5-2 mm. diam.; ascis 160-180 \approx 16; sporidiis 25-30 \approx 8. Ad ramos in silvis subvirgineis Guarapi Brasiliæ (BALANSA).

Sect. 5. Scolecosporæ.

LAHMIA Körb. Par. p. 281, Rehm Disc. p. 341 (Etym. a cl. lichenologo LAHM e Münster). — Ascomata superficialia e globoso mox turbinata, brevissime stipitata, atra, duriuscula. Asci clavati octospori, paraphysati. Sporidia acicularia v. filiformia, parallele stipata, hyalina.

1. **Lahmia Kunzei** (Flot.) Körb. Par. p. 282, Rehm Disc. p. 341. *Calicium* Flot. — Ascomatibus sparsis, initio globosis, clausis dein turbinatis, tenui-marginatis, brunneolis, 0,1-0,4 mm. lat., extus

atris; ascis clavatis supra rotundatis, tenui-stipitatis, 100-150 \approx 15-18, octosporis; sporidiis polystichis, cylindraceo-verruciformibus, 3-5-septatis, hyalinis, 30-45 \approx 4-5; paraphysibus ramosis, supra brunneolis.

Hab. in cortice Populi albæ et tremulæ, raro Salicum, Robiniæ, Quercus, in Germania.

2. **Lahmia Piceæ** Anzi Lich. Lang. n. 457, Rehm Disc. pag. 343. — 4718
Ascomatibus gregariis, globulosis dein discoideis, crasse stipitatis, demum turbinatis tenui-marginatis, atro-brunneis 0,3-0,8 mm. lat.; ascis clavatis, tenui-stipitatis, 110-130 \approx 15-17, octosporis; sporidiis parallele stipatis, aciculari-fusoideis, 7-septatis, hyalinis, 40-45 \approx 3-5; paraphysibus tenuibus, septatis, furcatis, supra brunneis concretis.

Hab. in cortice Abietis pr. Bormio Ital. bor.

3. **Lahmia Fuistingii** Körb. Par. p. 464, Rehm Disc. p. 343. — Asco- 4719
matibus gregariis, sessilibus, dein turbinatis, 150-500 μ . lat. et alt., nigris; disco appanato v. subconvexo; ascis supra obtuse acuminatis, 90-100 \approx 15-17, paraphysatis; sporidiis parallele dispositis, acicularibus, rectis acutiusculis, 7-15-septatis, 20-70 \approx 2-2,5.

Hab. in thallo Sphyriddii byssoidis et S. placophylli etc. Westfalen et Silesia.

MYCOBACIDIA Rehm Pilzfl. Disc. p. 337 (Etym. quasi *Bacidia* fungina). — Ascomata parasitica, sparsa vel gregaria, sessilia, pallida, rarius nigra, crustula discolori sæpe inserta, firmo-ceracea, disco primitus cyathi- v. patelliformi, marginato, dein convexo et immarginato. Asci clavati, supra rotundati, 8-spori, paraphysati. Sporidia circa asci axim disposita, acicularia v. filiformia, transverse multiseptata, hyalina.

1. **Mycobacidia herbarum** (Hepp) Rehm loc. cit. — Ascomatibus sub- 4720
biculo indeterminato, levi, coriaceo, griseo insidentibus, usque ad 1 mm. lat., firmo-ceraceis; disco patelliformi, nitenti-castaneo, dein opace rubro-brunneo, tandem nigro-brunneo; ascis 55-60 \approx 10-12; sporidiis subspiraliter dispositis, filiformibus, plus minus undulatis, uno apice valde acutatis, transverse distincte 7-15-septatis, 40-60 \approx 1,5-3; paraphysibus supra furcatis et incrassatis.

Hab. ad muscos, gramineas et Juniperi ramulos in Franconia.

2. **Mycobacidia flavo-virescens** (Dicks) Rehm Disc. p. 338. — Asco- 4721
matibus subiculo crustaceo gregatim insidentibus, nigris, nudis,

0,3-0,7 mm. lat., firmo-ceraceis, disco cyathi- dein patelliformi; ascis anguste clavatis, stipitatis, 4-8 sporis, 75-90 \approx 12-14; sporidiis parallele dispositis, acicularibus, utrinque acuminatis, 5-15-septatis, 30-90 \approx 3; paraphysibus 1,5 μ . cr. supra ramosis et viriduli-brunneolis.

Hab. ad *Sphyridium byssoides* in tota fere Europa.

BACTROSPORA Mass. Ric. p. 133, Rehm Disc. pag. 344 (Etym. *bactron* baculus et *spora*). — Ascomata crustula pallida inserta, sessilia, initio globosa clausa demum scutellata, marginata demum immarginata. Asci cylindranei, ramoso-paraphysati, octospori. Sporidia bacillaria pluriseptata, parallele stipata, ex hyalino flavida, subinde demum in articulos secedentia.

1. **Bactrospora dryina** (Ach.) Mass. l. c., Rehm l. c. — Ascomatibus 4722 gregariis atro-purpureis, dein nigris 0,2-1,2 mm. lat.; ascis terti-clavatis, apice rotundatis, 120-130 \approx 10-15; sporidiis bacillaribus 11-septatis, subhyalinis, 60-80 \approx 2-2,5; paraphysibus repetito-ramosis, 2 μ . cr., septatis.

Hab. in cortice *Quercuum* in Germania, Italia.

Fam. 9. **Gymnoascaceæ** BAR.

Subf. EXOASCEÆ Sad.

TAPHRINA Fr. — Syll. VIII. p. 812 *).

1. **Taphrina lethifera** (Peck.) Sacc. *Ascomyces* Peck 40 Rep. p. 66. 4723 — Indefinita, hypophylla, sæpe paginam superiorem totam occupans et glauco-pruinosa reddens; ascis cylindraneis obtusis v. subtruncatis, 40-50 \approx 15-20; sporidiis minutis ex ellipsoideo subglobosis, 4-5 \approx 2-3.

Hab. in foliis vivis *Aceris spicati*, Elizabethtown Amer. bor.

2. **Taphrina rubro-brunnea** (Peck) Sacc. *Ascomyces* Peck 40 Rep. 4724 p. 67. — Maculis definitis, variis, minutis et suborbicularibus vel latis et irregularibus, subinde confluentibus, sæpius supra concavis, infra convexis, sordide rubro-brunneis, infra pallidioribus; ascis oblongis, apice truncatis, 50-75 \approx 15-22; sporidiis minutis, subellipticis, 3-4 \approx 1,5-2.

*) Cfr. R. Sadebeck Krit. Untersuch. Taphr. Hamb. 1890 cum tab., ubi et species quædam reformantur et novæ fuse describuntur. Hic earum notas essentielles tantum retuli.

Hab. in foliis *Quercus rubræ*, Sandlake Amer. bor. — *Taphrinæ alutaceæ* affinis sed color alius, asci crassiores etc.

3. **Taphrina Johansonii** Sadeb. Krit. Unters. Taphr. p. 9, *T. rhizophora* Johans. (p. p. in carpellis *P. tremulæ*). Est maxima *Taphrinæ* species. 4725

Hab. in fructibus *Populi tremulæ* in Suecia et Germania.

4. **Taphrina epiphylla** (Sad.) Sacc. Syll. VIII, p. 816. — Var. **maculans** Sadeb. Krit. Unters. Taphr. pag. 10, t. IV, f. 2. — Maculis 0,5-1 cm. lat.; ascorum cellula basilari deorsum acutiori et sæpius minori, cetera eadem. 4726

Hab. in foliis *Alni glutinosæ* et *A. incano-glutinosæ* in Germania.

5. **Taphrina Kruchii** (Vuill.) Sacc. *Exoascus Kruchii* P. Vuill. Rev. Myc. 1891, p. 141. — Hypophylla, totam fere paginam occupans; ascis infra planis, subcuticularibus, cellula basilari carentibus, supra subclavatis, 72-80 \approx 21-23, initio octosporis; sporidiis sphaericis octonis 4 μ . diam., demum numerosissimis ellipsoideis 2,5 \approx 2. 4727

Hab. in foliis vivis *Quercus Ilicis* in Italia et Gallia. — Ramuli fungillo correpti deformantur (*Scopazzi*), de quo cfr. cl. Kruch Malpigh. 1891, p. 424. — A *Taphr. cærulescente*, præter colorem, differt ascis majoribus etc.

6. **Taphrina Githaginis** Rostr. Medd. Nat. Foren. Kjobenhavn 1890, p. 257. — Hyphis intercellularibus, totam matricem occupantibus; ascis subepidermicis, ellipsoideis, flavescentibus, 48-58 \approx 30-45, cellula basilari nulla; sporidiis globosis; conidiis numerosissimis oblongis, 4-6 \approx 2-3. 4728

Hab. in foliis caulibusque vivis *Agrostematis Githaginis* in Dania.

7. **Taphrina lutescens** Rostr. Medd. Nat. Foren. Kjobenhavn 1890, p. 257. — Maculis intense flavis in frondibus vivis non bullatis; hyphis intercellularibus; ascis gracilibus, 60-70 \approx 8-9, cellula basilari nulla; conidiis numerosis e proliferatione sporidiorum ortis, exiguis, 3-4 \approx 0,5-1. 4729

Hab. in frondibus *Polystichi Thelypteridis* in Dania.

8. **Taphrina Cissi** Zoll. in Flora 1847, p. 300. — Maculis purpurascenscentibus, rotundatis, villosis-sericeis, 2-4 mm. diam., vix 0,5 mm. cr.; floccis (ascis?) clavatis, articulatis, granulosis, purpurascenscentibus; granulis (sporidiis?) depresso-sphaericis, cruciatim notatis, aliis minoribus intermixtis. 4730

Hab. in foliis *Cissorum* variorum ad pedem M. Salak Javæ.

EXOASCUS Fuck. — Syll. VIII, p. 816.

1. **Exoascus Celtidis** (Sadeb.) Sacc. *Taphrina* Sadeb. Krit. Unters. 4731
p. 20, t. V (1890). — Maculis irregularibus, brunneis, amphigenis,
vix inflatis 0,5-1 cm. lat.; ascis cylindraceutis, obtusis, octosporis,
25-28 \approx 8-10; cellula basilari epidermidem non intrante, valde lata,
8-10 μ . alta, 25-30 μ . lata; sporidiis globosis 1-guttulatis, 3-3,5
 μ . diam.

Hab. in foliis *Celtidis australis*, cui valde noxius, prope
Lugano. — *Exoasco Ulmi* subaffinis.

2. **Exoascus Æmiliæ** Passer. F. N. IV. n. 35 (Jun. 1890). — Maculis 4732
subdiscoideis variis, primo albido-griseis, dein exaridis, fuscis, tan-
dem circumscissis elabentibus; ascis in macula plana hypophyllis,
sparsis vel subgregariis, tubulosis vel basim versus plus minus
angustatis, utrinque rotundatis, cellula basilari non visa, 12-15 \approx
6-7,5; sporidiis octonis, globosis, distichis v. conglobatis, hyalinis,
2,5-3 μ . diam.

Hab. in foliis *Celtidis australis*, Vigheffio prope Parma
Ital. bor. — «Etsi cellulæ basilares non visæ, species verisimillime
eadem ac præcedens».

3. **Exoascus Alni-incanæ** Kühn in litt. (ut var.), *Taphrina Alni-* 4733
incanæ (Kühn) Sadeb. Krit. Unters. p. 17, t. IV, f. 1 a, et 1 b,
Exoascus alnitorquus Auct. (p. p. in amentis), *Taphr. amento-*
rum Sadeb. in Centralb. 1888, p. 349. — Ascis cellula basilari
carentibus, 40-45 \approx 10, tereti-clavatis, 8-sporis; sporidiis subdisti-
chis, globosis, 5 μ . cr.

Hab. in amentis femineis *Alni incanæ* in Germania etc. —
Plerumque colorem atro-rubrum amentis affert. — Ascii nunc epi-
dermidi profunde immersi, nunc leviter. *Ascomyces endogenus*
Fisch Bot. Zeit. 1885, p. 33, t. I, verisimiliter est eadem species,
præterviso mycelio.

4. **Exoascus Cerasi** Fuck. Symb. p. 252 (ut var.) *Exoascus et Ta-* 4734
phrina deformans Auct. (p. p. in Ceraso), *Taphrina Cerasi*
(Fuck.) Sadeb. Krit. Unters. Taphr. pag. 26, t. IV, f. 8. — Ascis
angustis 35-50 \approx 5-7, octosporis; cellula basilari 10-16 \approx 5; spori-
diis 3-5 μ . diam.

Hab. in foliis *Pruni Cerasi* et *P. avium*, frequens. — *E.*
deformans (Berk.) Tul. typicus viget in *Amygdalo Persica* et
præbet ascos crassiores, 35-40 \approx 9-10, cellulas basilares 6-8 μ .
lat. et alt.

5. **Exoascus Cratægi** (Sadeb.) Sacc. *Taphrina* Sadeb. Krit. Unters. 4735
Taphr. p. 21, t. IV, f. 5, *Exoascus bullatus* Sadeb. et Auct. p. p.
— Ascis cylindræis utrinque truncatis, 25-35 \approx 8, cellula basilari 6-8 μ . diam. suffultis, 8-sporis; sporidiis globosis 4,5 μ . diam.
Hab. in foliis rarius et in floribus *Cratægi Oxycanthæ* in Germania alibique. Folia correpta rubescunt, corrugantur et torquentur. Ascii inter cellulas epidermidis haud penetrant.
6. **Exoascus minor** (Sadeb.) Sacc. *Taphrina* Sad. Krit. Unters. Taphr. 4736
p. 24, t. IV, f. 6. — Ramulos et gemmas vexans et deformans foliorumque pag. inferiorem ex toto vel partem occupans, sæpius rubro-tingens et pruina albida conspergens, demum contorquens; ascis tereti-clavatis 30-35 \approx 6-8, cellula basilari 8-10 μ . diam. suffultis, octosporis; sporidiis globoso-ellipsoideis, 6-7 \approx 5.
Hab. in foliis vivis *Pruni Chamæcerasi* pr. Hamburg Germaniæ et forte alibi. — Mycelium tantum subcuticulare.
7. **Exoascus Farlowii** (Sad.) Sacc. *Taphrina* Sad. Krit. Unters. Taphr. 4737
p. 30, t. IV, f. 3. — Ascis inter se remotiusculis, tereti-clavatis, apice rotundatis, 20-30 \approx 8-9, cellula basilari cylindræa, longiuscula, 15-25 \approx 8-9, in matricem non penetrante.
Hab. in fructibus immaturis, qui hyperhophice deformantur, *Pruni serotinæ*, Cambridge Mass. Amer. bor. (FARLOW). — Affinis *Exoasco Pruni*, sed vere distinctus.

Subfam. 2. GYMNOASCEÆ Bar.

ENDOMYCES v. Tiegh. — Syll. VIII, p. 820.

1. **Endomyces Scytonematum** Zukal in Flora 1891, p. 106, t. III, 4738
f. 34, *Ephibella Hegetschweileri* Itzigs. — Mycelio hyalino, septato, 0,8-1 μ . cr., partibus fertilibus, 2 μ . cr., ad septa inflatis; ascis piriformibus, stipitatis, 8-sporis, 25-26 \approx 17-18; sporidiis conglobatis, coffeiformibus, h. e. uno latere planis, continuis, hyalinis, levibus, 8 \approx 6.
Hab. in *Scytonemate* alato pr. Neuhaus in Stiria. — Glomeruli ascorum sistunt in *Scytonematibus* tumores subglobosos peculiare (*Algen-gallen*).
2. **Endomyces Magnusii** Ludw. in Bericht. Deutsch. Bot. Gesellsch. 4739
1886, p. XVII et Bref. Unters. IX, p. 124, t. I, f. 1-18. — Mycelii hyphis filiformibus longis, ubique ramosis, septatis, hyalinis; ascis in ramulis acrogenis copiosis, ovato-ellipsoideis, 40-45 \approx 25, tetrasporis; sporidiis ellipsoideis, parce sed conspicue verruculosis, hyalinis 12-15 \approx 8-10.

Hab. in lymphâ spumosa fluente (*Schleimfluss*) *Quercus* pr. Greiz in Germania. — Mensuram asci et sporidiorum ex iconibus Brefeldii sumpsit.

GYMNOASCUS Bar. — Syll. VIII, p. 823.

1. **Gymnoascus Zuffianus** Morini in Mem. R. Acc. Bol. IV, tomo X, 4740 p. 137 cum iconibus. — Ascomatibus globulosis, luteo-pallidis, circiter 330-500 μ . diam., numerosis setulis hyphoidis emergentibus, acuminatis et rigidulis conspersis; hyphis ascogenis exilissimis, septatis, incoloribus, ramulis ultimis in ascos globulosos 15-18 μ . diam. abeuntibus; sporidiis octonis, conglobatis, hyalinis, sphaeroidalibus, 4-6 μ . diam.

Hab. in Ozonio (*O. stuposo* Pers.?) insidens prope Sassari ins. Sardiniae.

2. **Gymnoascus Eidami** Cocc. Svil. tre picc. fung. pag. 8, t. II. — 4741 Ascomatibus exiguis, cinereo-flavidulis, 0,3-0,4 mm. diam., subcircularibus, extus breve setulosis; hyphis ascophoris cylindricis, ramosis, continuis, hyalinis; ascis in ramulis acrogenis, globosis, octosporis, 12-14 μ . diam.; sporidiis conglobatis, sphaericis, hyalinis, 3-5 μ . diam.

Hab. in foliis putridis stercoratis in agro Bononiensi. — «*Excipulum* v. *perithecium* (uti auctor vocat) adest minute parenchymaticum; an ergo potius *Cephalothecæ* species?».

ASCOCORTICIUM Bref. Unters. Myk. IX, p. 145 (Etym. quasi *Corticium* ascigerum). — Ascomata effusa, indeterminata, plana, membranacea, ex ascis fere omnino composita. Asci verticaliter stipati, clavato-oblongi, sessiles, 8-spori, paraphysati, ex hyphis mycelii horizontaliter effusis, continuis, filiformibus oriundi. Sporidia ellipsoidea, continua hyalina.

1. **Ascocorticium albidum** Bref. loc. cit. t. I, f. 37-30. — Flocculosum, 4742 griseo-album vel rubescens, 1-5 cm. long., 1-3 cm. lat.; ascis clavato-oblongis, 18-24 \times 7-8; sporidiis subdistichis, ellipsoideis, 4-5 \times 2, hyalinis.

Hab. in cortice relaxato Pinuum prope Münster Germaniae (v. TAVEL).

ASCOIDEA Bref. Untersuch. Myk. IX, p. 94 (Etym. *ascos* et *eidos* species). — Ascomata indeterminate effusa, nuda, colorata, carnosula. Asci tereti-clavati, pluri-tunicati, apice dehiscentes, in my-

celii densi hyphis septatis acrogeni, myriospori. Sporidia minuta globulosa, basi plano-truncata, hyalina. Adsunt simul hyphæ conidicæ, conidia subspicata ovato-oblonga.

1. **Ascoidea rubescens** Bref. loc. cit. t. III, B, f. 1-31. — Initio le- 4743
vis, rubra, albido tincta, demum obscurior submuriculata, 3 cm.
et ultra lata, 12 mm. cr.; ascis generis; sporidiis 5 μ . diam.

Hab. in trunco dejecto Fagi in silvis prope Wolbeck Germaniæ. — Quoad speciei evolutionem cfr. Bref. loc. cit.

Fam. 10. **Caliciaceæ** FR.

Sect. 1. **Phæosporæ.**

HYPSTOTHECA Ell. et Ev. — Syll. VIII, p. 834.

1. **Hypstotheca ephemera** (Swackh) Sacc., *Coniocybe Beckhausii* Körb. Par. p. 301, *Caliciopsis ephemera* (Zwackh) Rehm Disc. p. 388, *Calicium* Zwackh. Huc ducenda fere absque dubio, teste Rehm loc. cit., *Hyps. subcorticalis* (C. et E.) Ell. et Ev., Syll. VIII, p. 834. Sporidia etiam in exempl. amer. 5 μ . diam.

CALICIOPSIS Peck. — Syll. VIII, p. 833.

1. **Caliciopsis stenocyboides** (Nyl.) Rehm Disc. p. 389. Huc est ducenda, teste Rehm loc. cit., *Caliciopsis pinea* Peck — Syll. VIII, pag. 833.

Sect. 2. **Didymosporæ.**

CALICIUM Pers. — Syll. VIII, p. 834.

1. **Calicium fallax** Auersw. Hedw. 1858, p. 14, Rehm Disc. p. 412. 4744
— Ascomatibus capitulatis, stipite crassiusculo, elongato, e basi latiore plerumque aciculari-attenuato, non raro furcato suffultis, brunneis, brunneo-pulvereis; disco cyathiformi; sporidiis elongato-fusoideis, indistincte 1-septatis, brunneolis, 7-9 \approx 3-3.5.

Hab. in thallo pulvereo-crustaceo, albido, sociâ *Biatorâ lucidâ*, Tharandt in Saxonia. — Secundum Sydow Flecht. Deutschl. p. 251, sporidia usque ad 16 \approx 7.

2. **Calicium atomarium** Fr. Vet. Ak. Handl. 1817. p. 227, Rehm Disc. 4745
p. 402. — Ascomatibus sparsis, sessilibus, dein hemisphæricis, demum brevissime turbinatis, nigris, subinde leniter viridulo-tinctis,

0,1-0,3 mm. lat., 0,1-0,25 mm. alt., corneis; disco sæpius valde convexo; ascis cylindræis, 8-sporis, 45-50 \approx 5; sporidiis monostichis, elongato-ellipsoideis v. fusoideis, obtusis, rectis, 1-septatis, rarissime medio constrictis, primo hyalinis, dein brunneis, 6-9 \approx 2,5-3; paraphysibus filiformibus, 1 μ . lat., hyalinis.

Hab. in cortice vetusto *Quercus* et *Pini* in Germania.

3. **Calicium hospitans** Th. Fr. Bot. Not. 1865, pag. 40, Rehm Disc. 4746 p. 401. — Ascomatibus gregariis, rarius sparsis, lenticularibus v. hemisphæricis, basi in stipitem pallidiorem angustatis, 0,2-0,3 mm. lat., ceraceo-firmis, disco convexis, immarginatis; ascis cylindræis, supra rotundatis, 8-sporis, 45-50 \approx 4-5; sporidiis monostichis, obtuse ellipsoideis, continuis, demum raro 1-septatis et medio subconstrictis, brunneis, 6-9 \approx 3; paraphysibus filiformibus, 2-2,5 μ . lat., supra subramosis, dilute flavidis.

Hab. in thallo *Lecanoræ* ad ramos putridos *Quercus*, ad ramos siccos, vetustos *Pini* et truncos *Aceris* in Germania et Austria. — *C. paroico* affine.

4. **Calicium parietinum** Ach. Vet. Ak. Handl. 1816, p. 260, t. 8, Rehm 4747 Disc. p. 405. — A *C. pusillo*, cui conjunctum in Syll. VIII, p. 835, differt præcipue stipite usque 2 mm. long.; sporidiis plerumque continuis, 5-8 \approx 3.

Hab. in corticibus et lignis præcipue *Quercus*, *Pini* in Germania, Helvetia, Italia, Suecia etc. — «Potius *Embolus*».

5. **Calicium præcedens** Nyl. Flora 1867, Rehm Disc. p. 405. — Asco- 4748 matibus gregariis, primo subcylindricis, dein turbinato-lenticularibus, 0,1-0,2 mm. lat., stipite tenuissimo, circ. 0,2 mm. præditis, nigris, corneis; disco rotundo, convexo, tenuiter marginato; ascis cylindræis, 8-sporis, 75-90 \approx 6-7; sporidiis monostichis, elongatis, raro ellipsoideis, continuis, rectis, brunneolis, 9-14 \approx 4-5; paraphysibus filiformibus, 2 μ . lat.

Hab. in ramis siccis *Alni* viridis in Tirolia et Württemberg Germaniæ. — *C. parietino* affinis. «Potius *Embolus*».

6. **Calicium tremulicolum** (Norrl.) Rehm Disc. pag. 405, *Stenocybe* 4749 Norrl. Cfr. Flora 1883, p. 531. — Ascomatibus sparsis, hemisphæricis, disco convexis, breviter tenuiterque stipitatis, circ. 0,3 mm. alt., supra 0,2 mm. lat., nitenti-nigris; ascis cylindræis, apice rotundatis, 8-sporis, 90-95 \approx 5-6; sporidiis 1-stichis, rectis, tenuiter 1- raro 3-septatis, ad septa non constrictis, involuero mucilaginoso, tenui cinctis, griseo-brunneolis, 15-17 \approx 4-4,5; paraphysibus filiformibus, 1 μ . lat.

Hab. in cortice levi, vetusto Coryli in Württemberg Germanie, rarissime. «Potius *Stenocybe*»,

7. **Calicium disseminatum** (Ach.) Fr. Lich. eur, p. 397, Rehm Disc. 4750 p. 403. — Ascomatibus gregariis, dein breviter turbinatis, sessilibus, nigris, vix cœruleo- v. viridulo-tinctis, usque ad 0,3 mm. alt., 0,1-0,25 mm. lat., corneis; disco rotundo, demum convexo; ascis cylindraceutis, 8-sporis, circ. $50 \approx 5$; sporidiis monostichis, elongatis, obtusis, rectis v. subincurvis, 1- demum 3-septatis, hyalinis, dein atro-brunneis, 10-12 \approx 3,5-4; paraphysibus filiformibus, 1 μ . lat., hyalinis.

Hab. in cortice fisso Quercus, Betulæ et Abietis pectinatae in Germania et Helvetia. — An potius *Stenocybe*?

Fam. 11. **Arthoniaceæ** REHM Disc. p. 414.

Ascomata innata dein erumpentia, excipulo nullo manifesto cincta, convexo-applanata, ambitu rotunda v. varie efformata.

Genera hujus familiæ hucusque inter Lichenes enumerabantur, sed gonidia nulla, hinc a cl. Rehm ad Discomycetes recte translata. Opus eximium (*Deutsch. Discom.*) hujus auctoris est necessario conferendum; hic tantum, notitiæ causa, synopsis generum et specierum ex eodem opere excerpsi.

Clavis analytica Generum.

A. Parasiticæ in Lichenibus.

Phacopsis. Ascomata subrotunda. Sporidia continua, hyalina.

Conida. Ascomata subrotunda. Sporidia 1- raro 2-septata, hyalina vel flavidula.

Celidium. Ascomata subrotunda. Sporidia 3-septata, hyalina v. demum brunnea.

B. Corticicolæ.

Lecideopsis. Ascomata rotunda vel inæqualiter maculiformia. Sporidia 1-septata, hyalina.

Arthonia. Ascomata e rotundo angulosa vel ramulosa. Sporidia 3-5-septata, hyalina v. flavidula.

Arthothelium. Ascomata inæqualiter sinuoso-maculiformia. Sporidia pluri-septato-muriformia, hyalina v. brunnea.

PHACOPSIS Tul. Ann. Sc. nat. III, t. XVII, pag. 124, Rehm Disc. p. 419 (Etym. *phace* lenticula et *opsis* facies).

1. **Phacopsis vulpina** Tul. l. c., Rehm l. c. — Ascomatibus nigris, sub 4751

inde viridiflavo-pruinosis, 0,2-0,5 mm. diam.; ascis 45-50 \approx 18-30, octosporis; sporidiis ellipsoideo-oblongis, 13-16 \approx 4-6.

Hab. in thallo *Everniæ* in Germania, Tirolia, Helvetia.

CONIDA Mass. *Symm. Lich.* p. 75, *Rehm Disc.* p. 420 (Etym. *conis*, *conidos* lens seu ovum pediculorum).

1. **Conida clemens** (Tul.) Mass. *Misc. Lich.* pag. 16, *Phacopsis* Tul. 4752 *Ann. Sc. nat.* 1852, pag. 124. — Ascomatibus nigris, 0,2-1 mm. diam.; ascis 36-40 \approx 15-17, octosporis; sporidiis clavato-oblongis, 10-15 \approx 3-5, hyalinis, constricto 1-septatis; hypothecio dilute flavo-brunneo.

Hab. in epitheciis *Lichenum* plurimorum in Germania, Italia, Gallia, Suecia, Helvetia.

2. **Conida lecanorina** (Almq.) *Rehm Disc.* p. 422, *Arthonia* Almq. 4753 *Mon. Arth.* p. 54. — Ascomatibus nigris, 0,2-0,4 mm. lat.; ascis 36-40 \approx 15-17, octosporis; sporidiis pyreniformibus, constricto-1-septatis, hyalinis, 9-10 \approx 4,5-5; hypothecio saturate flavo-brunneo.

Hab. in apotheciis *Lecanoræ* in Germania.

3. **Conida punctella** (Nyl.) Arn. *Jura, Fl.* p. 46, *Rehm Disc.* p. 423, 4754 *Arthonia* Nyl. — Ascomatibus nigris, punctiformibus; ascis 42 \approx 18, octosporis; sporidiis ovato-clavatis, 15 \approx 6, 1-septatis, ex hyalino brunneolis; hypothecio achroo.

Hab. in thallo *Diplotommatis epipolii* in Franconia sup. (ARNOLD).

4. **Conida destruens** *Rehm Disc.* p. 423. — Ascomatibus nigris, 0,2- 4755 0,3 mm. lat.; ascis 36-40 \approx 10-12, quadri-octosporis; sporidiis clavulatis, 9-15 \approx 3-5, 1- raro 2-septatis ex hyalino brunneolis; hypothecio brunneo.

Hab. in thallo, rarius apotheciis *Parmeliæ* et *Physciæ* in Germania.

5. **Conida Pelveti** (Hepp.) Arn. *Flora* 1874, pag. 105, *Rehm Disc.* 4756 p. 424, *Celidium* Hepp. — Ascomatibus nigris, 0,3-1,5 mm. lat.; ascis 35-45 \approx 15-20, quadri-octosporis; sporidiis oblongo-clavatis, constrictulo-1-septatis, 10-13 \approx 3, hyalinis; hypothecio brunneolo.

Hab. in thallo *Solorinæ*, Algau Bavaricæ,

6. **Conida nephromiaria** (Nyl.) Arnold. *Flora* 1874, p. 105, *Rehm* 4757 *Disc.* p. 425, *Celidium* Karst., *Syll.* VIII, p. 743. — Var. **stereo-caulina** Ohlert in *Rehm* loc. cit. — Ascomatibus nigris, 0,15-0,18 mm. lat.; ascis 18-20 \approx 6-8; sporidiis obovato-clavulatis, 10-15 \approx 3-5, hyalinis.

Hab. in thallo *Stereocauli* et *Parmeliæ* in Germania.

CELIDIUM (Tul.) Korb. Syst. lich. p. 210, Rehm Disc. p. 425. Syll. VIII, p. 742. — Species Syllogi addendæ sequuntur.

1. **Celidium pulvinatum** Rehm Disc. p. 427. — Ascomatibus nigris, 4758
albido-pruinosis, 0,3-1,5 mm. lat.; ascis 60-70 \approx 18-21, octosporis;
sporidiis ellipsoideo-oblongis, 3-septatis, 18-24 \times 4-7, ex hyalino
brunneis.

Hab. in thallo *Endocarpi* in Germania.

2. **Celidium lepidophilum** (Anzi) Rehm Disc. p. 427, *Abrothallus* Anzi 4759
Anal. p. 24. — Ascomatibus convexis, nigris, siccis viridulo-prui-
nosis, 0,1-0,2 mm. diam.; ascis 60 \approx 10-12, octosporis; sporidiis
fusoides, 1-3-septatis, 10-15 \approx 3-5, hyalinis.

Hab. in thalli squamis *Cladoniæ*, Val Furva Ital. bor.

3. **Celidium tabescens** Anzi Anal. lich. var. p. 25, Rehm Disc. p. 428. 4760
— Ascomatibus minutissimis, nigris v. nigro-purpureis; sporidiis
navicularibus 1-2-septatis, quaternis vel senis; epithecio et hypo-
thecio rubro-brunneo.

Hab. in thallo *Imbricariæ saxatilis*, Bormio Ital. bor. —

Ad **Celidium varians** (Dav.) Arn., Syll. VIII, p. 742, var. **intextum**
Almq., Rehm Disc. pag. 429 est ducenda *Metasphaeria Lichenis-*
sordidi (Mass.) Sacc. Syll. II, p. 184.

4. **Celidium Ericetorum** (Fl.) Rehm Disc. p. 431, *Nesolechia* Flot. — 4761
Ascomatibus opace nigris, 0,1-0,3 mm. diam.; ascis 60-65 \approx 9-10,
octosporis; sporidiis elongatis, 3-septatis, hyalinis, 10-15 \approx 3.

Hab. in thallo *Bæomycetis rosei* et *Sphyridii* in Ger-
mania.

LECIDEOPSIS Almq. Mon. Arth. Scand. p. 46, Rehm Disc. pag. 432
(Etym. *Lecidea* et *opsis* facies).

1. **Lecideopsis Bueriana** (Lahm) Rehm Disc. pag. 432, *Coniangium* 4762
Lahm. — Ascomatibus nigris, rugulosis, 0,1-0,25 mm. diam.; ascis
36-40 \approx 12-15, 4-8-sporis; sporidiis ovato-oblongis, 1-septatis, ex
hyalino brunneolis, 12-15 \approx 4-5.

Hab. in cortice *Quercus* in Germania.

2. **Lecideopsis galactites** (DC.) Rehm Disc. p. 433, *Verrucaria* DC. 4763
— Ascomatibus in areis argenteo-albis gregariis, nigris, 0,1-0,5
mm. lat.; ascis 30-40 \approx 15-18, octosporis; sporidiis ovato-oblongis,
clavulatis, 1-septatis, hyalinis, 12-18 \approx 4-5.

Hab. in cortice levigato *Populorum* in tota fere Europa.

3. **Lecideopsis excipienda** (Nyl.) Rehm Disc. p. 434, *Arthonia* Nyl. 4764
— Ascomatibus in areis pallidis fusco-cinctis gregariis, nigris, 0,2-1,2 mm. lat., demum anguloso-stellatis; ascis 40-45 \approx 21-25, 8-sporis; sporidiis oblongo-ovatis, 1-septatis, hyalinis, 14-19 \approx 6-7.

Hab. in ramis corticatis Berberidis, Ligustri, in Germania, Helvetia etc.

4. **Lecideopsis cembrina** (Anzi) Rehm Disc. p. 434, *Arthonia* Anzi 4765
Manip. p. 126. — Ascomatibus in areis dealbatis gregariis, varie sinuoso-stellatis, nigris, 0,1-1 mm. long., 0,1-0,2 mm. lat.; ascis 40-45 \approx 15-20, 6-8-sporis; sporidiis clavulatis, 1-septatis, hyalinis, 12-15 \approx 4-5.

Hab. in cortice levigato Pini Cembræ in Germania et Italia.

ARTHONIA Ach. Lich. Univ. p. 25, Rehm Disc. p. 435 (Etym. $\alpha\rho\delta\omega$ nec $\alpha\rho\theta\omega$ (ut male legit Acharius) irrigo, conspergo, quasi thallus ascomatibus minutis conspersus; hinc «*Ardonia, Ardothelium, Ardoniaceæ*» rectius esset scribendum.

1. **Arthonia punctiformis** Ach., Rehm Disc. p. 435. — Ascomatibus 4766
in areis albidis gregariis stellatis vel versiformibus, nigris, 0,2-0,7 mm. lat.; ascis 36-40 \approx 21-24, octosporis; sporidiis oblongo-ovatis, 3-5-septatis, flaveolis, 17-20 \approx 4-6.

Hab. in cortice levigato Tiliæ, Fraxini, Ulmi, Celtidis, Fagi, Tremulæ, Pini, Castaneæ, Piri in tota Europa.

2. **Arthonia obscura** (Pers.) Leight. Graph. p. 56, Rehm Disc. p. 436. 4767
— Ascomatibus in areis brunneo-viridulis gregariis, varie angulosis, nigricantibus, 0,1-2,5 mm. lat.; ascis 40-45 \approx 18-20, 6-8-sporis; sporidiis oblongis, 5-septatis, medio constrictis, ex hyalino flavidis.

Hab. ad basim truncorum juniorum Fagi, Coryli, Quercus, Alni in tota fere Europa.

3. **Arthonia dispersa** (Schrad.) Rehm Disc. p. 437, *Opegrapha* Schrad. 4768
— Ascomatibus in areis expallentibus gregariis, sublinearibus vel versiformibus ramulosisque, 0,1-0,2 mm. lat.; ascis 21-30 \approx 15-20, octosporis; sporidiis cuneatis, 1-3-septatis, 10-12 \approx 3-4, hyalinis.

Hab. in ramis truncisque junioribus Æsculi, Fraxini, Alni, Coryli, Pruni, Rhois, Sorbi, Rhamni, Quercus, Berberidis, Ribis, Liriodendri, Caraganæ, Pini, Rhododendri in tota fere Europa.

ARTHOTHELIUM Mass. Rich. Lich. p. 54, Rehm Disc. p. 438 (Etym. *ardo* conspergo et *thele* papilla).

1. **Arthothelium ruanideum** (Nyl.) Arn. Lich. n. 1078, Rehm Disc. 4769 p. 438, *Arthonia* Nyl. — Ascomatibus in areis griseo-brunneolis, gregariis confluendo rotundo-stellatis, 1 mm. lat., nigris; ascis 50-60 \approx 2-5, octosporis; sporidiis oblongo-ellipticis, 7-septato-muriformibus, hyalinis, 15-18 \approx 7-9.
Hab. in cortice juniore Alni, Fraxini, Coryli, Pini, Ilicis, in Germania, Helvetia.
2. **Arthothelium ruanum** (Mass.) Rehm Disc. p. 439, *Arthonia* Mass. 4770 Ric. p. 47. — Ascomatibus in areis pallidis acervulatis, ramoso-confluentibus, 0,1-0,2 mm. lat., nigris; acervulis 1-1,5 mm. lat.; ascis 36-40 \approx 21-25, octosporis; sporidiis ellipsoideis, 5-7-septato-muriformibus, 15-18 \approx 6-7, hyalinis dein brunneolis, medio constrictis.
Hab. in cortice Pinorum, Quercus, Fraxini, Carpini, Juglandis in Germania, Helvetia.
3. **Arthothelium subcembrinum** (Anzi) Rehm Disc. p. 439, *Arthonia* 4771 Anzi Symb. p. 22. — Ascomatibus sparsis, punctiformi-inæqualibus; ascis piriformibus, 6-8-sporis; sporidiis obovato-cuneatis, pluriseptato-muriformibus, 17-21 \approx 8-10, hyalinis.
Hab. in cortice leviore Pini Cembræ in Val Furva Ital. bor. (ANZI).
4. **Arthothelium Beltraminianum** Mass. Mem. Lich. pag. 115, Rehm 4772 Disc. p. 440. — Ascomatibus in areis albis subrotundis gregariis, e rotundo stelliformibus, radiatim expansis, 0,2-1 mm. lat.; ascis 36-45 \approx 21-24, octosporis; sporidiis oblongis, 7-septato-muriformibus, hyalinis, 15-18 \approx 6-7.
Hab. in cortice Carpini et Juglandis in Italia et Germania.
5. **Arthothelium spectabile** (Flot.) Mass. Ric. pag. 54, Rehm Disc. 4773 p. 440, *Arthonia* Flot. — Ascomatibus in areis niveis amplis gregariis, inæqualiter ruguloso-ramosis, nigris, 0,2-3 mm. long.; ascis 50-60 \approx 50, 6-8-sporis; sporidiis ellipsoideis, 5-septato-muriformibus, hyalinis, 25-30 \approx 10-15.
Hab. in cortice leviore Alni, Cratægi, Coryli, Quercus, Fraxini in Germania, Helvetia.
6. **Arthothelium subastroideum** Anzi Symb. p. 22, Rehm Disc. p. 441. 4774 — Ascomatibus in areis dealbatis gregariis, subrotundis, sæpe maculiformi-confertis, atris, 0,5 mm. lat.; ascis 45-50 \approx 36-38, octosporis; sporidiis oblongo-ovoideis, 7-9-septato-muriformibus, hyalinis v. flavidulis, 21-24 \approx 10-12.

Hab. in cortice leviore Pini Cembræ pr. Bormio et Val Furva Ital. bor. (ANZI).

7. **Arthothelium anastomosans** (Ach.) Arnold Lich. n. 514, Rehm 4775 Disc. pag. 442, *Arthonia* Ach. — Ascomatibus in areis dealbatis gregariis, rotundo-stellatis, radiatim expansis, 50-200 μ . lat.; ascis 36-40 \approx 21-25, octosporis; sporidiis oblongo-clavulatis, 5-7-septato-muriformibus, 15-18 \approx 6-8, hyalinis.

Hab. ad basin truncorum Rhamni Frangulæ, Rhododendri in Helvetia et Tirolia.

8. **Arthothelium Flotowianum** Körb. Par. p. 261, Rehm Disc. p. 442. 4776 — Ascomatibus in areis farinoso-leprosis sitis, rotundis, brunneo-nigris, 0,1-1,2 mm. lat.; ascis 100-120 \approx 27-30, octosporis; sporidiis oblongo-ellipsoideis, medio constrictis, 7-septato-muriformibus ex hyalino luteolis, 30-36 \approx 10-12.

Hab. in cortice Pinorum, Betulæ in Germania et Helvetia.

9. **Arthothelium fusco-cinereum** (Zwackh) Mass. Catagr. p. 683, Rehm 4777 Disc. p. 443, *Arthonia* Zwackh. — Ascomatibus in areis griseis gregariis, subrotundis, 0,1-0,7 mm. lat.; ascis 100-120 \approx 45, octosporis; sporidiis cuneatis, medio subconstrictis, 7-septato-muriformibus, ex hyalino brunneolis, 27-33 \approx 12-14.

Hab. in truncis Fagi et Carpini pr. Heidelberg Germaniæ.

10. **Arthothelium Lahmianum** Körb. Par. Lich. p. 263, Rehm Disc. 4778 p. 444. — Ascomatibus in areis dealbatis sparsis, subrotundis, brunneo-nigris v. nigris, 0,2-0,3 mm. lat.; ascis 36-40 \approx 27, bisporis; sporidiis oblongis, subcuneatis, medio subconstrictis, 6-8-septato-muriformibus, 21-24 \approx 8-9, brunneis.

Hab. in radicibus decorticatis et in cortice Quercuum in Germania.

ONYGENACEÆ Fr. — Syll. VIII, p. 861.

ONYGENA Pers. — Syll. VIII, p. 861.

1. **Onygena corvina** A. et S. — Syll. VIII, p. 861. — Var. **alliacea** 4779
Bomm. Rouss. Contr. Myc. Belg. II, p. 7. — A typo odore alliaceo
gravi et matrice præcipue differt.

Hab. in foliis alneis putridis dejectis Hoeylaert Belgii. — « An
inter folia penna aliqua avis decomposita latebat? »

TUBEROIDEÆ (Vitt.) Paol. — Syll. VIII, p. 863.

Fam. 1. Elaphomycetaceæ Tul.

ELAPHOMYCES Nees. — Syll. VIII, p. 863.

1. **Elaphomyces hassiacus** Hesse Hypog. I, p. 32 *). 4780
Hab. ad terram humosam in pinetis, Hessen-Nassau.
2. **Elaphomyces plicatus** Hesse Hypog. I, p. 32. 4781
Hab. ad arenariam variegatam in pinetis, Hessen-Nassau.

Fam. 2. Tuberaceæ Fr.

BALSAMIA Vitt. — Syll. VIII, p. 877.

1. **Balsamia fuispora** Schulz. Hedw. 1871, p. 63. — Irregularis, 10 4782
cm. long., 5 lat. et alt., basi radiformi, 14 mm. cr. prædita, gla-
bra; cortice non secernibili; gleba brunnea, lacunis majoribus et
minoribus, parietibus levibus, forma variis; ascis 8-sporis; spori-
diis recte monostichis, fusoides dilute coloratis, utrinque acumina-
tis et sæpe hyalinis, ob granula longitudinaliter disposita pseudo-
uniseptatis, 18-20 \approx 5.

Hab. in Hungaria boreali. — Ex ipso auctore dubia species.

HYDNOBOLITES Tul. — Syll. VIII, p. 879.

1. **Hydnobolites Tulasnei** Hesse Hypog. I, p. 32. 4783

*) *Elaphomycetis*, *Hydnobolitis* et *Tuberis* species cl. Hessei hic allatæ
sine diagnosi, describentur in vol. II ejusdem eximie Monogr. Hypog. German.
proxime edendo.

Hab. ad terram sabulosam in silvulis pineis et tiliaceis, Hessen-Nassau.

TUBER Mich. — Syll. VIII, p. 882.

1. **Tuber Requieri** Tul. Syll. VIII, pag. 896. — Var. **stramineum** 4784
Ferry et Quél. XVI Suppl. p. 4, t. 21, f. 13. — Globosum v. oblongum. 1,5 cm. diam., leve, eburneum, dein stramineum et purpureo-maculatum, pruinatum, dein nitens; cortice duro, tenaci, subtili, hyalino, parum secernibili; gleba molli, dein indurata, albida, fulva, dein subrosea, venis albis venulis hyalinis marginatis minute marmorata; sporidiis ellipsoideis, conferte aculeatis, fulvo-aureis, 25-30 μ . long.

Hab. in humo argilloso-sabulosa in montibus Pyrenæis et in Gallia australi. — Odor moschi vel sinapis.

2. **Tuber Bellonæ** Quél. XVI Suppl. p. 5. — Globulosum, gibberulum, 3-7 cm. diam., nigrum; cortice verrucis pentagoniis, sulcatis asperato; gleba fulvo-cinerea, venis albis et obscuris, cerebriformigyrosis minute marmorata; ascis 1-4-sporis; sporidiis globosis, late reticulatis, fulvis, 20-40 μ . diam.

Hab. in humo argilloso-silicea Vaucluse Galliae. — Odor bituminosus: *T. mesenterico* affine sed sporidiis sphaericis.

3. **Tuber montanum** Chatin Bull. Soc. bot. Fr. 1891, p. 58. — Ascomatibus verrucis convexis majusculis; gleba subgrisea; venis vermicularibus lineis quinque efformatis, linea media alba angusta, lineis binis brunneis binis albis cincta; sporidiis *T. melanospori* sed paullo pallidioribus. 4786

Hab. in montanis Pellafol près Corps Galliae, alt. 900 m. (AGLOT). — Odor debilior quam *T. melanospori*.

4. **Tuber exiguum** Hesse Hypog. I, p. 30. 4787

Hab. ad terram sabulosam et humosam in fagetis et pinetis, Hessen-Nassau.

5. **Tuber De-Baryanum** Hesse Hypog. I, p. 31. 4788

Hab. ad terram calcaream et humosam in fagetis et quercetis, Hessen-Nassau.

6. **Tuber murinum** Hesse Hypog. I, p. 31. 4789

Hab. ad terram humosam et sabulosam in silvulis fraxineis et avellaneis, Hessen-Nassau.

7. **Tuber scruposum** Hesse Hypog. I, p. 31. 4790

Hab. ad terram calcaream in silvulis fraxineis, fagineis et coryleis, Hessen-Nassau.

8. **Tuber rutilum** Hesse Hypog. I, p. 31.

Hab. ad terram calcaream in fagetis, Hessen-Nassau.

CRYPTICA Hesse Eine neue Tuberaceengatt. p. 198, t. VI-VIII (Etym. *cryptos* absconditus). — Ascomata carnosia, basi levia et mycelio radicante prædita, supra floccosa, minute verrucosa et plicato-foveolata; gleba apice lacunis ad ascomatis superficiem non apertis, excavata. Asci tereti-oblongi, basi stipitato-attenuati, vulgo 8-spori. Sporidia globosa, exosporio crasso, eximie obtuseque verrucoso. — Differt a *Genea* et *Hydnocystide* ascis non linearibus, ab *Hydnotrya* exosporio crasso, distincte verrucoso.

1. **Cryptica lutea** Hesse loc. cit. — Ascomatibus sæpius globosis v. subapplanato-irregularibus, carnosis, basi fibrillis radican- 4792
tibus, brunneo-rubris præditis; cortice circ. 1. mm. cr., luteo, basi levi, supra minute gibberulo, varie plicato-foveolato, pilis sæpius torulosis obsito; gleba apice lacunis ad ascomatis superficiem apertis perfossa, zonis radiantibus, parallelis, hyalinis, latiusculis, cum aliis angustioribus flavis intermixtis prædita; ascis cylindraneo-oblongatis, basi in stipitem attenuatis, 30-50 μ . lat., sæpius 8-sporis; sporidiis globosis, primo hyalinis dein exosporio crasso, atro-brunneo, obtuse verrucoso præditis, circ. 20 μ . diam., 1-guttatis, granuloso-farctis.

Hab. sub foliis in silvis fagineis pr. Eisenach et Marburg.

APPENDIX

TRICHOCOMA Jungh. Præm. Jav. pag. 9, f. 7, Fisch. Hedw. 1890, p. 161, t. III (Etym. *thrix* capillus et *coma*), *Trichoskytale* Corda Anl. p. 196 (nomen mutavit ob *Trichocoma* DC. quæ vero non genus sed sectio). — Ascoma sessile, globoso-oblongum, verticale, molliusculum basi indusio tuberoso cupulato persistente auctum, intus longitud. venosum, venæ parallelæ, prismaticæ, brunneæ, asco-genæ, sepimentis pallidioribus (flavidis) filamentosis divisæ. Asci ovato-oblongi, fugaces, suboctospori. Sporidia ellipsoidea, continua, hyalina, demum brunneola, muriculata. — Sec. cl. Masee (Trans. R. Soc. Lond. 1887, pag. 305-309, tab. 25) *Trichocoma* esset gasterolichen nempe gonidiis (*Botryococci*) præditus et ascis carens, sed illustratio cl. Fischeri contraria docet.

1. **Trichocoma paradoxa** Jungh. loc. cit., Fisch. loc. cit., *Trichoscy- 4793
tale paradoxa* Berk. Hand. Fl. New. Zeal. p. 617. — Ascomate

tereti-elongato, basi sulphureo, supra fuscescente, 2 cm. alt., 1 cr., indusio rufo-brunneo; margine flavicante; ascis ex ovato inæqualibus subsessilibus, 15-20 = 10-12; sporidiis ellipsoideis, 5-7 × 5.

Hab. gregatim in truncis erosis, putridis in Java, Nova Zelandia, Himalaya, Nepal, Neel-Gherries.

2. **Trichocoma levispora** Masee Trans. R. Soc. Lond. 1887, tab. 25, 4794

T. paradoxa Berk. p. p. — A specie præcedente differt statura minore et præsertim sporidiis levibus.

Hab. in lignis putridis in Carolina inferiori Amer. bor.

MYXOMYCETEÆ Wallr. *) — Syll. VII, p. 323.

Sect. 1. Amaurosporæ ROST.

BADHAMIA Berk. — Syll. VII, p. 329.

1. **Badhamia? pulcherrima** Speg. F. Puigg. n. 187. — Peridiis dense aggregatis, cylindraceo-ellipsoideis, 1-1,2 mm. alt., 0,5-0,6 mm. cr., albo-cinereis, hypothallo arachnoideo insidentibus, tunica duplici vestitis; tubulis simplicibus brevissimis hyalinis reticulato-connexis calcareis; sporis globosis, levibus, atro-fuligineis, 10-15 μ . diam. 4795

Hab. Ad corticem putrescentem arborum in silvis prope Apiahy, Brasilia. — Peridiorum greges orbiculares 10-100 mm. diam.; granula calcarea alba numerosa minuta 1-2,5 μ . diam.; species pulcherrima, peridiorum fabrica distinctissima, et facile a genere *Badhamia* separanda.

2. **Badhamia nodulosa** (Cooke et Balf.) Masee Journ. Myc. 1889, 4796 p. 186, *Physarum* C. et B. in Rav. F. Am. n. 479. — Peridiis globosis, stipitatis, tenui-tunicatis, 1,5 mm. alt. supra plerumque hyalinis et crusta calcarea alba asperula tectis, infra absque calce et amœne iridescentibus, demum inæqualiter ruptis; stipite peridium superante sæpe subdecumbente brunneo, longitud. noduloso, basi in hypothallum minutum irregularem expanso; columella nulla; capillitio copioso, applanato, ramoso, nodis amplis inæqualibus

*) Cfr. potissimum Raunkier Myxomycetes Daniæ, Copenh. 1888; Masee Revision of Trichiaceæ, Lond. 1889; Lister Notes on Mycetozoa, nec non Grevillea XVI, p. 18 et 116, XVII, p. 18, 39, 49; in quibus operibus emendationes nonnullæ ad species jam notas simul inveniuntur.

granula calcea gerentibus; sporis globosis, sordide lilacinis, minute verrucosis, 8-10 μ . diam.

Hab. in cortice *Acaciæ*, Aiken Carolinæ inf.

3. **Badhamia penetralis** C. et Ell. Grev. V, p. 49, t. 80, f. 1. — Gre- 4797
garia, stipitata; peridiis subglobosis, albidis, demum atris; capillitio atro-fusco; stipite penetrante fusco-atro; sporis globosis, atro-fuscis, in massas sphaericas diu conglobatis.

Hab. in asscribus pineis non omnino putridis, New Jersey Amer. bor.

PHYSARUM Pers. — Syll. VII, p. 336.

1. **Physarum Carlylei** Masee Grev. XVII, p. 56. — Peridiis stipita- 4798
tis, globosis, aurantio-miniatis, minute furfuraceis; stipite peridii diametrum subæquante, crasso, ruguloso, miniato, in hypothallum tenue plicatum deorsum expanso, capillitio tenui, flavo, floccis dense reticulatis, angulis incrassatis et granula calcea aurantia continen-
tibus; columella nulla; sporis globosis, levibus, sordide violaceis, 7-8 μ . diam.

Hab. ad ligna putrescentia, Carlisle Britannicæ (Doct. CARLYLE). — Peridia 1,5-2 mm. alt. solitaria, binata vel ternata. Distincta species ad *Phys. rubiginosum* accedens, sed sporis minoribus, peridiis stipitatis subsparsis mox distincta.

2. **Physarum Calidris** A. Lister Journ. of Bot. 1891, p. 258, t. 308, 4799
f. 2. — Peridiis subglobosis, 0,5 mm. diam., sparsis, niveis, rugosis, stipitatis, tunica incolori, ob granula calcea incrassatâ; stipite subdiaphano, 1-1,5 mm. long., subulato, erecto, sulcato, rubente; columella nulla; floccis hyalinis, ramosis, angulis dilatatis; nodis calceis variis, 10-40 μ . diam.; sporis brunneo-violaceis, levibus, 8-10 μ . diam.

Hab. in foliis dejectis, Lyme Regis Britannicæ. — *P. leucophæo* affine.

3. **Physarum tenerum** Rex Descript. Myxom. pag. 192. — Peridiis 4800
stipitatis, erectis vel pendulis, exacte sphaericis, circ. $\frac{1}{3}$ mm. diam., tunica simplici, membranacea, granulis calcareis, circularibus, applanatis, flavis asperata, dein laciniatim fissa; stipite 1-1,5 mm. alt., subulato, opaco, gracili, supra dilute flavo, subtus ad brunneum vergente, basi tantum vel omnino longitudinaliter striato; columella nulla; capillitio albo, delicato, laxè regulariterque reticulato, ad intersectiones granulis calcareis, numerosis, minutis

instructo; sporis atro-brunneis, minutissime delicateque verruculosus, 7,5-8 μ . diam.

Hab. in Fairmount Park Philadelphia et Ohio (MORGAN).

4. **Physarum scyphoides** Cooke et Balf. in Masseur Journ. Myc. 1889, 4801 p. 186. — Peridiis globosis v. late obovatis, stipitatis, tunica superne albida ob granula calcea amorphia rugosa, infra late brunnea et tamquam cupula inæquali persistente; stipite peridium subæquante, late brunneo, sursum subattenuato, inæqualiter nodoso et sæpe compresso et contorto in hypothallum minutum brunneum basi expanso; capillitio denso, nodis calcareis albis flavidisve, copiosis, amplis, inæqualiter ramosis, basi constipatis columellamque fere formantibus; sporis globosis, lilacino-brunneis, minute verrucosis, 7-9 μ . diam.

Hab. in foliis vivis, graminibus, Darien Georgiae (RAVENEL).

CHONDRIODERMA Rost. — Syll. VII, p. 362.

1. **Chondrioderma Puiggarii** Speg. F. Puigg. n. 188. — *Leangium?* 4802 peridiis e globoso ellipsoideis, 400-600 \approx 250-400, sessilibus, gregaris, cortice rufo-fulvo frustulatim evanescente tectis, gleba fusco-fuliginea; capillitio parco hyalino, columella destituto, floccis parcis, furcatis, nodulis triangulari-applanatis; sporis globosis, asperulis, fusco-fumosis, 8-10 μ . diam.

Hab. ad folia viva *Leucobryi longifolii* in silvis prope Apiahy Brasiliæ.

DIDYMIUM Schrad. — Syll. VII, p. 375.

1. **Didymium australe** Masseur Grev. XVII, p. 7. — Sporangis gregaris 4803 globosis v. leniter compressis, 2 mm. lat., 1,5 mm. alt. obsolete umbilicatis, strato crystallorum denso albo, in squamas secedente, tectis; stipite elongato, erecto, filiformi, 3-4 mm. longo, læte brunneo, deorsum leniter incrassato, floccis capillitii hyalinis, tenuibus, varie ramosis; sporis globosis, levibus e fumoso purpureo-brunneis, 10-11 μ . diam.

Hab. in *Auricularia vetusta*, Brisbane Australiae (BAILEY).

2. **Didymium tenue** Pat. Bull. Soc. Myc. 1888, pag. 96. — Peridiis 4804 sparsis, globulosis, stipitatis, cinereo-nigris, crystallis elongatis stellato-congestis tectis, intus nigris; capillitio calce carente, incolori, tenui et ramoso; columella globosa exigua; sporis globulosis 7-8 μ . diam., levibus, violaceis; stipite gracili, brunneo; hypothallo minuto, orbiculari.

Hab. in foliis dejectis, Puerto Zamuro Venezuelæ.

3. **Didymium Fairmani** Sacc. Journ. Myc. 1889, pag. 78 et 180. et 4805
Fairm. Contr. Myc. West. N. Y. p. 52, t. III, f. 7-9. — Peridiis
sparsis, sessilibus, subcinereis, 1-1,3 mm. diam.; floccis laxe reti-
culatis, hyalinis, crystallis copiosis, eximie stellatis; columella sub-
globosa, brunneola; sporis globosis, levibus, 8-10 μ . diam.

Hab. in foliis nondum emortuis Smilacinæ bifoliæ, Lyn-
donville Orleans County, N. Y. Amer. bor.

4. **Didymium ossicolum** Pat. Bull. Soc. Myc. 1888, p. 95. — Peridiis 4806
sparsis, stipitatis, globulosis, albo-citrinis, granulosis, calce incru-
statis, inæqualiter laceratis, intus brunneo-rubris; capillitio calce
carente, ramoso, incolori; sporis globulosis, levibus, rufis, 7-9 μ . d.

Hab. in ossibus bovinis coacervatis, Caracas. — Peridia 4-5
mm. alta.

5. **Didymium Bonianum** Pat. Journ. Bot. 1891, pag. 316. — Peridiis 4807
aggregatis numerosis in hypothallo communi tenui brunneo, subinde
duobus confluentibus, stipitatis, globulosis, $\frac{2}{3}$ mm. diam., infra um-
bilicatis, griseo-cinereis, flavo-nitentibus, ob crystallia calcarea stel-
lata farinaceo-furfuraceis; massa sporarum nigra; columella glo-
bulosa, ochracea; capillitio parco, hyalino vel vix violaceo, vix 1
 μ . diam., ramoso, undulato, spirali, calce carente, e columella ad
peripheriam radiante; sporis violaceis, globosis, asperulis, 8-10
 μ . diam.; stipite peridium æquante, albido, plus minus plicato utrin-
que incrassato.

Hab. in foliis putridis ad terram, Tonkin.

6. **Didymium affine** Raunk. Myx. Dan. p. 71, t. 5, f. 3-4, Descr. Engl. 4808
p. 92. — Peridiis e globoso hemisphæricis; stipite tenui, peridio
æquilongo v. longiore, basi in hypothallum orbicularem dilatato,
læte brunneo; membrana grisea, non calcarifera, sub lente hyali-
na; columella e globoso semiglobosa, læte brunnea, capillitii tu-
bulis subhyalinis, in ampullas numerosas, breviter fusoides, brun-
neo-violaceas dilatatis; sporis levibus vel delicate verrucosis, 8-9
 μ . diam.

Hab. in seminibus quibusdam, Copenhagen.

7. **Didymium subcastaneum** Romell F. exs. Scand. n. 100. — Peri- 4809
diis aggregatis vel dense sparsis, sphæroideis vel obovatis, breve
stipitatis v. sessilibus, cervino-castaneis, subnitidis, sub lente re-
ticulato-marmoratis, 1 mm. diam.; stipite concolori, brevissimo;
tunica peridii calcarea, crassiuscula, dura sed fragili; floccis fuscis,
2-4 μ . cr., reticulato-connexis, hinc inde noduloso-incrassatis, haud

calcareis, fuscis, sursum angustatis pallidioribusque; columella non visa; sporis sphæroideis, subtiliter denseque verruculosis, fuscis, 12-15 μ . diam.

Hab. in foliis putridis Betulæ etc., Kumla Sueciæ. — Ovula insectorum æmulatur.

COMATRICHA Preuss — Syll. VII, p. 394.

1. **Comatricha longa** Peck 43 Rep. p. 24, t. III, f. 1-5. — Stipiti- 4810
bus in hypothallo nitido membranaceo dense gregariis. in peridium
tamquam columella penetrantibus, capillaribus, nigris; peridiis an-
guste cylindræis, sæpius elongatis, 12-40 mm. long., flexuosis,
fugacibus, cinereo-nigris; capillitio e columella oriente, ramis basi
laxe subreticulatis, extus in ramulos tenues acutos divergentes spi-
nuliformes, liberos divisus, nigricantibus; sporis globosis, levibus,
7-9 μ . diam.

Hab. in cortice Salicis babilonicæ, Flatbush Amer. bor.
(ZABRISKIE).

2. **Comatricha subcæspitosa** Peck 43 Rep. pag. 25, t. III, f. 6-9. — 4811
Stipitibus subcæspitosis vel laxè aggregatis, basi incrassatis, nigris
peridium dimidium æquantibus, et in illud intrantibus tamquam
columella; peridiis ovato-oblongis, obtusis, fugacibus, capillitio e
columella oriundis, reticulatim connexis et rete superficiale laxum
nigricans formantibus; sporis globosis, levibus, atro-brunneis, 10-
12 μ . diam.

Hab. in ligno decorticato Tsugæ canadensis, Sandlake
Amer. bor. — *Com. typhinæ* subaffinis.

STEMONITES Gled. — Syll. VII, p. 397.

1. **Stemonites confluens** C. et Ell. Grev. V, p. 51, t. 80, f. 3. — Fa- 4812
sciculata, in hypothallum persistentem confluens, atro-fusca; pe-
ridiis fugacissimis; stipitibus furcatis, erectis, basi conjunctis; spo-
ris brunneis, majusculis, globosis, 12 μ . diam.

Hab. in cortice quercino, New Jersey Amer. bor.

2. **Stemonites subclavata** Zoll. Flora 1847, p. 301. — Subfascicula- 4813
ta; peridiis fugacissimis, subclavatis apice subattenuatis, capillitio
remote reticulato sporisque alutaceo-rufis, oblongiusculis.

Hab. in truncis putridis, Bantam Javæ. — Hypothallus persi-
stens corneus; peridium stipite duplo longius, 4 mm. long. circ.

CLASTODERMA Blytt in Botan. Zeitung 1880, pag. 343 et Clastod.

Christianiæ 1882 cum tabula (Etym. *clastos* fractus et *derma*). — Peridia discreta, calce destituta, stipitata, columella brevissima aut subnulla. Capillitium e columella ortum, ramis solidis, lilacinis demum lutescentibus, repetito bifurcatis, ramulis non anastomosantibus. Peridii maturi membrana in fragmenta membranacea subhyalina inter se libera et distantia divisa. Fragmenta irregulariter rotundata, oblonga vel polygona, ramulis ultimis capillitii singulis vel 2-5 affixa. Sporæ lilacinæ.

1. **Clastoderma De-Baryanum** Blytt loc. cit. — Peridiis sphæroideis, 4814 $\frac{1}{5}$ - $\frac{1}{4}$ mm. diam., stipite fusco-flavescente, erecto 1,3-1,4 mm. long., e basi latiori versus apicem sensim attenuato, basi 212 μ ., apice 8 μ . cr., ad basin columellæ annulo membranaceo angustissimo cincto; columella subnulla, rotundata vel brevissima, 30 μ . long., apice dilatato rotundata; sporis sphæroideis, levibus 9,5-11 μ . diam.; membranæ fragmentis 10-15 μ . diam. v. 30 μ . long.

Hab. in Polypori emortui facie inferiori gregarie insidens, in silva abiogna prope Fornebo Christianiæ Norvegiæ.

ANCYROPHORUS Raunk. Myx. Dan. p. 75, t. 5, f. 8-9, Descr. Engl. pag. 93 (Etym. *ancyra* ancora et *phoreo* fero). — Peridia stipitata. Columella peridii apicem attingens, et superne in membranam discoideam expansa. Capillitium e disco et superiore parte columellæ oriens, filamentis apice tantum furcatis, ramulis ultimis hamatis, spinulis numerosis, subulatis præditis. Sporæ globosæ, violaceæ.

1. **Ancyrophorus crassipes** Raunk. loc. cit. p. 76, Descr. Engl. p. 93. 4815 — Peridiis globosis, stipitatis; stipite peridio brevior, basi valde incrassato; columella subulata, apice in discum validum expansa; capillitii filamentis ramulis transversis paucissimis connexis, ramulis ultimis hamatis et spinulis numerosis, subulatis præditis; sporis levibus v. delicate verrucosis, læte violaceis, 10-12 μ . diam.

Hab. in ligno putri, Sealand Daniæ.

Sect. 2. Lamprosporæ ROST.

ORCADELLA Wing. in Proc. Acad. Nat. Sc. Philad. 1889, p. 280-281 cum ic. (Etym. *orca* vas fictile). — Peridia stipitata, tegumento crassiusculo prædita apiceque membrana tenui, definite operculiformi, plus minus depressa instructa. Columella et capillitium nulla.

— Ex hoc genere familiam propriam (*Orcadellaceæ*) constituit auctor.

1. **Orcadella operculata** Wing. loc. cit. — Peridia minutissima, 0,37- 4816
1,25 mm. alt.; massa sporacea flavida; sporis globosis, levibus 8-
10 μ . diam.

Hab. in cortice *Quercus rubræ* in Philadelphia et Maine Amer. bor.

LICEA Schrad. — Syll. VII, p. 404.

1. **Licea guaranitica** Speg. Guar. I, p. 140. — Peridiis laxè grega- 4817
riis, superne obscure ochraceis et hemisphæricis, inferne cinere-
scentibus et obconicis, 0,5-1 mm. diam. calce et columella desti-
tutis; stipite elongato crassoque, 1-2 mm. long., 0,2-0,3 mm. cr.,
fusco-ochraceo, basi incrassatulo, hypothallo sordide fusco, muce-
dineo, crustaceo lateque diffuso insidente; gleba peridio concolori;
capillitii tubulis dimorphis, aliis crassiusculis, 4-5 μ . cr., levissimis,
parce ramosis septatisque, aliis tenuissimis, 1,5-2 μ . diam., dense
ramoso-anastomosantibus, hinc inde denticulato-nodulosis, hyalinis,
dense septatis; sporis globosis vel hemisphæricis, 4-8 μ . diam.,
grosse 1-guttulatis, sæpe caudula tortuosula, 4,5 \approx 1 donatis.

Hab. in corticibus putrescentibus in silvis pr. Guarapî Brasilîæ.

2. **Licea spumarioidea** Cooke et Mass. Grev. XVI, p. 74. — Plasmio- 4818
diis irregularibus, cinereis, cortice membranaceo, venis ramulosis
reticulatis; sporangiis mox diffluentibus; capillitio obsoleto; sporis
majusculis, sphæricis, rotundato-verrucosis, flavis 16-18 μ . diam.

Hab. ad ramos, quos ambit et ad terram prope Melbourne Au-
straliæ (READER).

3. **Licea incolor** Zoll. in Flora 1847, p. 300. — Conglomerata, peri- 4819
diis subclavatis, nitidissimis; sporis subconcoloribus pallide-ferru-
gineis.

Hab. in trunco putrido silvulæ humidæ prope Bantam Javæ.
— Tota vix 2 mm. alta; hypothallus rugosus, tremellinus. — An,
præeunte Rost., forma *Tubulinæ cylindricæ*?

TUBULINA Pers. — Syll. VII, p. 406.

1. **Tubulina cylindrica** (Bull.) DC. — Syll. VII, 1, p. 406 — var. **acuta** 4820
Peck in Fairm. Contr. Myc. West. N. Y. p. 53. — A typo recedit
peridiis apice acutis nec rotundatis.

Hab. in truncis putridis in silvis Western New York Amer.

bor. — Teste Niel in Bull. Soc. Myc. 1891, p. 98, *Tubulina fragiformis* Pers., quæ ab ill. Rostafinskio cum *T. cylindrica* conjungitur, ab hac differret colore rubro-cerasino, nec argillaceo-cremeo et habitatione in Coniferis nec in frondosis.

ENTERIDIUM Ehrenb. — Syll. VII, p. 409.

1. **Enteridium macrosporum** Raunk. Myx. Dan. p. 31, t. 2, f. 1. — 4821
 Æthaliis hemisphæricis, circ. 2 mm. diam., primo rubentibus, dein olivaceis; sporis 5-25 in massulas ex ovoideo globosas conjunctis, latere tantum convexo spinulosis, 12-14 μ . diam.

Hab. in ramis abietinis prope Copenhagen.

2. **Enteridium Rostrupii** Raunk. Myx. Dan. p. 31, Descr. Engl. p. 89. 4822
 — Æthaliis irregularibus, elongatis, usque ad 4 cm. long.; peridiis unistratosis, olivaceis, parietibus lateralibus maturitate late et ovaliter perforatis; massa sporacea olivacea; sporis 5-25 in massulas ex ovoideo ellipsoideas congestis, latere convexo tantum verrucosis, 11-12 μ . diam.

Hab. in truncis abietinis et ramis querneis pr. Horsens in Jutland.

3. **Enteridium antarcticum** Speg. F. Fueg. n. 363. — Plasmodio pul- 4823
 vinulato plano, irregulariter sublineari vel repandulo-subramuloso 3-14 mm. long., 3-5 mm. lat., 0,5-1 mm. crass., sordide olivascenti-virescente, levi; sporis in glomerulos globulosos 20-30 μ . diam. conglutinatis, hemisphæricis vel irregulariter angulosis, 9-10 μ . diam., ubique levibus, pallide virescentibus.

Hab. ad cortices vel ligna decorticata muscosa in silvis in Burnt island Fuegiæ. — Vix ab *En. olivaceo* sporis levibus differt.

CRIBRARIA Pers. — Syll. VII, p. 412.

1. **Cribraria? perpusilla** Speg. F. Guar. II, n. 157. — Sporangiiis 4824
 e globoso piriformibus, minutis 200-250 μ . diam., albis, levibus, glabris, inferne in stipitem erectum teretem striato-rugulosum subtortum 300-400 \times 50-80, rufescentem pusillum, glabrum basi abrupte areolatum-expansum productis; cortice sporangii superne frustulatum evanescente, inferne cupulatum persistente, tenui membranaceo, rigidulo; columella, floccis ac granulis calcareis nullis; sporis globosis vel e mutua pressione angulosis 10 μ . levibus pallide fumoso-subvinosis.

Hab. ad folia viva *Phari latifolii* in silvaticis montanis, Cerro de Acahy vocatis Brasiliæ.

PERICHÆNA Fr. — Syll. VII, p. 420.

1. **Perichæna nitens** Raunk. Myx. Dan. p. 38, t. 2, f. 11, Descr. Eng. 4825 p. 90. — Peridiis simplicibus v. parce gregariis, globoso-piriformibus, sessilibus vel breviter stipitatis, regulariter dehiscentibus, griseo-brunneis et leviter violaceo-metallicis, circ. 0,5 mm. lat., membrana simplici, fere levi; capillitii tubulis longis, subramosis, peridii membranæ dilatato-adfixis, inæqualiter delicatissimeque spinulosus, æqualiter 1-1,5 μ . cr., flavido-hyalinis; sporis delicate spinulosus, flavido-hyalinis, 10-12 μ . diam.

Hab. in cortice Quercus et Abietis et in foliis dejectis Pini, Sealand et Jutland Daniæ.

2. **Perichæna cano-flavescens** Raunk. Myx. Dan. p. 37, t. 2, f. 10, 4826 Descr. Engl. p. 90. — Peridiis gregariis, hypothallo tenui, flavo-griseo insidentibus, e globoso hemisphæricis vel ex elongato reniformibus, sessilibus, circ. 0,5 mm. lat., læte flavo-griseis, plus minus regulariter operculatim dehiscentibus, membrana granulis rotundis v. angulosis, numerosis asperata et in parte superiore et inferiore regulariter tenuiterque incrassato-reticulata, areis 5-6-goniis 12 μ . diam.; capillitio vix manifesto, e filamentis paucis, subramosis v. simplicibus, inæqualiter verrucosis, ex hyalino flavidis, 1,5-2 μ . lat. verrucis exclusis; sporis aureo-flavis, delicate verrucosis, 12,5-14 μ . diam.

Hab. in cortice Fagi in Lolland Daniæ.

3. **Perichæna phæosperma** Karst. in Rev. Myc. 1887 et Symb. Fenn. 4827 XVIII, p. 84. — Peridiis gregariis, sessilibus, rotundato-depressis, e cyaneo dilute badiis, opacis, areolatim dehiscentibus; capillitio parum evoluto, tubulis circ. 1,5 μ . crassis; sporis sphæroideis, levibus, atro-fuscis (sub lente fuscidulis), 9-15 μ . diam.

Hab. supra ligna et cortices Populi tremulæ locis udis umbrosis pr. Mustiala in Fennia.

4. **Perichæna vermicularis** (Schw.) Rost. — Syll. VII, p. 421. — Sec. Masee Grev. XX, p. 38, huc spectant *Ophiotheca umbrina* Ell. et *Per. variabilis* Masee. Sporæ 13-14 μ . diam. — Nascitur quoque in lignis Yatton Britanniæ (BUCKNALL). Cl. Masee nomen novum l. c. (*Per. confusa*) adhibet, sed ratio latet.

5. **Perichæna? Pseudoæcidium** Speg. Guar. I, p. 140. — Peridiis conicis, cylindræis v. calyciformibus, 1-1,5 mm. long., 0,5-1 mm. diam., sessilibus v. breviter stipitatis, tûnica tenuissime cartilagineo-membranacea donatis, basi levibus v. minute rugulosis, apice

irregulariter laciniatim v. fimbriatim dehiscentibus, castaneis v. fusco-tabacinis; gleba citrina v. flavescente; capillitii tubulis tenuissimis, 1 μ . cr., parce ramosis, levissimis, hinc inde spinulis solitariis conicis v. elongato-subramuliformibus ornatis, flavescenti-hyalinis; sporidiis globosis, 6-7 μ . diam., e mutua pressione sæpe compresso-angulosulis, levissimis, dilute flavescenti-vinosis.

Hab. ad folia viva *Filicum* plurimarum nec non *Tillandsiæ* muscoidis in Sierra de Tehololo Brasilæ.

CORNUVIA Rost. — Syll. VII, p. 423.

1. **Cornuvia depressa** A. Lister Journ. of Bot. 1891, p. 264, t. 311, 4829
fig. 3. — Peridiis pulvinatis, depressis vel effusis, 2-10 mm. lat., 0,3 mm. cr., brunneo-griseis, nitidulis, tunica levi translucida brunneola, basi incrassata; capillitii profusi floccis, pallide umbrinis, inæqualibus, 0,5-2 μ . cr. furcatis, subinde fasciculatis, apice abrupte acuminatis; sporis globosis, delicate spinosis, pallidissimis, 6-8 μ . diam.

Hab. in ramis putrescentibus *Fraxini* prope Lyme Regis Britannæ.

2. **Cornuvia minutula** Speg. F. Puigg. n. 196. — Peridiis ovoideis stipitatis, purpureo-fuscis, levibus, opacis, 0,5-0,6 mm. diam.; stipite longiuscolo, tenui, 2-3 mm. long., 120-150 μ . cr. coccineo-roseo, capillitio reticulato, tubulis spiraliter 4-tæniolatis, 5-6 μ . cr., flavescentibus; sporis globosis, levibus, flavescentibus, 6-7 μ . diam. 4830

Hab. ad terram pinguem muscosam (an in radicibus putrescentibus?) in pratis prope Apiahy Brasilæ. — Species pusilla humigena, habitu fere *Stilbi* cujusdam.

ARCYRIA Hall. — Syll. VII, p. 425.

1. **Arcyria Winteri** Wettst. Bot. Zeitschr. 1885, p. 199. — Peridiis 4831
gregariis numerosis, cuticulæ tenuissimæ insidentibus, campanulato-ovoideis, apice obtusis, 1-1,5 mm. long., 0,7-1 mm. cr., aurantiacis, stipite tenui, recto, 1-3 mm. long., capillitii floccis tenuibus, hyalinis, reticulatim connexis, unilateraliter verruculosus; sporis globosis, 5-8 μ diam., aurantiacis, levibus vel tenuissime verruculosus.

Hab. in asseribus putrescentibus in fodinis Stiria. — Ab *A. ochroleuca* in primis stipite longiore differt.

2. **Arcyria dictyonema** Rost. — Syll. VII, p. 431. — Sec. Grev. XVIII, pag. 20 adest forma lecta in lignis Smethwick a claro A.

CAMM differens peridiis vix stipitatis, olivaceis, floccis sporas æquantibus, non vero spinosis, sporis non omnino levibus, sed minute verrucosis. « An specificè distinguenda? ».

3. **Arcyria aurantiaca** Raunk. Myx. Dan. p. 44, t. 3, f. 4 et 9-11, 4832
 Descr. Engl. p. 92. — Peridiis gregariis, ovoideis v. breviter cylindraceis, stipite æquilongis v. longioribus, membrana intus minute verrucosa, e lateritio aurantiaca; capillitii tubulis e lateritio aurantiacis, 5-7 μ . cr., irregulariter et conferte incrassato-annulatis; sporis levibus, 10-11 μ . diam., e lateritio aurantiacis.

Hab. in ligno putri in Jutland Daniæ.

4. **Arcyria punicea** Pers. cfr. Syll. VII, pag. 426. — Var. **cribroides** 4833
 Raunk. Myx. Dan. p. 43, t. 3, f. 12, Descr. Engl. p. 91. — Areis seu maculis interioribus æqualibus, in capillitii superficie majusculis cum minutissimis alternantibus.

Hab. in lignis putridis in Jutland Daniæ.

5. **Arcyria cinerea** (Bull.) Schum. cfr. Syll. VII, p. 427, — Var. **cribroides** 4834
 Raunk. Myx. Dan. p. 41, Descr. Eng. p. 90. — Capillitii tubulis quam in typo latioribus; areis seu maculis interioribus æqualiter crassis, in capillitii superficie majusculis cum minutissimis alternantibus.

Hab. in ramis dejectis Abietis pr. Copenhagen.

6. **Arcyria viridis** Zoll. in Flora 1847, p. 300. — Peridiis gregariis, 4835
 substipitatis, obovato-clavatis, pulcherrime viridibus, $\frac{1}{4}$ mm. long.; hypothallo tenuissimo floccoso-membranaceo, viridi; stipite $\frac{1}{5}$ mm. cr. spurio; capillitio compacto; sporis globosis peridio concoloribus.

Hab. ad culmos putres Bambusæ in horto botanico Bogor Javæ.

TRICHIA Hall. — Syll. VII, p. 438.

1. **Trichia Carlyleana** Masee Rev. Trich. p. 5. fig. 15. — Peridiis 4836
 clavatis v. tereti-oblongis stipitatis, purpureo-brunneis, levibus; stipite peridium dimidium æquante, in basin discoideam subincrassato, substriato, concolori; tunica peridii intus stipitisque cavitate massulis rubentibus præditis; elateribus fusoides, 5-6 μ . cr., sæpe ramosis, apice longe et flexuose spinosis; spiralibus confertissimis; sporis globosis, levibus, 10-12 μ . diam.

Hab. ad ligna Carlisle in Britannia (Doctor CARLYLE). — Fungillus 2-3 mm. alt.

2. **Trichia nitens** Fr. in Masee Rev. Trich. p. 9, f. 11. — Peridiis 4837
 lata basi sessilibus, confertis, e globoso angulosis, late flavis, niti-

dis, intus sordide aurantiis; elateribus cylindricis, 14-16 μ . cr., breviusculis; apicibus brevibus, abruptis, levibus; spiralibus prominulis, remotis, non spinulosis; sporis globosis, verrucosis, 14-16 μ . diam.

Hab. ad ligna, Upsala Suecia (FRIES). — Habitus *Oligonematis nitentis*.

3. **Trichia subfusca** Rex Descript. Myxom. p. 192. — Peridiis stipitatis, solitariis v. 2-3 gregariis, plerumque exacte sphaericis, raro globoso-turbinatis, circ. $\frac{1}{2}$ - $\frac{2}{3}$ mm. diam., supra fusco-fulvis, basi atro-brunneis; stipite æqualiter crasso, $\frac{1}{2}$ - $\frac{2}{3}$ mm. alt., brunneo v. brunneolo-nigro, longitudinaliter rugoso, a peridii cavitate ob stratum membranæ interiorem separato; capillitio læte flavo; elateribus cylindræis 3,5-4 μ . diam. in apiculos leves, 10-12 μ . long., desinentibus; tæniolis spiralibus quaternis, non spinulosis; sporis delicate verrucosis, 11,5-12,5 μ . diam., læte flavis.

Hab. in montibus Adirondack Amer. bor. — *Tr. fragili* affinis.

4. **Trichia advenula** Masee Rev. Trich. p. 12, fig. 38. — Sessilis, dense conferta, rarius sparsa, e globoso subangulosa, flava, nitidula intus aurantia; elateribus cylindricis, 4-5 μ . cr., hinc v. utrinque incrassatis nec non semel-ter intercalari-inflatis, in spinulam subflexuosam, tenuem, 15-20 μ . long. terminatis; spiralibus creberrimis, vix prominulis, in partibus inflatis obsoletis; sporis globosis, minute verrucosis, 12-14 μ . diam.

Hab. in ligno putri Glamis in Scotia. — *Tr. minimæ* affinis; cæspitulos 2-5 cm. lat. format.

5. **Trichia minima** Masee Rev. Trich. p. 12, fig. 18. — Peridiis confertis, lata basi sessilibus, e circulari inæqualibus, pallide flavis, intus concoloribus; elateribus cylindricis, 6-7 μ . cr., in spinulam 8-10 μ . long. desinentibus; spiralibus tenuibus, subdistantibus, non prominulis, levibus; sporis globosis, minutissime verrucosis, 10 μ . diam.

Hab. ad ligna, Oldham Britannicæ.

6. **Trichia nana** Masee Rev. Trich. p. 12, fig. 12. — Peritheciis sparsis v. aggregatis, lata basi sessilibus, levibus, pallide ochraceis, opacis, intus flavis, tunica tenuissima; elateribus cylindræis 3-4 μ . cr., spiralibus, irregularibus, remotis prominentibusque; apicibus abruptis; sporis globosis, minute verrucosis, 6-8 μ . diam.

Hab. ad ligna, Westbrook Maine Amer. bor. — Elateres 200 μ . long. circ.

7. **Trichia erecta** Rex descript. Myxcom. p. 193. — Peridiis stipitatis, solitariis, raro 2-3 gregariis, rarissime 6-8 cum stipite unico

fasciculatis, globosis v. globoso-turbinatis, $\frac{1}{2}$ - $\frac{2}{3}$ mm. lat., atro-brunneis, supra irregulariter interrupte atro-brunneis e reticulo læte flavo, irregulari notatis; stipite circ. 1 mm. alt., rugoso v. granuloso, æqualiter crasso, atro-brunneo; capillitio læte flavo; elateribus cylindræis, 3,75-4 μ . diam., in apiculos leves, acutos, 4-6 μ . long. desinentibus; tæniolis spiralibus quaternis, irregulariter convolutis, spinulis numerosis, irregularibus asperatis; sporis 12-13 μ . diam., delicate verruculosis, læte flavis.

Hab. in Shawangunk et in montibus Adirondack. — *Tr. fragili* subaffinis.

8. **Trichia sulphurea** Masee Rev. Trich. p. 15, fig. 3. — Peridiis 4843
dense confertis, e circulari subangulosis v. reniformibus, pallide flavis, levibus, intus subcitrinis; elateribus cylindricis, sæpe ramosis, 9-10 μ . cr.; spiralibus confertis, sat prominulis, apicibus non incrassatis, acutis, levibus, 10-14 μ . long.; sporis globosis, 10-14 μ . diam., plane costatis, costis interruptis, lunulatis.

Hab. ad ligna Ceylon. — Peridia 0,5-1 mm. diam. — Affinis *Tr. nitenti*.

9. **Trichia Balfourii** Masee Rev. Trich. p. 15, fig. 4. — Peridiis ses- 4844
silibus, confertis, ex hemisphærico angulosis, pallide flavis, intus fusco-flavis, elateribus cylindricis, 9-10 μ . cr., infra apicem inflatis, apice 2-3-spinulosis; spiralibus laxiusculis, non prominentibus, muriculatis; sporis globosis, plane et interrupte costatis, 16-18 μ . diam.

Hab. ad ligna ad Caput Bonæ Spei. — Affinis *Tr. Jackii*.

10. **Trichia abrupta** Cooke Myx. U. S. p. 404, Syll. VII, p. 446 (sine 4845
diagnosi), Masee Rev. Trich. p. 16. f. 2. — Peridiis dense gregariis in hypothallo bene evoluto basi lata sessilibus e globoso angulosis, pallide flavis, intus aurantiis; elateribus cylindræis, 8-11 μ . cr., spiralibus remotiusculis, non prominentibus, vix spinulosis apice abrupte in 2-3 spinulas rectas v. curvas 8-10 μ . longas desinentibus; sporis globosis, 10-16 μ . diam., inæqualiter plano-costatis, costis oblongis interruptis foveolatis.

Hab. ad ligna in Britannia et America boreali.

11. **Trichia intermedia** Masee Rev. Trich. p. 17, fig. 1. — Peridiis 4846
subglobosis sessilibus, confertis, sæpe inæqualibus, nitidulis, læte ochraceis, intus flavidulis; floccis simplicibus, 10 μ . cr., in apiculum brevem desinentibus; spiralibus confertis, non prominulis, hinc inde breve spinulosis, tæniolis transversis connexis; sporis globo-

sis 9-11 μ . diam. inæqualiter plano-costulatis, costulatis interruptis, foveolatis.

Hab. ad truncos Scarborough Britanniaë.

12. **Trichia verrucosa** Berk. in Flor. Tasm. p. 269, Masee Rev. Trich. 4847

p. 19, fig. 9. — Peridiis piriformibus, brunneo-castaneis, nitidis, in stipitem longum, tenuem abeuntibus, simplicibus v. botryoideis, sparsis, ex hypothallo crasso, lato oriundis; floccis simplicibus, cylindricis, 8-10 μ . cr., apicibus attenuatis, variis, rectis v. curvis; spiralibus confertis, tenuibus, haud prominulis; sporis globosis, 14-16 μ . diam., plane costato-areolatis, areolis magnis, paucis, inæqualiter polygoniis.

Hab. ad ligna in Tasmania (ARCHER). — Fungillus 2-3 mm. alt. A *T. chrysosperma* pluribus notis differt.

13. **Trichia Kalbreyeri** Masee Rev. Trich. p. 20, f. 8. — Peridiis con- 4848

fertis, sessilibus, e globoso inæqualibus, pallide flavis, levibus, intus subconcoloribus; elateribus cylindricis, 9-10 μ ., cr.; apicibus brevibus, levibus; spiralibus confertis, haud prominulis; sporis globosis, 11-14 μ . diam., plane et inæqualiter areolato-costatis.

Hab. ad ligna et folia viva in Nova Granata (W. KALBREYER).

14. **Trichia superba** Masee Rev. Trich. p. 21, fig. 6. — Botryoidea, 4849

raro simplex; peridiis lato-obovatis, flavidis, intus luteis, stipite communi striato-sulcato, sæpe contorto, concolori, ex hypothallo majusculo oriundo; elateribus simplicibus, cylindricis, 9-11 μ . cr.; apicibus abrupte attenuatis, levibus, curvulis; spiralibus confertis, vix prominulis; sporis globosis 17-20 μ . diam., plane costato-areolatis, areolis polygoniis, costis foveolatis.

Hab. ad muscos et ligna in Nova Zelandia. — Fungillus 3-4 mm. alt.

OLIGONEMA Rost. — Syll. VII. p. 436.

1. **Oligonema Broomei** Masee Rev. Trich. p. 22, fig. 22. — Peridiis 4850

sparsis v. aggregatis, depressis, e circulari elongatis, sordide atro-brunneis, intus rufo-ochraceis; elateribus cylindræis, 3-4 μ . cr., inæqualiter ramosis, fusco-aurantiis, elevato-annulatis, annulis sparsis v. 3-4 approximatis, apice obtuso; sporis grosse verrucosis, globosis, 13-14 μ . diam.

Hab. in corticibus, Warleigh Britanniaë (BROOME).

2. **Oligonema minutulum** Masee Rev. Trich. p. 24, fig. 20. — Peri- 4851

diis sparsis, raro aggregatis, basi angusta sessilibus, citrinis, sordidis; capillitio parcissimo; elateribus simplicibus, brevibus, cylindricis, 5-6 μ . cr., rugulosis, apice obtusis; spiralibus omnino indi-

stinctis; sporis globosis, plane areolato-costatis, 12-14 μ . diam., areolis polygoniis, æqualibus.

Hab. ad ligna in Algeria.

3. **Oligonema furcatum** Buck. Fungi Bristol p. XIII, Grev. XX, p. 38. 4852

— Peridiis sparsis, globosis, nitidis, læte flavis, intus concoloribus; elateribus cylindræis, simplicibus v. ramosis, extremitatibus incrassatis obtusisque; spiralibus laxis, tenuibus, 3-4 μ . diam.; sporis globosis, minute verrucosis, 10-12 μ . diam.

Hab. in truncis putridis pr. Bristol Britannia.

ALWISIA B. et Br. in Journ. Linn. XIV, p. 87, t. II, f. 6 et XV, t. II, f. 1, Masee Rev. Trich. p. 24 (Etym. a cl. mycetum zeylanicorum pictore DE ALWIS) — Peridia in stipitem communem fasciculato-connexa, irregulariter dehiscentia, tunica singula. Capillitium parcum. Elateres ex tunicæ part. infer. oriundi, apicibus liberis attenuatis v. obtusi subinde bifidis, spiralibus spinulisque rudimentariis. Sporæ globosæ.

1. **Alwisia Bombarda** B. et Br. l. c. Masee l. c. f. 19, *Trichia fragilis* 4853

Rost. p. p. Syll. VII, n. 1494 p. p. — Peridiis late fusoides v. ellipsoideis, longe stipitatis, atro-brunneis, subinde purpureo-tinctis, intus brunneis, stipite composito, concolori, cavo, ex hypothallo majusculo oriundo; elateribus cylindricis, 6-7 μ . cr., hinc inde inflatis, sublevibus; sporis globosis, levibus, 5-6 μ . diam.

Hab. in lignis dejectis in silva Gongolla Ceylon. — Fungillus 2-3 mm. alt.

PROTOTRICHIA Rost. — Syll. VII, p. 437.

1. **Prototrichia flagellifera** Rost. e. p., Masee Rev. Trich. p. 26, f. 23. 4854

Syll. VII, n. 1492 e. p. — Peridiis sessilibus; elateribus basi incrassatis, 7-9 μ . cr., sursum attenuatis et e medio ter dichotomico-ramosis; sporis globosis, 10-13 μ . diam., levibus.

Hab. in truncis Abietum in Britannia et Suecia.

2. **Prototrichia metallica** (B. et Br.) Masee Trich. p. 26, f. 26, *P.* 4855

elegantula Rost., Syll. VII, n. 1491. — Peridiis stipitatis v. subsessilibus, globosis v. lenticularibus, cupreis, nitidis, intus flavis, carneis; elateribus utrinque attenuatis, apice fasciculato-ramosis, ramulis subinde torulosis, apice acutis, 40-60 \approx 2; spiralibus latis planis; sporis globosis, levibus, 9-11.

Hab. ad ligna in Suecia et Tasmania.

3. **Prototrichia cuprea** Masee Rev. Trich. p. 27, f. 24. — Peridiis 4856

sparsis v. confertis, subglobosis, sessilibus v. brevissime stipitatis, læte cupreis subinde iridescentibus, intus rubro-carneis; floccis inferne brunneis, 6-8 μ . crassis, bis ter dichotomico-ramosis, ramis 150-200 μ . long., apice in corymbum filamentorum incolorium 1-2 μ . cr., desinentibus; spiralibus subconfertis, non prominentibus; sporis globosis, minute verrucosis, 10-13 μ . diam.

Hab. in spinis putridis Scarborough Britanniae. — Peridia 0,5-1 mm. diam.

HEMIARCYRIA Rost. — Syll. VII, p. 446.

1. **Hemiarcyria fuliginea** Cooke et Mass. Grev. XVI. p. 74. — Floccis 4857
anastomosantibus, spinulosis 3-4 μ . diam., spinulis unilateralibus, spiraliter dispositis; sporis globosis, glabris vix decoloratis 8 μ . diam.; capillitio sporisque (coacervatis) fuligineis.

Hab. in foliis *Atherospermi* in mont. Wilson N. S. W. Australiæ (HAMILTON). — Specimina imperfecta observata.

2. **Hemiarcyria Bucknallii** Mass. Grev. XVIII, pag. 27. — Peridiis 4858
sessilibus basi plus minus lata, hypothallo tenui insidentibus circulari-reniformibus vel mutua pressione subangularibus, cortice tenuissimo, gilvo-ochraceo, mox disparente; massa sporarum aurantia; capillitio valde evoluto; floccis in rete laxum conjunctis 4-5 μ . cr., extremitatibus pluribus liberis annulatis, annulis plerumque confertis, sed hinc inde sparsis et subinde in spiram abeuntibus, spinulas tenues, rectas, 3-4 μ . long., copiosas exserentibus, apicibus liberis inæqualiter inflatis; sporis globosis, pallide flavis, minute asperulis, 7-9 μ . diam.

Hab. ad ligna, Bristol Britanniae (C. BUCKNALL) — Sæpius conferta, 0,5-1,5 mm. lat.; affinis *H. Wigandi* sed major et floccis diversis.

3. **Hemiarcyria stipitata** Masee Rev. Trich. p. 30, f. 32. — Peridiis 4859
piriformibus, 2-5 in stipitem communem coalitis v. solitariis, pallide citrinis, opacis, intus ochraceo-fuscis; stipite elongato, æquali, atrobrunneo v. nigricante, longitud. ruguloso; capillitio dense reticulato, apicibus liberis nullis; spiralibus remotis, tenuibus, haud prominentibus; sporis globosis, minute verrucosis, 7-8 μ . diam.

Hab. in stipitibus *Palmarum* in Java. — Fungillus 3-4 mm. alt.; stipes 2 mm. long., cavus. Affinis *H. clavatae*.

4. **Hemiarcyria paradoxa** Masee Rev. Trich. p. 32, fig. 35. — Pe- 4860
ridiis sparsis v. aggregatis, sessilibus, hemisphæricis v. subvermiformibus, levibus, nitidulis, sordide ochraceis, intus pallide citrinis;

tunica intus granulis calceis amorphis incrustata; capillitio parco, floccis 4-5 μ . cr. valde contortis, laxè reticulatis, apicibus liberis paucis; spiralibus confertissimis, non prominulis; sporis globosis, 8-10 μ . diam., minute verrucosis.

Hab. ad ligna, Weybridge, Surrey, in Britannia. — Peridia 0,5-1 mm. diam.

5. **Hemiarcyria intorta** A. Lister Journ. of Bot. 1891, p. 268, t. 312, 4861 f. 3. — Peridiis turbinatis, flavidis v. olivaceo-flavidis, nitidis, 0,3-0,7, mm. diam., aggregatis v. sparsis, stipitatis, tunica flava membranacea, ob granula basi incrassata, intus papillosa; stipite purpureo-brunneo 0,4-0,7 mm. long., utrinque incrassatulo, longitrorsum 2-4-sulcato, solido; capillitii floccis 4 μ . cr. contortis, spinulosis vel sublevibus, aurantiis, extremitatibus liberis paucis vix incrassatis; tæniis spiralibus 4-5 plus minus distinctis; sporis flavis, minute verrucosis, 9-10 μ . diam.

Hab. in truncis Ulmi dejectis, Hitchin et Birmingham Britannia.

6. **Hemiarcyria Ellisii** Masee Rev. Trich. p. 30, f. 30. — Peridiis fasciculatis, 3-7 in communem stipitem contortum connatis v. sessilibus, levibus, atro-castaneis, nitidulis, intus brunneo-aurantiis, demum circumscisso-dehiscentibus; floccis 6-7 μ . cr., raro ramosis, spiralibus, tenuibus, remotiusculis, haud prominulis, acute spinulosis, apicibus brevibus, acutis; sporis globosis, grosse verrucosis, 10-12 μ . diam.

Hab. ad ligna in America foederata (ELLIS in N. A. Fung. n. 1113 sub *H. rubiformi*).

7. **Hemiarcyria chrysozona** A. Lister in Grev. XV, p. 126 et Masee 4863 Rev. Trich. p. 33, fig. 37. — Peridiis lata basi sessilibus, vulgo aggregatis, læte ochraceis, intus flavis, floccis 5 μ . cr., laxè reticulatis, apicibus liberis, conicis, spiralibus 4, confertis, non prominulis, processibus transversis connexis; sporis globosis, plane areolato-costatis, 16 μ . diam.

Hab. in ramis Laricis dejectis, Lyme Regis Britannia.

SCHIZOMYCETACEÆ Naeg. — Syll. VIII, pag. 923.

Post editam Schizomycetum enumerationem in Sylloges vol. VIII (1889), plures species v. formæ novæ innotuerunt sed pleræque in operibus clinicis et hinc potius clinice quam botanice tractatæ. Vetus hæc innumera opera, quibus profanus sum, persequi, fungillos hos abhorrentes relinquo. Qui in his speciatim occupatur, conferat opera clinica et præcipue tractatus bacteriologicos nuperiores.

SPHÆROPSIDEÆ (Lév.) Sacc. — Syll. III, p. 1.

Fam. 1. Sphærioidæ SACC.

Sect. 1. Hyalosporæ.

PHYLLOSTICTA Pers. — Syll. III, p. 3.

1. In Dicotyledoneis lignosis.

1. **Phyllosticta mahoniæcola** Pass. in litt. Brun. in Rev. Myc. 1886, 4864 p. 140. — Maculis amplis, brunneis, non limitatis, subinde totum folium occupantibus; peritheciis epiphyllis, sparsis, epidermide supra perithecium decolorata, circum circa brunnea tectis, demum vix erumpentibus, perforatis; sporulis oblongis, hyalinis, 7,5-8 = 2,5, biguttulatis.

Hab. in foliis languescentibus Mahoniæ japonicæ, Préguiillac Galliæ (BRUNAUD).

2. **Phyllosticta asiatica** Cooke in Grevillea XIII, p. 91. — Maculis 4865 orbicularibus vel irregularibus, fuscis, margine purpureo-atro-brunneo cinctis; peritheciis paucis, in utraque pagina foliorum insidentibus, gregariis, minutis, atris, punctiformibus; sporulis minutis, hyalinis, 4 = 1,5; basidiis longioribus.

Hab. in foliis languidis Berberidis asiaticæ, Kew London Britannicæ.

3. **Phyllosticta circumvallata** Winter in Jour. of Myc. 1885. — Ma- 4866 culis rotundato-angustatis, griseis, linea fusco-atra, elevata circumscriptis, 5 mm. diam.; peritheciis sparsis, plerumque epiphyll-

lis, lenticularibus, atris, membranaceis, 100-120 μ . diam.; sporulis ellipticis, utrinque acuminatis, 7-9 \approx 3 $\frac{1}{2}$ -4, nucleis 2, magnis præditis, hyalinis, continuis.

Hab. ad folia languida *Liriodendri Tulipiferæ*, Missouri Amer. bor.

4. **Phyllosticta Tulipiferæ** Passer. Diagn. F. N. III, n. 49. — Maculis 4867
 subdiscoideis, exaridis, fusco-marginatis, mox laceris; peritheciis epiphyllis subgregariis minutissimis, semiimmersis; sporulis oblongis, continuis, hyalinis, 10 \approx 3-4.

Hab. in foliis vivis *Liriodendri Tulipiferæ* in horto botanico Parma Ital. bor. — A *P. Liriodendri* sporularum forma et magnitudine differt.

5. **Phyllosticta camelliæcola** Brun. Miscell. mycol. p. 13. — Maculis 4868
 magnis, suborbicularibus vel oblongis, brunneis, dein griseis, anguste brunneo-marginatis; peritheciis epiphyllis, magnis, tectis, dein ostiolo erumpentibus, brunneo-nigris; sporulis hyalinis, 5-6 \approx 2-3.

Hab. in foliis languidis *Camelliæ japonicæ*, Saintes Rochefort Galliæ.

6. **Phyllosticta Winterii** Speg. F. Fueg. n. 375. — Maculis orbiculari- 4869
 expansis majusculis 1-3 cm. diam., sæpius concentrice rugulosis subdeterminatis amphigenis, superne e nigricante cinerescentibus inferne, glaucescenti-roseis v. cinereis; peritheciis amphigenis sparsis immersis vix prominulis, olivaceis, minutis 50-60 μ . diam., membranaceis, ostiolo minutissimo impresso perforatis, contextu parenchymatico fusco donatis; sporulis elliptico-cylindræcis utrinque obtuse rotundatis 4,5 \approx 1,5-2 et sæpe 1-guttulatis, hyalinis.

Hab. ad folia languida *Drymidis Winterii* in Staten island Fuegiæ.

7. **Phyllosticta magellanica** Speg. F. Fueg. n. 371. — Maculis nullis; 4870
 peritheciis hypophyllis, laxe gregariis, immerso-prominulis, epidermide velatis e globoso lenticularibus 120-150 μ . d., atris, coriacellis, glabris, ostiolo non v. vix papillulato, contextu densissime parenchymatico sæpe subindistincto; sporulis elliptico-cylindræcis utrinque plus minusve acutato-rotundatis 4-6 \approx 1,5-2,5 eguttulatis hyalinis.

Hab. in foliis dejectis *Ribis magellanicæ* in Picton island Fuegiæ.

8. **Phyllosticta Ribis** Speg. F. Fueg. n. 372. — Maculis amphigenis, 4871
 irregulariter rotundatis, parvulis 2-5 mm. diam., determinatis, sordide rufescentibus; peritheciis epiphyllis, laxissime gregariis paucis,

innato-prominulis, globoso-conoideis 80-90 μ . diam., atris tenui-membranaceis, ostiolo minutissimo impresso pertusis, contextu majusculè parenchymatico donatis; sporulis elliptico-subglobosis, utrinque obtusis 3-4,5 \approx 2-2,5, eguttulatis, hyalinis.

Hab. ad folia languida Ribis magellanici in Staten island et prope Ushuvaia Fuegiæ.

9. **Phyllosticta lenticularis** Passer. Diagn. F. N. III, n. 51. — Peri- 4872
theciis epiphyllis, lenticularibus, crebre sparsis atris, opacis, nucleo albo in maculis irregularibus amplis albo-exaridis; sporulis oblongo-ellipticis, rectis, biguttulatis, hyalinis, 12,5-15 \approx 5, basidiis crassiusculis, subæquilongis fultis.

Hab. in foliis vivis Citri Limonum, Parma Ital. bor.

10. **Phyllosticta deliciosa** Passer. Diagn. F. N. III, n. 52. — Peri- 4873
theciis epiphyllis, punctiformibus, atris in maculis exiguis albo-exaridis, margine elevato, castaneo-fulvo nitido cinctis; sporulis minimis, cylindricis, integris, hyalinis, 4 \approx 1.

Hab. in foliis vivis Citri deliciosæ, in horto botanico, Parma Ital. bor.

11. **Phyllosticta adusta** Ell. et Mart. in Journ. of Myc. 1886, p. 130. 4874
— Maculis amphigenis, pallidis vel griseis, margine definito, subtili, luteo-brunneo cinctis, sæpe marginalibus, 1-4 cm. latis vel marginem foliorum longe occupantibus; peritheciis amphigenis, atris, subglobosis, laxè aggregatis, subinde confluentibus, epidermide mox rupta tectis, 175-240 μ . diam.; sporulis hyalinis, oblongis vel subcylindræis, sæpe bi- vel trinucleatis, 10-16 \approx 4-7; basidiis 7-10 μ . longis.

Hab. in foliis Citri Aurantii gelu tactis Green Cove Springs, Florida Amer. bor. — Sporulis crassioribus a *P. marginali* distinguenda.

12. **Phyllosticta Deutziae** Ell. et Ev. Journ. Myc. 1889, pag. 146. — 4875
Maculis amphigenis, dilute brunneis v. albidis, rotundis, 1-2 mm. diam., in utraque folii pagina elevato-marginatis, peritheciis lenticularibus, nigris, plerumque epiphyllis, subsuperficialibus, $\frac{1}{5}$ mm. diam.; sporulis subellipsoideis, fuscis, 4-5 \approx 3.

Hab. in foliis Deutziae, Amer. bor. 1875

13. **Phyllosticta coronaria** Passer. Diagn. F. N. III, n. 57. — Ma- 4876
culis plus minus amplis, subdiscoideis, discretis, raro pluribus confluentibus, halonè fusco circumdatis; peritheciis epiphyllis, punctiformibus sparsis, primo tectis, dein epidermide perforata cinctis, atris, subglobosis; sporidiis oblongo-ellipticis, integris, hyalinis, ad

apices nucleolatis, endoplasmate opaco, medio leniter constrictis, 7-7,5 = 2,5-3.

Hab. in foliis vivis Philadelphi coronarii, Vigheffio pr. Parma Ital. bor. — A *Ph. vulgari* differt peritheciis aliquanto minoribus non superficialibus et sporulis multo brevioribus.

14. **Phyllosticta Spinosæ** E. et K. Journ. Myc. 1887, p. 102. — Ma- 4877
culis amphigenis, rotundis, parvis, 1-3 mm. lat., supra albis, subtus rubiginoso-albis, plerumque purpureo-marginatis; peritheciis plerumque centro maculæ insidentibus, punctiformibus, nigris, subprominulis; sporulis oblongis, 2-guttatis, 12-14 = 4-5.

Hab. in foliis Sidæ spinosæ, Manhattan, Kansas Amer. bor. (W. T. SWINGLE). — Maculæ subtus hyphis cæspitosis, brunneis, sterilibus, circ. 40 = 3, plerumque incurvis tectæ.

15. **Phyllosticta sidæcola** Cooke in Grevillea XIV, pag. 39. — Epi- 4878
phylla; maculis brunneis, indistinctis, demum centro pallidioribus, irregularibus vel confluentibus; peritheciis punctiformibus, membranaceis, brunneis, minutis; sporulis ellipsoideis, enucleatis, hyalinis, 4 = 2.

Hab. in foliis languidis Sidæ Napææ, Kew Britannia.

16. **Phyllosticta hibiscina** Ell. et Ev. Journ. of Myc. 1888, p. 9. — 4879
Maculis amphigenis, griseis, inæqualibus, latis, 0,5-1,5 cm. diam., deciduis; peritheciis majusculis, lenticularibus, nigris, utrinque prominulis; sporulis oblongo-ellipsoideis, hyalinis, 2-guttatis, 6-8 = 1,5-2.

Hab. in foliis vivis Hibisci mutabilis, Louisiana Am. bor. (LANGLOIS). — A *Ph. syriaca* satis diversa.

17. **Phyllosticta Hibisci** Peck 42 Rep. p. 29. — Maculis suborbicu- 4880
laribus, albidis vel rubenti-griseis, anguste brunneo-marginatis, 4-8 mm. lat.; peritheciis minutis, 100 μ . lat., epiphyllis, nigris; sporulis oblongis, 7,5-10 = 3-4, sæpius 1-2-guttatis; basidiis simplicibus v. ramosis, 10-20 μ . long.

Hab. in foliis vivis Hibisci moscheuti, Eastport et Patehogue Amer. bor.

18. **Phyllosticta Hardenbergiæ** Cooke et Mass. Grev. XVI, p. 3. — 4881
Maculis amphigenis, variis, fuscis; peritheciis plerumque hypophyllis, minutissimis, gregariis, punctiformibus, 60-80 μ . diam, atris; sporulis minutis, subglobosis, hyalinis, 2-3 μ . diam.

Hab. in foliis vivis Hardenbergiæ Box Hill, V. Australiae (F. CAMPBELL).

19. **Phyllosticta advena** Passer. Diagn. F. N. III, n. 54. — Maculis 4882

discoideis, parvulis v. irregularibus, plus minus amplis, primo luteis, dein fuscis, exaridis, haud marginatis; peritheciis minimis, lente vix perspicuis; sporulis ovatis vel oblongis, rectis vel leniter curvis, integris, hyalinis, 8-12 \approx 3.

Hab. in foliis languidis Robiniæ Pseudacaciæ, Gajone pr. Parma Ital. bor.

20. **Phyllosticta Pseudacaciæ** Pass. Fung. Gall. nov. in Journ. d'Hist. nat. 1885, n. 4, p. 54. — Maculis parvis, subrotundis, fuscis, ascendendo fusco-cinereis; peritheciis minutis, nigris; sporulis minutissimis, bacteriformibus. 4883

Hab. in foliis vivis Robiniæ Pseudacaciæ prope Saintes (Charente-Inférieure) in Gallia (BRUNAUD).

21. **Phyllosticta coniothyrioides** Sacc. F. Ard. n. 146, *Ascochyta Cytisi* Lib. Crypt. II, n. 156 (1832). — Epiphylla; maculis suborbiculatis cinereis, ambitu umbrinis; peritheciis globulosis, fuscis, poro apertis, cirris rubescentibus; sporulis elliptico-oblongis, 5 \approx 3, demum subfuligineis. 4884

Hab. in foliis Cytisi Laburni in Arduennis.

22. **Phyllosticta Cytisorum** Pass. in litt. Brunaud in Rev. Myc. 1886, p. 139. — Peritheciis sparsis in maculis aridis, irregularibus, epiphyllis, subglobosis, atris; sporulis oblongo-ellipticis, hyalinis, crassiuscule binucleatis, 5 \approx 2,5; basidiis multo longioribus. 4885

Hab. in foliis Cytisi Laburni, Préguiillac Galliæ (BRUNAUD).

23. **Phyllosticta Phyllodiorum** Sacc. in Hedw. 1890, p. 156. — Maculis subcircularibus, amphigenis, albidis, fusco-cinctis; peritheciis punctiformibus, pertusis, 90-100 μ . diam., contextu fuligineo; sporulis perexiguis botuliformibus, hyalinis, 4-5 \approx 1. 4886

Hab. in phyllodiis Acaciæ, Caromby Australiæ (TEPPER).

24. **Phyllosticta candicans** Passer. Diagn. F. N. III, n. 55. — Maculis irregularibus exaridis candicantibus, margine fusco-rubiginoso limitatis; peritheciis mesophyllo immersis, punctiformibus atris, utrinque perspicuis; sporulis ellipticis, guttulatis, hyalinis, 5-7,5 \approx 2,5-3,7. 4887

Hab. in foliis Bauhiniæ aculeatæ in horto botanico Parma Ital. bor. — A *Ph. cytisella*, cui quodammodo accedit, magnitudine sporularum differt, et a *Ph. Bauhiniæ* maculis candicantibus et sporulis longioribus diversa.

25. **Phyllosticta Sophoræ** Ell. et Ev. Proc. Acad. Phil. 1891, p. 77. — Maculis amphigenis, minutis, 1 mm. diam., rotundis, concavis, subnigris, elevato-marginatis, dein rubenti-brunneis; peritheciis in- 4888

nato-erumpentibus plerumque singulis in quaque macula, globosis, 100-150 μ . diam.; sporulis perexiguis, 1,5-2,5 \approx 0,7.

Hab. in foliis vivis *Sophoræ speciosæ*, S. Antonio Texas Amer. bor. (EGELING).

26. **Phyllosticta sordidula** Speg. Guar. I, p. 142. — Maculis nullis; 4889
peritheciis epidermide cinerescenti tectis, sparsis, lenticularibus, 80-100 μ . diam., dein subcollabentibus, atris, minute pertuso-papillatis; sporulis ellipsoideo-ovoideis, 3-3,5 \approx 1,5-2, hyalinis, biguttulatis.

Hab. in siliquis *Cassiae* prope Guarapí Brasiliæ.

27. **Phyllosticta Parkinsoniæ** Ell. et Ev. Proc. Acad. Phil. 1891, p. 77. 4890
— Maculis amphigenis, orbicularibus, minutis, 1 mm. diam., subnigris, elevatulo-marginatis, dein rubenti-brunneis; peritheciis innatis vel prominulis, depresso-globosis, 80-100 μ . diam.; sporulis ellipsoideo-oblongis, hyalinis, 4-6 \approx 2.

Hab. in foliis vivis *Parkinsoniæ aculeatæ*, S. Antonio Texas Amer. bor. (EGELING).

28. **Phyllosticta Borszczowii** Thüm. M. U. n. 1894. — Maculis obso- 4891
letis vel arescendo decoloratis; peritheciis dense gregariis hypophyllis, raro amphigenis punctiformibus, prominulis, atro-nitidis; sporulis minutissimis, eguttulatis, ellipsoideis, utrinque rotundatis, hyalinis, 3 \approx 1,5.

Hab. in foliis vivis *Caraganæ arborescentis*, Maidaschi Sibiriae (N. MARTIANOFF).

29. **Phyllosticta Araliæ** Sacc. et Berl. in Rev. Myc. 1885. — Epi- 4892
phylla; maculis flavo-cinereis, latis, linea ochracea cinctis; peritheciis minutis, sparsis vel subgregariis, tectis, ostiolo epidermidem perforante demum emergentibus, nigris; sporulis ovoideis, 4-5 \approx 1½-2, pallidissime viridulis.

Hab. in pag. superiore foliorum viventium *Araliæ* in Algeria.

30. **Phyllosticta Hydrangeæ** Ell. et Ev. Journ. Myc. 1889, p. 145. — 4893
Maculis 1-1,5 cm. vel ultra diam., rubiginoso-brunneis, anguste elevato-marginatis, primo purpureo-tinctis; peritheciis epiphyllis, lenticularibus, supra pertusis, 100-115 μ . diam.; sporulis oblongis, 2-3-guttatis, hyalinis, 10-12 \approx 2,5-3,5.

Hab. in foliis *Hydrangeæ* cultæ, New Jersey Amer. bor.

31. **Phyllosticta thallina** Sacc. Bomm. et Rouss. Fl. Myc. Belg. II, 1894
p. 25. — Maculis albis, nitidulis, zona purpurea marginatis, inæqualiter circularibus, confluentibus; peritheciis crebris, tectis, exiguis, 90-170 μ . diam.; sporulis ellipsoideis, continuis, hyalinis, 6 \approx 3.

Hab. in ramulis Corni sanguineæ, Groenendael Belgii. —
Habitus fere thalli albi lichenosi.

32. **Phyllosticta indica** Roum. et Karst. Rev. Myc. 1890. — Peritheciis gregariis, epidermide dein fissa tectis, subsphæroideis, atratis, contextu parenchymatico, fuligineo, pertusis, macula ampla, vaga arescendo dealbata, fusco cincta insidentibus, circiter 75 μ . diam.; sporulis oblongatis, continuis, obtusis, rectis, hyalinis, 3 = 1. 4895

Hab. in pagina superiore foliorum languescentium Aucubæ Spini? in Tonkin (B. BALANSA). — A *Phyllosticta Aucubæ* et *Ph. aucubæcola* admodum differens.

33. **Phyllosticta Æsculi** Ell. et Mart. in Journ. of Myc. 1886, p. 130. — Hypophylla, in maculis latis, indefinite limitatis; peritheciis punctiformibus, minutis, 40-50 μ . diam., sparsis, brunneis; sporulis oblongo-cylindræis, hyalinis, 3-4 = 1. 4896

Hab. in foliis vivis Æsculi glabræ, Missouri Amer. bor. — A *P. sphæropsidea* sporulis valde minoribus differt.

34. **Phyllosticta sphæropsidea** Ell. et Ev. in Bull. Torr. bot. Club. 1883, p. 97. — Maculis rufo-brunneis, margine pallide luteo cinctis, sparsis, 1-2 cm. diam., vel confluentibus et latioribus; peritheciis sparsis, punctiformibus, immersis, supra perforatis, in pagina sup. foliorum prominulis, sed epidermide tectis; sporulis globosis vel late ellipsoideis, hyalinis, minute guttulatis crasseque 1-2-nucleatis, 12-15,5 \times 8-10, in basidiis *Sphæropsidum* similibus insertis. 4897

Hab. in foliis vivis Æsculi Hippocastani, Vineland Amer. bor. (D. C. BIDWEL).

35. **Phyllosticta paviæcola** Brun. Champ. Saint 1887, p. 429. — Maculis oblongis vel suborbicularibus, sæpe confluentibus, brunneo-nigris, dein cinerescentibus, demum expallentibus brunneo-cinctis; peritheciis epiphyllis, exiguis, nigris; sporulis oblongis vel ovoideo-oblongis, 5-7 \times 2-2,5 non guttulatis, hyalinis. 4898

Hab. in foliis Paviæ macrostachyæ in horto botanico Rochefort Galliæ.

36. **Phyllosticta Terebinthi** Passer. Diaga. F. N. III, n. 53. — Maculis amplis irregularibus, exaridis, ferrugineo-griseis, mox laceris; peritheciis epiphyllis sparsis punctiformibus, ostiolo perforato, membranaceis, contextu minute celluloso rufidulo; sporulis minutis ovalibus, hyalinis, 2,5-3 \times 1,5-2, ad apices obscure nucleolatis. 4899

Hab. in foliis languidis Pistaciæ Terebinthi in horto botanico Parma Ital. bor.

37. **Phyllosticta spermoides** Peck 40 Rep. p. 58. — Maculis subor- 4900
bicularibus, brunneis v. cinereis, margine brunneo donatis v. sub-
inde confluentibus; peritheciis minutis, 35-62 μ . diam., numero-
sis, hypophyllis, nigrescentibus; sporulis minutis, cylindraceis, 5
 μ . long.

Hab. in foliis vivis *Vitis ripariæ*, Gansevoort Amer. bor.

38. **Phyllosticta microspila** Passer. Diagn. F. V. IV, p. 8. — Macu- 4901
lis irregularibus, parvulis, fuscis, brunneo-limitatis; peritheciis epi-
phyllis, atris, sparsis; sporulis oblongis, ad apices attenuatis, hya-
linis, 10 \approx 3.

Hab. in foliis *Vitis viniferæ silvestris* in silvis Collecchio pr. Parma Ital. bor. — *Ph. viticola*, quamvis sporularum magnitudine proxima, differt maculis amplis interdum confluentibus, peritheciis amphigenis vel hypophyllis et sporulis ad apices non attenuatis.

39. **Phyllosticta Bizzozzeriana** C. Mass. Contr. Mic. Ver. p. 79, t. I, 4902
f. II. — Peritheciis punctiformibus, nigris, hypophyllis vel sub-
amphigenis, globoso-conicis, prominulis, poro pertusis, erumpenti-
bus, 50-80 μ ., in maculis parvis, irregularibus, exaridis dense ag-
gregatis; sporulis perexiguis, hyalinis, breviter bacillaribus, con-
tinuis, utrinque obtusis, 2,5-3,5 \approx 1,5.

Hab. in foliis *Vitis viniferæ*, Calavena prope Tregnago agri Veronensis. — A *Ph. viticola* et *Ph. Vitis* satis diversa.

40. **Phyllosticta neurospilea** Sacc. et Berl. Misc. Myc. II, n. 37. — 4903
Maculis epiphyllis, nervis exacte limitatis, hinc angulosis, rufo-
ochraceis; peritheciis globoso-depressis, parcissimis, innato-promi-
nulis, punctiformibus; sporulis ovato-oblongis, 8-10 \approx 5-6, intus
granulosis, hyalinis; basidiis brevibus e basi stromatica, densius-
cula oriundis.

Hab. in foliis *Vitis antarcticæ*, Logan Australiæ.

41. **Phyllosticta Monspessulani** Pass. in Brun. Champ. Saint. V, p. 4. 4904
— Maculis minutis, griseis dein albis, angulosis; peritheciis par-
cis, punctiformibus, nigris; sporulis fusoido-bacillaribus, hyalinis,
continuis, 8-10 \approx 2,5.

Hab. in foliis *Aceris monspessulani*, Rochefort Galliæ.

42. **Phyllosticta minutissima** Ell. et Ev. Proc. Ac. Phil. 1891, p. 76. 4905
— Maculis amphigenis irregularibus, suborbicularibus, 4-9 mm.
diam., supra rubenti-brunneis, dilutius marginatis, infra pallidio-
ribus; peritheciis hypophyllis, minutis, 75-85 μ . diam., globosis,

subprominulis, copiosis; sporulis minutissimis, subellipticis, hyalinis, $1,5-2 \approx 0,5$.

Hab. in foliis vivis *Aceris glabri*, Nebraska Amer. bor. (H. J. WEBBER).

43. **Phyllosticta Saccharini** Ell. et Mart. in Journ. of Myc. 1886, 4906 pag. 130. — Maculis amphigenis, definitis, parvis, 1-2 mm. diam., albis, margine rubiginoso-brunneo, irregulariter sparsis; peritheciis epiphyllis, in pagina superiore conspicuis, lenticularibus, atris, 100-120 μ . diam.; sporulis oblongis, $3,5-4,5 \approx 1-1,3$, hyalinis.

Hab. in foliis vivis *Aceris saccharini*, Missouri Americæ borealis.

44. **Phyllosticta campestris** Pass. in litt. Brun. in Rev. Myc. 1885, 4907 pag. 139. — Maculis parvis, angulosis, brunneis, centro pallidioribus, subinde folium ad marginem decolorantibus; peritheciis minutis, punctiformibus, parvis, nigris; sporulis minutis, oblongis, hyalinis, enucleatis, $2 \approx 1$.

Hab. in foliis *Aceris campestris* prope Saintes Galliæ (BRUNAUD).

45. **Phyllosticta rubra** Peck in Thirty-fifth Rep. St. Mus. Bot. 1884, 4908 p. 138. — Maculis parvis, angulatis vel irregularibus, quandoque confluentibus, rubris; peritheciis 1-5 in quaque macula, epiphyllis, minutis, nigris; sporulis late ellipticis vel subglobosis, $8 \approx 6$, hyalinis.

Hab. in foliis vivis *Cratægi tomentosæ*, Albany Americæ borealis.

46. **Phyllosticta Treleasei** Berl. et Vogl. Add. Syll. n. 4214, *Phyllosticta* sp. Trel. Paras. Fungi Visc. pag. 17. — Maculis rotundatis vel oblongis, 3-8 mm. diam., rufo-brunneis; peritheciis minutis, atris; sporulis ellipsoideis, hyalinis, $7-8 \approx 2-4$, unicellularibus.

Hab. in foliis *Pruni serotinæ*, Madison Amer. bor. — Verisimiliter a *P. serotina* non distinguenda.

47. **Phyllosticta Passerinii** Berl. et Vogl. Add. Syll. n. 4215, *Phyllosticta Mahaleb* Pass. Fung. Gall. novi, in Jour. d'Hist. nat. 1885, n. 4, pag. 16. — Maculis subrotundis, minutis, fuscis, arescendo ochraceis, margine tenui elevato cinctis; peritheciis paucis, hinc inde congregatis, globoso-lenticularibus, pertusis; sporulis bacillaribus, minimis, $2\frac{1}{2} \approx \frac{3}{4}$, hyalinis.

Hab. in foliis languidis *Pruni Mahaleb* in Gallia (BRUNAUD). — «Non *Ph. Mahaleb* Thüm. — Sacc. Syll. III, p. 5».

48. **Phyllosticta vindobonensis** Thuem. Pilze d. Aprik. p. 2. — Ma- 4911

culis magnis, plus minusve orbicularibus, sordide griseo-fuscis, arescendo suberosis; peritheciis numerosis, punctiformibus, atris, gregariis; sporulis numerosissimis, breve ellipsoideis vel subcylindraceis, utrinque rotundatis, simplicibus, eguttulatis, homogeneis, nubiloso-hyalinis vel dilute fumigatis, $3,5-5 \approx 1,5-2,5$.

Hab. in fructibus *Armeniacæ*, Wien Austriae.

49. **Phyllosticta Rosarum** Pass. Erb. critt. it. II, n. 1092. — Macu- 4912
lis parvulis discoideis, atro-sanguineis, centro albicantibus ibique perithecia punctiformia atra aggregata foveantibus; sporulis ellipticis, simplicibus, hyalinis, $5 \approx 2,5 \mu$.

Hab. in foliis *Rosarum* cultarum, Vigheffio prope Parma Ital. bor.

50. **Phyllosticta Pallor** (Berk.) Oud. Contr. Myc. Pays-bas XIII, pag. 34, t. IX, f. 21. — Ita nuncupanda est, teste Oud. loc. cit. *Ascochyta Pallor* Berk. — Syll. III, p. 399 — nam sporulæ continuæ, granulosæ, subinde curvulæ, hyalinæ, $14-18 \approx 4-5$. Nascitur quoque in sarmentis *Rubi idæi* in Nederlandia.

51. **Phyllosticta arbutifolia** Ell. et Mart. in Journ. of Myc. 1886, 4913
pag. 129. — Maculis epiphyllis, minutis, 1 mm. vel minus, diam., albis, in pagina inferiore foliorum; peritheciis sæpe singulis in centro cujusdam maculæ, subastomis, emergentibus, atris, $70-80 \mu$ diam.; sporulis subglobosis, hyalinis, $6-8 \mu$ long.

Hab. in foliis vivis *Piri arbutifoliæ*, Newfield Amer. bor.

52. **Phyllosticta piriseda** Passer. Diagn. F. N. IV, p. 9. — Perithe- 4914
ciis epiphyllis, lenticularibus, prominulis in maculis parvulis discoideis albicantibus sæpe circinatis; sporulis ovoideo-oblongis, hyalinis, $2,5-3 \approx 1,5$.

Hab. in foliis languidis *Piri communis*, socia *Asteromella bacillari*, Parma. — A *Ph. pirina* differt sporulis brevioribus angustioribusque, et ob maculas evidentes, perithecia sæpius ordinata sporulasque paullo grandiores, a *Ph. piricola* pariter diversa.

53. **Phyllosticta Mali** Prillieux et Delacroix, Bull. Soc. Myc. Fr. 1890, 4915
p. 180, f. III, planche XX. — Maculis parvis, elongatis vel subcircularibus, primum brunneo-ochraceis, demum sordide griseis, margine fusco, leniter incrassato; peritheciis parcis, subapplanatis, poro pertusis, $130-170 \approx 100-120$; sporulis ovoideis, $6,5-8,5 \approx 4-4,5 \mu$.

Hab. in pagina superiore foliorum *Mali communis*, Lorient Galliae.

54. **Phyllosticta Briardi** Sacc. *Phyllosticta Mali* Briard Suppl. p. 79, 4916

nec Prill. — Maculis variis, brunneis vel ochraceis, margine concolore, utrinque visibilibus; peritheciis epiphyllis punctiformibus, innatis, nigris, 80-100 μ . diam., hinc inde cæspitose-aggregatis; sporulis cylindræis obtusis, 4-5 \approx 1,5-2, hyalinis.

Hab. in foliis viventibus Mali communis, Aube Galliæ.

55. **Phyllosticta variabilis** Peck in Thirty-fifth Rep. St. Mus. Bot. 4917
1884, p. 138. — Maculis parvis vel majusculis, suborbicularibus vel irregularibus, brunneis aut purpureo-brunneis, centro primum areolis aridis, albis punctatis, denique undique aridis; peritheciis minutis, epiphyllis, nigris; sporulis oblongo-ellipsoideis, 5-7 \approx 2,5-3.

Hab. in foliis vivis Rubi odorati, Albany Amer. bor.

56. **Phyllosticta bicolor** Peck 43 Rep. p. 26. — Maculis majusculis, 4918
4-12 mm. lat., irregularibus, primo brunneis, dein centro albidis, late brunneo-cinctis, subtus brunneis; peritheciis epiphyllis, centro maculæ insidentibus, minutis 100-125 μ . lat., nigris; sporulis minutis, oblongis, hyalinis, 5-6,5 \approx 2-2,5.

Hab. in foliis vivis Rubi odorati, Whitehall Amer. bor.

57. **Phyllosticta Crenatæ** Brun. Miscell. mycol. p. 14. — Maculis su- 4919
pra nigricantibus vel brunneo-nigris, subtus brunneo-griseis, magnitudine et forma variis, sæpius oblongis v. angulatis; peritheciis hypophyllis, sparsis, punctiformibus, erumpentibus, brunneis; sporulis ovoideis, continuis vel interdum 2-guttatis, 4-5 \approx 2,5-3, hyalinis.

Hab. in foliis Spirææ crenatæ, Saintes Galliæ.

58. **Phyllosticta Metrosideri** Brun. Miscell. mycol. p. 14. — Maculis 4920
orbicularibus, pallide griseo-brunneis, margine rubro-brunneo cinctis; peritheciis globosis, minutissimis, parum numerosis, nigris; sporulis ovoideo-oblongis, hyalinis, 5 \approx 2.

Hab. in foliis Metrosideri villosæ, in insul. Tahiti (GASTON BRUNAUD).

59. **Phyllosticta Globuli** Passer. Diagn. F. N. III, n. 56. — Perithe- 4921
ciis hypophyllis, dense gregariis, in maculis parvulis amphigenis subdiscoideis, umbrinis; sporulis bacillari-fusiformibus, integris, hyalinis, 10-12,5 \approx 1,5-1,8.

Hab. in foliis dejectis Eucalypti Globuli in horto botanico, Parma Ital. bor.

60. **Phyllosticta myrticola** Speg. F. Puigg. n. 409. — Maculis am- 4922
phigenis, orbicularibus, candidis, determinatis, 2-5 mm. diam., angustissime vinoso-marginatis; peritheciis minutis, membranaceis,

ostiolatis, 80-90 μ . diam.; sporulis ellipsoideo-ovoideis, hyalinis, 3-5 = 1-1,5, biguttulatis.

Hab. ad folia viva *Eugeniæ* speciei cujusdam in dumetis pr. Apiahy Brasilæ.

61. **Phyllosticta Mayteni** Speg. F. Fueg. n. 370. — Maculis arescenti-albis, amphigenis determinatis, linea stricta rufescente cinctis; peritheciis innato-immersis, lenticularibus, majusculis, 200-250 μ . diam., coriacellis, ostiolo vix papillulato, contextu densissime subimperspicueque parenchymatico fusco; sporulis ellipticis vel ovoideis, utrinque acutiusculis, 6-9 = 2-3, ac sæpe 1-guttulatis, sterigmatibus breviusculis, 6-10 = 1,5-2, suffultis, hyalinis. 4923

Hab. ad folia languida *Mayteni* magellanicae in silvis pr. Shammacus et in Picton island Fuegiæ. — Perithecia in parte infera tenuissime membranacea, subevanida, an dimidiata? Sporulæ per ætatem sæpe medio 1-septulatae.

62. **Phyllosticta Cyrillæ** Ell. et Mart. in Journ. of Myc. 1886, p. 130. 4924
— Maculis latis, marginis apicem basimque foliorum occupantibus, primo rufo-brunneis dein griseo-brunneis; peritheciis atris, subglobosis, pertusis, valde immersis, dein erumpentibus, sæpe epiphyllis, aggregatis, 110-140 μ . diam.; sporulis hyalinis, ovoideis, granulosis, 8-10 = 5-7.

Hab. in foliis vivis *Cyrillæ* racemifloræ, Green Cove Springs, Florida Amer. bor.

63. **Phyllosticta Camusiana** Sacc. in Atti Soc. Nat. Mod. 1888, p. 109, 4925
Ph. Paliuri P. Brun. Champ. nouv. VI, p. 2. — Maculis amphigenis, minutis, valde ramosis, gregariis (topographiam fere imitantibus!), pallide ochraceis, mox dealbatis, anguste rufo-marginatis; peritheciis globoso-lenticularibus, epidermide velatis, nigricantibus, poro pertusis; sporulis ellipsoideis, dilute olivaceis, 6-8 = 3-4.

Hab. in foliis vivis *Paliuri* australis, Modena Ital. bor. et Rochefort Gallia. — Differt ab affini *Ph. Zizyphi* sporulis leniter coloratis, maculis candidis etc.

64. **Phyllosticta Paliuri** (Lév.) Cooke Grev. XIII, pag. 45, *Dothidea* 4926
Lév. Demid. II, p. 107, t. V, f. 6. — Hypophylla, atra, maculiformis; peritheciis minutissimis, confertis, albo-farctis, stromate tenui impositis; sporulis ovato-linearibus, pellucidis, curvatis, simplicibus, obtusis, 6 = 2.

Hab. in foliis *Paliuri* australis, Yalta in Tauria.

65. **Phyllosticta Alaterni** Pass. in litt. Brun. in Rev. Myc. 1886, p. 139. 4927
— Maculis orbicularibus, albo-griseis, amphigenis, nigro-brunneo-

marginatis; peritheciis sparsis, paucis, parvis, globulosis, atris; sporulis ovoideis, hyalinis, eguttulatis, $5 \approx 3,5-4$.

Hab. in foliis Rhamni Alaterni, Saintes Galliæ (BRUNAUD).

66. **Phyllosticta advena** Passer. Diagn. F. N. V. n. 24. — Maculis 4928
ovalibus aut vagis, amphigenis, superne albo-cinereis, fusco-cinctis, subtus fuscis; peritheciis epiphyllis punctiformibus sparsis v. raro subcircinantibus, atris; sporulis ovalibus, integris, hyalinis, $3,5-4 \approx 2,5$.

Hab. in foliis languidis Rhamni corymbosi (?) (in hortis nomine *Guevinæ Avellanæ* culti) San Remo Ital. bor. (F. PANIZZI).

67. **Phyllosticta sardoa** Passer. Diagn. F. N. IV, p. 8. — Maculis 4929
amplis, exaridis candicantibus, fusco-cinctis; peritheciis illis *Pyrenophoræ coronatæ* var. *Evonymi* similibus, amphigenis; sporulis elongato-fusiformibus, integris, hyalinis, endoplasmate granuloso, $18-22,5 \approx 5-7$, basidiis subæquilongis fultis.

Hab. in foliis languidis *Evonymi japonici*, Sassari Sardinia et Livorno.

68. **Phyllosticta Prini** Peck 43 Rep. p. 26. — Maculis parvis, sub- 4930
orbicularibus, supra albis v. griseolis, subtus brunneolis; peritheciis parvis, 175μ . lat., epiphyllis, depressis, nigris; sporulis ellipsoideis v. oblongis, $7,5-12,5 \approx 4$.

Hab. in foliis *Ilicis* (*Prini*) *verticillatæ*, Catskill mountains Americæ borealis.

69. **Phyllosticta concomitans** Ell. et Ev. Journ. of Myc. 1888, p. 9. 4931
— Maculis amphigenis, 2-3 mm. diam., margine elevato purpureo cinctis zonaque; peritheciis minutis sparsis, immersis, pertusis, basi subtus leniter prominulis; sporulis oblongis, hyalinis, $5-7 \approx 1,5-2$.

Hab. in foliis vivis *Ilicis deciduæ*, Louisiana Amer. bor. (LANGLOIS).

70. **Phyllosticta terminalis** Ell. et M. Am. Nat. 1884, p. 70. — Ma 4932
culis sæpius apicem vel quandoque marginem foliorum occupantibus, linea purpureo-nigra circumscriptis; peritheciis globosis, parenchymate immersis, epidermidem nigrescentem vix elevantibus; sporulis oblongis, $3-4 \approx 1$; basidiis cylindræis, sporulas longitudine æquantibus.

Hab. in foliis *Ilicis Dahoensis*, New Florida Amer. bor.

71. **Phyllosticta Monetia** Speg. Guar. I, p. 142. — Maculis amphi- 4933
genis, orbicularibus, pallidis, obsolete marginatis; peritheciis lenticularibus tectis, $100-150 \mu$. diam., sparsis, atris, pertusis, demum col-

labentibus, contextu olivaceo; sporulis ellipsoideis, $3,5-4 \approx 1,5-2$, utrinque obtusissimis, sæpe 2-guttulatis, hyalinis.

Hab. in foliis languidis *Monetiæ* pr. Paraguay Brasiliæ.

72. **Phyllosticta symphoriella** Sacc. et March. in Rev. Myc. 1885, 4934 p. 147. — Maculis vagis, fuscescentibus, amphigenis; peritheciis sparsis, lenticularibus, punctiformibus, pertusis; sporulis ellipsoideis, olivaceo-fuscellis, $4-6 \approx 3$.

Hab. in foliis *Symphoricarpi* in Belgio. — A *Ph. Symphoricarpi* differt sporulis coloratis, quibus ad *Coniothyrium* aliquid accedit.

73. **Phyllosticta implexæ** Passer. Diagn. F. N. III, n. 59. — Maculis 4935 discoideis v. late expansis, folium dimidium et ultra occupantibus; peritheciis epiphyllis sparsis vel subgregariis, punctiformibus, depressis, opacis; sporidiis fusiformibus, continuis, acervatim visis flavidulis, singulatim hyalinis, $5-7,5 \approx 2,5$.

Hab. in foliis languidis *Loniceræ implexæ*, sociâ subinde *Sphærellâ implexæ*, in horto botanico Parma Ital. bor. — Præter sporulas non atomisticas, peritheciis non prominulis neque nitidulis a *Ph. nitidula* differt.

74. **Phyllosticta Lantanæ** Pass. Erb. critt. it. II, n. 1290. — Maculis 4936 vagis, irregularibus, parvulis, mox laceratis, albis, nitidis; perithecia epiphylla, minima, atra, sparsa foveis; sporulis integris, hyalinis, $5 \approx 2,5$.

Hab. in foliis *Viburni Lantanæ*, Vigheffio pr. Parma Ital. bor. — A *Ph. Viburni* Grog. in Roumeguère, Fungi gallici 2236 plane diversa.

75. **Phyllosticta Lantanoidis** Peck in 38 Rep. St. Mus. pag. 94. — 4937 Maculis latis, suborbicularibus, cinereis, sæpe brunneo-marginatis; peritheciis minutis, 100 μ . diam., vix prominulis, epiphyllis, atris; sporulis ellipticis, binucleatis, $6-8 \approx 4$, hyalinis.

Hab. in foliis vivis *Viburni lantanoidis*, Caroga Amer. bor. — Differt a *P. tineæ* magnitudine atque sporulis.

76. **Phyllosticta Viburni** Pass. in litt. Brunaud in Rev. Myc. 1886, 4938 p. 139. — Maculis irregularibus, majusculis, griseis v. griseo-roseis, crasse rufo-brunneo-marginatis; peritheciis parvis, sparsis, minutis, nigris; sporulis oblongo-navicularibus, biguttulatis, $10-12 \approx 2,5-3$.

Hab. in foliis *Viburni Tini*, Saintes Galliæ (BRUNAUD).

77. **Phyllosticta limbalis** Pers. — Syll. III, pag. 24. — Sec. Celott. Mic. Montp. p. 12, sporulæ metiuntur $6 \approx 3$. Nascitur quoque in *Buxi* foliis, Montpellier Galliæ.

78. **Phyllosticta Stillingiæ** E. et E. Journ. Myc. 1887, pag. 130. — 4939
 Maculis amphigenis, definitis, rubenti-brunneis, non copiosis, 2-3 mm. diam.; peritheciis epiphyllis, sparsis, paucis, atris, convexis; sporulis oblongo-ellipsoideis, 2-guttatis, hyalinis, 5-7 \approx 2,5-3.
Hab. in foliis *Stillingiæ* sebiferæ, Point à la Hache, Louisiana Amer. bor. (REV. A. B. LANGLOIS).
79. **Phyllosticta Halstedii** Ell. et Ev. Journ. Myc. 1889, p. 146. — 4940
 Maculis amphigenis, subrotundis, rubro-brunneis, $\frac{1}{4}$ -1 $\frac{1}{4}$ cm. diam., concentrice corrugatis vel zonatis, margine definito, angusto, atro cinctis; peritheciis paucis, lenticularibus, 100-150 μ . diam., innatis, in utraque folii pagina plerumque perspicuis; sporulis latis, fusoideo-oblongis, rectis, granulosis, utrinque rotundatis, 15-20 \approx 5-7.
Hab. in foliis vivis *Syringæ* vulgaris, New Brunswick, N. J. Amer. bor. (DR. B. D. HALSTED).
80. **Phyllosticta viridis** Ell. et Kell. Journ. Myc. 1889, pag. 142. — 4941
 Maculis magnis, subindefinitis, 0,5-1 cm. lat., amphigenis, margine subpallidioribus; peritheciis hypophyllis, numerosis, suberumpentibus, parvis, 65-80 μ . lat.; contextu grosse parenchymatico; sporulis copiosis, oblongis, minutis, 2 \approx 0,5.
Hab. in foliis *Fraxini* viridis, Rocks County, Kansas Amer. (BARTHOLOMEW).
81. **Phyllosticta variegata** Ell. et Ev. Journ. Myc. 1889, p. 145. — 4942
 Maculis numerosis, angulosis, pallide flavis, 1-3 mm. diam., margine angusto, definito, saturatius colorato cinctis; peritheciis epiphyllis, lenticularibus, nigris, 90-100 μ . diam.; sporulis ovoideis v. ellipsoideis, 4-5 \approx 1,5-2.
Hab. in foliis *Fraxini*, London, Canada Amer. bor. (F. DEARNESS).
82. **Phyllosticta Fraxini** Ell. et M. in Am. Nat. 1884, p. 189. — 4943
 Maculis brunneolis, margine obscure purpureo, $\frac{1}{2}$ -1 cm. diam.; peritheciis epiphyllis, sparsis, lentiformibus, atris 150 μ . diam.; sporulis oblongis vel oblongo-ellipsoideis, hyalinis, 1-2 nucleatis, 7-9 \approx 2,5-3.
Hab. in foliis *Fraxini*, Bethlehem Amer. bor.
83. **Phyllosticta fraxinifolia** Pass. in litt. Brun. in Rev. Myc. 1886, 4944
 p. 139. — Maculis epiphyllis, albis, suborbicularibus, minutis, non vel vix brunneo-marginatis; peritheciis paucis, minutis, atris; sporulis oblongis, hyalinis, obscure biguttulatis, 5 \approx 2,5.
Hab. in foliis *Negundinis fraxinifoliæ*, Saintes Galliæ (BRUNAUD).

84. **Phyllosticta sinuosa** Ell. et Mart. Am. Nat. 1884, p. 1264. — Ma- 4945
culis orbicularibus, 1,5-6 (plerumque 2-3) mm. lat., rubenti-brun-
neis, dein subnigris, margine elevato, rufescenti-nigro cinctis; pe-
ritheciis epiphyllis, sparsis, lenticularibus, 150 μ . diam., plerum-
que ad marginem folii; sporulis oblongis vel clavato-oblongis, hya-
linis, 3,5 (immaturis?)-15 \approx 1,5-2.

Hab. in foliis Oleæ americanæ, Green Cove Springs, Flo-
rida Amer. bor.

85. **Phyllosticta Ovalifolii** Brun. Miscell. mycol. p. 14. — Maculis ir- 4946
regularibus, majusculis, ochraceo-pallidis, brunneo-marginatis; pe-
ritheciis globosis, punctiformibus, sparsis, nigris; sporulis oblongo-
elongatis, hyalinis, 2-guttatis, 8-10 \approx 3.

Hab. in foliis Ligustri ovalifolii, Saintes, Rochefort Galliæ.

86. **Phyllosticta Epigeæ** Peck in 38 Rep. Stat. Mus. p. 94. — Ma- 4947
culis latis, irregularibus, brunneis vel rufo-brunneis; peritheciis
minutis, 110-130 μ . diam., epidermide tectis, erumpentibus, epiphyll-
lis, atris; sporulis ellipticis, 8 \approx 4, hyalinis.

Hab. in foliis vivis Epigeæ repentis, Caroga Amer. bor.

87. **Phyllosticta Gaultheriæ** E. et E. in Jour. of Myc. I, p. 153. — 4948
Maculis amphigenis, sparsis, atro-roseo-purpureis, minutis, 1-2
mm., margine fusco-purpureo cinctis; peritheciis amphigenis, sub-
lenticularibus, atris, crasse parenchymaticis, leniter prominentibus,
cuticula tectis, 100-115 μ . diam.; sporulis ellipticis, hyalinis, gra-
nularibus, 5-7 \approx 4-5.

Hab. in foliis vivis Gaultheriæ procumbentis, Newfield
Amer. bor.

88. **Phyllosticta garryæcola** Pass. in litt. Brun. in Rev. Myc. 1886, 4949
p. 140. — Maculis rotundatis vel suborbicularibus, brunneis, dein
pallidis, demum griseo-viridibus v. griseo-brunneis; peritheciis pun-
ctiformibus, nigris; sporulis oblongis, hyalinis, 5,6 \approx 2,5-3.

Hab. in foliis Garryæ ellipticæ, Préguiillac in Gallia (BRU-
NAUD).

89. **Phyllosticta Arbuti-Unedonis** Pass. Fung. Gall. novi, in Jour. 4950
d'Hist. nat. 1885, n. 4, p. 16. — Peritheciis minutissimis, atris,
in maculis e fusco albicantibus, margine tenui, elevato-brunneo-
cinctis; sporulis exiguis, elliptico-oblongis, hyalinis.

Hab. in foliis languidis Arbuti Unedonis, prope Breuil-
Magné, Saintes in Gallia (BRUNAUD).

90. **Phyllosticta Maximi** E. et E. Journ. Myc. 1888, p. 123. — Ma- 4951
culis magnis, rubenti-brunneis, saturatius marginatis, plerumque

terminalibus v. lateralibus, 3-5 cm. lat.; peritheciis sparsis, epiphyllis, minutis $\frac{1}{3}$ mm. diam., apice subacuto subprominulis; sporulis globoso-ellipsoideis, hyalinis, granulosis, 10-12 \approx 6-8; basidiis gracilibus sporularum diametro circ. æquilongis.

Hab. in foliis *Rhododendri maximi*, Bedford Mass. Amer. bor. — *Ph. sphærospideæ* et *P. terminali* similis.

91. **Phyllosticta rhododendricola** Brun. Miscell. mycol. pag. 14. — 4952

Maculis majusculis, oblongis v. irregularibus, ultra tertiam partem foliis interdum occupantibus, griseo-cinereis, anguste brunneo-marginatis; peritheciis sparsis, minutis, globosis, tectis, dein erumpentibus, nigris, nitentibus, pertusis; sporulis oblongis, elongatis, 8-10 \approx 3, hyalinis.

Hab. in foliis languidis *Rhododendri* culti, Saintes Galliæ.

92. **Phyllosticta Leucothōes** Ellis New North Am. Fung. in Am. 4953

Nat. 1884, p. 1264. — Peritheciis in parte superiore foliorum decolorata, distincte marginata, brunneo-rubiginosa sparsis, globosis, 150-200 μ . diam., parvis, parenchymate immersis, apicibus vix prominulis, sed epidermide tectis; sporulis ovato-oblongis, 15-21 \approx 6-7, granulosis vel 2-3-nucleatis.

Hab. in foliis *Leucothōes acuminatæ*, Green Cove Springs Amer. bor. — Differt a *Ph. terminali* folio diverse decolorato nec non sporulis multo majoribus.

93. **Phyllosticta papuensis** Cooke in Grevillea XV, pag. 18. — Epi- 4954

phylla vel amphigena; peritheciis gregariis, punctiformibus, semi-immersis, atris, nitidis, poro pertusis; sporulis linearibus, rectis, hyalinis, 10 \approx 1.

Hab. in foliis emortuis plantæ subfruticosæ, New Guinea (Rev. S. CHALMERS).

94. **Phyllosticta Nubecula** Pass. Erb. critt. it. II, n. 1474. — Perithe- 4955

ciis hypophyllis, gregariis, nubeculas griseas vagas efformantibus; sporulis tenuibus, cylindricis, rectis, 2,5 \approx 1,8.

Hab. in foliis *Castaneæ vescæ*, Vigheffio prope Parma Ital. bor. — A *Ph. maculæformi* Sacc. sporularum tenuitate diversa.

95. **Phyllosticta fagicola** Ell. et Mart. Journ. Myc. 1888, p. 10. — 4956

Maculis amphigenis, orbicularibus, 1 cm. diam., sordide albis, anguste 1 mm. diam., rubro-marginatis; peritheciis nigris, sparsis, prominentibus, plerumque epiphyllis; sporulis anguste ellipsoideis, 10-13 \approx 3-4, pallide flavidis.

Hab. in foliis *Fagi ferrugineæ*, Ohio Amer. bor.

96. **Phyllosticta faginea** Peck 40 Rep. p. 58. — Maculis suborbicularibus, parvis, sæpe seriatis v. subconfluentibus, foliorum venis parallele dispositis, cinereis v. griseo-rubentibus margineque rubenti-brunneis v. omnino rubenti-brunneis, subtus subferrugineis; peritheciis paucis, epiphyllis, minutis, 75 μ . lat., nigris; sporulis ovoideis v. ellipsoideis, 7,5-10 \approx 5-6,5. 4957

Hab. in foliis vivis Fagi ferrugineæ Argusville et Elizabeth-town Amer. bor.

97. **Phyllosticta bellunensis** Mart. N. Giorn. bot. it. 1888, p. 395. — Maculis magnis, irregularibus, subrotundis, obscuris; peritheciis punctiformibus, ubique sparsis, obscuris; sporulis bacillaribus, minutissimis. 4958

Hab. in foliis Ulmi deciduis in agro bellunensi Ital. bor.

98. **Phyllosticta ulmaria** Passer. Diagn. F. N. V, n. 25. — Maculis subdiscoideis, exaridis, albidis, fusco-cinctis; peritheciis epiphyllis sparsis, punctiformibus, atris; sporulis ellipticis, hyalinis, 3,5-4 \approx 2,5-3. 4959

Hab. in foliis Ulmi campestris in viridario publico, Parma Ital. bor. — Maculis albidis et minutie sporularum a *Phyllosticta ulmicola* diversa. Maculæ sæpius steriles.

99. **Phyllosticta lacerans** Passer. Diagn. F. N. III, n. 62. — Maculis vagis, exaridis, griseis, plus minus amplis et confluentibus, mox laceris; peritheciis exiguis punctiformibus tectis; sporulis ovoideis vel elliptico-oblongis, hyalinis, 4-7,5 \approx 2,5-3. 4960

Hab. in foliorum vivorum partibus exaridis, quas lacerat, Ulmi campestris, Parma Ital. bor. — A *Ph. ulmicola* differt maculis laceris et sporulis hyalinis, et a *Ph. Ulmi* sporulis minoribus.

100. **Phyllosticta alnicola** C. Mass. Contr. Mic. Ver. p. 80, t. I, f. 4. — Maculis crebris, minutis, angulosis, internerviis, sæpe confluentibus, subferrugineis; peritheciis punctiformibus, nigris, amphigenis, globulosis, prominulo-erumpentibus, 50-90 μ . diam., in soros parvos aggregatis; sporulis hyalinis, minutissimis, brevissime bacillaribus, 2-3,8 \approx 0,7-1, utrinque evanide subincrassato-rotundatis. 4961

Hab. in foliis languidis Alni glutinosæ prope Verona Ital. bor. — A *Ph. alnigena* satis diversa.

101. **Phyllosticta corylina** Ellis New North Am. Fungi in Amer. Nat. 1884, p. 1264. — Maculis rufo-brunneis, rotundis, 2-5 mm. diam., sæpius confluentibus et ad margines foliorum dispositis; peritheciis brunneo-nigris, erumpentibus, lenticularibus, amphigenis, 4962

90-120 μ . diam.; sporulis subhyalinis, oblongis, utrinque nucleatis, 12-15 \approx 6-7.

Hab. in foliis *Coryli americanæ*, Newfield N. J. Amer. bor. — A *Ph. Coryli* et *Ph. corylaria* sporulis latioribus, characteribus macularum differt.

102. **Phyllosticta ludoviciana** Ell. et Mart. in Journ. of Myc. 1886, 4963 pag. 130. — Peritheciis amphigenis, in parte superiore magis prominulis, brunneis, laxis, erumpentibus, 150 μ . diam., in areolis rufo-brunneis, sæpe lateralibus vel in maculis ovoideis vel subangularibus, obscure subtiliterque marginatis, definitis, sparsis; sporulis ovoideis, hyalinis, 5-8 \approx 2-3.

Hab. in foliis vivis *Quercus aquaticæ*, Louisiana Americæ borealis.

103. **Phyllosticta illicicola** Pass. Fung. Gall. novi, in Journ. d'Hist. nat. 1885, n. 4, p. 54. — Maculis rotundis, brunneis, arescendo griseo-cinereis, marginatis; peritheciis lenticularibus, minutis, numerosis, nigris; sporulis minutis, ellipticis, hyalinis, 5-6 \approx 1½-2.

Hab. in foliis *Quercus Ilicis* prope Saintes, Saujon in Gallia (BRUNAUD).

104. **Phyllosticta marginalis** Ell. et Ever. Journ. of Myc. 1888, p. 9. 4965 — Maculis apicalibus et marginalibus rubiginoso-brunneis, indefinitis, zona purpurescenti vage limitatis; peritheciis hypophyllis, sparsis, 150 μ . diam., prominulis, subcutaneis, nigricantibus; sporulis oblongo-ellipsoideis, hyalinis, 6-7 \approx 2,5-3; basidiis cylindraceis, 12 \approx 1,5.

Hab. in foliis *Quercus aquaticæ*, Point à la Hache Louisiana Amer. bor. (LANGLOIS). — Sporulæ subinde apiculatæ.

105. **Phyllosticta Virentis** Ell. et Langl. Journ. myc. 1890, p. 36. — 4966 Maculis amphigenis, 1 cm. diam., pallide griseo-brunneis, subirregularibus, linea subsaturatiore definite limitatis; peritheciis partim erumpentibus, parvis, 75-100 μ . lat.; sporulis oblongo-ellipsoideis, subovato-ellipsoideis vel subfusoides, hyalinis, 4-7 \approx 1,5-2,5.

Hab. in foliis vivis *Quercus virentis*, Louisiana Amer. bor. (LANGLOIS).

106. **Phyllosticta tumoricola** Peck 40 Rep. p. 57. — Maculis suborbicularibus, aridis, pallidis, margine rubente vel rubenti-brunneo cinctis; peritheciis amphigenis vel epiphyllis, minutis, 125-175 μ . lat., depressis, brunneolis; sporulis oblongis vel anguste ellipsoideis, hyalinis, 10-12,5 \approx 5-6,5.

Hab. in foliis galligeris *Quercus albæ*, Karner Amer. bor.

107. **Phyllosticta salicicola** Thüm. Fung. Gall. novi, in Jour. d'Hist. 4968
nat. 1885, n. 4, p. 55. — Peritheciis epiphyllis, plerumque soli-
tariis, parvis, hemisphærico-subemersis, lenticularibus, nigris, in
macula plus minusve orbiculata, arescendo albo-grisea, sordide fu-
sca irregulariterque marginata; sporulis numerosissimis, simplici-
bus, cylindrico-ellipticis, utrinque rotundatis, enucleatis, achrois,
 $3\frac{1}{2}$ -4 \approx $1\frac{1}{2}$ -2.

Hab. in foliis Salicis albæ pr. Saintes in Gallia (BRUNAUD).

108. **Phyllosticta cinerea** Passer. Diagn. F. N. V, n. 26. — Maculis 4969
epiphyllis albido-cinereis; peritheciis sparsis, punctiformibus atris;
sporulis minutis, integris, hyalinis, ovalibus, $5 \approx 2$ -2,5.

Hab. in foliis languentibus Populi albæ, Vigheffio prov.
Parma Ital. bor.

109. **Phyllosticta caryogena** Sacc. *Phyllosticta Caryæ* E. et E. Journ. 4970
Mycol. 1888, p. 107, an Peck. — Maculis subrotundis, brunneis,
centro pallidioribus, utrinque sæpe acutis, folii nervo sæpe percur-
sis, $\frac{1}{2}$ -1 cm. diam., definite marginatis; peritheciis sparsis, epi-
phyllis, minutis, lenticularibus, nigro-brunneis, numerosiusculis;
sporulis oblongis, hyalinis, circ. 5 -8 \approx 1,5-2.

Hab. in foliis viventibus Caryæ raro in gallis ejusdem, New-
field N. J. Amer. bor.

110. **Phyllosticta Caryæ** Peck 40 Rep. p. 57 (1887). — Maculis ma- 4971
gnis, irregularibus, sæpe confluentibus, primitus flavidis, dein brun-
neis, interdum centro ad griseum vergentibus; peritheciis minutis,
100 μ . lat., punctatis, epiphyllis; sporulis irregulariter ellipsoi-
deis, $5 \approx 2$.

Hab. in foliis vivis Caryæ albæ, Piffard Amer. bor.

111. **Phyllosticta Celtidis** Ell. et Kell. Journ. of Myc. 1888, p. 27. 4972
— Maculis amphigenis, sordide brunneis, suborbicularibus plus mi-
nus irregularibus, 2-10 mm. diam., supra demum cinerescentibus;
peritheciis minutis, nigris, hypophyllis; sporulis oblongis, 3-4 \approx
0,5-0,7, hyalinis.

Hab. in foliis vivis Celtidis occidentalis, Rooks Co. Kan-
sas Amer. bor. (E. BARTHOLOMEW).

112. **Phyllosticta Macluræ** Ell. et Ev. Journ. Myc. 1889, p. 145. — 4973
Maculis atro-rubro-brunneis, subirregularibus et subindefinitis,
sæpe marginatis et confluentibus, $\frac{1}{4}$ -1 cm. diam.; peritheciis epi-
phyllis, prominentibus, $\frac{1}{3}$ mm. diam.; sporulis ovoideo-oblongis v.
fusoideo-oblongis, 2-4-guttatis, 10-12 \approx 3.

- Hab.* in foliis *Macluræ aurantiacæ*, Newfield N. J. America borealis.
113. **Phyllosticta morifolia** Passer. Diagn. F. N. III, n. 61. — Maculis amphigenis subdiscoideis, arescendo sordide griseis, margine latiusculo, castaneo-fusco cinctis; peritheciis epiphyllis, gregariis punctiformibus, nigris; sporulis hyalinis, minutis, oblongis, integris, $3,5 \approx 1,5$. 4974
- Hab.* in foliis languidis *Mori albæ*, Parma Ital. bor.
114. **Phyllosticta Fici** Bres. Rev. Myc. 1891, p. 68. — Maculis amphigenis, candidis, circularibus, zona fusca marginatis; peritheciis epiphyllis, marginalibus, prominulis, nigris, obovoideis, $150-200 \mu$. diam.; sporulis cylindræis ad latera subcompressis, hyalinis, 2-guttatis, $2,5-3,5 \approx 0,5-0,8$. 4975
- Hab.* in foliis *Fici macrophyllæ* in ins. St. Thomé (QUINTAS).
115. **Phyllosticta Caricæ** C. Mass. Contr. Mic. Ver. p. 86, t. I, f. 3. — Peritheciis hypophyllis, minutis, subgloboso-conicis, erumpentibus, in maculis parvis angulosis sæpe confluentibus, in pagina superiore foliorum nigrescentibus, densissime gregariis, $60-80 \mu$. ostiolo subhemisphærico, prominulo, celluloso-papillato; sporulis breviter oblongis ovalibusve, minutissimis, subchlorinis, $3-5 \approx 1,5-2$. 4976
- Hab.* in foliis dejectis *Fici Caricæ*, Marcenigo pr. Tregnago agri veronensis. — Affinis *Ph. sycophilæ*.
116. **Phyllosticta Owaniana** Wint. in Hedw. 1885, I. — Peritheciis in maculis fumoso-griseis, demum glaucescentibus, margine lato, fusco determinato circumdatis, rotundato-angulatis vel irregularibus, interdum confluentibus, $9 \approx 4$, epiphyllis, globosis, poro pertusis, immersis, demum erumpentibus, atris, membranaceis, $85-90 \mu$. latis; sporulis ovatis, subpiriformibus vel ellipsoideis, hyalinis, $10-12 \approx 8$. 4977
- Hab.* in foliis languescentibus *Brabeii stellatifolii* ad pedem montis Tabularis Brasiliæ (MAC OWAN).
117. **Phyllosticta Embotryi** Speg. F. Fueg. n. 367. — Maculis nullis vel hypophyllis fuscescentibus, indeterminatis; peritheciis hypophyllis in maculis laxè aggregatis, minutis, globosis, $60-70 \mu$., epidermide velatis tenui-membranaceis, circa ostiolum vix papillulatum atris subcarbonaceis, ceterum pallide olivascentibus, contextu parenchymatico; sporulis ellipticis vel ovoideis utrinque obtusiusculis, $2,5-3 \approx 1,5-2$, hyalinis. 4978
- Hab.* ad folia languida *Embotryi coccinei* in Aicina insula Fuegiæ.

118. **Phyllosticta soriformis** Cooke et Masee Grev. XIX, p. 47. — 4979

Maculis brunneis, orbicularibus, atro-marginatis, 2 mm. diam., amphigenis; peritheciis minutis ad centrum maculæ aggregatis, prominulis, epidermidem perforantibus (soros Uredinearum imitantibus); sporulis ellipsoideis, 4-5 \approx 2, dilute melleis, hyalinis.

Hab. in foliis Proteaceæ cujusdam, Victoria Australiæ (Mrs. MARTIN).

119. **Phyllosticta Perseæ** E. et M. in Jour. of Myc. 1885, p. 100. — 4980

Maculis brunneolo-griseis, apicem et latera foliorum occupantibus; peritheciis brunneo-atris, lenticularibus, innato-erumpentibus, epiphyllis, 150-300 \approx 60-80; sporulis oblongis, hyalinis, nucleatis, 5-8 \approx 1-3.

Hab. in foliis vivis Perseæ carolinensis in Americæ borealis.

120. **Phyllosticta Linderæ** Ell. et Ev. in Journ. of Myc. 1888, p. 9. — 4981

Maculis latis, rotundis, 1 cm. diam., atro-brunneis, margine rubenti-flavo; peritheciis hypophyllis, 65-75 μ . diam., erumpentibus, late pertusis; sporulis oblongo-cylindræis, 3-4 \approx 0,5, hyalinis.

Hab. in foliis vivis Linderæ Benzoin, Faulkland Del. Amer. bor. (COMMONS).

121. **Phyllosticta brasiliensis** Speg. F. Puigg. n. 403. — Maculis 4982

epiphyllis, griseis, determinatis; peritheciis circinantibus, minutis, atris; sporulis ellipsoideis, ex hyalino chlorinis, 4-8 \approx 2-3, utriusque obtusis, subinde 2-guttatis.

Hab. ad folia viva Xanthoxyleæ v. Anacardiaceæ cujusdam in dumetis pr. Apiahy Brasilæ. — Status sporulifer *Leptosphaeriæ brasiliensis* Speg. macula et perithecia ut in statu ascophoro.

122. **Phyllosticta? Pleromatis** Speg. F. Puigg. n. 405. — Maculis de- 4983

determinatis, amphigenis, albo-cinereis, angustissime fusco-cinctis, 3-10 mm. diam.; peritheciis minutis, coriaceis, astomis, 150-200 μ . diam.; sporulis elliptico-fusoideis, hyalinis, 6-8 \approx 2,5-3, subinde 2-guttatis.

Hab. ad folia viva Pleromatis speciei cujusdam in herbosis prope Apiahy Brasilæ.

123. **Phyllosticta Melastomacearum** Speg. F. Puigg. n. 404. — Ma- 4984

culis determinatis, amphigenis, rufescentibus, 3-6 mm. diam., anguste saturatius marginatis; peritheciis membranaceis, ostiolatis, atris, 70-80 μ , diam.; sporulis ellipsoideis, hyalinis, 4-5 \approx 1,5-2, subinde 2-guttatis.

Hab. ad folia viva *Melastomacearum* speciei cujusdam in dumetis pr. *Apiahy* *Brasilie*.

124. **Phyllosticta Pilocarpi** Pat. Bull. Soc. Myc. 1887, p. 129. — Ma- 4985
culis circularibus, albis, rufo-marginatis; peritheciis amphigenis crebris, minutis, tectis, nigris; sporulis cylindræis, hyalinis, sæpe 2-guttulatis, rectis curvulisve, 3 = 1.

Hab. in foliis *Pilocarpi pinnatifolii*, in *Brasilia*.

125. **Phyllosticta Erythroxyli** Graziani Bull. Soc. Myc. 1891, p. 154, 4986
t. X, f. 2. — Maculis paucis, rotundis v. irregularibus, arescendo candidis, ochraceo-fulvo-marginatis, amphigenis; peritheciis epiphyllis, subglobosis punctiformibus, minutissimis, sparsis, copiosis, 50-100 μ . diam., innato-erumpentibus, laxe cellulosis, ochraceo-umbrinis, poro 15-20 μ . diam. pertusis; sporulis ellipsoideis vel longe ovatis, 5,5-6,5 = 2-3, granulosis, hyalinis.

Hab. in foliis *Erythroxyli Cocæ* in *Bolivia*.

126. **Phyllosticta carniolica** Voss Mat. Pilzk. IV, p. 18, f. 8. — Pe- 4987
ritheciis epiphyllis, minutissimis, atris, gregariis, conicis in macula expallescens, plerumque marginali, fusco-purpureo-cincta; sporulis ovoideis v. piriformibus, 2-guttulatis, hyalinis, 9-10 = 6 (ex icone).

Hab. in foliis *Daphnes Blagayanæ* pr. *Billichgratz Carniolie*.

127. **Phyllosticta Hamamelidis** Peck 39 Rep. p. 44. — Maculis ma- 4988
ximis, dimidium folium interdum occupantibus, irregularibus, angulosis, supra rubenti-brunneis, subtus pallidioribus; peritheciis minutissimis, 100 μ . lat., amphigenis, nigris; sporulis late ellipsoideis, hyalinis, 12,5-15 = 8,5-10, sæpe ample 1-guttatis.

Hab. in foliis vivis *Hamamelidis virginianæ*, *Day Americæ borealis*.

128. **Phyllosticta Staphyleæ** Dearn. Proc. Acad. Phil. 1891, p. 77. — 4989
Maculis vinosis, dein brunneis, junioribus purpureo-marginatis; peritheciis sparsis, 90-145 μ . diam., innatis, initio vinosis, dein obscurioribus, annulo epidermico elevatulo cinctis; sporulis oblongo-ellipsoideis, hyalinis, dein brunneolis, 6-7 = 2,7-3,3.

Hab. in capsulis vivis *Staphyleæ trifoliæ*, *London Canada (DEARNES)*.

129. **Phyllosticta Catalpæ** Ell. et Mart. in *Am. Nat.* 1884, p. 189. — 4990
Maculis pallide brunneis, circularibus, 5-7 mm. diam., margine obscuro; peritheciis parcis, sparsis, sæpe sterilibus, brunneis, lenticularibus, innatis, epiphyllis, 112 = 84; sporulis subhyalinis, ovatis, 5-7 = 2,5-4,5.

Hab. in foliis *Catalpæ bignonioidis*, West Chester Americæ borealis.

130. **Phyllosticta Thunbergii** Wint. in Hedw. 1885, 1. — Peritheciis 4991

epiphyllis, gregariis, secus nervos tenuiores dispositis, macula magna, indeterminata et irregulari, pallidissime flava, centro obscuriori insidentibus, hemisphæricis, atris, nitidis, membranaceis, 150-160 μ . latis; sporulis ovatis, subpiriformibus seu late ellipticis, plerumque subirregularibus, hyalinis, intus granulosis, 12-14 \approx 8-9.

Hab. ad folia viva *Cocculi Thunbergii* prope Tokio Japan (KECK).

131. **Phyllosticta ivæcola** E. et E. in Journ. of Myc. 1886, p. 37. — 4992

Maculis amphigenis, parvis, 1-2 mm. diam., albescentibus, margine brunneo, vix elevatulo cinctis; peritheciis epiphyllis, punctiformibus, 75-90 μ . diam., nigris; sporulis ovato- vel oblongo-ellipsoideis, hyalinis, 4-5 \approx 1,5.

Hab. in foliis vivis *Ivæ frutescentis*, Plaquemines Americæ borealis.

132. **Phyllosticta Gordoniæ** E. et E. in Jour. of Myc. 1885. — Ma- 4993

culis atro-brunneis, siccis, apicem et margines foliorum occupantibus; peritheciis brunneo-atris, subglobosis, innatis, leniter erumpentibus, amphigenis, 120-140 μ . diam.; sporulis hyalinis, oblongis, nucleatis, 12 \approx 3.

Hab. in foliis vivis *Gordoniæ Lasianthi* in Amer. bor.

133. **Phyllosticta Lagerstrœmiæ** E. et E. Journ. Myc. 1888, p. 101. 4994

— Apicem emortuum foliorum occupans; peritheciis amphigenis, punctiformibus, nigris, gregariis, erumpentibus, 100-111 μ . diam.; sporulis ovoideis, granulosis, 6-8 \approx 4-5.

Hab. in foliis viventibus *Lagerstrœmiæ indicæ*, Point à la Hache, Louisiana Amer. bor. — *Ph. terminali* affinis sed sporulis minoribus.

134. **Phyllosticta Meliæ** Ell. et Ev. Journ. of Mycol. 1888, p. 9. — 4995

Peritheciis amphigenis, lenticularibus, erumpentibus 150 μ . diam.; sporulis oblongo-fusoideis, 2-guttatis, hyalinis, 5-8 \approx 1,5.

Hab. in foliis vivis *Meliæ Azedarach*, Louisiana Amer. bor. (LANGLOIS). — Maculæ marginales, arescendo albentes. A *Ph. Azedarachis* satis diversa.

135. **Phyllosticta Aizoi** Cooke in Grevillea XIV, pag. 40. — Epiphyl- 4996

la; maculis parvis, suborbicularibus, brunneis, obscure marginatis; peritheciis minutis, membranaceis, brunneis, immersis; sporulis ellipsoideis, continuis, hyalinis, 3 \approx 1,5.

Hab. in foliis Sedi Aizoi, Kew London Britannicæ.

136. **Phyllosticta Opuntiae** S. et S. — Syll. III, p. 26 — var. **microspora** Cav. Fung. parass. V, n. 118. — Peritheciis amplioribus, 200-250 μ . diam., contextu minute celluloso brunneo; sporulis ovoideis, perexiguis, hyalinis, 2,5-3,5 μ . long.; basidiis brevibus filiformibus. 4997

Hab. in cladodiis Opuntiae Fici-indicæ, Palermo Siciliae (Ross).

137. **Phyllosticta cycadina** Pass. Diagn. F. N. III, n. 64. — Peritheciis in macula fusco-cincta sparsis v. subgregariis, globosis, atris, per epidermidem erumpentibus, cellulis grandiusculis, fuscis, non radiatis contextis, ostiolo punctiformi; sporulis minutissimis, bacillaribus, hyalinis, 2,5 = 0,5-0,7. 4998

Hab. in foliis Cycadis revolutæ in horto botanico, Parma Ital. bor. — A *Leptothyrio Cycadis* peritheciis crassioribus epidermidem sublevantibus facile distinguenda.

138. **Phyllosticta Ginkgo** Brun. Liste Sphærops. pag. 7. — Peritheciis amphigenis, subconfertis et hinc inde maculas minutas formantibus, punctiformibus, atris; sporulis minutis, ovoideis, hyalinis, 3-4,5 = 2. 4999

Hab. in foliis delapsis Ginkgo bilobæ, Rochefort Gallicæ.

II. In Dicotyledoneis herbaceis.

139. **Phyllosticta fatiscens** Peck 40 Rep. p. 58. — Maculis majusculis, suborbicularibus, pallidis, lineis 1 v. pluribus elevatis, concentricis notatis, margine a folio partim vel omnino rimoso-secedentibus; peritheciis minutis, 100 μ . diam., epiphyllis, primo pallidis, dein brunneolis; sporulis oblongis, rectis v. leniter curvis, 6-10 = 3-4. 5000

Hab. in foliis vivis Nupharis advenæ, Argusville, Schoharie county Amer. bor.

140. **Phyllosticta Orontii** Ell. et M. — Syll. III, pag. 59. — Var. **advena** E. et E. Journ. Myc. 1889, p. 146. — Maculis subellipsoideis, 1-1,5 cm. diam., pallide flavis, plus minus concentricè corrugatis, margine angusto, definito, subelevato cinctis, centro definito marginato et pallidiore tantum peritheciigeris; peritheciis epiphyllis, incatis, atris, subprominulis; sporulis oblongis, utrinque obtusis, 5-8 = 2,5-3. 5001

Hab. in foliis Nupharis advenæ, Canada Amer. bor. (J. DEARNESS). — Verisimiliter vix v. non diversa a præcedenti.

141. **Phyllosticta Sanguinariæ** Winter in Journ. of Myc. 1885. — 5002

Maculis sparsis, rotundatis vel parum irregularibus, determinatis, arescendo griseis vel albidis, margine distincto, fusco-purpureo, ambitu linea elevata, fusco-atra limitatis, area indeterminata, lata, fuscidula circumdatis, 1-5 mm. latis; peritheciis epiphyllis, gregariis, erumpentibus, punctiformibus, globosis, atris, 100 μ . diam.; sporulis numerosissimis, elliptico-oblongis, sæpe uno apice parum attenuatis, hyalinis, 5-7 \approx 1,5-2,5.

Hab. ad folia viva Sanguinariæ canadensis, Missouri in Amer. bor.

142. **Phyllosticta Trollii** Trail Trans. Crypt. Scot. 1889, p. 43. — 5003

Peritheciis hypophyllis, nigris, membranaceis, depresso-globosis, 120-130 μ . diam., confertis, in maculis brunneis irregularibus, sæpius venis limitatis sitis; sporulis copiosissimis, minutis, cylindraceis 4 \approx 1, utriusque truncatis, hyalinis.

Hab. in foliis Trollii europæi, Hell's Glen Scotiæ.

143. **Phyllosticta Hamadryadis** Speg. F. Fueg. n. 369. — Maculis 5004

majusculis indeterminatis, superne sordide fuscescentibus, inferne subcinerescentibus; peritheciis hypophyllis in maculis laxe gregariis, e globoso lenticularibus 90-120 μ . diam., epidermide velatis, tenui-membranaceis, ostiolo minutissimo vix papillulatis, contextu grosse parenchymatico olivaceo; sporulis cylindraceis vel elliptico-elongatis utrinque obtusiusculis 2-4 \approx 1 et sæpe 1-guttulatis, rectis vel curvulis, hyalinis.

Hab. in foliis languidis vel emortuis Hamadryadis magellanicæ in summis montibus prope Port Cook in Staten Island Fuegiæ.

144. **Phyllosticta corrodens** Passer. Diagn. F. N. III, n. 46. — Ma- 5005

culis vagis, repentibus, griseis, fusco-cinctis, mox erosis; peritheciis epiphyllis punctiformibus atris; sporulis oblongo-ellipticis ad polos obscure nucleatis, integris, hyalinis, 7,5 \approx 2,5.

Hab. in foliis vivis Clematidis Vitalbæ, Vigheffio prope Parma Ital. bor.

145. **Phyllosticta bacteriosperma** Passer. Diagn. F. N. III, n. 47. — 5006

Peritheciis hypophyllis punctiformibus tectis, in maculis irregularibus angulosis fuscis sparsis; sporulis minimis, bacillaribus, æqualibus, hyalinis, 2-2,5 μ . longis.

Hab. in foliis Clematidis Vitalbæ, Vigheffio prope Parma Ital. bor., sociâ *Septoriâ Clematidis*.

146. **Phyllosticta atro-zonata** Voss Mat. Pilz. Krains V. pag. 230, 5007

f. 4. — Maculis cinereis, centro nigris, peripherice zonis 3-4 atris cinctis, orbiculatis vel ellipticis, 1-2,5 cm. lat., epiphyllis; peritheciis punctiformibus, circinantibus, globosis, nigris; sporulis globo-ellipsoideis, sæpe 1-3-guttatis, chlorino-hyalinis, 3-5,5 \approx 2-3.

Hab. in foliis subviviis Hellebori viridis et altifolii, Podnart Carniolæ super.

147. **Phyllosticta helleboricola** C. Mass. Contr. Mic. Ver. p. 81, t. 1, 5008

f. 6. — Peritheciis hypophyllis, subsphæricis, punctiformibus, pertusis, 70-100 μ ., sub epidermide filamentis mycelicis arachneoso-connexis, in maculis amphigenis, aridis, angulosis, interdum confluentibus in pagina superiore foliorum albicantibus, disseminatis; sporulis minutissimis, hyalinis, subbacillaribus, 3-5 \approx 1-1,5 μ ., utrinque vix subincrassato-obtusis.

Hab. in foliis languidis Hellebori viridis in Vallecula dell'Orco prope Cogolo et in selva di Progno agri veronensis. — A *Phyll. helleborella* satis distincta.

148. **Phyllosticta Commonsii** Ell. et Ev. Journ. Myc. 1889, p. 146. 5009

— Maculis pallide flavidis, definitis, 3-4 mm. diam.; peritheciis minutis, 75-80 μ . lat.; sporulis oblongis vel ellipsoideis, fumoso-hyalinis; 4-8- raro 6-7 \approx 2-2,5.

Hab. in foliis Pæoniæ, Wilmington, Del. Amer. bor. — Differt a *P. Pæoniæ* maculis definitis, peritheciis sporulisque minoribus.

149. **Phyllosticta Moutan** Passer. Diagn. F. N. III, n. 48. — Maculis 5010

fusco-atris, subdiscoideis vel oblongis; peritheciis sparsis, superficialibus, punctiformibus, fuscis; sporulis ellipticis, hyalinis, circiter 4 \approx 2,5.

Hab. in foliis languidis Pæoniæ Moutan, Vigheffio pr. Parma Ital. bor.

150. **Phyllosticta baldensis** C. Mass. Contr. Mic. Ver. p. 82, t. 1, 5011

f. 7. — Peritheciis numerosissimis, minutis, nigris, globulosis, vix prominulis, 60-80 μ ., hypophyllis, epidermide velatis, dein erumpentibus, ostiolo pertusis, in maculis amphigenis, plus minusve amplis, irregularibus, internerviis, fuscis, dense disseminatis; sporulis minutissimis, continuis, breviter bacillaribus, 3-6 \approx 1,5, utrinque (vix subincrassatis) obtusis.

Hab. in pag. inf. foliorum Pæoniæ peregrinæ in M. Baldo prope Verona. — A *Phyll. Pæoniæ* omnino diversa.

151. **Phyllosticta Libertæ** Sacc., F. Ard. n. 145, *Coniosporium Vio-* 5012

læ Lib. Crypt. II, n. 148, ex parte (1832). — Peritheciis minutis,

globosis, atris, in maculam orbicularem atram stipatis, poro pertusis, 80-90 μ . diam.; sporulis ellipsoideis perexiguis, 1-1,5 \approx 0,7-1, hyalinis.

Hab. in pag. sup. foliorum subvivorum *Violæ odoratæ* in Arduennis.

152. **Phyllosticta Libertiana** Sacc. et March. in Rev. Myc. 1885, *Co.* 5013
niosporium Violæ Lib. ex p. — Peritheciis globosis, subastomis, atris, minute cellulosis, 60-70 μ . diam., dense gregariis; sporulis ellipsoideis, continuis, hyalinis, 3-4 \approx 2-2,5.

Hab. in foliis *Violæ odoratæ* in Belgio.

153. **Phyllosticta Saniculæ** Brun. Champ. env. Saint. p. 336. — *Ma-* 5014
culis irregularibus, brunneis; peritheciis sparsis, punctiformibus, nigris; sporulis ovoideis, oblongis, 6,5-7 \approx 2,5, hyalinis.

Hab. in foliis *Saniculæ europææ*, Pessines, Saintes Galliæ.

154. **Phyllosticta Chærophylli** C. Mass. Contr. Mic. Ver. p. 83, t. I, 5015
fig. 8. — Peritheciis hypophyllis, globosis, immersis, ostiolo vix prominulis, minutis, circiter 100 μ ., nigro-carbonaceis, in maculis angulosis, nigris dense aggregatis sæpeque confluentibus; sporulis subcylindræis, botuliformibusve, hyalinis, utrinque obtusis, 3-6 \approx 1,5-2.

Hab. in foliis *Chærophylli hirsuti* pr. Campofontana agri veronensis. — *Affinis Ph. Laserpitii.*

155. **Phyllosticta Umbellatarum** Rab. F. Eur. n. 1262 (nomen). 5016

156. **Phyllosticta Trailii** Sacc. *Phyllosticta Geranii* Trail Fung. Hard. 5017
p. 493 (1889). — Maculis hypophyllis, effusis, brunneis; peritheciis sphæricis, subcutaneis, vix papillatis, 60-80 μ . diam., tenuibus, pallide brunneis; sporulis ellipsoideis, 2-2,5 \approx 0,7-1.

Hab. in foliis *Geranii silvatici*, Simodal Norvegiæ.

157. **Phyllosticta Geranii** E. et E. Journ. Myc. 1887, p. 130. — *Ma-* 5018
culis amphigenis, parvis, 1-1,5 mm. lat., rotundis v. subangularibus, supra albidis, subtus rubiginosis, margine angusto, saturatius colorato, subelevato cinctis; peritheciis paucis, punctiformibus, nigris, erumpentibus, plerumque epiphyllis; sporulis subellipsoideis v. subovoideis, hyalinis, 2,5-3 \approx 1.

Hab. in foliis viventibus *Geranii caroliniani*, Point à la Hache, Lousiana Amer. bor. (LANGLOIS).

158. **Phyllosticta Ipomœæ** E. et K. Journ. Myc. 1887, p. 102. — *Ma-* 5019
culis amphigenis rubiginoso-brunneis, suborbicularibus, 2-4 mm. diam., anguste atro-marginatis; peritheciis sparsis, immersis, supra prominulis; sporulis ellipsoideis, 2-guttatis, hyalinis, 4-6 \approx 2,5-3.

- Hab.* in foliis *Ipomœæ panduratæ*, Mound City Kansas Amer. bor. (W. A. KELLERMAN).
159. **Phyllosticta Desmodii** Ell. et Ev. Journ. Myc. 1889, p. 146. — 5020
Maculis amphigenis, suborbicularibus vel irregularibus, 2-5 mm. diam., sæpe plus minus confluentibus, atro-brunneis, dein centro dealbatis, demum plus minus rimulosis; sporulis oblongo-ellipsoideis, hyalinis, $3,5 \approx 1,5-2$.
- Hab.* in foliis *Desmodii*, Walworth County, Wis. Amer. bor. (Doct. J. J. DAVIS).
160. **Phyllosticta astragalicola** Massal. Bot. Centr. 1890, n. 26, p. 386. 5021
— Maculis sordide olivaceis, dein expallentibus, brunneo-cinctis; peritheciis $60 \approx 80 \mu$. lat., punctiformibus, amphigenis, nigris, ostiolo pertusis; sporulis breviter oblongis, eguttatis, hyalinis, continuis, utrinque rotundatis, $3-4 \approx 1-1,5$.
- *Hab.* in foliis languentibus *Astragali glycyphylloidis*, Ferrara Ital. bor.
161. **Phyllosticta Trifolii** Rich. Champ. Marn. n. 1549. — Maculis 5022
et peritheciis non descriptis; sporulis ovoideis 2-3 μ . longis.
- Hab.* in foliis *Trifolii repentis*, socio *Polythrincio Trifolii* St. Amand Marne.
162. **Phyllosticta Ormocarpi** Bres. Rev. Myc. 1891, p. 68. — Maculis 5023
amphigenis albis rufo-lateritio-cinctis, circularibus vel oblongis; peritheciis epiphyllis, laxe gregariis, parcis, nigris, subglobosis vel lenticularibus, 100-150 μ . diam.; sporulis obovatis, hyalinis, $3-4 \approx 1,5$.
- Hab.* in foliis *Ormocarpi sesamoidis* in ins. St. Thomé (MOLLER).
163. **Phyllosticta Silenes** Peck 43 Rep. pag. 26. — Maculis magnis, 5024
dimidium folium interdum occupantibus, pallidis; peritheciis amphigenis v. hypophyllis, minutis, punctiformibus, nigris, 100-125 μ . lat.; sporulis oblongis v. cylindræis, hyalinis, $10-12,5 \approx 3,5-5$.
- Hab.* in foliis vivis *Silenes antirrhinæ*, Copake Iron Works Amer. bor.
164. **Phyllosticta Zahlbrukneri** Bäuml. Crypt. Presb. I, p. 7. — Macu- 5025
lis subcircularibus, arescendo dealbatis, primo sanguineo demum fusco-marginatis; peritheciis epiphyllis, sparsis, lenticularibus, 150-180 μ . diam., contextu parenchymatico, dilute fuligineo, ostiolo manifesto; sporulis oblongis, $8-12 \approx 2-3$, utrinque rotundatis, hyalinis.
- Hab.* in foliis vivis *Silenes nutantis*, Gemsenberg pr. Pressburg Hungariæ.

165. **Phyllosticta Cephalariae** Wint. in Hedw. 1885, I. — Peritheciis 5026
in maculis albidis, margine atro-purpureo, latiusculo cinctis, rotundatis, angulatis vel plus minus irregularibus, demum interdum confluentibus, amphigenis, gregariis, punctiformibus, globosis, fuscis verticem versus obscurioribus, poro pertusis, demum late apertis, 60-80 μ . latis; sporulis exiguis, bacillaribus, utrinque acutiusculis unicellularibus, hyalinis, 4-5 = 1.

Hab. in foliis vivis Cephalariae attenuatae ad montem Boschberg prope Somerset-East Africae (MAC-OWAN).

166. **Phyllosticta Scorzonerae** Pass. in Brun. Champ. nouv. VI, p. 2. 5027
— Peritheciis hypophyllis, punctiformibus, aggregatis, maculas minutas brunneolas formantibus; sporulis breve bacillaribus, rectis curvulisve, hyalinis, 8-10 = 2.

Hab. in foliis languidis Scorzonerae humilis, Pessines Galliae.

167. **Phyllosticta dahliaecola** Brun. Champ. Saint. 1887, pag. 429. — 5028
Maculis suborbicularibus, magnis, brunneis, dein expallentibus; peritheciis lenticularibus, tectis, nigris; sporulis ovoideis vel ovoideo-oblongis, hyalinis, 8-9 = 2,5.

Hab. in foliis languidis Dahliae cultae, Pessines Galliae.

168. **Phyllosticta Antennariae** Ell. et Ev. Journ. of Myc. 1888, p. 9. 5029
— Maculis epiphyllis, atro-purpureis, centro expallente, subconfluentibus; peritheciis parcis, epiphyllis; sporulis ovoideis, 7 = 3.

Hab. in foliis vivis Antennariae plantaginifoliae, Falkland Del. Amer. bor. (A. COMMONS).

169. **Phyllosticta Petasitidis** Ell. et Ev. Proc. Ac. Phil. 1891, p. 76. 5030
— Maculis orbicularibus, rubro-brunneis, subinde centro pallidioribus, 0,5-1 cm. diam., concentricè rugulosis, indefinite marginatis; sporulis oblongo-ellipsoideis hyalinis, 5-8 = 2,5-3.

Hab. in foliis Petasitidis palmatae, London Canada (DEARNESS).

170. **Phyllosticta abortiva** E. et K. in Journ. of Myc. I, p. 4. — Ma- 5031
culis brunneis, suborbicularibus, $\frac{1}{4}$ -1 cm. diam., margine fusco, leniter elevato; peritheciis innatis, perforatis, minutis, atris et sparsis in maculis; sporulis..... imperfecte evolutis.

Hab. in foliis Menispermici canadensis, Manhattan Americae borealis.

171. **Phyllosticta Menispermici** Passer. Diagn. F. N. III, n. 50. — Ma- 5032
culis vagis, angulosis, venis limitatis, superne fuscis, inferne griseis; peritheciis hypophyllis, gregariis, minutissimis, globosis, tectis,

membranaceis plus minus cærulescentibus; sporulis ellipticis, continuis hyalinis, ad polos plus minus perspicue nucleatis, rectis, 5-6 \approx 3.

Hab. in foliis languidis *Menispermii canadensis* in horto botanico Parma Ital. bor.

172. **Phyllosticta gossypina** Ell. et M. in Journ. of Myc. 1886, p. 129. 5033

— Maculis brunneolis, pallidis vel vix albis, irregularibus, 3-5 mm. latis, margine rufo-purpureo, lato cinctis, sæpe foliorum decolorantibus; peritheciis nigris, subglobosis, collapsis, membranaceis innato-erumpentibus, vix prominulis, epiphyllis, sparsis, in maculis parvis, 65-95 μ . diam.; sporulis hyalinis, ovoideis, utrinque obtusis, 2,5-3,5 \approx 1,5-2,5.

Hab. in foliis emortuis *Gossypii herbacei* in Amer. bor. (PROF. L. F. SCRIBNER).

173. **Phyllosticta althæicola** Pass. Fung. Gall. novi, in Jour. d'Hist. 5034

nat. 1885, n. 4, p. 54. — Maculis determinatis, subcircularibus vel irregularibus, sæpe confluentibus, arescendo expallentibus, non marginatis; peritheciis sparsis, minimis, nigris; sporulis oblongis, utrinque rotundatis, binucleatis, hyalinis, 7-10 \approx 3.

Hab. in foliis *Althææ officinalis* prope Brie-sous-Mortagne (Charente-Inferieure) in Gallia (BRUNAUD).

174. **Phyllosticta Pentastemonis** Cooke in Grevillea XIV, p. 90. — 5035

Maculis irregularibus, brunneis, indistincte marginatis; peritheciis subimmersis, sæpe concentrice dispositis, subinde sparsis, punctiformibus, atris; sporulis ovoideo-oblongis vel ellipsoideis, hyalinis, 5 \approx 3.

Hab. in foliis *Pentastemonis grandiflori*, Kew Britanniae.

175. **Phyllosticta tremniacensis** C. Mass. Contr. Myc. Ver. p. 83, t. II, 5036

f. 9. — Peritheciis epiphyllis, minutis, globoso-conicis, nigris, 60-90 μ ., semiimmersis, erumpentibus, ostiolo perviis, in areolis exaridis, suboblongis, haud discolori-marginatis, disseminatis; sporulis minutissimis, utrinque obtusis, breviter bacillaribus, 2,5-5 \approx 1-1,5.

Hab. in foliis languidis *Digitalis luteæ* prope Tregnago agri veroneensis.

176. **Phyllosticta Venziana** Mart. in N. Giorn. bot. it. 1888, p. 396. — 5037

Maculis parvis rotundatis, griseis; sporulis oblongis, utrinque rotundatis, 12 \approx 5, hyalinis.

Hab. in foliis vivis *Lamii*, in agro bellunensi Ital. bor.

177. **Phyllosticta Lycopi** Ell. et Ev. Proc. Ac. Phil. 1891, p. 76. — 5038

Maculis amphigenis, tenuibus, albis, griseo-variegatis, dein deciduis, sæpe confluentibus, 1-3 mm. diam., anguste nigro-limitatis; peritheciis epiphyllis, sublenticularibus, nigris, pertusis, 80-100 μ . diam., parcis; sporulis copiosis ellipsoideis, hyalinis, 2-guttatis, 2,5-3 \approx 1,5.

Hab. in foliis *Lycopi canadensis*, London Canada (I. DEARNESS).

178. **Phyllosticta Labiatarum** Rab. F. Eur. n. 1260 (nomen; n. v.). 5039

179. **Phyllosticta Melissophylli** Passer. Diagn. F. N. III, n. 60. — Ma- 5040

culis amphigenis discoideis vel angulosis arescendo albido-griseis, halone fusco-rubiginoso circumdatis; peritheciis epiphyllis subgregariis punctiformibus tectis; sporulis oblongis, utrinque nucleatis et rotundatis, integris, hyalinis, 7,5-10 \approx 4,5.

Hab. in foliis *Melittis Melissophylli*, Collecchio pr. Parma Ital. bor.

180. **Phyllosticta Calaminthæ** Ell. et Ev. Journ. Myc. 1889, p. 145. 5041

Maculis amphigenis, definitis, rotundis, 1-2 mm. diam., subnigris, demum albidis, tenuibus; peritheciis paucis, lenticularibus, epiphyllis, supra pertusis, 80 μ . diam.; sporulis ellipsoideis, hyalinis, 2-guttatis, 3,5-4,5 \approx 2-2,5.

Hab. in foliis *Calaminthæ Clinopodii*, London, Canada Amer. bor.

181. **Phyllosticta Lycopersici** Peck 40 Rep. p. 57. — Maculis ma- 5042

gnis, suborbicularibus, cinereis; peritheciis minutis, brunneis vel nigrescentibus, poro 1 v. subinde 2 pertusis; sporulis copiosis, oblongis v. ellipsoideis, 6-7,5 \approx 2,5-3.

Hab. in fructu *Lycopersici* esculenti, Menands, Albany county Amer. bor.

182. **Phyllosticta phytolaccicola** Brun Miscell. mycol. p. 15. — Ma- 5043

culis parvis, rotundatis, pallide brunneis, anguste brunneo-marginatis; peritheciis parum numerosis, minutissimis, nigris; sporulis ovoideis, hyalinis, 5 \approx 2,5.

Hab. in foliis *Phytolaccæ acinosæ*, Rochefort Gallia.

183. **Phyllosticta Epilobii** Brun Champ. env. Saint. p. 336. — Macu- 5044

lis rotundis, parvis, albidis, margine pallide brunneo cinctis; peritheciis sparsis, tectis, dein erumpentibus, punctiformibus, albidis; sporulis oblongis, 2-guttatis, hyalinis, 7 \approx 2,5.

Hab. in foliis *Epilobii hirsuti*, Saintes Gallia.

184. **Phyllosticta Mitellæ** Peck 39 Rep. p. 44. — Maculis suborbicu- 5045

laribus, brunneis; peritheciis minutis, 62,5-75 μ . lat., amphigenis, nigris; sporulis subglobosis, hyalinis, 5-6,5 μ . long.

Hab. in foliis vivis *Mitellæ diphyllæ*, Newburgh Americæ borealis.

185. **Phyllosticta Lagenariæ** Passer. Diagn. F. N. III, n. 58. — Peritheciis epiphyllis, minutis gregariis, in maculis sordidis discoideis v. irregularibus mox laceris; sporulis oblongis, utrinque rotundatis rectis, eguttulatis, hyalinis, 10-12,5 \times 5. 5046

Hab. in foliis languidis *Lagenariæ vulgaris* in horto botanico Parma Ital. bor.

186. **Phyllosticta orbicularis** E. et E. Journ. Myc. 1888, pag. 10. — Maculis orbicularibus, magnis, 3 cm. lat., cinereo-brunneis, anguste atro-marginatis; peritheciis plerumque epiphyllis, prominentibus, circ. 100 μ . diam., supra late pertusis; sporulis subacute ellipsoideis, hyalinis, 5-6 \times 2-2,5. 5047

Hab. in foliis *Cucurbitæ Peponis*, Faulkland, Del. Amer. bor. — Superficies folii circa maculas flavescens. Differt a *Ph. Cucurbitacearum* sporulis non incurvis.

187. **Phyllosticta Pirolæ** Ell. et Ev. Journ. Myc. 1889, pag. 145. — Maculis amphigenis, rubenti-brunneis, orbicularibus, margine angusto, subelevato cinctis, 1,5-2 mm. diam.; peritheciis epiphyllis, erumpentibus, globosis, 100-112 μ . diam.; sporulis ovato-globosis, hyalinis, 5-6 μ . long. 5048

Hab. in foliis vivis *Pirolæ rotundifoliæ*, Centreville, Del. Amer. bor. (A. COMMONS).

188. **Phyllosticta Stephanotidis** Grove in Journ. of Bot. 1886. — Maculis rotundatis vel irregularibus, albidis, linea tenui, fusco-nigra cinctis; peritheciis epiphyllis, numerosis, sparsis, atris, lenticularibus, depresso-papillatis, $\frac{1}{4}$ mm. diam., epidermide ostiolo pertusâ; sporulis oblongis, utrinque rotundatis, 12-16 \times 4-5, hyalinis. 5049

Hab. in foliis *Stephanotidis*, Sutton Warwickshire Britannia. — A *Ph. Asclepiadearum* peritheciis sporulisque multo majoribus differt.

189. **Phyllosticta Apocyni** Trelease Prelim. List. par. Fungi of Wis. pag. 17 (Nov. 1884), *Ph. Apocyni* Ellis et Mart. New North Am. Fungi in Am. Nat. Dec. 1884, p. 1264. — Epiphylla, in maculis rotundatis, 1-2 mm. diam., margine vix tumidulo, brunneo; peritheciis definite cibus subglobosis, erumpentibus, sæpe centrum macularum occupantibus; sporulis globosis v. ovatis, 7-9 μ . diam., granuloso-farctis, iis *P. Asclepiadearum* latioribus. 5050

Hab. in foliis *Apocyni cannabini*, Wisconsin, New Jersey in America bor.

190. **Phyllosticta Molluginis** Ell. et Halst. Journ. Myc. 1890, p. 33. 5051
— Peritheciis amphigenis, sparsis, nigris, prominentibus, 80-100 μ . diam.; sporulis oblongis v. ellipsoideo-oblongis, hyalinis, 8-10 μ . \approx 3-4.

Hab. in foliis Molluginis verticillatæ, New Brunswick, N. J. Amer. bor.

191. **Phyllosticta Diapensiæ** Pat. in Rev. Myc. 1884, p. 181. — Ma. 5052
culis epiphyllis, albidis; peritheciis minutis, globulosis, nigris; sporulis numerosissimis, hyalinis, tenuissimis, 3 \approx 1.

Hab. in foliis Diapensiæ, Yunnan Sinarum (AB. DELAVAY).

192. **Phyllosticta Dodecanthæ** Trelease Paras. Fungi Wiscos. p. 16. 5053
— Maculis circularibus, brunneis, circiter 3 mm. diam.; sporulis hyalinis, ovoideo-oblongis, sæpe subsphæroideis, eguttulatis, 3,5-7 \approx 2-5.

Hab. in foliis Dodecanthæ Meadiæ, Stoughton Amer. bor.

193. **Phyllosticta Mentzelii** Ellis et Kellerm. in Journ. of Myc. 1886, 5054
p. 4. — Maculis amphigenis, pallidis, definitis, $\frac{1}{4}$ - $\frac{1}{2}$ cm. diam.; peritheciis immersis, sæpe epiphyllis, fere 100 μ . diam., atris; sporulis oblongis, 5-7 \approx 2 $\frac{1}{2}$ -3.

Hab. in foliis vivis Mentzelii nudæ, Kansas Amer. bor.

194. **Phyllosticta japonica** Fautr. Rev. Myc. 1891, p. 9. — Maculis 5055
aridis irregularibus; peritheciis exiguis, 100 μ . diam., pallidis dein griseis, sparsis; sporulis oblongis, 2-guttatis, 8 \approx 2,5-3.

Hab. in foliis Humuli japonici in horto Noidan Côte d'Or Galliæ.

195. **Phyllosticta Humuli** S. et S. — Syll. III, p. 53. — Var. **major** 5056
E. et E. Journ. Myc. 1889, p. 145. — Maculis sordide rubiginoso-albis, dein albescentibus, 2-3 mm. diam., suborbicularibus, anguste elevato-marginatis; peritheciis epiphyllis, innatis, flavidis, 80-90 μ . lat.; sporulis 1-3-guttatis, 12-16 \approx 4-5.

Hab. in foliis Humuli, Jowa Amer. bor. (A. S. HITCHCOCK).

196. **Phyllosticta Gunneræ** Speg. F. Fueg. n. 368. — Maculis nullis 5057
v. pallescentibus, indeterminatis; peritheciis hinc inde laxe gregariis, e lenticulari conoideis, 80-100 μ . diam., prominulis, atris, glabris, ostiolo impresso, latiusculo, 10 μ . diam., circa ostiolum subcarbonaceis, ceterum membranaceis, contextu grosse parenchymatico; sporulis cylindræis, utrinque subtruncato-rotundatis, 2,5-4 \approx 1, ac sæpe minute 1-guttulatis, rectis v. curvulis, hyalinis.

Hab. ad folia languida Gunneræ magellaniciæ in herbosis prope Agaia in Hoste island, Fuegiæ.

197. **Phyllosticta Chamissoæ** Speg. Guar. I, p. 141. — Maculis am- 5058
phigenis orbicularibus, 5 mm. diam., arescenti-pallidis, zona fusca
v. ferruginea cinctis; peritheciis tectis, globoso-lenticularibus, atris,
dein collabentibus, 150-200 μ . diam., pertusis, contextu minute cel-
lulosis; sporulis ellipsoideis v. ovoideis, 9-12 \approx 3-3,5, basi curvulis,
acutis, hyalinis.

Hab. in foliis vivis Chamissoæ celosioïdis prope Guarapi
Brasiliæ.

198. **Phyllosticta Amaranthi** E. et K. in Jour. of Myc. I, pag. 4. — 5059
Maculis roseo-brunneis (2-4 mm.) margine atro cinctis; perithe-
ciis 6-12 in quaque macula, epiphyllis, erumpentibus, amplis; spo-
rulis oblongo-ellipticis, 2-nucleatis, 9-11 \approx 3-5.

Hab. in foliis Amaranthi retroflexi, Garden City Ame-
ricæ borealis.

199. **Phyllosticta Tokutaroi** Speg. in Rev. Myc. 1886, pag. 183. — 5060
Maculis sparsis, solitariis, irregulariter orbicularibus, parvulis, 2-3
mm. diam., centro pallescentibus, areola sordide intenseque casta-
neo-fusca, indeterminata, latiuscula cinctis; peritheciis paucis, pro-
minulo-subexsertis, globoso-depressis, 257 μ . d., atris, glabris v. sub-
papillosis, ostiolo parum manifesto, in senectute lacero-dehiscente,
coriacellis, contextu sinuoso-parenchymatico, olivaceo-atro, subpel-
lucido donatis; basidiis fasciculatis, obclavato-elongatis, 25 \approx 2-3,
hyalinis, monosporis, continuis; sporulis ellipticis vel ovoideis re-
ctis v. inæquilateralibus, 5-6 \approx 2-2 $\frac{1}{2}$, hyalinis.

Hab. ad folia viva Polygoni multiflori in dumetis prope
Tokio Japonica.

200. **Phyllosticta Nieliana** Roum. F. Gall. exs. n. 4469. — Maculis 5061
rubentibus, margine atro-purpureo cinctis, subrotundis v. confluendo
difformibus; peritheciis parcis, subepidermicis, minutissimis, 80-
150 μ . diam.; sporulis fusoides, continuis, 6 \approx 2.

Hab. in foliis vivis Polygoni Bistortæ Eugon, Orne Gal-
liæ (E. NIEL). — An spermogonium *Sphærellæ Polygonorum*?

201. **Phyllosticta Rhei** Ell. et Ev. Journ. Myc. 1889, p. 145. — Ma- 5062
culis plerumque marginalibus, subconfluentibus, magnis 1-2 cm.
lat., rubiginoso-brunneis, concentrice zonatis, non marginatis vel
linea subsaturatius limitatis, zona extima lata, pallide flava omni-
no cinctis; peritheciis innatis, in folio utrinque subprominulis, ma-
jusculis, 100-150 μ . diam., non copiosis; sporulis oblongo-ellipsoi-
deis, 2-guttatis, utrinque rotundatis, hyalinis, 5-7 \approx 2-2,5.

Hab. in foliis Rhei officinalis, Newfield N. J. Amer. bor.

202. **Phyllosticta Fourcadei** Sacc. *Phyllosticta Rhei* Roum. F. Gall. 5063
exs. n. 4168, nec E. et E. — Maculis subovatis, angulosis, solitariis dein confluentibus, multizonatis, rubentibus margine angustissimo saturatiore cinctis; peritheciis epiphyllis punctiformibus, nigris, parvis; sporulis oblongis, perexiguis, 1-1,5 \approx 1, hyalinis.

Hab. in foliis vivis Rhei Rhapsontici culti, Bagnères de Luchon Galliæ (CH. FOURCADE).

203. **Phyllosticta Rhei** Ell. et Ev. Proc. Acad. Phil. 1891, p. 77. — 5064
Maculis latis 1 cm. et amplius diam., rubenti-brunneis, concentricè zonatis; sporulis oblongis vel clavato-oblongis vel ellipsoideis, 2-3-nucleatis, hyalinis, 7-12 \approx 3,5-4,5.

Hab. in foliis Rhei Rhapsontici, Newfield N. J. et New Brunswick Amer. bor. (HALSTED).

III. In Monocotyledoneis.

204. **Phyllosticta Palmetto** Ell. et Ev. Journ. Myc. 1889, p. 146. — 5065
Maculis subellipsoideis, 0,5-1 cm. long., 0,25-0,5 cm. lat., pallidis, margine flavo-tincto cinctis; peritheciis amphigenis, pustuliformibus 110-150 μ diam., plumbeis, centro minute et rotunde pertusis; contextu minute parenchymatico; sporulis cylindræis, obtusis, 2-3-guttatis, hyalinis, 12-14 \approx 2,5-3.

Hab. in foliis Sabal Palmetto, sæpe sociâ *Sphærellâ sabaligenâ* (an ejus status spermogonicus?) in Louisiana (LANGLOIS) et Leland, Miss. (TRACY) Amer. bor.

205. **Phyllosticta palmicola** Cooke in Grevillea XIV, p. 90. — Ma- 5066
culis irregularibus, amphigenis, albido-cinereis, margine subelevato fusco; peritheciis subinnatis, atris, minutis, pertusis, plerumque numerosissimis; sporulis elliptico-cylindræis, hyalinis, 5 \approx 2.

Hab. in foliis Palmarum, Daintree Australiæ.

206. **Phyllosticta cocoina** Sacc. in Rev. Myc. 1885, p. 158. — Ma- 5067
culis amphigenis, subcircularibus, amœne rubro-crocatis, anguste marginatis; peritheciis paucis, punctiformibus, atris, innatis; sporulis ellipsoideis, 7-8 \approx 6-7, hyalinis, pauciguttulatis.

Hab. in foliis Cocos nuciferæ in insula Tahiti (BRUNAUD).

207. **Phyllosticta cocophila** Passer. Diagn. F. N. III, n. 63. — Macu- 5068
lis exaridis, candidis, irregularibus, oblongis, fusco marginatis; peritheciis atris, subglobosis epidermidem lacerantibus; sporulis oblongo-lanceolatis, achrois, opacis endoplasmate granuloso repletis, sterigmatibus longiusculis filiformibus fultis, 15-20 \approx 6-7,5.

Hab. in foliis Cocos flexuosæ in horto botanico Parma

Ital. bor. — Sporulis multo majoribus a *Ph. Cocos* et *Ph. cocoïna* pariter distinguenda. «Sporulæ quasi *Macrophomæ*».

208. **Phyllosticta vagans** Peck 40 Rep. p. 58. — Maculis nullis; peritheciis minutis, 75–88 μ . lat., amphigenis, numerosis, totum folium occupantibus, nigris; sporulis minutissimis, spermatoideis, 3 \approx 1. 5069

Hab. in foliis emortuis *Smilacinae racemosæ*, Corklingville Amer. bor. — Species ob sporulas minutissimas spermatoideas sat anomala.

209. **Phyllosticta potamia** Cooke in Grevillea XIV, p. 39. — Maculis pallidis, ochraceis, dein brunneis, indistincte marginatis; peritheciis præcipue in pagina inferiore, punctiformibus, atris, subinde protuberantibus, nitidis; sporulis ellipsoideis, hyalinis, 10–12 \approx 3. 5070

Hab. in foliis *Potamogetonis*, Lyndhurst, Hantg Epping Forest Britannia.

210. **Phyllosticta Danaës** Pass. in litt. Brun. in Rev. Myc. 1886, p. 140. — Maculis amplis, irregularibus vel indeterminatis, griseis dein albescentibus, margine tenui, brunneo; peritheciis amphigenis, minutis, globulosis, nigris, primum tectis; sporulis ovoideis, non guttulatis, hyalinis, 8 \approx 5. 5071

Hab. in cladodiis *Rusci racemosi* in Horto botanico Rochefort Gallia (BRUNAUD).

211. **Phyllosticta Cordyline** Sacc. et Berl. Misc. Myc, II, n. 36. — Maculis vagis, expallentibus; peritheciis crebris, epiphyllis, punctiformibus, globoso-depressis, pertusis, 60–90 μ . diam.; sporulis oblongis, 2-guttulatis, 4–5 \approx 1, hyalinis. 5072

Hab. in foliis *Cordyline terminalis*, Tambourine in Australia.

212. **Phyllosticta yuccogena** E. et E. Journ. Myc. 1887, p. 130. — Maculis amphigenis, discoideis, oblongis vel acute ellipsoideis, supra et subtus concavis, margine obtuso, elevato cinctis, 1–2 \approx 0,5 cm.; peritheciis immersis, magnis, 0,5 mm., sparsis, amphigenis, interdum subconfluentibus, epidermidem erumpentibus; sporulis irregulariter ellipsoideis et subinæquilateralibus, utrinque subacutis, hyalinis, granuloso-farctis, 18–22 \approx 7–8. 5073

Hab. in foliis *Yuccæ*, Florida Amer. bor. (W. W. CALKINS). 5074

213. **Phyllosticta Arisari** Bres. Fung. Lusit. pag. 6. — Maculis epiphyllis, subrotundis, fuscidulis; peritheciis gregariis punctiformibus globoso-conicis, subprominulis, 90–150 μ . diam.; sporulis cylindræis vel ellipticis, pallide olivaceis, guttulatis, 5–6 \approx 2,5–3.

Hab. in foliis *Arisari vulgaris*, S. Bento prope Coimbra Lusitaniæ.

214. **Phyllosticta Sagittifoliæ** Brun. Suppl. Sphæroid. p. 1. — Ma- 5075
culis subrotundis v. oblongis, ochraceis, atro-brunneo-marginatis;
peritheciis sublenticularibus, nigricantibus, minutis; sporulis oblon-
gis vel ovoideo-oblongis, rectis v. curvulis, eguttatis, hyalinis, $8 \approx 3$.

Hab. in foliis *Sagittariæ sagittifoliæ* pr. Saintes Galliæ.

215. **Phyllosticta Rostkoviæ** Speg. F. Fueg. n. 373. — Maculis nul- 5076
lis v. apicalibus, pallescentibus; peritheciis laxissime gregariis, im-
mersis, epidermide velatis e lenticulari globosis 80-90 μ . diam.,
atris, glabris membranaceo-coriacellis, ostiolo impresso minutissimo,
contextu densiuscule, parenchymatico parum distincto, fusco-atro;
sporulis cylindræis vel subfusoides utrinque acutiuscule rotunda-
tis, $3-4 \approx 0,8$, rectis v. curvulis, eguttulatis, hyalinis.

Hab. in culmis languidis *Rostkoviæ grandifloræ* in Sta-
ten island Fuegiæ.

216. **Phyllosticta bambusina** Speg. Guar. I, p. 142. — Maculis nul- 5077
lis; peritheciis adnato-superficialibus, subellipticis, 0,2-0,3 mm.
long., 0,15 mm. lat., atris, glabris, rimose inæqualiter dehiscenti-
bus, subcarbonaceo-carnosulis, indistincte parenchymaticis, atro-
fuligineis; sporulis ellipticis $10 \approx 3$, basi acutato-truncatis, 2-gut-
tulatis, hyalinis.

Hab. in foliis vivis *Bambusa* cæ, sociâ *Phyllach bambusi-
nâ*, prope Naranjo Brasiliæ.

217. **Phyllosticta Spartinae** Brun. Champ. Saint. VII, p. 4. — Ma- 5078
culis suborbicularibus, minutis, albis, brunneo cinctis; peritheciis
punctiformibus, nigris, parcis; sporulis subovoideis, hyalinis, exi-
guis, $3-3,5 \approx 2$.

Hab. in vaginis *Spartinae strictæ*, Foures prope Saintes
Galliæ.

218. **Phyllosticta Stenotaphri** Thuem. Pilz. d. Gazell. p. 5. — Peri- 5079
theciis solitariis, parcissimis, minutis, hypophyllis, conoideo-sub-
globosis, atris, semiimmersis, in macula suborbiculato-inæquali,
sat magna arescendo pallide griseo-fuscidula, late irregulariter
ochraceo-marginata; sporulis minutissimis, globulosis, 1,5 μ . diam.,
hyalinis.

Hab. in foliis languidis *Stenotaphri subulati* in nova
Guinea.

219. **Phyllosticta stomaticola** Bäuml. Myc. Not. II, p. 1. — Maculis 5080
rotundatis v. irregularibus, arescendo dealbatis, rubro-marginatis;

peritheciis semper ad stomata nidulantibus, globosis vel oblongis, 100-130 \approx 60-80, contextu laxo parenchymatico, brunneo; sporulis oblongis, lunulatis, utrinque attenuatis, 14-18 \approx 2-2,5, hyalinis, continuis.

Hab. in foliis vivis Arrhenatheri elatioris pr. Pressburg Hungariæ.

220. **Phyllosticta divergens** Sacc. F. Abyss. n. 35, f. 14. — Maculis 5081 amphigenis subcircularibus, minutis, pallide alutaceis, sæpe anguste fusco-marginatis; peritheciis epiphyllis, punctiformibus, lenticulari-globulosis, nigris, anguste pertusis; sporulis breve fusoideis, rectis, 6-8 \approx 4, nubiosis, hyalinis, basidiis brevibus conoideis suffultis, pseudoparaphysibus filiformibus, 15 \approx 5, hyalinis intermixtis.

Hab. in foliis subvivi Albizziæ anthelminticæ, Keren Abyssiniæ (PENZIG). — Socia adest *Ravenelia minima*.

221. **Phyllosticta Papayæ** Sacc. F. Abyss. n. 36. — Maculis epiphyllis, minutis, subcircularibus, albidis; peritheciis punctiformibus, nigris, pertusis, 150 μ . diam., contextu fuligineo-olivaceo, minute parenchymatico; sporulis oblongis, 2,5-3,5 \approx 1, hyalinis. 5082

Hab. in epicarpio Caricæ Papayæ, Keren Abyssiniæ (PENZIG). — Adsunt in epicarpio maculæ elevatae, eximie stellatae, albidæ nitidæ (tumores?) mihi ignotæ.

PHOMA Fr. em. Desm. — Syll. III, p. 65.

1. *In Dicotyledoneis lignosis.*

1. **Phoma Styphnolobii** Brun. Suppl. Sphæroid. p. 1. — Peritheciis 5083 sparsis v. adproximatis, globuloso-lenticularibus, brunneo-nigrescentibus, intus pallidioribus, epidermide decolorata tectis, dein vix erumpentibus; sporulis oblongo-fusoideis, hyalinis, 2-guttatis, 8 \approx 2,5-3; basidiis filiformibus, subcurvulis, sporulis, 2-3-plo longioribus.

Hab. ad ramos emortuos Styphnolobii penduli, Rochefort Galliæ.

2. **Phoma Daviesiæ** Cooke et Mass. Grev. XVIII, p. 7. — Hypophylla; peritheciis minutissimis, tectis, atris, maculas nebulosas efformantibus, conidiis ovalibus, profusis, hyalinis, 5 \approx 3. 5084

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

3. **Phoma compressa** Karst. et Har. Journ. Bot. 1850, p. 357. — Peritheciis 5085
 theciis gregariis, sæpe confluentibus, inter fibras immersis, vertice nigrescente leviter emergente, ostiolo prominulo, papillato vel compresso, sæpe nullo, atro, elongatis, rarissime rotundatis, circ. 0,2 mm. longis; sporulis fusoides v. ovoideo-elongatis, rectis, hyalinis, 8-12 \approx 2; basidiis flexuosis v. curvatis, 30 \approx 1.

Hab. in ramis cortice orbatis Cytisi Laburni in Neustria Galliae (LEBISEY). — Forte typus novi generis «*Phlyctænella*» nuncupandi et *Phlyctænæ* respondentis.

4. **Phoma spartiicola** P. Brun. Esp. Sphærops. p. 1. — Peritheciis 5086
 sparsis, tectis, vix erumpentibus, globosis, nigris; sporulis subovoideis, 2,5-3,5 \approx 0,5-2, hyalinis.

Hab. in ramulis emortuis Spartii juncei, Saintes Galliae.

5. **Phoma Herminieræ** Cooke in Grevillea XIII, p. 93. — Peritheciis 5087
 minutis dense, gregariis, cortice nidulantibus, primo cuticula stellatim rupta tectis, atris; sporulis lanceolatis, binucleatis, hyalinis, 10 \approx 3,5; basidiis simplicibus vel furcatis, elongatis, 40 μ . longis.

Hab. in cortice Herminieræ Elaphroxyli, Kew Britanniae.

6. **Phoma navicularis** Passer. Diagn. F. N. IV, n. 70. — Peritheciis 5088
 longitudinaliter crebre digestis v. sparsis, per corticem fissum v. stellatim ruptum pustuliformiter erumpentibus, globosis, atris, nucleo fusco; sporulis navicularibus, majusculis, biguttulatis, continuis, hyalinis, 10 \approx 3,5-4, basidiis bacillaribus, subæquilongis fultis.

Hab. in ramulis siccis Gleditschiæ Triacanthi, Parma Ital. bor.

7. **Phoma Julibrissin** Pass. et Roum. in Rev. Myc. 1885, p. 172. — 5089
 Peritheciis laxè gregariis vel sparsis, subglobosis, atris; sporulis cylindricis, numerosissimis, minutis, hyalinis, utrinque nucleatis, 4-5 \approx 2,5; basidiis nullis vel obsoletis.

Hab. ad legumina fracida Mimosæ Julibrissin cultæ in Horto Mimatensi Galliae (Reliquiæ PROSTII).

- *7. **Phoma Henningsii** Sacc., *Ph. Acaciæ* P. Henn. Fung. afr. p. 368, 5090
 nec Penz. et Sacc. — Peritheciis gregariis, immersis, epidermide velatis, pustulatis, pallidis; sporulis breve cylindræis v. ellipsoideis, 3,5-5 \approx 2, hyalinis.

Hab. in ramis emortuis Acaciæ etbaicæ pr. Mai Baba et Belta (Mensa) Abyssiniæ (SCHWEINFURTH).

8. **Phoma Camelliæ** Pass. Rev. myc. 1887, p. 145. — Peritheciis 5091
 sparsis, subglobosis, epidermidem sublevantibus, tectis, tandem erumpentibus, minute papillatis, atris; sporulis oblongo-ellipticis

v. subfusiformibus, apicibus plus minus perspicue guttatis, hyalinis, $5-7,5 \approx 2,5$; basidiis non visis.

Hab. in ramulis vivis v. languidis *Camelliæ japonicæ* in frigidariis *Parmæ Ital.* bor.

9. **Phoma Brunaudi** Sacc. *Phoma Camelliæ* Brun. *Miscell. Mycol.* 5092

p. 15 nec Pass. — Peritheciis sparsis, globosis, tectis, dein vix erumpentibus, nigris; sporulis ovoideis v. oblongo-ovoides, hyalinis, continuis, $5-5,5 \approx 2,5-3$; basidiis longissimis, rectis v. hamatis.

Hab. in caulibus emortuis *Camelliæ japonicæ*, *Saintes Galliæ*.

10. **Phoma Camilleæ** Cooke in Grev. XIII, p. 4. — Hypophylla; pe- 5093

ritheciis sparsis, minutis, membranaceis, vix 100μ . diam. poro pertusis; sporulis ellipticis, crasse 2-nucleatis, $10 \approx 5$.

Hab. in foliis *Camilleæ* (*Camelliæ*?) *Theæ*, *Johore Perak Indiæ*.

11. **Phoma ejiciens** Pass. *Rev. myc.* 1887, p. 145. — Peritheciis 5094

crebre sparsis, minutissimis, tectis, epidermidem angustissime perforantibus, globulo minuto, atro v. filo tenuissimo dehiscentibus; sporulis subfusiformibus, utrinque guttatis, hyalinis, $5-6 \approx 2-2,5$; basidiis non visis.

Hab. in ramulo arido *Camelliæ japonicæ* in frigidariis *Parmæ Ital.* bor.

12. **Phoma tecta** Pass. in *Rev. myc.* 1887, p. 145. — Peritheciis 5095

sparsis, tectis, epidermidem pustulatin sublevantibus et vix findentibus; sporulis minutis, ellipticis, eguttatis, hyalinis, $2,5-3 \approx 1,5$; basidiis tenuibus, longiusculis.

Hab. in ramulis aridis *Camelliæ japonicæ* in frigidariis *Parmæ Ital.* bor.

13. **Phoma longicruris** Pass. *Rev. Myc.* 1887, p. 145. — Peritheciis 5096

subcutaneis, minutis, pustuliformibus, vix erumpentibus; sporulis subfusiformibus, apice guttatis, hyalinis, $7,5 \approx 2,5$; basidiis filiformibus, $20-25 \mu$. long.

Hab. in ramulis aridis *Camelliæ japonicæ* in frigidariis *Parmæ Ital.* bor.

14. **Phoma tenuis** Pass. in *Rev. myc.* 1887, p. 145. — Peritheciis 5097

crebre sparsis, epidermidi innatis, minutis atris; sporulis bacillaribus, exiguis, integris, hyalinis, $2,5-3 \approx 0,5$; basidiis filiformibus, $10-12 \mu$. long.

Hab. in ramulis aridis *Camelliæ japonicæ* in frigidariis *Parmæ Ital.* bor.

15. **Phoma pterogena** Passer. Diagn. F. N. IV, n. 66. — Peritheciis 5098
 minimis punctiformibus, ostiolo atro, tantum perspicuo v. tandem
 nudatis, globosis, atris; contextu fuligineo, minute celluloso; spo-
 rulis innumeris, bacteriformibus, hyalinis.
Hab. in fructibus dejectis Liriodendri Tulipiferæ in hor-
 to botanico parmensi Ital. bor.
16. **Phoma Thümenii** Passer. Diagn. F. N. IV, n. 65, *Ph. Liriodendri* 5099
 Thüm. Fungi littor. 170? — Peritheciis minutis, gregariis v. linea-
 ri-seriatis, hypodermis erumpentibus, globosis, atris; sporulis el-
 lipticis v. elongatis, hyalinis, non guttulatis, 5-7 \approx 2,5-3.
Hab. in ramulis siccis Liriodendri Tulipiferæ in horto
 botanico parmensi, Ital. bor.
17. **Phoma cratægicola** Berl. et Bres. Micr. Trid. p. 61. — Perithe- 5100
 ciis hypophyllis, sparsis, minutis, 70-100 μ . diam., tectis, ostiolo
 minuto pertusis, vix prominulis, contextu laxo parenchymatico, fu-
 ligineo; sporulis numerosis, oblongis, 6-8 \approx 2,5, hyalinis, eguttulatis.
Hab. in foliis emortuis Cratægi monogynæ prope Trento
 Ital. bor.
18. **Phoma dealbata** Passer. Diagn. F. N. IV, n. 71. — Peritheciis epi- 5101
 dermide albicante velatis; sporulis minimis, bacillaribus, sterigma-
 tibus longioribus fultis.
Hab. in ramulis siccis Amygdali Persicæ, Vigheffio Ita-
 liæ borealis.
19. **Phoma Pomi** Passer. Diagn. F. N. IV, n. 73. — Peritheciis in 5102
 matrice albo-pulverulenta gregariis, pustuliformibus, tectis; ostio-
 lo papillari, atro; sporulis cylindricis, hyalinis, obscure biguttula-
 tis, 5 \approx 1,5; basidiis non visis.
Hab. in fructu indurato Cydoniæ sinensis, Vigheffio pr.
 Parmam Ital. bor.
20. **Phoma Aucupariæ** Bres. Rev. Myc. 1891, p. 25, t. 114, f. IV. — 5103
 Peritheciis subcutaneis, majusculis, gregariis v. interdum cæspito-
 sulis, $\frac{1}{3}$ - $\frac{1}{2}$ mm. diam., e subgloboso depressis, ostiolo conico
 pertusis; contextu parenchymatico fuligineo, sporulis oblongis, hya-
 linis, 8-10 \approx 3,5-4,5.
Hab. in ramis Sorbi Aucupariæ pr. Leutschau Hungariæ
 (GRESCHIK).
21. **Phoma Pruni-lusitanicæ** Cooke in Grevillea XIII, p. 93. — Gre- 5104
 garia; peritheciis subglobosis, ad extremitatem ramulorum colle-
 ctis, cuticulam vix decoloratam, ostiolis minutis perforatam, ele-
 vantibus; sporulis fusiformibus, binucleatis, hyalinis, 10 \approx 4.

Hab. in ramulis *Pruni lusitanicæ*, Kew Britannicæ.

22. **Phoma Prunorum** Cooke in Grevillea XIII, p. 92. — Dense 5105
gregaria, in ramulis minoribus, cortice elevato, non decolorato, longitudinaliter fisso tecta; peritheciis subglobosis, atris mediæ, magnitudinis; sporulis late lanceolatis utrinque attenuatis, binucleatis, hyalinis, $10 \approx 4,5$.

Hab. in ramulis emortuis *Pruni Lauro-cerasi*, Kew Brit.

23. **Phoma cerasina** Cooke in Grevillea XIV, p. 80. — Epiphylla; 5106
peritheciis punctiformibus, densissime gregariis, semiimmersis, atris, nitidis, poro pertusis; sporulis subcylindricis, utrinque rotundatis, rectis, enucleatis, hyalinis, $15-16 \approx 3,5$.

Hab. in foliis emortuis *Pruni Lauro-cerasi*, Aiken S. Carol. (RAVENEL).

24. **Phoma virginiana** Ell. et Halsted Journ. Myc. 1888, p. 8. — 5107
Maculis amphigenis, magnis, 0,5-1 cm. lat., rotundis, subindefinitis, supra rubiginoso-brunneis, subtus saturatius coloratis; peritheciis hypophyllis, minutis, copiosis, erumpenti-superficialibus; sporulis oblongo-cylindræis, $5-7 \approx 1,5$.

Hab. in foliis *Pruni virginianæ*, Ames, Iowa Amer. bor.

25. **Phoma Pruni** Peck in 38 Rep. St. Mus. pag. 95. — Peritheciis 5108
minutis, vix prominulis, subconicis, primum epidermide tectis, demum erumpentibus, atris; sporulis oblongo-ellipticis vel subfusiformibus, binucleatis, $8-10 \approx 3-4$; hyalinis; basidiis longitudinem sporularum æquantibus.

Hab. in ramis emortuis *Pruni virginianæ* in Amer. bor.

26. **Phoma Armeniacæ** Thuem. Pilze d. Aprik. pag. 3. — Peritheciis 5109
sat numerosis, fere globulosis, semiemergentibus, nigris, mediis, contextu parenchymatico, fuligineo, in macula orbiculata v. irregulari, arescendo candida, concava, indurata, anguste dein latius rufo- v. ochraceo-brunneo-marginata; sporulis ovalibus v. breve ellipsoideis, eguttatis, subhyalinis v. dilute chlorinis, $2-3 \approx 0,9-1,4$.

Hab. in fructibus submaturis *Pruni armeniacæ* in Austria infer. — Fructibus vere noxia.

27. **Phoma Chænomeles** Brun. Champ. env. Saint. p. 337. — Perithe- 5110
ciis numerosis, sparsis v. gregariis, dein erumpentibus, globoso-depressis, nigris, pertusis; sporulis fusoides, 2-guttatis, $10-12 \approx 3-3,5$, hyalinis.

Hab. in caulibus emortuis *Chænomeles japonicæ*, Pons pr. Saintes Gallicæ.

28. **Phoma Amelanchieris** Cooke in Grevillea XIII, p. 93. — Subgre- 5111

garia, corticola; peritheciis cortice immersis, cuticulam elevantibus et rumpentibus, globosis, atris, mediæ magnitudinis; sporulis subfusiformibus, obtusis, binucleatis, $8 \approx 2,5-3$; basidiis tenuibus, curvis; sporulis triplo longioribus,

Hab. in ramulis *Amelanchieris*, Kew Britanniaë.

29. **Phoma spiræina** Passer. Diagn. F. N. IV, n. 72. — Peritheciis 5112
crebre sparsis, epidermide tectis, atris, globoso-depressis; ostiolo vix aperto; contextu minute celluloso, fuligineo; sporulis ellipticis, $5 \approx 2,5$ eguttatis, hyalinis; basidiis non visis.

Hab. in ramulo sicco *Spirææ sorbifoliæ*, Parma Ital. bor.

30. **Phoma opulifolia** Cooke in Grevillea XIV, p. 2. — Gregaria; 5113
peritheciis punctiformibus depresso globosis, cuticula non decolorata, leniter elevata tectis; sporulis anguste lanceolatis, continuis, binucleatis, $10 \approx 2,5$; basidiis brevibus.

Hab. in ramulis *Spirææ opulifoliæ*, Kew Brit. — Nonnullis notis a *Ph. Sorbariæ* differt.

31. **Phoma aromatica** Cooke in Grevillea XIV, p. 4. — Peritheciis 5114
gregariis, cuticula leniter convexa tectis, depressis, minutis, leniter papillatis; sporulis sublanceolatis, continuis, binucleatis, hyalinis, $8-10 \approx 3-3,5$; basidiis brevibus.

Hab. in ramulis *Calycanthi occidentalis*, Kew Britanniaë.

32. **Phoma viminalis** Cooke et Mass. Grev. XVI, p. 75. — Epiphyl- 5115
la; peritheciis immersis, erumpentibus, atris, subglobosis, perforatis; sporulis minutis, hyalinis, continuis, ellipsoideis, $3-4 \approx 1\frac{1}{2}-2$.

Hab. in foliis *Eucalypti viminalis*, Melbourne Australiaë (READES).

33. **Phoma Barringtoniæ** Cooke et Mass. in Grev. XVII, pag. 79. — 5116
Epiphylla, maculis magnis, irregularibus, glaucis insidens; peritheciis convexis, papillatis, subgregariis, nigris, cuticula tenui, nitente tectis; sporulis fusoideo-ellipsoideis, utrinque 1-guttatis, continuis, hyalinis, $13-15 \approx 4-5$.

Hab. in foliis vivis *Barringtoniæ speciosæ*, Kew Britanniaë.

34. **Phoma brunneo-tincta** B. et C. in Grev. XVII, p. 42, Syll. III, 5117
p. 152. — Peritheciis semiimmersis, in maculas brunneolas v. nigrescentes gregariis, papillatis, $0,5-1$ mm. diam., subnitentibus; sporulis rectis vel curvis, hyalinis, utrinque plus minus rotundatis, interdum guttulatis, $14-16 \approx 3-4$; basidiis subvalidis, $35-40 \mu$. long.

Hab. in pericarpio *Æsculi*, Kew Britanniaë.

35. **Phoma Clintonii** Peck 39 Rep. p. 45. — Peritheciis numerosis, ligno immersis, oblongis v. subhysteriformibus, nigris; sporulis oblongo-ovatis, hyalinis, $10-11,25 \approx 4$; basidiis gracilibus. 5118
Hab. in ligno *Æsculi Hippocastani* decorticato, Albany Amer. bor.
36. **Phoma æsculana** Sacc., *Phoma Hippocastani* Pass. in Brun Miscell. mycol. p. 15, nec Arcang. — Peritheciis tectis, dein erumpentibus, sparsis v. gregariis, globosis v. subglobosis, nigro-brunneis, papillosis; sporulis subnavicularibus, hyalinis, utrinque guttatis, $7-8 \approx 2,5$; basidiis elongatis, filiformibus, curvis v. sæpe hamatis, $20-45 \approx 1-5$. 5119
Hab. in ramis junioribus emortuis *Æsculi Hippocastani*, Saintes Galliæ.
37. **Phoma Hippocastani** Arcang. Erb. critt. it. II, n. 1289. — Tuberculis (peritheciis?) depressis, nigris v. cortice ramulorum nidulantibus, sat confertis, umbone longiusculo conspicue prominulis; sporulis oblongis, $8-9 \approx 2-5$, hyalinis, guttulas seu granula minima vix conspicua fomentibus. 5120
Hab. in cortice ramulorum emortuorum *Æsculi Hippocastani* in Horto bot. Pisa Ital. mediæ (ARCANGELI).
38. **Phoma sambucicola** Karst. Hedw. 1887, pag. 126, Fragm. myc. XXII, p. 3. — Peritheciis sparsis v. seriatim confluentibus, semiimmersis, inter fibras ligni nidulantibus, conoideis v. oblongatis, poro pertusis, atris, 0,3 mm. lat.; sporulis ellipsoideo-sphæroideis, rectis, $3-5 \approx 2-3$. 5121
Hab. in ligno nudato vetusto *Sambuci racemosæ* in regione Aboënsi Fenniæ. — An potius *Aposphæria*?
39. **Phoma Sambuci** Pass. in Journ. hist. Nat. Bord. 1885, pag. 135, Brun. List. Sphær. p. 10. — Peritheciis approximatis, punctiformibus, parvis, nigris; sporulis lineari-lanceolatis, enucleatis, hyalinis, $10 \approx 1,5-2$. 5122
Hab. in ramis decorticatis *Sambuci nigræ*, Saintes Galliæ.
40. **Phoma Beckhausii** Cooke in Grevillea XIII, p. 91. — Peritheciis subglobosis, sparsis, cortice leniter elevata tectis, indistinctis; sporulis sublanceolatis, continuis, sæpe binucleatis, $8-10 \approx 3$. 5123
Hab. in ramulis *Viburni Lantanæ*, socia *Diaporthe Beckhausii*, Dartford et Kew Britannicæ.
41. **Phoma lirelliformis** Sacc. Syll. III, p. 87 — Var. **Viburni-Opuli** Brun. Liste Sphærops. p. 11. — Sporulis elongato-oblongis, subfusoides, $8 \approx 2-3$, utrinque guttuligeris. In caulibus emortuis de- 5124

corticatisque *Viburni Opuli*, *Saintes Galliæ*. — Var. **Weigeliæ roseæ** Br. l. c. — Sporulis ovoideo-oblongis, biguttulatis, $8 \approx 3$; basidiis duplo longioribus. In ramis emortuis decorticatisque *Weigeliæ roseæ*, *Saintes Galliæ*. — Var. **Tini** Brunaud in Rev. Myc. 1886, pag. 140. — Sporulis oblongis, $8 \approx 2,5-3$, biguttulatis; basidiis $15-16 \approx 2$.

Hab. in ramis emortuis decorticatisque *Viburni Tini*, *V. Opuli* et *Wergeliæ* *Saintes Galliæ*.

42. **Phoma oblongata** Briard et Hariot Rev. Myc. 1890, n. 47. — 5125
Peritheciis innatis, nigris, minutis, breviter seriatis, lirelliformibus, trans epidermidem atratam visibilibus; sporulis ovato-oblongis, obtusis, hyalinis, 2-guttatis.

Hab. in ramulis siccis et decorticatis *Loniceræ Caprifolii*, *Méry-sur-Seine Galliæ* (P. HARIOT). — *Ph. crypticæ* affinis sed lignicola nec corticola et peritheciorum forma.

43. **Phoma consocia** Bomm. Rouss. Sacc. Contr. Myc. Belg. IV, p. 77. 5126
— Peritheciis erumpentibus, subglobosis; sporulis ellipsoideis vel ovalibus, acutatis, 2-guttatis, $6-8 \approx 2$; basidiis uncinatis.

Hab. in ramulis *Hippophaës rhamnoidis*, *Knocke Belgii*. — Socia adest *Diaporthe Hippophaës*, cujus hæc *Phoma* videtur st. spermogonicus.

44. **Phoma viventis** Cooke in Grevillea XIV, pag. 2. — Gregaria; 5127
peritheciis punctiformibus vel leniter elongatis, minutis, atris, cuticula incolori, demum longitudinaliter fissa tectis; sporulis subfusiformibus, utrinque obtusis, enucleatis, hyalinis, $6-7 \approx 2,5$.

Hab. in ramulis vivis *Loniceræ*, *Kew Britanniæ*.

45. **Phoma baccicola** Rich. Cat. Champ. Marn. p. 546. — Perithe- 5128
ciis in areis atratis sitis, sparsis, hemisphæricis, ostiolo amplo; sporulis ellipsoideis, 2-guttulatis, in globulum exsurgentibus; basidiis longiusculis rectis.

Hab. in baccis vetustate atratis *Symphoricarpi*, *St.-Amand Galliæ*.

46. **Phoma cladophila** Passer. Diagn. F. N. V, n. 27. — Peritheciis 5129
crebre sparsis, minutis, tectis, fuscis; sporulis cylindricis, hyalinis, non guttulatis, $8-10 \approx 2-2,5$; basidiis filiformibus, rectis, $20-25 \mu$. long.

Hab. in ramulis emortuis *Elæagni reflexæ* in horto botanico parmensi Ital. bor. — A *Phoma-Elæagni*, præter situm, differt sporulis angustioribus non guttulatis et basidiis rectis.

47. **Phoma elæagnella** Cooke in Grevillea XIV, p. 4. — Sparsa vel 5130

subgregaria, minuta, cuticula convexa tecta; peritheciis depresso globosis, atris; sporulis ovoideis, profusis, continuis, hyalinis, enucleatis, $5 \approx 2,5$; basidiis indistinctis.

Hab. in ramis Elæagni, Kew Britanniaë.

48. **Phoma fallens** Sacc. sp. nov. — Peritheciis globoso-inæqualibus, 5131
subinde fere botryoideis, confertis, tectis, mox erumpenti-superficialibus, in maculis arescendo pallentibus fragilibus sitis, nigris, varie breve papillatis, 0,3-0,7 mm. diam., contextu parenchymatico, atro-fuligineo, solidiusculo; sporulis subsessilibus, ovato-oblongis, utrinque præcipue apice rotundatis, $7-9 \approx 3-4$, hyalinis, eguttatis.

Hab. in fructibus adhuc vivis Oleæ europeæ prope Empoli Etruriæ (U. MARTELLI). — Species anceps, ob maculas ad *Phyllostictam*, ob perithecia subbotryoidea ad *Dothiorellam* nutans.

49. **Phoma Oleæ** (Cav.) Sacc. *Plenodomus* Cavara App. Pat. veg. 5132
p. 13, t. VI, f. 17-18. — Maculis orbicularibus, induratis, excavatis; peritheciis globosis immersis, demum erumpentibus, 180-200 μ . diam., intus carnosocellulosis (?), flavis; sporulis ellipticis, hyalinis, utrinque obtusis, $4,5 \approx 2-3,5$.

Hab. in fructibus Oleæ europeæ, Pegli Ital. bor. — Ex icone potius *Phomæ* species.

50. **Phoma incompta** Sacc. et Mart. sp. n. — Maculis subcircularibus 5133
rubescentibus; peritheciis lenticulari-oblongis, sæpe irregularibus, 60-120 μ . lat., poro subrimoso pertusis, subcutaneo-erumpentibus, atris; sporulis oblongis, minutis, $3 \approx 1$, hyalinis, coacervatis chlorinis, eguttulatis; basidiis dense stipatis bacillaribus, $6-8 \approx 1-2$, e strato prolifero olivaceo oriundis.

Hab. in drupis adhuc vivis Oleæ europeæ pr. Firenze.

51. **Phoma ramulicola** Cel. Mic. Montp. p. 14. — Peritheciis sparsis, 5134
epidermide tectis, globoso-depressis, nigris, 300 μ . diam.; sporulis minutissimis, $3-4 \approx 0,5-2$, immersis, hyalinis; basidiis non visis.

Hab. in ramulis Oleæ europeæ decorticatis, Montpellier Galliaë.

52. **Phoma Chionanthi** Brun. Suppl. Sphæroid. p. 1. — Peritheciis spar- 5135
sis vel approximatis, minutis, tectis dein erumpentibus, globosis, nigris; sporulis oblongis, $7-8 \approx 2,5-3$, hyalinis, 2-guttatis.

Hab. in ramis emortuis Chionanthi virginicaë, Saintes Galliaë. — Spermogonia *Diaporthes Chionanthi*.

53. **Phoma Jasmini** Cooke in Grevillea XVI, pag. 2. — Peritheciis 5136
sparsis, cuticula tectis, prominentibus, atris, subglobosis, *Phomæ domesticæ* latioribus et magis prominulis; sporulis subfusiformibus, binucleatis, $9-10 \approx 3$.

Hab. in ramis *Jasmini officinalis*, Kew Brit. — Sæpe simul occurrit *Ph. domestica*.

54. **Phoma Friesii** Brun. Champ. Saint. p. 337. — Peritheciis remotis tectis, dein erumpentibus, a cortice dejecto liberatis, ligno immersis, conicis vel subglobosis, nigris, nitentibus; sporulis subovoideis, minutis, hyalinis, continuis, $4,5-6 \approx 3-4$. 5137

Hab. ad ramos emortuos *Ligustri ovalifolii*, sociâ *Melomastiâ Friesii*, Saintes Galliæ.

55. **Phoma depressa** (Lév.) Sacc. Syll. III, p. 82. — Var. **fructicola** Brun. Liste Sphærops. p. 11. — Sporulis $10-12 \approx 3$. 5138

Hab. in fructibus exsiccatis *Syringæ vulgaris*, Saintes Galliæ.

56. **Phoma planiuscula** Karst. Hedw. 1888, pag. 104. — Peritheciis gregariis, cortici innatis, per peridermium fissum emergentibus, rotundato-applanatis, glabris, atris, 0,2 mm. diam.; sporulis ellipsoideis vel subsphæroideis, hyalinis, $2-2,5 \approx 1$, v. $1,5-2,5 \mu$. diam. 5139

Hab. in ramis emortuis *Syringæ vulgaris* in sacellania Merimasku Fenniæ. — Mixta cum *Teichosporella planiuscula*, cujus spermogonia verisimiliter sistit.

57. **Phoma scobina** Cooke in Grevillea XIII, pag. 92. — Peritheciis subcutaneis, gregariis, ad nodos congestis, cuticulam perforantibus, subglobosis, atris, depressis; sporulis fusoideis vel clavatis, subinde binucleatis, hyalinis, $10-12 \approx 3-3,5$; basidiis rectis. 5140

Hab. in ramulis *Fraxini excelsioris*, socia *Diaporthe scobina*, cujus est spermogonium, Kew, Darenth, Highgate Brit.

58. **Phoma divergens** Oud. Contr. Mycol. XIII, p. 36, t. 8, f. 23. — Peritheciis minime ad ramorum nodos congestis, infra periderma occultatis, dein ostiolo pertusis; sporulis extra perithecia cirri in modum expulsis, ovoideis vel breviter oblongatis, $5-7 \approx 2,5$, continuis, eguttatis. 5141

Hab. in ramis *Fraxini excelsioris*, Zorgvlied prope Haye Nederlandiæ. — A *Ph. controversa* et *Ph. minima* discedit sporulis eguttatis.

59. **Phoma infossa** Ell. et Ev. Journ. Myc. 1888, p. 102. — Peritheciis sparsis, cortice immersis, majusculis; ostiolo obtuse conico, erumpente; sporulis cylindræis, hyalinis, subincurvis, $5-6 \approx 1\frac{1}{4}$, utrinque obtusis. 5142

Hab. in ramis emortuis *Fraxini Syracuse*, N. Y. Amer. bor. (UNDERWOOD et COOKE). — An satus secundarius *Valsæ*?

60. **Phoma Forsythiæ** Cooke in Grevillea XIII, p. 92. — Laxe gre- 5143

garia; peritheciis punctiformibus, subglobosis, epidermide vix elevata, demum ostiolo minuto fissa, tectis; sporulis ellipticis, minutis, enucleatis, hyalinis, 3-5 \approx 2; basidiis brevibus.

Hab. in ramis Forsythiæ, Kew Britanniae et F. viridissimæ, Saintes Galliae. — Species homonyma cl. Brunaudii (Rev. Myc. 1886, pag. 140), leviter differt sporulis paullo longioribus, nempe 7-8 \approx 2-2,5.

61. **Phoma Celottii** Sacc. *Phoma Philadelphi* Cel. Micet. Montpell. 514
p. 13 (1887). — Peritheciis subgregariis, erumpentibus, globoso-ellipsoideis, $\frac{1}{3}$ mm. diam.; sporulis minimis, *Bacterio Thermo* similibus, 2-3 \approx 1, hyalinis; basidiis cæspitosis, 10-12 μ . long.

Hab. in ramis corticatis Philadelphi grandiflori, Montpellier Galliae. — A *Ph. Philadelphi* differt sporulis minoribus.

62. **Phoma Philadelphi** Cooke in Grevillea XIII, p. 93 (1885). — Pe- 514
ritheciis minutis, gregariis, seriatim dispositis, epidermide vix elevata tectis, cortice immersis, depressis, nigris, pertusis; sporulis cylindricis, utrinque obtusis, enucleatis, 12 \approx 2,5, hyalinis.

Hab. in ramulis Philadelphi, Kew Britanniae. — Habitu fructificationeque a *Ph. Landeghemiae*, quæ simul occurrit, distincta.

63. **Phoma Buddleiae** Cooke in Grevillea XVI, p. 48 (1887). — Peri- 514
theciis sparsis, minutis, epidermide elevata demumque fissa tectis; sporulis ovoideis, hyalinis, 6 \approx 4.

Hab. in ramis Buddleiae globosæ, Kew Britanniae.

64. **Phoma Lyndleyana** Sacc. *Phoma Buddleiae* Brun. Champ. nouv. 514
VI, p. 2 (1888). — Peritheciis tectis, dein erumpentibus, globosocompressis, minutis, nigris, nitidulis; sporulis oblongis, hyalinis, 6-8 \approx 2-5.

Hab. in ramis emortuis Buddleiae Lindleyanæ cultæ, Saintes Galliae.

65. **Phoma Rhododendri** Cooke in Grevillea XIII, p. 93. — Subgre- 514
garia, in ramulis tenuioribus dealbatis, minuta, epidermide elevata sed vix decolorata tecta; peritheciis subglobosis, atris; sporulis minutis, ovoideis, hyalinis, enucleatis, 4-5 \approx 2.

Hab. in ramulis Rhododendri, Kew Britanniae.

66. **Phoma Rhodoræ** Cooke in Grevillea XIV, p. 3. — Maculis api- 514
calibus vel marginalibus latis, irregularibus, brunneis; peritheciis gregariis, minutis, punctiformibus, atris, immersis, oculo nudo vix visibilibus; sporulis numerosis, minutis subellipticis, hyalinis, 4-5 \approx 2; basidiis brevibus.

Hab. in foliis vivis Rhododendri, Kew Britanniae.

67. **Phoma Andrachnes** Lév. Voy. p. 110, t. VI, 3, Sacc. Syll. III, 5150
p. 169. — Epi- et hypophylla, unilocularis; peritheciis globosis,
adnatis, ostiolis prominulis, pertusis, intus nigris; sporulis minimis,
simplicibus, oblongo linearibus.
Hab. in foliis emortuis Arbuti Andrachnes, Orianda Tauri-
riæ imp. Rossici. — Var. **orbicularis**: peritheciis in annulum di-
spositis.
68. **Phoma andromedina** Karst. Hedw. 1888. — Peritheciis sparsis, 5151
emergentibus, epidermide radiatim fissa tectis, rotundatis, atris, vix
0,2 mm. diam.; sporulis ellipsoideis vel oblongatis, rectis eguttula-
tis, hyalinis, 4-6 \approx 2.
Hab. in foliis languidis Andromedæ polifoliæ pr. pagum
Sipilä par. Tammela Fenniae.
69. **Phoma Lentisci** Passer. Diagn. F. N. IV, n. 69. — Peritheciis 5152
amphigenis, sparsis, epidermidem sublevantibus, tandem erumpenti-
bus, atris; sporulis subfusiformibus, ad polos obscure nucleatis,
5-7 \approx 3,5, basidiis tenuibus, rectis, subduplo longioribus fultis.
Hab. in foliis siccis Pistaciæ Lentisci in horto botanico
parmensi Ital. bor.
70. **Phoma Sumacis** Brun. Liste Sphærops. p. 11. — Peritheciis glo- 5153
bulosis, atris, primo tectis, dein erumpentibus, perforatis, minutis;
sporulis ovoideis, hyalinis, minutis, 2,5-3 \approx 2.
Hab. in caulibus emortuis Rhois glabræ, Pons Galliae. —
Affinis *Ph. Ebuli* et verisimiliter ut hujus varietas habenda.
71. **Phoma Lauri** Pass. et Brun Mat. Myc. Saint. p. 21. — Perithe- 5154
ciis primo tectis, seriatis, adproximatis, globulosis v. subglobulosis,
nigris; sporulis cylindraceutis, utrinque rotundatis, minute guttula-
tis, hyalinis, rectis, 12,5 \approx 2,5; basidiis filiformibus, 15-20 \approx 1,2.
Hab. ad caules emortuos Lauri nobilis, Saintes Galliae.
72. **Phoma insularis** Cooke et Mass. in Grev. XVI, p. 6. — Perithe- 5155
ciis gregariis, plerumque maculis atris linea nigra circumscriptis
insidentibus, subcuticularibus, dein erumpentibus; sporulis angu-
ste ellipsoideis, utrinque 1-guttatis, continuis, hyalinis, 10 \approx 3.
Hab. in ramis Aucubæ japonicæ, Kew Britanniae.
73. **Phoma crustosa** Sacc. Bomm. et Rouss. Fl. Myc. Belg. II, p. 28. 5156
— Peritheciis numerosis, punctiformibus, epidermide persistente,
nigrificata tectis, poro minusculo pertusis; sporulis sæpe irregula-
ribus, ovato-acuminatis, hyalinis, 2-4-(sæpe 2-)guttatis, 7-9 \approx 3,5,
interdum uno apice acuto, altero rotundato; basidiis fasciculatis,
apice attenuatis.

Hab. in trunco et ramis *Ilicis Aquifolii*, Ixelles Belgii. — Verisimiliter spermogonium *Diaporthes crustosæ*.

74. **Phoma ilicina** Ell. et Anders. Bot. Gaz. 1891, p. 46. — Amphigena; peritheciis innatis, cuticulam pustulatim elevantibus, globosis, minutis, 0,2 mm. diam., apice suberumpentibus; sporulis fusoido-oblongis, hyalinis, binucleatis, 6-8 \approx 2-3; basidiis sporulam subæquantibus. 5157

Hab. in foliis emortuis *Ilicis*, Washington Amer. bor.

75. **Phoma Celastrinæ** Cooke in Grevill. XIII, pag. 92. — Gregaria v. aggregata; peritheciis globosis, atris, epidermide tectis eamque ostiolo punctiformi, atro, nitido perforantibus; sporulis lanceolatis, utrinque attenuatis, binucleatis, hyalinis, 13 \approx 5, primo stipitatis. 5158

Hab. in ramulis *Evonymi americani*, Kew Britannia.

76. **Phoma arcuata** Passer. Diagn. F. N. IV, n. 39. — Peritheciis punctiformibus, atris, 125 μ . diam., ostiolo pertuso, albido, epidermidem vix sublevantibus; sporulis cylindricis, arcuatis, integris, hyalinis, 14-15 \approx 1,3; sterigmatibus filiformibus, longiusculis. 5159

Hab. in foliis dejectis *Evonymi japonici*, Livorno Italia.

77. **Phoma Weldiana** Fairm. Contr. Myc. West. N. Y. p. 50. — Peritheciis parcis, sparsis, nigris, nitentibus, parvis, ovoideis v. rotundis, 25-30 μ . diam.; sporulis oblongis, uno apice abrupte acuminatis v. utrinque rotundatis. 5160

Hab. in ligno decorticato *Evonymi atropurpurei*, Lyndonville, N. Y. Amer. bor.

78. **Phoma rhamnigena** Fautrey in Rev. Myc. 1890, p. 166. — Peritheciis . . . ; sporulis elongatis, 10-16 \approx 1, rectis, hyalinis, continuis; basidiis brevissimis v. obsoletis. 5161

Hab. in ramis *Rhamni*, Pr cy C te-d'Or Gallia. — A *Phoma Robergeana* et *Ph. Staphyleæ* satis diversa dicitur.

79. **Phoma Staphyleæ** Cooke in Grevillea XIV, p. 2. — Gregaria; peritheciis punctiformibus, cuticula demum nigrescente tectis, dein prominulis, tandem liberis; sporulis ellipticis, continuis, enucleatis, 5-8 \approx 3-4; basidiis non distinctis. 5162

Hab. in ramulis *Staphyleæ pennatæ*, *S. trifoliatæ* et *S. colchicæ*, Kew Britannia.

80. **Phoma Brunaudi** Berl. et Vogl. Add. Syll. n. 4644, *Phoma Staphyleæ* Brun. Liste Sphærops. pag. 12 (non Cooke). — Maculis stromaticis, subcircularibus v. irregularibus, nigrescentibus, linea atra, subinde distinctissima cinctis; peritheciis cortice innatis, minutis, sparsis vel vix appropinquatis, primo tectis, dein vix erum-

pentibus; sporulis oblongis, rectis, $8 \approx 2,5-3$; basidiis 15-20, rectis vel hamatis.

Hab. in ramis emortuis *Staphyleæ eolchiæ*, Saintes Gallæ. — «An diversa a *Phoma Staphyleæ* Cooke?».

81. **Phoma cytosporella** Penz. et Sacc. Monogr. Agr. p. 361, t. XXXIII, 5164

f. 2. — Peritheciis irregularibus, congregatis v. confluentibus, cortice v. stromate immersis, haud papillatis, aterrimis; basidiis confertissimis, linearibus, continuis, $20-30 \approx 2-2,5$; sporulis oblongo-ellipsoideis, utrinque rotundatis, hyalinis, 2-guttatis, $7-9 \approx 2,5-4$.

Hab. in ligno vetusto *Citri vulgaris* et *C. Aurantii* et in ramis *C. Limonum*, Roma, Modena. — Ad *Cytosporam* vergit.

82. **Phoma paraguayensis** Speg. F. Guar. II, n. 160. — Peritheciis 5165

minutis, e lenticulari conoideis, $70-90 \mu$. diam., epidermide velatis, dense congestis, plagulas atras v. cinerescens, longe lateque per matricem serpentes efformantibus, tenui membranaceis, parenchymatico-fuligineis, glabris, levibus, ostiolo impresso, latiusculo, 25μ . diam., pertusis; sporulis ellipticis, utrinque acutiusculis, $15-17 \approx 5-6$, rectis v. falcatis, continuis, hyalinis.

Hab. ad ramulos languidos *Citri Aurantii* in cultis pr. Guarapî Amer. bor. — Potius *Macrophoma*.

83. **Phoma obtusula** Sacc. et Br. Misc. Myc. II, p. 24. — Peritheciis 5166

hinc inde gregariis, erumpentibus, globulosis, obtusulis, $\frac{1}{4}$ mm. diam., atris, nitidulis, vix papillatis; sporulis ovato-oblongis, utrinque acutiusculis, $8-12 \approx 4$, hyalinis; basidiis brevibus.

Hab. in ramulis corticatis *Aceris campestris*, Troyes Gallæ (BRIARD).

84. **Phoma Platanoidis** Cooke in Grevillea XIII, p. 93. — Peritheciis 5167

subcutaneis, erumpentibus, gregariis epidermidem rumpentibus et ramulum rugosum reddentibus; sporulis fusiformibus, acutis, binucleatis, hyalinis, $7-8 \approx 3$; basidiis rectis, sporulâ duplo vel amplius longis.

Hab. in ramulis *Aceris Pseudoplatani*, Kew Brit. — Adest simul *Calospora Platanoidis*, cujus verisimiliter est spermogonium.

85. **Phoma negundinicola** Thuem. M. U. n. 2090. — Peritheciis sub- 5168

gregariis, minutis, punctiformibus, hemisphærico-semiimmersis, atris, ostiolo prominentibus; sporulis numerosissimis, cylindræis, rectis v. raro leviter curvis, utrinque rotundatis, sæpius 2-guttulatis, hyalinis, $3,5-4,5 \approx 1,5$.

Hab. in pedunculis emortuis *Negundinis fraxinifolii*, Newfield N. J. Amer. bor. (ELLIS).

86. **Phoma globigera** Cooke et Mass. Grev. XVII, p. 75. — Peritheciis gregariis, numerosis, punctiformibus, atris, sursum nudis, convexis; sporulis globosis, continuis, hyalinis, 5-6 μ . diam. 5169

Hab. in sarmentis *Vitis viniferæ* in America? (MENDE).

87. **Phoma Viniferæ** Cooke in Grevillea XIII, p. 92, *Phoma viticola* Sacc. Syll. III, p. 79, non *Phoma viticola* (Cooke) Sacc. Syll. III, pag. 110. Occurrit quoque in sarmentis *Vitis viniferæ*, Kew Britannicæ.

88. **Phoma cordifolia** Brun. Champ. Saint. VII, p. 4. — Peritheciis remotis, secus ligni fibras seriatim dispositis, siccis depressis, nigris, per epidermidem nigrificatam sæpe irregulariter laceratam erumpentibus; sporulis oblongo-elongatis, rectis, 7-9 \approx 2,5-3, continuis, 2-guttatis. 5170

Hab. in sarmentis emortuis *Vitis cordifoliæ*, Rochefort Gallicæ.

89. **Phoma lenticularis** Cavara Bitt. Rot, p. 24, t. V, f. 4. — Peritheciis gregariis interdum confluentibus, lenticularibus, epidermide tectis, 180-220 μ . diam., poro pertusis; sporulis ellipsoideo-cylindraceis, utrinque rotundatis, typice 2-guttatis, hyalinis, 7,5-8,5 \approx 3-5,5; basidiis filiformibus, 20-22 μ . long. 5171

Hab. in baccis *Vitis viniferæ* in collibus Stradella, Codevilla Ital. bor. — «*Phoma uvicola* B. et C., Syll. III, pag. 149, sec. exempl. typ. in Rav. F. Carol. n. 17 et Thüm. M. U. n. 1386, præbet sporulas ovato-oblongas, 2-guttatas, 6 \approx 2,5 brevissime pedicellatas, hinc omnino differt a *Coniothyrio Diplodiella*. E contra *Ph. uvicola* var. *Labruscæ* Thüm. in Ellis N. A. F. n. 26, præbet sporulas multo majores, utrinque acutulas, 10-12 \approx 4-5, 1-2-guttatas, demum dilute fuligineas, pedicellis 12-14 \approx 2 suffultas, hinc ad *Conioth. Diplodellam* valde accedit et ut ejus var. *oxy-sporum* sumenda. Observandum quod vera *Phoma uvicola* var. *Labruscæ* Thüm. Pilz. d. Weinst. pag. 16, ob sporulas «semper subglobosas, 7-8 μ . diam.» sit res omnino diversa.

90. **Phoma ampelocarpa** Pass. N. G. B. It. 1890, n. 1, Rev. Myc. 1890, p. 86. — Peritheciis in centro maculæ discoideæ brunneæ gregariis, erumpentibus, cuticula vix fissa cinerescente tectis; sporulis oblongo-ellipsoideis, enucleatis, hyalinis, 7,5 \approx 2,5. 5172

Hab. in baccis maturis *Vitis Moscatello di Spagna* dictæ in Ital. bor.

91. **Phoma Farlowiana** Viala et Sauv. in Journ. Bot. 1891, pag. 363, 5173
t. V, f. 10. — Peritheciis immersis, ostiolo vix erumpente, ovoideis 132 \approx 110, contextu nigricante; basidiis filiformibus, brevissimis; sporulis oblongo-ovatis, utrinque obtuse attenuatis, 21 \approx 5-6, hyalinis, vix granulosis.

Hab. in foliis Vitis Labruscæ et ripariæ in America fœderata et Canada. — Potius *Macrophoma*.

92. **Phoma Cissi** Rich. Cat. Champ. Marn. p. 546. — Peritheciis te- 5174
ctis, nigris, hemisphæricis, sparsis, epidermidem frustulatim elevan-
tibus et findentibus; sporulis oblongis, 6 μ . long., utrinque subin-
crassatis, biguttatis; basidiis longis, rectis.

Hab. in sarmentis Cissi, St. Amand Galliæ.

93. **Phoma insularis** Speg. F. Fueg. n. 282. — Maculis nullis; peri- 5175
theciis sparsis, parenchymate immersis, epidermide tectis, dein sæ-
pius laciniatim vel suboperculatim erumpentibus, globulosis, 130-
180 μ . diam., atris, crasse coriaceo-membranaceis, ostiolo non vel
vix papillulato, contextu indistincto; sporulis ellipticis v. ovoideo-
sublanceolatis, sæpius utrinque longiuscule acutato-obtusatis, non
v. medio 1-guttulatis, 5-7 \approx 1,5, hyalinis, sterigmatibus filiformibus,
12-15 \approx 1.

Hab. ad folia dejecta Berberidis ilicifoliæ in Staten island
Fuegiæ.

94. **Phoma cistina** Cooke in Grevillea XIV, pag. 3. — Dense gre- 5176
garia, subcutanea, subinde erumpens; peritheciis subglobosis, atris,
siccitate collapsis; ostiolo interdum brevi, cuticulam perforante,
subinde duplo v. triplo perithecii diametro longiore, flexuoso; spo-
rulis subcylindræis vel fusoideis, utrinque obtusis, sæpe minute
binucleatis, hyalinis, 6-7 \approx 2,5; basidiis circiter sporulâ duplo lon-
gioribus.

Hab. in ramulis Cisti laurifolii, Kew Britannia.

95. **Phoma Cisti** Brun. Fragm. myc. II, p. 8. — Peritheciis numero- 5177
sis, subgregariis, minutissimis, nigris, vix erumpentibus; sporulis
subovoideis, hyalinis, minutissimis, 3 μ . long., continuis.

Hab. in ramis exsiccatis Cisti salvifolii, Fouras pr. Sain-
tes Galliæ.

96. **Phoma lirelliformis** Sacc. Syll. III, p. 87. — Form. **Clerodendri** 5178
Brun. Fragm. Myc. II, p. 8. — Sporulis 2-guttatis, 8 \approx 3; basidiis
20 μ . long.

Hab. in ramis emortuis Clerodendri fœtidi, Rochefort
Galliæ.

97. **Phoma? hysterina** Karst. et Roum. Rev. Myc. 1890, n. 47. — 5179
 Peritheciis laxè gregariis, subcutaneis, ovalibus, plano-convexis, parte innata subindistincta, atris, minutis; ostiolo papillato, erumpente, planiusculo, pallidiore; sporulis ellipsoideis v. ovoideo-elongatis, guttulatis, 6-10 \approx 2,5-3,5.
Hab. ad ramulos exsiccatos Capparidis spinosæ in St.-Capprais pr. Tolosa Galliæ (MARIE DE CALVINHAC). — Typum novi generis forte sistit.
98. **Phoma Capparidis** Passer. Diagn. F. N. IV, n. 67. — 5180
 crebre sparsis, epidermide tectis, lenticularibus v. ovalibus, ostiolo non perspicuo; sporidiis oblongis, elliptico-lanceolatis, ad polos guttatis 10 \approx 2,5; basidiis filiformibus, tenuibus, 20-25 μ . long.
Hab. in ramis siccis Capparidis spinosæ, Parma Ital. bor. — A *Ph. herbarum* f. *Capparidis* sporulis et basidiis longioribus diversa.
99. **Phoma capparidina** Passer. Diagn. F. N. IV, n. 68. — 5181
 crebre sparsis, epidermide nigricante tectis, crassitie varia; sporulis oblongis, ad polos non v. obscure nucleatis, tandem pulvere albo ejectis, 5 \approx 1 $\frac{1}{4}$.
Hab. in ramis Capparidis spinosæ, Parma Ital. bor.
100. **Phoma Winterii** Speg. F. Fueg. n. 385. — 5182
 3-5-aggregatis, globulosis, 150-180 μ . diam., cortice immersis, peridermio velatis, atris, glabris, coriaceo-subcarbonaceis, ostiolo impresso perforatis, contextu indistincto, opaco donatis; sporulis cylindræis, utrinque obtusis, 3-5 \approx 0,8-1, rectis v. curvulis, hyalinis.
Hab. ad corticem ramorum emortuorum Drymidis Winterii in Staten island Fuegiæ.
101. **Phoma Drymidis** Speg. F. Fueg. n. 378. — 5183
 pallescentibus, epiphyllis, indeterminatis; peritheciis sparsis immersis, primo tectis, dein erumpenti-prominulis, globulosis, 110-120 μ . diam., subastomis, coriaceis, atris, glabris, contextu subindistincto, olivaceo; sporulis lanceolatis v. fusoideo-ovatis, superne acutissimis, inferne obtusiusculis, 9-11 \approx 2,5-3, eguttulatis, hyalinis; sterigmatibus longiusculis, 10-15 \approx 1-1,5, simplicibus.
Hab. ad folia languida Drymidis Winterii in Staten island Fuegiæ.
102. **Phoma incommoda** Trail in Trans. Crypt. Scot. p. 43. — 5184
 ciis punctiformibus, atris, prominulis, gregariis, a folii contextu imperfecte disjunctis, ostiolo subpapillato; sporulis elongato-ellipsoideis, 8-10 \approx 2-2,5, hyalinis; basidiis dense stipatis, 20 \approx 2.

Hab. in foliis emortuis *Myricæ* Gales pr. Loch Awe Scotiæ occid.

103. **Phoma Myricæ** Karst. in Hedwigia 1884, pag. 6. — Peritheciis 5185
in cæspites, per peridermium erumpentes aggregatis, subsphæroides, pressione mutua varie compressis difformibusve, glabris, atris, 0,4 mm. diam.; sporulis sphæroideis vel ellipsoideo-sphæroideis, hyalinis vel chlorino-hyalinis, circiter 2 μ . diam. vel 3 \approx 2.

Hab. in ramis *Myricæ* Gales emortuis prope Vasa Fenniæ.

104. **Phoma Aloysiæ** Passer. Diagn. F. N. IV, n. 41. — Peritheciis 5186
sparsis, minutis, globoso-conicis, tectis, ostiolo acuto, vix erumpente, atris; contextu minute celluloso, olivaceo-fusco; sporulis innumeris, bacillaribus, rectis v. leniter curvis, eguttulatis, hyalinis, 7,5-12,5 \approx 2; basidiis non visis.

Hab. in ramis siccis *Aloysiæ* citriodoræ in horto botanico parmensi Ital. bor.

105. **Phoma Viticis** Celotti Mic. Montpell. p. 15. — Peritheciis glo- 5187
bosis, superficialibus, sparsis, nigris, poro pertusis; sporulis ellipticis, hyalinis, 6-8 \approx 2-3; basidiis 18-20 \approx 2.

Hab. in ramis *Viticis* Agni-casti, Montpellier Galliæ.

106. **Phoma Bignoniæ** Sacc. Bomm. Rouss. Contr. Myc. Belg. III, p. 14. 5188
— Peritheciis sparsis, subcutaneis, nigris, exiguis, 0,25 mm. diam., papilla erumpente; sporulis inæqualiter ellipsoideis, subinde guttulatis, 4-6 \approx 2,5-3.

Hab. in ramis emortuis *Tecomæ* radicans, Tervueren Belgii et Parma Ital. bor. — A *Ph. Tecomæ* sat diversa. Homonyma et posterior species cl. Passerini Diagn. F. N. IV, n. 74, a nostra non differt.

107. **Phoma tecomicola** Brun. Champ. Saint. 1887, p. 429. — Peri- 5189
theeciis sparsis, tectis, dein suberumpentibus, globosis, minutis, nigris, pertusis; sporulis oblongis, hyalinis, 8 \approx 2,5-3, biguttatis.

Hab. in sarmentis emortuis *Tecomæ* grandifloræ, Saintes Galliæ.

108. **Phoma Radicantis** Cooke in Grevillea XIII, p. 32. — Caulicola; 5190
peritheciis gregariis in maculis albicantibus, minutis, punctiformibus, applanatis, cuticula subtili tectis; sporulis numerosis, ovalibus, hyalinis, 3 \approx 1,5; basidiis non distinctis.

Hab. in ramulis vivis *Tecomæ* radicans, Kew Britannia.

109. **Phoma Gnidii** Brun. Suppl. Sphærioid. p. 2. — Peritheciis grega- 5191
riis, nigris, globosis, subepidermicis, erumpentibus; sporulis ovoideis v. ellipsoideo-elongatis, 2-guttatis, hyalinis, 6-7 \approx 2,5.

Hab. in ramulis *Daphnes Gnidii*, Saint-Palais-sur-mer pr. Saintes Galliæ.

110. **Phoma microsporella** Karst. et Har. Journ. Bot. 1890, p. 358. 5192
— Peritheciis sparsis, innato-erumpentibus, subsphæroideis, atris, ore sat lato orbiculari apertis, 50-75 μ . diam.; sporulis cylindraceis, rectis, hyalinis, 3-4 \approx 0,5.

Hab. ad folia *Caricæ Papayæ*, Ohio Amer. bor.

111. **Phoma paraguariensis** Speg. Guar. I, p. 144. — Maculis subin- 5193
determinatis, parvulis, 1-2 mm. diam., orbiculari-irregularibus, are-
scenti-fuscis, parum manifestis, amphigenis, stromatibus parvulis,
epiphyllis, macularum centro insidentibus, atris, glabris, rugosulis,
prominulis, 2-5-ocularibus, coriacellis; contextu indistincto, opaco,
atro; loculis globosis v. e mutua pressione angulosis, parvulis, 120-
150 μ . diam., ostiolo minuto donatis; sterigmatibus fasciculatis, fili-
formibus, 20 \approx 1, hyalinis, acrogene monostichis; sporulis cylindra-
ceis, ellipsoideis v. ovoideis, sæpe suballantoideis, 6-7 \approx 1-2, sæpe
minute 1-guttulatis et rotundatis, hyalinis.

Hab. ad folia viva *Crotonis* sp. in silvis prope Paraguari
Brasiliæ.

112. **Phoma Periplocæ** Brun. Champ. Saint. IV Ser., p. 8. — Peri- 5194
theciis sparsis prominulis, convexis, nigris, nitidulis, pertusis; spo-
rulis oblongis, hyalinis, 2-guttulatis, 10-12 \approx 3.

Hab. in foliis languidis, quæ leviter decolorantur, *Periplocæ*
græcæ cultæ, Rochefort Galliæ.

113. **Phoma Coriariæ** Brun. Suppl. Sphærioid. pag. 1. — Peritheciis 5195
sparsis v. gregariis, epidermide subcolorata tectis, dein suberum-
pentibus, nigris, minutis, globosis; sporulis ovoideis, 6 \approx 2,5, egut-
tatis, hyalinis.

Hab. in ramis emortuis *Coriariæ myrtifoliæ*, Saintes
Galliæ.

114. **Phoma Barbari** Cooke in Grevillea XIV, pag. 3. — Peritheciis 5196
laxe gregariis, epidermide tectis, convexis, non erumpentibus, de-
mum pertusis; sporulis ovoideis, binucleatis, hyalinis, 5 \approx 3.

Hab. in ramulis *Lycii barbari*, Kew Britannicæ.

115. **Phoma Araliæ** Cooke et Mass. in Grev. XVI, p. 6. — Peritheciis 5197
gregariis, maculis irregularibus, nigris plerumque insidentibus, par-
vis, subglobosis, prominentibus, demum epidermidem perforantibus;
sporulis ovoideis v. ellipsoideis, continuis, hyalinis, 8 \approx 4.

Hab. in caulibus *Araliæ spiniferæ*, Kew Britannicæ.

116. **Phoma hederacea** Arc. Erb. critt. it. II, ser. n. 840. — Maculis 5198

subfuscis, 1 cm. et ultra lat., suborbicularibus; peritheciis minutis discretis, punctiformibus, nigris, subcutaneis; sporulis minutis numerosis, ellipsoideis, hyalinis, $5 \approx 2,2$.

Hab. in foliis Hederæ nondum emortuis in viridario Boboli, Firenze. — Comparanda cum *Phyll. hedericola* Dur. et Mont.

117. **Phoma peridermii** Pass. Erb. critt. it. II, n. 1186. — Peritheciis 5199 subglobosis, fuscis, peridermio immutato immersis 87-100 μ . diam., sporulis oblongis 5-7 \approx 2-2,5, hyalinis, apicibus obscure nucleatis.

Hab. in cortice Lagerstrœmiæ indicæ in Horto bot. Parma Ital. bor. (PASSERINI). — A *Ph. Lagerstrœmiæ* Speg. diversa.

118. **Phoma Lagerstrœmiæ** Speg. — Syll. III, p. 93 — var. **foliicola** 5200 E. et E. Journ. Myc. 1888, p. 101. — Peritheciis amphigenis, sublenticularibus, circ. 150 μ . diam., erumpentibus; sporulis fusoido-oblongis, 6-8 \approx 2; basidiis gracilibus, 15-20 μ . long.

Hab. in foliis Lagerstrœmiæ indicæ, Pointe à la Hache Louisiana Amer. bor. (LANGLOIS). — Apices foliorum emortuos, brunneos, sæpe leniter concentricè zonatos occupans.

119. **Phoma Diploglottidis** Cooke et Mass. Grev. XVII, pag. 56. — 5201 Hypophylla, gregaria; peritheciis semiimmersis, atris minutis, papillatis; sporulis arcte amygdalæformibus, binucleatis, hyalinis, 10-11 \approx 4-5.

Hab. in foliis subemortuis Diploglottidis, Brisbane Australiæ (BAILEY).

120. **Phoma Loti** Cooke in Grevillea XIV, p. 2. — Gregaria; pe- 5202 ritheciis globosis, atris, tectis, cuticulam elevantibus et ostiolo prominente perforantibus; sporulis ellipticis, hyalinis, enucleatis, 5 \approx 2; basidiis nullis vel obsoletis.

Hab. in ramulis Diospyri Loti, Kew Britannia.

121. **Phoma confluens** Karst. et Har, Journ. Bot. 1890, p. 358. — 5203 Peritheciis erumpenti-superficialibus, discretis v. sæpius concre-scentibus, sphæroideo-applanatis, subinde vertice depressis, rugosulis, nitentibus, demum poro pertusis, 0,1 mm. v. paullo, ultra; sporulis cylindræis, utrinque obtusissimis, rectis, utrinque 2-guttatis, hyalinis, 5-6 \approx 2.

Hab. ad folia Hausknechtia, Lazistam Asiæ (HAUSSKNECHT).

122. **Phoma Muehlenbeckiæ** Cooke et Mass. XVI, p. 6. — Peritheciis 5204 minutissimis, subcuticularibus, dense gregariis atro-brunneis, membranaceis, subglobosis, papillatis; sporulis ellipsoideis, continuis, basidiis brevibus primo fultis, 3 \approx 2.

Hab. in caulibus emortuis Muehlenbeckiæ, Kew Britannia

123. **Phoma Epicecidium** (Berk.) Sacc., *Sphæronema* Berk. in Hook. 5205
Kew. Gard. Miscell. I, p. 291, t. X, f. B (1849), Syll. III, p. 198
(nomen). — Peritheciis minutis, innatis, globoso-depressis, ore ob-
tuse prominulo, pertuso; sporulis obovatis v. piriformibus, hyalinis.
Hab. in cecidiis clavato-infundibuliformibus amphigenis ad fo-
lia *Ochnaceæ* cujusdem *Para* et *Caripi* *Brasilæ*.
124. **Phoma Baccharidis** Brun. Champ. Saint. VII, p. 4. — Perithe- 5206
ciis sparsis vel gregariis, globosis, nigris, minutis, vix erumpenti-
bus; sporulis ovoideis, hyalinis, 5-6 \approx 2,5.
Hab. in ramulis emortuis *Baccharidis halimifoliæ*, Fou-
ras prope *Saintes Galliæ*.
125. **Phoma Fuchsiae** Brun. Champ. env. Saint. p. 337. — Peritheciis 5207
sparsis v. gregariis, minutis, nigris, globosis, pertusis, vix erum-
pentibus; sporulis oblongo-elongatis, hyalinis, 2-guttatis, 10-12 \approx 3.
Hab. ad ramos emortuos *Fuchsiae coccineæ* cultæ *Sain-
tes Galliæ*.
126. **Phoma salicifolia** Cooke in Grev. XVI, p. 48. — Epiphylla; 5208
peritheciis minutissimis, punctiformibus, sparsis v. sæpius in cæ-
spitulos orbiculares, parvos gregatis; sporulis subglobosis v. ovoi-
deis, continuis, hyalinis, 6 \approx 4.
Hab. in foliis emortuis *Salicis*, *Kew* *Britanniæ*.
127. **Phoma glyptica** Cooke et Mass. in Grev. XV, p. 107. — Sub- 5209
cuticularis; peritheciis secus orbes dispositis, linea plus minus di-
stincta cinctis, subglobosis; ostiolo epidermidem perforante; sporu-
lis ovoideis, continuis, hyalinis, 4-5 \approx 3; basidiis longis.
Hab. in ramis *Salicis*, *Tunbridge Wells* *Britanniæ*. — Habi-
tus *Valsæ glypticæ*.
128. **Phoma Colensoi** Cooke Grev. XIX, p. 3. — Peritheciis per corti- 5210
cem erumpentibus, gregariis vel sparsis, subglobosis, atris; sporu-
lis ovalibus, continuis, hyalinis, 3 \approx 2.
Hab. in ramis *Populi* in *Nova Zelandia* (*COLENZO*).
129. **Phoma urens** Ell. et Ev. Journ. Myc. 1888, p. 102. — Peri- 5211
theciis subglobosis, dense gregariis, interdum pro parte confluen-
tibus, plus minus erumpentibus, nigris, corticem interiorem nigri-
ficantibus; sporulis oblongo-ellipsoideis, hyalinis, 6-8 \approx 2,5-3.
Hab. in ramis *Populi*, *Middlesex Falls*, *Mass.* Amer. bor. (Prof.
L. M. UNDERWOOD).
130. **Phoma Populi** Peck 40 Rep. p. 59. — Peritheciis minutis, 75- 5212
100 μ . lat., epiphyllis, gregariis, nigris, poro lato pertusis; spo-
rulis cylindræis, rectis v. subincurvis, 15-20 \approx 3.

Hab. in foliis emortuis *Populi tremuloidis*, Elizabethtown Amer. bor.

131. **Phoma atro-cincta** Sacc. F. Rom. n. 42, fig. 5. — Peritheciis 5213
areolis exiguis circulari-ovatis atratis v. atro-limitatis innatis, in quaque areola 1-3, globulosis, $\frac{1}{4}$ - $\frac{1}{3}$ mm. diam., obtuse papillatis, nigricantibus; sporulis breve fusoideis, $5 \approx 2$, hyalinis, 2-guttulatis; basidiis fasciculatis bacillaribus, $6-10 \approx 1$.

Hab. in foliis emortuis *Fici elasticæ* in hortis, Roma.

132. **Phoma cicatricum** Passer. Diagn. F. N. IV, n. 75. — Perithe- 5214
ciis crebre vel laxe gregariis, peridermio insculptis, minutissimis, atris; sporulis ellipticis, non guttulatis, integris, hyalinis, $5-6 \approx 2,5-3$.

Hab. in circatricibus foliorum in ramulis emortuis *Ficus Caricæ* in horto botanico parmensi Ital. bor. — Peritheciis minoribus non subcutaneis et sporulis non guttulatis nec fusiformibus a *Phoma cinerescenti* facile distinguenda.

133. **Phoma ulmicola** Rich. Cat. Champ. Marn. p. 548. — Peritheciis 5215
sparsis, subcutaneis; sporulis ovoideis 12μ . long., pluriguttulatis, basidiis longis suffultis.

Hab. in ramis *Ulmi campestris*, sociâ *Cryptosporellâ hypodermiâ*, cujus spermogonium dicitur, in silvis St-Amand Galliæ.

134. **Phoma Hariotiana** Wint, Exot. Pilze IV, p. 11. — Peritheciis 5216
amphigenis, dense sparsis, primo immersis, epidermide immutata, pustulatim inflata tectis, demum vertice erumpentibus, subglobosis, plus minus depressis, immo fere lentiformibus, ostiolo late papilliformi, obtuso, prominentibus, membranaceis, atris, $115-230 \mu$. long., $100-115 \mu$. (cum papilla) alt.; sporulis numerosissimis, ellipsoideis, utrinque acutiusculis, hyalinis, continuis, $5-7 \approx 2,5$.

Hab. ad folia emortua *Fagi antarcticæ*, Cap Horn America austr.

135. **Phoma antarctica** Speg. F. Fueg. n. 376. — Maculis nullis; 5217
peritheciis hypophyllis hinc inde dense aggregatis, immersis, epidermide velatis, parum prominulis ac perspicuis, subglobosis, $180-220 \mu$. diam., atro-olivaceis, ostiolo minuto impresso; contextu densissime parenchymatico, subimperspicuo, olivaceo-fuligineo; sporulis, ellipticis v. subcylindræco-fusoideis, utrinque plus minusve rotundato-acutatis, $2-4 \approx 0,7-1$, grosse 2-guttulatis, hyalinis; sterigmatibus conoideo-cylindræcis, $10 \approx 1-2$.

Hab. ad folia languida *Fagi betuloidis* in Staten island Fuegiæ.

136. **Phoma desolationis** Speg. F. Fueg. n. 377. — Maculis nullis; 5218
peritheciis globulosis, 80-90 μ . diam., hinc inde dense ac subbo-
tryose aggregatis, primo epidermide tectis, dein erumpenti-denu-
datis, atris, subcarbonaceis, glabris, brevibus, ostiolo minutissimo,
impresso; cõtextu indistincto; sporulis cylindræis v. allantoideis,
utrinque obtusis ac minute 1-guttulatis, 2-3 = 0,5-0,8, hyalinis.
Hab. in gallis ramulorum Fagi betuloidis in Fuegia pr.
Brecknok pass.
137. **Phoma clausa** Wint, Exot. Pilze IV, p. 11. — Peritheciis nu- 5219
merosis, sparsis, in alveolis ligni minutissimis semiimmersis, sub-
globosis vel ellipticis, tenuissime membranaceis, fuscis, poro haud
conspicuo, tandem vertice dilabentibus, basin tantum fere cupuli-
formem relinquentibus, 160-270 μ . long.; sporulis myriadeis, minu-
tissimis, oblongis, utrinque rotundatis, continuis, hyalinis, 3,5 = 1,8.
Hab. in lignum nudum Fagi antarcticæ ad Cap Horn
Amer. austr.
138. **Phoma castanea** Peck 40 Rep. p. 59. — Peritheciis numerosis, 5220
ramulum cingentibus, 275-350 μ . lat., erumpentibus, nigris; spo-
rulis minutis, oblongis vel cylindræis, 6,25-7,5 = 1,5-2; basidiis
brevibus.
Hab. in ramis emortuis Castanea vescæ, Sandlake Ameri-
cæ borealis.
139. **Phoma crassipes** Cooke in Grevillea XIV, pag. 2. — Erum- 5221
pens, subsparsa; peritheciis amplis, atris, opacis, subglobosis, de-
mum apice libero; sporulis ovoideis, continuis, hyalinis, enuclea-
tis, 6 = 4.
Hab. in ramulis Broussonetiæ papyriferae, Kew Bri-
tanniæ.
140. **Phoma millepunctata** Desm. XX, Not. pag. 11. — Amphigena; 5222
maculis nullis; peritheciis innatis, minutis, numerosissimis, sparso-
approximatis, globosis, 75-100 μ . diam. utrinque prominulis, rufo-
pallidis, dein fuscis, depressis; ostiolo punctiformi; sporulis pau-
cis, oblongis, exiguis, 5 μ . long.
Hab. in foliis delapsis Mori albæ in Gallia. — Non *Phoma*
millepunctata Penz. — Syll. III, pag. 105 — quæ *Macrophoma*
(Confr. Berlese et Voglino sopra un Nuovo gen. di Sferops. in
Atti Soc. Veneto-Trentina 1886).
141. **Phoma morifolia** Berl. F. moric. f. VI, n. 13, t. 48, f. 8-12. — 5223
Peritheciis sparsis, primo pallidis, dein brunneolis, demum brun-
neis, apicem versus obscurioribus astomis dein perforatis, globoso-

conoideis, epidermide primo tectis, postremo emergentibus, membranaceo-molliusculis, $\frac{1}{5}$ mm. diam.; sporulis ovoideis utrinque guttulatis, hyalinis, $6-7 \approx 3-5$; basidiis cylindræis vel obclavatis, $9-12 \approx 2,5$.

Hab. in pagina superiore foliorum putrescentium *Mori albæ*, Padova Ital. bor.

142. **Phoma Morearum** Brun. Champ. Saint. 1887, p. 429. — Peri- 5224
theciis sparsis vel gregariis, in cortice nidulantibus, dein erumpentibus, subglobosis vel globoso-depressis, nigris, pertusis; sporulis oblongo-subfusoides, hyalinis, $8 \approx 2,5$, rectis, 2-guttatis.

Hab. in ramis emortuis *Mori albæ*, Pessines pr. Saintes Galliæ.

143. **Phoma limbalis** Passer. Diagn. F. N. IV, n. 76. — Maculis nul- 5225
lis; peritheciis hypophyllis sparsis v. gregariis, primo tectis, ostiolo minuto, vix visibili, dein nudatis, punctiformibus, atris glabris; sporulis oblongo-ellipticis, hyalinis, continuis, non guttulatis, $5 \approx 2,5$; basidiis non visis.

Hab. in foliis dejectis *Platani occidentalis*, sociâ *Læstadiâ venetâ* immaturâ, cujus forte status spermogonicus, in Ital. bor.

144. **Phoma dispersa** Cooke in *Grevillea* XIII, p. 93. — Hypophyl- 5226
la; peritheciis sparsis, crassis, subglobosis, erumpentibus dein sub-superficialibus, nigris, opacis; sporulis ellipticis, continuis, hyalinis, enucleatis, $15 \approx 6$.

Hab. in foliis delapsis *Platani*, Kew Britannicæ.

145. **Phoma Gallarum** Briard Suppl. p. 89. — Peritheciis numerosis, 5227
late effusis sphericis, rugulosis, sæpe depressis, nigris, basi leviter innatis, $0,2-0,25$ mm. diam.; sporulis subirregularibus, ovoideo-oblongis vel ovalibus, obtusis vel acutiusculis, sæpe 2-guttatis, hyalinis, $8-9 \approx 3-4,5$.

Hab. in gallis quercinis, Aube Galliæ.

146. **Phoma allantella** (Peck) Sacc. *Aposphæria allantella* Peck 43 5228
Rep. p. 26. — Peritheciis subglobosis subsuperficialibus, $170-200 \mu$. diam., nigris; sporulis minutis, allantoideis, $4-5 \approx 2$.

Hab. in ligno decorticato expallente *Quercus rubræ*, Mont. Catskill Amer. bor.

147. **Phoma aposphærioides** Briard et Hariot Rev. Myc. 1890 Oct. 5229
— Peritheciis numerosis, confertis, nigrescentibus, minutis, $\frac{1}{6}-\frac{1}{5}$ mm. diam., orbicularibus, depressis, rugosis et papillatis; sporulis ovoideis, hyalinis, 2-guttatis, $3,5-4 \approx 1,5-2$.

Hab. in ligno quærneo putrido, Jab Puy-de-Dôme Galliæ (HÉRIBAUD).

148. **Phoma quercicola** Sacc. et Briard in Rev. Myc. 1886. — Peritheciis 5230
 theciis innatis, erumpentibus, nigris, nitidis, epiphyllis, approxima-
 tis, poro pertusis, in maculis griseis, irregularibus; sporulis ovato-
 oblongis, obtusis, continuis, hyalinis, 4-6 \approx 1,5-2.

Hab. in pagina superiore foliorum emortuorum *Quercus*,
 Troyes Galliæ (BRIARD).

149. **Phoma celtidicola** Brun. Suppl. Sphæroid. p. 1. — Peritheciis 5231
 sparsis vel adproximatis, tectis, dein erumpentibus, nigris, globo-
 sis, pertusis; sporulis oblongo-elongatis vel subfusoides, 8-10 \approx
 2,5-3, hyalinis, 2-guttulatis.

Hab. in ramis emortuis *Celtidis occidentalis*, Saintes
 Galliæ.

150. **Phoma Celtidis** Cooke in Grevillea XIV, pag. 3. — Peritheciis 5232
 prominentibus, convexis, laxe gregariis, cuticula tectis eamque
 ostiolo atro, punctiformi perforantibus; sporulis ovoideis, enuclea-
 tis, hyalinis, 5 \approx 3,5.

Hab. in ramulis *Celtidis occidentalis*, Kew? Britanniæ.

151. **Phoma albovestita** Fairm. Contr. Myc. West. N. Y. p. 50. —
 Maculis corticalibus, plerumque zona alba cinctis; peritheciis par-
 vis, erumpentibus, cortice interiore immersis, raro botryoideo-ag-
 gregatis, sordide nigris; sporulis oblongis, utrinque rotundatis,
 4-7 \approx 1,5-2.

152. **Phoma juglandicola** Bacc. Fungh. Avell. p. 371. — Peritheciis 5233
 gregariis punctiformibus depressis, obtusis, sub epidermide decolo-
 rata tandem fissa et ab hypodermio sejuncta prominulis, ostiolo
 minuto centrali pertusis; contextu crasso, nigro; sporulis ellipsoi-
 deis, 7 \approx 4, hyalinis; basidiis filiformibus mediocribus.

Hab. in mallo nucum *Juglandis putrescentium*, Avellino
 Ital. infer.

153. **Phoma Balsameæ** Brun. Esp. Sphærops. pag. 1. — Peritheciis 5234
 vulgo epiphyllis, sparsis, punctiformibus, nigris, epidermide dein
 rimose lacerata tectis; sporulis ovatis, hyalinis, 8 \approx 3, eguttatis.

Hab. in foliis emortuis *Abietis balsameæ* in horto botani-
 co Rochefort Galliæ.

154. **Phoma eguttulata** Karst. Symb. XIX, p. 88. — Peritheciis co- 5235
 noideo-rotundatis vel oblongatis, per epidermidem fissam erumpen-
 tibus, vertice varie dehiscentibus, pachydermaticis, atris, usque ad
 1 mm. diam.; sporulis oblongatis vel oblongo-ellipsoideis, utrin-
 que leniter attenuatis, rectis, eguttulatis, hyalinis, 5-6 \approx 2-3.

Hab. in foliis Pini silvestris et Abietis excelsæ circa Mustiala Fenniæ.

155. **Phoma Pittospori** Cooke et Harkn. — Syll. III, p. 73 — var. **Cembræ** Karst. Fragm. XXII, p. 2. — Peritheciis sparsis, per epidermidem erumpentibus laciniisque ejus cinctis, sphæroideis vel sphæroideo-applanatis, fuligineo-atris vel atris, 0,2-0,3 mm. diam., demum poro pertusis; sporulis ellipsoideis, oblongatis vel ovoideo-oblongatis, rectis, eguttulatis, hyalinis, 6-9 μ 2-3. 5236
- Hab.* ad ramulos siccos Pini Cembræ in horto mustaliensi Fenniæ (ONNI KARSTEN).
156. **Phoma allostoma** (Lév.) Sacc. Syll. III, pag. 74. Teste Celotti Mic. Montp. p. 13, sporulæ 4-5 μ 2-3. Nascitur quoque in ramis Taxi, Montpellier Galliæ.
157. **Phoma Cunninghamiæ** Pass. et Roum. in Rev. Myc. 1885, p. 172. 5237 — Peritheciis sparsis, punctiformibus, atris; sporulis oblongiusculis, hyalinis, basidiis filiformibus, elongatis suffultis.
- Hab.* in foliis aridis Cunninghamiæ sinensis in horto mimatensi Galliæ.
158. **Phoma Abietis** Briard Add. Syll. n. 4292. — Peritheciis minutissimis, dense longitudinaliter gregariis, mox superficialibus, vix $\frac{1}{10}$ mm. diam., atris, nitidulis, subglobosis, amphigenis; sporulis oblongis, cylindræis, utrinque obtusis, rectis, 6-8 μ 2-3, hyalinis; basidiis non visis. 5238
- Hab.* in foliis emortuis Abietis pectinatae, Troyes Galliæ.
159. **Phoma sapinea** Pass. in Rev. Myc. 1886, p. 91. — Peritheciis gregariis, epidermide velatis, subglobosis vel oblongis, fuscis; sporulis oblongis, utrinque rotundatis, enucleatis, hyalinis, 5 μ 2,5; basidiis nullis vel obsoletis. 5239
- Hab.* in squamis exsiccatis conorum Abietis excelsæ, Parma Ital. bor. (PASSERINI).
160. **Phoma conigena** Karst. in Rev. Myc. 1885, p. 106. — Peritheciis sparsis vel subgregariis, erumpentibus, mox superficialibus, difformibus, ut plurimum rotundatis, demum ore rimoso dehiscentibus, atris, 0,2-0,3 mm. latis; sporulis oblongatis, fusoides, eguttulatis, hyalinis, 6-9 μ longis. 5240
- Hab.* in squamis conorum emortuorum Pini silvestris ad Mustiala Fenniæ. — Ab affinibus *Phoma Pini*, *Ph. Pittospori* et *Ph. pithya*, peritheciis mox superficialibus statim dignoscenda.
161. **Phoma conophila** Sacc. *Phoma conigena* Karst. Symb. Myc. Fenn. XXVI, p. 29 (1888) nec Karst. (1885). — Peritheciis soli- 5241

tariis vel aggregatis, erumpentibus, superficialibus, varie compressis, sæpe elongatis, subhysterioides, atris, nitentibus, levibus, substomis, 0,1-0,2 mm. lat.; sporulis fusosideo-elongatis, solito rectis, eguttulatis, rarissime obsolete 1-septatis, 8-16 \approx 1,5-2,5; basidiis filiformibus rectis, 10 \approx 1.

Hab. in squamis strobilorum *Abietis excelsæ*, Mustiala Fennicæ. — «An forma *Sporonematis strobilini?*».

162. **Phoma cooperta** Passer. Diagn. F. N. IV, n. 77. — Peritheciis 5242
immersis, extus intusque atris, subglobosis, pustulas centro hiantes sublevantibus; sporulis hyalinis, cylindricis, rectis, utrinque truncatis, 10,5 μ . long., sessilibus vel basidiis brevissimis fultis.

Hab. in squamis strobilorum *Abietis excelsæ* in horto botanico parmensi Ital. bor.

163. **Phoma deflectens** Sacc. Bomm. Rouss. Contr. Myc. Belg. III, 5243
p. 14. — Peritheciis aggregatis, inæqualiter globoso-oblongis vel depressis, epidermidem arrectam perforantibus, 1 mm. alt., 0,5-0,7 mm. cr.; sporulis cylindræis, hyalinis, 2-guttatis, 7-12 \approx 2-3, in cirrum albidum expulsis; basidiis linearibus, 10-12 \approx 1,5.

Hab. in basi foliorum emortuorum *Araucariæ imbricatæ*, bois de la Cambre prope Bruxelles Belgii.

164. **Phoma crassicollis** Karst. Sphærops. Fenn. p. 50. — Peritheciis 5244
sparsis, innatis, sphæroideis, siccis collapsis, atris, 0,2-0,3 mm. lat.; ostiolo papillato, erumpente; sporulis oblongatis v. fusosideo-oblongatis seu elongatis, rectis, raro inæquilateralibus v. subcurvulis, eguttulatis, 7-16 \approx 2-4.

Hab. in foliis emortuis *Pini silvestris*, Mustiala Fennicæ.

165. **Phoma pityella** Sacc., *Sphæropsis pitya* Thuem. M. U. n. 1888 5245
nec Sacc. — Peritheciis solitariis v. subgregariis, interdum confluentibus, inordinate dispositis, cephaloideis, e cuticula dirumpenti elevatis, pro ratione magnis, opaco-atris; sporulis ellipticis v. ovatis, simplicibus, utrinque vix acutatis v. plerumque subrotundatis, achrois, 4-7 \approx 2-2,5; basidiis brevissimis fultis.

Hab. in ramulis *Laricis europææ*, Lohr Bavaricæ (REHM).

166. **Phoma pitya** Sacc. Syll. III, pag. 73. — Var. **Taxodii** Sacc. in 5246
Rev. Myc. 1885. — Sporulis 7-8 \approx 2, biguttulatis, hyalinis.

Hab. in cortice *Taxodii* in Gallia (ANGELE ROUMEGUÈRE).

167. **Phoma Laricis** Lév. Voy. pag. 111, t. IV, f. 5, Sacc. Syll. III, 5247
p. 169. — Erumpens, unilocularis; peritheciis sparsis v. subseriatis, globosis, nigris, ostiolis papillatis; sporulis oblongo-linearibus, simplicibus, pellucidis,

Hab. in conis Laricis in Tauria.

168. **Phoma Cycadis** Sacc. et Berl. in Rev. Myc. 1886. — Perithe- 5248
ciis sparsis, primum tectis dein ostiolo protuberante nitidis, conoi-
deis v. conoideo-applanatis, 150-200 μ . diam.; sporulis ellipsoideis,
minutis, 6 \approx 2, hyalinis, basidiis longiusculis, cylindraceis, simplici-
bus, 18-20 \approx 2, suffultis.

Hab. in pedunculo emortuo Cycadis revolutæ in Algeria.
— Cum *Chætophoma Cycadis*, cui magnitudine sporularum nec
non matrice affinis, haud comparanda.

169. **Phoma congregata** Pat. Bull. Soc. Myc. 1891, p. 178. — Peri- 5249
theciis minutis, 40-50 \approx 25, subglobosis, substipitatis, dense grega-
riis, sed semper solitariis coriaceis, brunneo-nigris, deorsum opa-
cis, sursum pellucidis, rugoso-squamulosis sed non pilosis; sporulis
cylindraceis, 3-6 \approx 1, hyalinis, numerosissimis.

Hab. in ramis decorticatis, Egido prope Quito Æquatoriæ. —
«An potius *Aposphæria*?»

170. **Phoma purpurea** Cooke et Mass. Grev. XV, p. 97. — Amphi- 5250
gena; maculis orbicularibus, purpureis; peritheciis semiimmersis,
atris, nitidis, primo tectis, gregariis, subcircinatis; sporulis minu-
tis, ellipticis, hyalinis, 4 \approx 2.

Hab. in foliis coriaceis, Brisbane Australiæ (BAILEY). — **Sphæ-**
ria pericarpii Schw., **Sph. glandicola** Schw., **Sph. Surculi** Fr. —
Syll. II. n. 4326, 4328, 4322. — Secundum Cooke Grev. XVI, ad
exempl. Berkeleyana, hæ sunt *Phomæ* species. *Sph. glandicola*
(sp. 5 \approx 3, basidia 20 \approx 3) non est forte a *Ph. glandicola* (Desm.)
satis diversa.

II. In Dicotyledoneis herbaceis.

171. **Phoma Hellebori** Br. et Har. Journ. de Bot. 1891, p. 170. — 5251
Peritheciis oblongis, numerosis, innatis, epidermide tumefacta et
nigrificata tectis, 0,3-0,5 mm. long., 0,2-0,3 mm. lat.; sporulis
ovato-oblongis, obtusis, rarius utrinque attenuatis, 2-guttatis, hya-
linis, 8-10 \approx 3-4; basidiis longis, 20-24 \approx 1-1,5, leviter uncinatis.

Hab. ad caules siccos Hellebori fœtidi pr. Clermont Ar-
vernæ (HÉRIBAUD).

172. **Phoma Aquilegiæ** Rich. Cat. Champ. Marn. p. 546. — Perithe- 5252
ciis seriatis, minutis, brunneis; sporulis grandiusculis, 6 μ . long.;
basidiis subarcuatis, 12 μ . longis.

Hab. in caulibus emortuis decorticatis *Aquilegiæ vulgaris*,
St. Amand Galliæ.

173. **Phoma endorrhodioides** Sacc. et Briard Champ. nouv. de l'Aube 5253
n. 12. — Peritheciis sparsis, innatis, subepidermicis, oblongis vel discoideis, nucleo roseo; ostiolo papillato, epidermidem nigrefactam perforante; sporulis ovato-oblongis, obtusis, hyalinis, 2-guttulatis, 12-16 \approx 4-5.
Hab. in caulibus siccis *Thalictri flavi*, Troyes Galliæ (BRIARD).
174. **Phoma Vitalbæ** Passer. Diagn. F. N. n. 78. — Peritheciis membranaceis, luteo-fuscidulis, basi hyphis reptantibus, articulatis præditis; sporulis oblongo-ellipticis, obscure ad apices 5 \approx 2,5, guttulatis. 5254
Hab. in ramulis *Clematidis Vitalbæ*, in horto botanico parmensi Ital. bor. — A *Ph. Clematidis* differt præsertim sporulis multo minoribus et peritheciis characteribus ab omnibus aliis in *Clematide* descriptis videtur diversa.
175. **Phoma Jacquiana** Cooke et Mass. Grev. XVII, p. 56. — Caulicola; peritheciis gregariis, minutis, nigris, papillatis, epidermidem elevantibus et demum perforantibus; sporulis ellipsoideis, utrinque 1-guttatis, hyalinis, 15 \approx 5. 5255
Hab. in caulibus *Delphinii Jacquiani*, Kew Britannia.
176. **Phoma tingens** Cooke et Mass. in Grev. XVII, p. 56. — Sparsa; peritheciis minutis, subglobosis, nigris, papillatis, maculis læte rubris, matrice penetrantibus insidentibus; sporulis ovoideis, 3-4 \approx 1,5. 5256
Hab. in caulibus *Delphinii elati*, Kew Britannia.
177. **Phoma gibberoidea** Cooke et Mass. in Grev. XVII, pag. 56. — Caulicola; peritheciis sparsis, membranaceis, mollibus et gelatinosis, magnis, subglobosis, dein depressis, apice pertusis, erumpentibus, atro-brunneis; sporulis profusis, cylindræis, obtusis, rectis v. subincurvis, hyalinis, 14 \approx 2; basidiis brevibus. 5257
Hab. in caulibus *Delphinii elati*, Kew Britannia.
178. **Phoma Alliaræ** Delacr. Bull. Soc. Myc. 1890, p. 140. — Peritheciis sparsis, atro-fuscis, secundum longitudinem caulis dispositis, applanatis, 500 μ . long., 190 μ . lat., 125 μ . alt., poro papillato; sporulis ovoideis vel fusoides, continuis, hyalinis, 2-guttulatis, 10-11 \approx 2,5-3; basidiis sursum attenuatis, rectis vel curvulis, 15 \approx 1. 5258
Hab. in caule sicco *Erysimi Alliaræ* Rueil pr. Paris. — *Ph. Lingam* affinis.
179. **Phoma matthiolicola** Brun. Champ. Saint. 1887, p. 430. — Pe- 5259

ritheciis sparsis v. subgregariis, tectis, dein erumpentibus, numerosis, minutissimis, globosis v. globoso-depressis; sporulis ovoideo-oblongis, 4-5 \approx 2, eguttatis, hyalinis.

Hab. in siliquis exsiccatis Matthiolæ sinuatæ, Fouras pr. Saintes Galliæ.

180. **Phoma Matthiolæ** Brun Suppl. Sphæroid. p. 2. — Maculis nul- 5260
lis; peritheciis globosis, dein applanatis, sparsis, nigris, subnitentibus, $\frac{1}{4}$ - $\frac{1}{3}$ mm. diam., primo tectis, mox omnino liberis, poro pertusis; sporulis oblongis, hyalinis, 2-guttatis, 7-10 \approx 2,5-3.

Hab. in siliquis Matthiolæ incanæ, Pessines prope Saintes Galliæ.

181. **Phoma glacialis** Speg. F. Fueg. n. 380. — Peritheciis sparsis, 5261
primo epidermide tectis, dein nudis, globosis v. conoideo-lenticularibus, 180-220 μ . diam., atris, glabris, coriaceo-membranaceis, ostiolo non v. vix papillulato pertusis; contextu subindistincto, parenchymatico, fuligineo; sporulis ellipticis, utrinque obtusiusculis, 2-3 \approx 1, uni-guttulatis, rectis vel inæquilateralibus, hyalinis.

Hab. ad caules emortuos Cardaminis geraniifoliæ var. glacialis in alpinis pr. Port Cook in Staten island Fuegiæ.

182. **Phoma Joannis** Sacc., *Phoma Polygalæ* Passer. Diagn. F. N. 5262
IV, n. 79, nec Cooke et Harkn. — Peritheciis sparsis, tectis, punctiformibus, pallidulis; sporulis cylindricis, rectis, utrinque acutiusculis et guttulatis, hyalinis, 10 \approx 2,5; basidiis non visis.

Hab. in caulibus siccis Polygalæ vulgaris, Fornovo prope Carona in agro parmensi Ital. bor.

183. **Phoma polygalina** Passer. Diagn. F. N. IV, n. 80. — A præce- 5263
dente differt peritheciis crassioribus, atris, pustulatim prominulis et sporulis ovoideis, minutissimis.

Hab. in Polygala vulgari, Fornovo prope Carona in agro parmensi Ital. bor.

184. **Phoma Polygalæ** Cooke et Harkness in Grevillea XIII, p. 111. — 5264
Caulicola; peritheciis gregariis, subcutaneis, globoso-depressis, pertusis, epidermide nitida velatis; sporulis subfusoides, enucleatis, utrinque obtusis, hyalinis.

Hab. in caulibus Polygalæ in California (HARKNESS).

185. **Phoma Cichorii** Passer. Diagn. F. N. IV, n. 85. — Peritheciis 5265
gregariis, lineari-seriatis, subglobosis v. oblongis, matricem infuscantibus v. strato subcrustaceo, fusco inquinantibus; sporulis oblongis, 2-guttatis, hyalinis, 5 \approx 2,5, basidiis filiformibus, longioribus fultis.

Hab. in caulibus siccis denudatis Cichorii Intybi et Phlogis Carolinæ, Vigheffio pr. Parma Ital. bor.

186. **Phoma Echioidis** Brun. Suppl. Sphæroid. p. 2. — Maculis stromaticis irregularibus, elongatis, nigris, margine saturatis; peritheciis sparsis v. gregariis, erumpentibus, compressis, nigris; sporulis oblongis, elongatis, hyalinis, 2-guttulatis, 7-10 \approx 2,5. 5266

Hab. in caulibus emortuis Helminthiæ echioidis, Saintes Galliæ.

187. **Phoma scutellata** Sacc. et Paol. Mycet. Sibir. p. 21, f. 21. — Peritheciis dense gregariis, innato-erumpentibus, globoso-applanatis, minutissime papillatis, demum collabascendo patellatis, initio brunneis, demum nigricantibus, $\frac{1}{10}$ mm. latis; sporulis fusoidis, curvatis, utrinque acutiusculis, 9 \approx 2,5, continuis, hyalinis, eguttulatis, basidiis nullis v. perexiguis. 5267

Hab. in caulibus Crepidis tectorum in desertis prope Gorodok Sibiria.

188. **Phoma Grovei** Berl. et Vogl. Add. Syll. n. 4303, *Phoma rubella* Grov. New Not. Fung. p. 8, n. 50 (non Cooke). — Peritheciis gregariis olivaceis, tenuibus, $\frac{1}{3}$ - $\frac{1}{4}$ mm. diam., lenticularibus, breve papillatis, sub epidermide late cruentata immersis, ostiolo pertuso vix emergente; sporulis oblongis, utrinque 1-guttatis, 6-7 \approx 2 $\frac{1}{2}$ -3, rectis, hyalinis. 5268

Hab. in caulibus emortuis Cardui, prope Three Shire Oak Brit., sociâ *Metasphæriâ rubellâ*, cujus vix dubie spermogonium habenda.

189. **Phoma sanguinolenta** Grove New Not. Fung. pag. 8, n. 49. — Peritheciis laxè gregariis, atris, opacis, $\frac{1}{3}$ mm. diam., epidermide libroque solutis, inter fibras ligneas, flexuosas, splendide purpureo-tinctas nidulantibus, demum emersis, globosis compressisve, conico-papillatis; hyphis purpureis, parce septatis, 3 μ . crass. vestitis; sporulis oblongis, utrinque 1-guttatis, 6-7 \approx 2 $\frac{1}{3}$ -3, rectis, hyalinis. 5269

Hab. ad basim caulium Cardui putrescentium prope Three Shire Oak Brit., sociâ *Leptosphæriâ cruentâ*, cujus haud dubie spermogonium.

190. **Phoma Pycnocephali** Passer. Diagn. F. N. V, n. 28. — Peritheciis sparsis, punctiformibus, epidermide velatis, membranaceis; contextu celluloso, fuscidulo; sporulis cylindræis, ad polos obscure guttulatis, 5 \approx 1-1,5, hyalinis. 5270

Hab. in caulibus Cardui pycnocephali, Vigheffio in agro parmensi Ital. bor.

191. **Phoma Pulicariæ** Passer. Diagn. F. N. V, n. 23. — Peritheciis 5271
dense sparsis, minutis, erumpentibus; sporulis elongato fusiformibus, eguttulatis, hyalinis, 10-12,5 \approx 2,5.

Hab. in ramulis Pulicariæ viscosæ in Ital. boreali.

192. **Phoma Solidaginis** Cooke in Grevillea XIII, pag. 95. — Cauli- 5272
cola; peritheciis gregariis, numerosis, primo cuticula tectis dein convexis, atris, nitentibus, poro minuto pertusis; sporulis anguste ellipticis, 9-10 \approx 2, binucleatis; basidiis brevibus.

Hab. in caulibus Solidaginis canadensis, Kew Brit.

193. **Phoma Rudbeckiæ** Fairm. Contr. Myc. West. N. Y. pag. 50. — 5273
Peritheciis numerosis, erumpentibus, globoso-depressis, ostiolatis, subnigris; sporulis oblongis, utrinque rotundatis, 4-6 \approx 2-3, hyalinis.

Hab. ad caules emortuos Rudbeckiæ laciniatæ, Lyndonville, N. Y. Amer. bor.

194. **Phoma Silphii** Passer. Diagn. F. N. IV, n. 84. — Peritheciis 5274
sparsis, punctiformibus, tectis, subglobosis, atris; sporulis subfusiformibus, apicibus acutis, non guttatis, 7,5-10 \approx 2,5, hyalinis.

Hab. in caulibus Silphii in horto botanico parmensi Ital. bor.

195. **Phoma Tussilaginis** Cooke et Mass. in Grev. XV, pag. 108. — 5275
Epiphylla; peritheciis primo tectis, dein hemisphæricis, nigris, apice pertusis, in maculas brunneas, irregulares gregariis, minutis, punctiformibus; sporulis ellipsoideis, hyalinis, continuis, 8-10 \approx 5-6.

Hab. in foliis putrescentibus Tussilaginis Farfaræ, Canal Bank, Hereford. — Species ad *Asteromellam* vergens.

196. **Phoma arvernica** Flag. et Sacc. nov. sp. — Peritheciis sparsis, 5276
hypophyllis innato-erumpentibus, villo foliorum fere abditis, lenticularibus, $\frac{1}{3}$ mm. diam., poro pertusis, nigricantibus; sporulis elliptico-fusoideis, rectis, 11-13 \approx 3, plerumque 2-guttatis, hyalinis; basidiis cylindræis sursum attenuatis, 15 \approx 2-3, subinde binis cellula communi suffultis.

Hab. in foliis exsiccatis Carlinæ acanthifoliæ, Plomb du Cantal, Saone et Loire Galliæ (FLAGEOLET).

197. **Phoma ambiguella** Karst. et Har. Journ. Bot. 1890, pag. 357. 5277
— Peritheciis sparsis, primo cuticula tectis, dein erumpenti-subsuperficialibus, orbicularibus v. oblongatis, solito irregularibus, membranaceis, mollibus, contextu parenchymatico, primitus clausis, dein ore plus minus ampliatis, brunnescentibus, siccitate subnigrescentibus, intus pallidis, pusillis, fere punctiformibus; sporulis ellipsoideis, eguttulatis, hyalinis, 6-9 \approx 3-4.

Hab. in caulibus exsiccatis *Tanacetii*, Méry-sur-Seine Galliaë.
— Inter *Phomam* et *Excipulam* anceps.

198. **Phoma Dipsaci** Cooke in Grevillea XIII, p. 94. — Caulicola; 5278
peritheciis gregariis, sed non stipatis, subglobosis, papillatis, cuti-
culam demum longitudinaliter perforatam elevantibus; sporulis sub-
lanceolatis, obtusis, binucleatis, $9-10 \approx 3,5$.

Hab. in caulibus *Dipsaci silvestris*, Kew Britanniaë.

199. **Phoma iaganica** Speg. F. Fueg. n. 381. — Maculis nullis; pe- 5279
ritheciis densiuscule gregariis, epidermide tectis, prominulis, e glo-
boso lenticularibus, $200-220 \mu$. diam., ostiolo exsertulo, crassiu-
sculo ac longiuscule papillato coronatis, atris, glabris, membrana-
ceo-coriaceis; contextu densissime parenchymatico, subimperspicuo,
atro-fuligineo; sporulis cylindræis v. ellipticis, utrinque acutatis
v. rotundatis, $2,5-4 \approx 1-1,5$, minute 1-guttulatis, hyalinis.

Hab. in leguminibus aridis *Viciae magellanicae* in herbosis
pr. Ushuvaia Fuegiaë.

- 200 **Phoma Thermopsidis** Ell. et Gall. Journ. Myc. 1889, p. 65. — 5280
Peritheciis gregariis, tectis, epidermidem elevantibus et findenti-
bus sed vix erumpentibus, subhemisphæricis, ostiolo papilliformi;
sporulis oblongis, hyalinis, 2-guttatis, non incurvis, $15-20 \approx 5-6$.

Hab. in caulibus emortuis *Thermopsidis rhombifoliae*,
Helena, Mont. Amer. bor.

201. **Phoma Astragali** Cooke et Hark. in Grevillea XIII, p. 111. — 5281
Caulicola, tecta; peritheciis depressis, semiimmersis, epidermide ve-
latis; sporulis subfusoides, binucleatis, hyalinis.

Hab. in caulibus *Astragali* in California (HARKNESS).

202. **Phoma Astragali-alpini** Oudem. Contr. à la Flore myc. de No- 5282
waja Semlja p. 15, t. I, f. 17. — Peritheciis caulogenis, sparsis,
atris, primo absconditis, denique superficialibus, depresso-globosis,
ostiolo breve conico, $170-200 \mu$. diam.; sporulis dilutissime flave-
scentibus, continuis, $6 \approx 2\frac{1}{3}$, rectis, utrinque obtusatis, vacuolis in
exemplis nostris siccatis perraro distinguendis.

Hab. in Astragalo alpino in Nowaja Semlja.

203. **Phoma phaseolina** Pass. in Brun. Mat. myc. Saint. pag. 22. — 5283
Peritheciis minutis, adproximatis, globosis, contextu minute fuligi-
neo-parenchymatico, intus albis; sporulis cylindræis, rectis, utrin-
que vix distincte 1-guttatis, $5 \approx 2$.

Hab. in leguminibus siccis *Phaseoli*, Pessines, Saintes Galliaë.

204. **Phoma Lupini** Ell. et Ev. in Bull. Wash. Lab. Nat. Hist. 1884, 5284
p. 6. — Peritheciis minutis, subsuperficialibus, atris, dense grega-

riis, in maculis 2-3 mm. diam. confluentibus, magnam partem paginæ inferioris foliorum occupantibus superioremque pallide brunneo colorantibus; sporulis oblongo-hyalinis, $2,5 \approx 1$.

Hab. in foliis vivis Lupini? Falcon Valley Amer. bor.

205. **Phoma Poterii** Passer. Diagn. F. N. IV, n. 40. — Peritheciis 5285
sparsis, epidermidem sublevantibus et longitudinaliter findentibus, ovalibus, atris; contextu membranaceo, celluloso, fuligineo; sporulis innumeris, bacillaribus, pluriguttatis, rectis, hyalinis, $10-12 \approx 1$; basidiis brevibus.

Hab. in caulibus siccis Poterii Sanguisorbæ, Parma Italiæ borealis.

206. **Phoma Plumbaginis** Passer. Diagn. F. N. IV, n. 86. — Perithe- 5286
ciis sparsis, minutis, tectis, subglobosis vel elongatis, papillulatis, atris, tandem epidermide consumpta nudatis; sporulis navicularibus utrinque acutiusculis et guttulatis, hyalinis, $5 \approx 2$; basidiis filiformibus, longitudine varia, sæpe sporulas multo superantibus.

Hab. in ramis siccis Plumbaginis europææ, Orvieto Italiæ.

207. **Phoma Lini** Passer. Diagn. F. N. IV, n. 81. — Peritheciis cre- 5287
bre sparsis, sæpius in lineas longitudinales digestis, minutissimis, fuscis; contextu celluloso fuligineo; sporulis minimis, allantoides.

Hab. in caulibus Lini tenuifolii, Vigheffio prope Parmam Ital. bor.

208. **Phoma Lysimachiae** Cooke in Grevillea XIII, p. 94. — Caulico- 5288
la, laxè gregaria, punctiformis; peritheciis atris, leniter cuticulam nigrescentem elevantibus, minutis, subglobosis; sporulis late lanceolatis, binucleatis, $10 \approx 4,5-5$; basidiis brevibus, rectis.

Hab. in caulibus Lysimachiae vulgaris, Kew Britanniae.

209. **Phoma Lyndonvillensis** Fairm. Contr. Myc. West. N. Y. p. 50, 5289
t. III, f. 4. — Maculas evanidas occupans; peritheciis ostiolatis; sporulis minutis, ovoideis vel oblongis, interdum guttulatis, $3-6 \mu$. diam.

Hab. in caulibus Malvæ rotundifoliae, New York Americæ borealis.

210. **Phoma corvina** Ravenel Fung. Amer. n. 588. — Peritheciis glo- 5290
boso-depressis, subcutaneo-erumpentibus, atris, laxè gregariis, vix papillatis; sporulis minutis, ellipticis, continuis, hyalinis, $8 \approx 1$.

Hab. in ramis Gossypii in Carolina infer. Amer. bor. (RA-

VENEL).

211. **Phoma Althææ** Pass. in Brun. Champ. Saint. V, p. 5. — Pe- 5291

peritheciis membranaceis, lenticularibus, depressis; contextu celluloso, fuliginoso; sporulis minutissimis, bacillaribus, hyalinis.

Hab. in caulibus emortuis *Althææ officinalis*, Saintes, Saint-Sever, Chaniers in Gallia.

212. **Phoma Alcearum** Cooke in Grevillea XIII, p. 94. — Caulicola; 5292
peritheciis numerosis, dense gregariis in macula lata, punctiformibus, membranaceis, fuscis, senectute atris, depressis, epidermide tectis; sporulis ellipticis, obtusis, enucleatis, hyalinis, $15 \approx 5$.

Hab. in caulibus *Althææ roseæ*, Kew Britanniae. — Habitu *Ph. nebulosæ* similis.

213. **Phoma Podophylli** Cooke in Grev. XV, p. 108. — Epiphylla; 5293
peritheciis subsparsis, nigris, punctiformibus, maculis brunneis insidentibus, convexis, subprominulis; sporulis anguste ellipsoideis, utrinque 1-guttatis, $10 \approx 3$.

Hab. in foliis *Podophylli*, Kew Britanniae.

214. **Phoma Nelumbii** Cooke et Mass. in Grev. XVI, p. 78. — Peri- 5294
theeciis sparsis, erumpentibus, mox denudatis et prominulis, subglobosis, nigris, opacis, $\frac{1}{6}$ mm. diam.; sporulis ovoideis, continuis, hyalinis, episporio crasso, centro 1-guttatis, $10 \approx 7$.

Hab. in caulibus putrescentibus *Nelumbii speciosi*, Kew Britanniae.

215. **Phoma tecta** Passer. Diagn. F. N. IV, n. 82. — Peritheciis 5295
subcutaneis, parvulis, globosis, lineari-seriatis, ostiolo minutissimo, vix perspicuo; contextu parenchymatico, atro; sporulis minutis, oblongis, non guttatis, $5-6 \approx 2,5$, hyalinis.

Hab. in caulibus *Bryoniæ dioicæ* in horto botanico parmensi Ital. bor.

216. **Phoma lagenaria** Passer. Diagn. F. N. IV, n. 83. — Stromate 5296
atro, plagas irregulares efformante, pustulis prominulis, obtusis disseminato; sporulis oblongis, apicibus rotundatis, 2-guttatis, hyalinis, $10 \approx 2,5$.

Hab. in pericarpio fracido *Lagenariæ vulgaris* in horto botanico parmensi Ital. bor.

217. **Phoma Mamillariæ** Ell. et Ev. Journ. Myc. 1888. pag. 102. — 5297
Peritheciis subelongatis; sporulis oblongo-cylindræis, 1-3-guttatis, $9-12 \approx 3,5-4$, utrinque obtusis.

Hab. in spinis *Mamillariæ viviparæ*, Sand Coulee, Montana Amer. bor.

218. **Phoma lirella** (Desm.) Sacc. Syll. III, pag. 139. — Var. **Sedi** 5298
Briard et Har. Suppl. p. 86. — Peritheciis 3-5 lirelliformiter se-

riatis innato-erumpentibus, nigris, 1-1,5 mm. long., 0,2-0,3 mm. lat.; sporulis oblongo-cylindræis, obtusis, hyalinis, 2-guttatis, 6-9 \approx 3.

Hab. in caulibus siccis Sedi Telephii, Aube Galliaë.

219. **Phoma Doliolum** Karst. Symb. myc. XXIII, p. 9. — Peritheciis 5299
subconoideis, ostiolo distincto, subtenui, pertuso nigris, 0,3 mm. lat.; sporulis elongatis, continuis, hyalinis, 8-12 \approx 2.

Hab. in caulibus emortuis Sedi Telephi pr. Aboam Fenniaë.
— Spermogonia *Leptosphaerice Dolioli* forte sistit.

220. **Phoma Batatæ** E. et Halst. Bull. N. Jers. Agr. Stat. n. 76, p. 25. 5300
— Peritheciis atris, gregariis, immersis; sporulis tereti-ovoideis, hyalinis, basidiis gracilibus fultis.

Hab. in tuberculis Convolvuli Batatæ, Amer. bor.

221. **Phoma Calystegiaë** Cooke in Grevillea XIII, pag. 94. — Cauli- 5301
cola, gregaria; peritheciis prominentibus, amplis, subglobosis, cuticulam nigrefactam elevantibus, interdum maculis irregularibus, albicantibus insidentibus; sporulis sublanceolatis, utrinque acutis, binucleatis, hyalinis, 7,5-8 \approx 3,5.

Hab. in caulibus emortuis Calystegiaë sepium, Kew, Highgate, Dartford Britanniaë.

222. **Phoma Salviaë** Brun. Liste Sphærops. pag. 16. — Peritheciis 5302
sparsis vel approximatis, primo tectis dein erumpentibus, globulosis, parvis, nigris, macula linea stromatica nigra cincta insidentibus; sporulis oblongis, hyalinis, biguttulatis, 7-8 \approx 2-2,5; basidiis filiformibus, 15 \approx 1.

Hab. in caulibus emortuis decorticatis Salviaë officinalis, Saintes Galliaë.

223. **Phoma Phlomidis** (Lév.) Cooke Grev. XIII. 1884, p. 44, Karst. 5303
et Har. Journ. Bot. 1890, pag. 358, *Dothidea* Lév. Voy. Demid. p. 108. — Peritheciis gregariis, erumpenti-superficialibus, globulosis vel globoso-conoideis, atris, nitentibus, ore lato apertis, 0,1 mm. diam., nucleo pallido; sporulis cylindræis, rectis vel subrectis, hyalinis, 4-6 \approx 1.

Hab. ad folia Phlomidis in Tauria (DEMIDOFF).

224. **Phoma Hyssopi** Passer. Diag. F. N. IV, n. 41. — Peritheciis 5304
subcutaneis, ovalibus, atris; sporulis minutis, allantoideis, hyalinis, basidiis bacillaribus, crassioribus, hyalinis, fultis.

Hab. in ramulis siccis Hyssopi officinalis, in horto botanico parmensi, Ital. bor.

225. **Phoma Leonuri** Let. in Rev. Myc. 1884, pag. 229. — Perithe- 5305

ciis punctiformibus, sæpe sub lente ovoideis, nigris, numerosis, sparsis, primo epidermide tectis, demum, eâ ruptâ, prominulis, poro pertusis; sporulis hyalinis, ovatis, $4-5 \approx 2$.

Hab. in caulibus exsiccatis Leonuri Cardiacæ, Seine infer. Galliæ.

226. **Phoma Stachydis** Brun. Mat. myc. Saint. p. 22. — Peritheciis 5306
tectis, oblongis vel subglobulosis, nigris, macula stromatica, nigra, fusoidea v. irregulariter elongata nigro-limitata insertis; sporulis ovoideis, hyalinis, $5,6 \approx 2,5$, eguttatis.

Hab. in caulibus emortuis Stachydis rectæ, Saintes Galliæ.

227. **Phoma Labiatarum** Cooke in Grevillea XIII, pag. 95. — Cauli- 5307
cola; peritheciis sparsis, punctiformibus, minutis, leniter prominentibus, convexis, atris, lucentibus, non papillatis; sporulis ovalibus, hyalinis, $5 \approx 3$; basidiis brevibus.

Hab. in caulibus emortuis Marrubii, Kew Britannia.

228. **Phoma Polemonii** Cooke in Grevillea XIII, pag. 94. — Caulico- 5308
la; peritheciis gregariis, globoso-depressis, atris, lucentibus, acute distincteque ostiolatis, demum cuticula secessa liberis; sporulis anguste ellipticis, indistincte nucleatis, $10 \approx 3$.

Hab. in caulibus Polemonii cœrulei, Kew Britannia.

229. **Phoma Oudemansii** Berl. et Vogl. Add. Syll. n. 4318, *Phoma Po-* 5309
lemonii Oudem. Contr. à la Flore myc. de Nowaja Semlja p. 16, t. I, f. 18 (non Cooke). — Peritheciis phyllogenis, subcarbonaceis, innato-erumpentibus, sparsis, minutis; sporulis hyalinis, oblongo-ovalibus, utrinque obtusis, $11\frac{2}{3} \approx 4\frac{2}{3}$.

Hab. in Polemonio pulchello in Nowaja Semlja.

230. **Phoma Goodeniarum** Cooke et Mass. Grev. XVI, p. 2. — Epi- 5310
phylla, sparsa; peritheciis punctiformibus, minutis, atris, innatis, membranaceis; sporulis subellipticis, binucleatis, continuis, hyalinis, $8-10 \approx 5$.

Hab. in foliis subemortuis Goodeniæ ovatæ, Victoria Australiæ (CAMPBELL).

231. **Phoma Atropæ** Roum. Fung. Gall. exsic. n. 4465. — Peritheciis 5311
brunneo-nigris, subconfertis, primo applanatis et epidermide hinc inde nigrificata tectis, dein erumpentibus, nudis, poro elongato pertusis; sporulis ovoideis, hyalinis, utrinque guttatis, $10 \approx 5$.

Hab. in caulibus siccis Atropæ Belladonnæ, Radepont Eure, sociâ *Cytoporâ Atropæ* Roum. loc. cit. receptaculis conoideis, epidermide velatis, disco applanato, nigro, erumpente; sporulis minutissimis, cylindricis, incurvis, hyalinis, $2-3 \approx 0,5$.

232. **Phoma Lycopersici** Cooke in Grevill. XIII, p. 94, *Phoma herbarum* Cooke Fungi Brit. II, 415. — Caulicola; peritheciis punctiformibus, nigris, dense gregariis, primum epidermide tectis, demum plus minusve erumpentibus; sporulis lanceolatis, binucleatis, $12 \approx 4$.

Hab. in caulibus Lycopersici, Forden Britanniae (VIZE).

233. **Phoma destructiva** Plowr. Fung. Dis. Tom. pag. 4, fig. 7. — 5313
Peritheciis carbonaceis, minutis, globosis, papillato-pertusis, aggregatis; sporulis oblongo-ovoideis, 2-guttatis, $5-6 \approx 1,5-2$, hyalinis.

Hab. in fructibus, quos valde vexat, Lycopersici esculenti pr. King's Lynn Britanniae.

234. **Phoma Solani** Cooke et Hark. in Grevillea XIII, p. 16. — 5314
Gargaria; peritheciis minutis, membranaceis, subglobosis, papillatis tectis; sporulis ellipticis, hyalinis, $6-7 \approx 4$.

Hab. in caulibus Solani in California (HARKNESS).

235. **Phoma solanicola** Prillieux et Delacroix Bullet. Soc. Mycol. de 5315
Fr. 1890, Pl. XX, fig. II. — Maculis amplis, candidis v. subluteolis; peritheciis gregariis, subrotundis, immersis; collo papillato, prominulo, $135-145 \approx 110-115$; sporulis ovatis, hyalinis, utroque apice uniguttatis, $7,5 \approx 3$.

Hab. in caulibus ramisque vivis Solani tuberosi, quos exsiccant, Verrières-le-Buisson et Joinville-le-Pont prope Parisios Galliae.

236. **Phoma Orobanthes** C. Mass. Contr. Mic. Ver. p. 85, t. II, f. 10. 5316
— Peritheciis minutis, sparsis, nigris, subcutaneis, vix prominulis, depresso-sublenticularibus, poro perviis; sporulis subcylindraceutis ovalibusve, $6-9 \approx 2-3$, hyalinis, biguttulatis, basidiis simplicibus, $10-12 \approx 2$ suffultis.

Hab. in corollis exsiccatis Orobanthes rubentis, Tregna-go agr. veronensis.

237. **Phoma Veronicæ** Roum. — Syll. III, p. 128. — Var. **fructicola**
Pat. in Har. Champ. Cap Horn. p. 196. — Peritheciis 100-150 μ . diam.; sporulis ovoideis $5 \approx 2,5$, hyalinis. In fructibus Veronicæ ellipticæ in ins. Wollaston (HARIOT).

238. **Phoma Lingam** (Tode) Desm. — Syll. III, p. 119 — forma **Li-** 5317
nariæ Sacc. et Paol. Myc. Sib. p. 20. — Sporulis $7 \approx 2$, allantoidis, in peritheciis gregariis, majusculis, complanatis, atris, albidofarctis congestis.

Hab. in ramis exsiccatis Linariæ genistæfoliæ in desertis pr. Nowaselowa Sibiriae (MARTIANOFF).

239. **Phoma Pedicularis** Fuckel in Heuglin Reisen Nordpol. vol. III, Oud. 5318
Contrib. Myc. p. 5. — Peritheciis ab epidermide tectis, depresso-globosis, atris, mediæ magnitudinis, ostiolo brevi, cylindrico erumpente, atro; sporulis cylindræis, rectis, biguttulatis, $6 \approx 2$ hyalinis.
Hab. in foliis exsiccatis *Pedicularis* cujusdam in insula Nowaja Semlja.
240. **Phoma Caryophylli** Cooke in Grevillea XIII, p. 94. — Peritheciis 5319
amplis, convexis, atris lucentibus, maculis indefinitis, albicantibus insidentibus; sporulis fusiformibus, utrinque subobtusis, vix distincte nucleatis, hyalinis, $9 \approx 3$.
Hab. in calycibus et subinde in pedunculis florum *Dianthi* culti, Shrewbury Brit. (REV. W. LEIGHTON).
241. **Phoma nebulosa** (Fr.) Mont. — Sacc. Syll. III, p. 135. — Var. 5320
Cerastii Pass. in Journ. hist. Nat. Bord. 1885, p. 135, Brun. Liste Sphærops. p. 17. — Sporulis bacillaribus, rectis, utrinque obtusis, $15 \approx 2,5$.
Hab. in caulibus et ramulis *Cerastii* trivialis, Saintes Echillais Galliæ.
242. **Phoma antarctica** Speg. F. Pat. n. 165. — Peritheciis densiuscule 5321
sparsis, subepidermicis, lenticularibus, 100-140 μ . diam., atris, glabris, epidermide nonnihil nigrificata adnatis, ostiolo minutissimo, papillæformi donatis, coriacellis; contextu subindistincto, dense minutissimeque parenchymatico, olivaceo; sterigmatibus cylindræis, breviusculis, $8-10 \approx 2$, apice acutis, hyalinis; sporulis cylindræo-ellipticis v. ovoideis, $5-6 \approx 1,5-2$, utrinque acutis, grosse 1-guttulatis, hyalinis.
Hab. ad folia emortua *Azorellæ* cujusdam in maritimis Gregory bay Patagoniæ.
243. **Phoma eryngicola** Brun. Champ. Saint. p. 337. — Peritheciis 5322
sparsis vel approximatis, epidermide nigrificata tectis, intus albis, subglobosis, ostiolo vix prominulo; sporulis cylindræo-oblongis, hyalinis, continuis, 2-guttatis, $10 \approx 3$.
Hab. in caulibus emortuis *Eryngii* campestris, Saintes Galliæ.
244. **Phoma eryngiana** Delacroix Bull. Soc. Myc. Fr. 1890, fasc. IV. 5323
— Peritheciis immersis, 120 μ . lat., mycelio atro, guttulato, endophyllo, hyphis 6-7 μ . lat.; sporulis hyalinis, ovatis, utrinque attenuatis, biguttatis, $5 \approx 2$.
Hab. in caulibus exsiccatis *Eryngii* campestris Saône et Loire Galliæ.

245. **Phoma subcomplanata** Cooke et Mass. in Grev. XV, p. 107. — 5324
Peritheciis gregariis, mox superficialibus, parvis, globosis, dein collapsis et cyathiformibus, nigris, $\frac{1}{6}$ - $\frac{1}{4}$ mm. diam.; sporulis subglobosis, continuis, hyalinis, numerosis, minutis, $3 \approx 2$.
Hab. in caulibus Heraclei, Tunbridge Wells (C. G. BAKER).
— *Ph. complanatae* affinis sed multo minor et sporulis minutissimis.
246. **Phoma clandestina** West. Bull. Acad. Brux. 1852, p. 117. — 5325
Peritheciis sparsis, exiguis, nigris, nitidulis, immersis, ostiolo papillato; sporulis ovoideis, minutissimis, 1-2-guttulatis, hyalinis, numerosissimis, demum madore cirrose expulsis.
Hab. in caule interiore emortuo Heraclei Sphondylii pr. Courtrai Belgii, — *Phoma Belangerii* West. in Syll. III, p. 169 citata sec. Streinz Nom. p. 444, loco Westendorpii citato non adest et verisimiliter cum *Ph. Bellynckii* eadem pag. revera occurrente fuit confusa. — *Phoma Podagrariae* West. — Syll. III, p. 169 — est *Phyllachora Podagrariae* (Roth) Karst., Syll. II, p. 615.
247. **Phoma alsatica** Br. et Har. Rev. Myc. 1891, p. 16. — Peri- 5326
theciis numerosis, confertis, rugosis, depressis, sæpe confluentibus, nigris, $\frac{1}{6}$ - $\frac{1}{5}$ mm. diam., longe parallele seriatis; sporulis cylindraceis, obtusis, hyalinis, $4,5-6 \approx 1,5$.
Hab. in caulibus siccis Peucedani alsatici, Riom Puy-de-Dôme Galliae (HÉRIBAUD).
248. **Phoma Peucedani** Pass. in Brun. Champ. Saint. V, pag. 5. — 5327
Peritheciis sparsis, globuloso-applanatis vel lenticularibus, erumpentibus, nigris; sporulis bacillaribus, hyalinis, 5 μ . long., basidiis gracilibus multo longioribus fultis.
Hab. in caulibus emortuis Peucedani officinalis, Beaugéay, Saintes Galliae.
249. **Phoma microspora** Sacc. in Rev. Myc. 1885, p. 158. — Peri- 5328
theciis seriatim dispositis, laxe gregariis, epidermide velatis, globulosis, atris $\frac{1}{4}$ mm. diam.; sporulis ovoideis, perexiguis, $2-3 \approx 1-2$, hyalinis.
Hab. in caule Athamantæ siculæ in Algeria (TRABUT).
250. **Phoma perpusilla** Karst. Symb. Myc. fenn. XIV, p. 23. — Peri- 5329
theciis superficialibus, hemisphæricis, rotundatis vel oblongatis, astomis, atris, glabris, 0,1 mm. diam.; sporulis elongatis, hyalinis, $6-7 \approx 1,5$.
Hab. in ferulis putrescentibus Anthrisci pr. Aboam Fenniae.
251. **Phoma rubella** Cooke in Grevillea XIV, pag. 3 — Peritheciis 5330

collectis in maculis indeterminatis, semiimmersis, depressis, atris, minute papillatis; sporulis anguste ellipticis, enucleatis, continuis, hyalinis, $7 \approx 2$.

Hab. in caulibus emortuis Umbelliferarum, Kew. Britanniaë.

252. **Phoma Karstenii** Berl. et Vogl. Add. Syll. n. 4307, *Phoma microsperma* Karst. Symb. Myc. IV, pag. 153 (non Preuss). — Peritheciis gregariis, subcutaneis, demum erumpentibus, subsphæroides, tandem poro pertusis, atris, circiter 0,2 mm. latis; sporulis elongatis, rectis vel curvulis, hyalinis, $2-4 \approx 0,5$. 5331

Hab. ad caules emortuos Umbelliferarum in regione Vasænsi Fenniaë.

253. **Phoma olivaceo-pallens** Karst. Symb. XV, p. 153. — Peritheciis gregariis, subcutaneis, applanatis, orbicularibus, olivaceo-vel fusco-pallentibus, siccis et adultioribus nigrescentibus, poro sæpe pallescente pertusis, circiter 0,3 mm. latis; sporulis oblongatis, utrinque obtusis, rectis biguttulatis, $4-6 \approx 2$. 5332

Hab. ad caules emortuos Umbelliferarum in regione Vasænsi Fenniaë.

254. **Phoma Galacis** Cooke in Grevillea XIV, p. 90. — Maculis irregularibus, pallide brunneis vel cinerescentibus, indistincte marginatis; peritheciis gregariis, minutis, 86μ . diam., basi immersis, punctiformibus, atris, nitentibus; sporulis cylindraceutis, utrinque rotundatis, $2-4$ -nucleatis, hyalinis, $12-15 \approx 4$. 5333

Hab. in foliis emortuis delapsisque Galacis aphyllæ, Kew Britanniaë.

255. **Phoma lirellata** Sacc. Syll. III, p. 118. — Var. **Centranthi** Brun. Liste Sphærops. p. 15. — Peritheciis sparsis vel in series parallelas congestis, subglobosis, compressis, subinde difformibus, nigris, tectis, dein subsuperficialibus, poro perspicuo pertusis, macula stromatica, oblongata, irregulari, atra vel atro-brunnea, sæpe linea nigra limitata, insidentibus; sporulis ovoideis vel ovoideo-oblongis, $6-8 \approx 2-3$, biguttulatis; basidiis filiformibus, $15-16 \mu$. longis. 5334

Hab. in caulibus emortuis Centranthi rubri, Saintes Galliaë.

256. **Phoma Chamænerii** Brunaud in Rev. Myc. 1886, pag. 140. — Peritheciis globuloso-compressis, sparsis vel subgregariis in series dispositis vel confluentibus, nigris, primum tectis, dein epidermidem ostiolo rumpentibus, macula plus minus nigrescente elongato-lanceolata, subcorticali, nigro-limitata insidentibus; sporulis oblongis, rectis, $8 \approx 2-2,5$, binucleatis, hyalinis; basidiis nullis vel obsoletis. 5335

- Hab.* in caulibus emortuis *Epilobii angustifolii*, Saintes Galliæ. — A *Ph. Epilobii* sporulis eguttulatis differt.
257. **Phoma Epilobii** Preuss. — Syll. III, p. 134. — Sec. Fautr. in Rev. Myc. 1890, p. 122, sunt sporulæ 10-13 \approx 3, quadriguttatæ; basidia fasciculata 25 \approx 3. Occurrit quoque in *Epilobio tetragono*, Noidan Galliæ.
258. **Phoma Onagracearum** Cooke in Grevillea XIII, p. 95. — Cau- 5336
licola; peritheciis sparsis, cuticula leniter elevata, demum fissa tectis; sporulis ellipticis, binucleatis, 6-8 \approx 3,5-4; basidiis brevibus.
Hab. in caulibus *Cœnotheræ* biennis et *Epilobii angustifolii*, Kew Britannicæ.
259. **Phoma Lythri** Cooke et Mass. Grev. XVI, p. 75. — Epiphylla; 5337
peritheciis sparsis vel gregariis, globosis, tectis, prominulis, demum erumpentibus, pertusis; sporulis globosis, hyalinis, 10 μ . diam.
Hab. in foliis *Lythri Hyssopifoliæ*, Melbourne (READER).
260. **Phoma Nepenthis** Cooke et Mass. in Grevillea XVIII, p. 73. — 5338
Peritheciis sparsis, immersis, membranaceis, pertusis; sporulis ellipsoideis, 2-guttatis, hyalinis, 7 \approx 3,5; basidiis brevibus.
Hab. in ascidiis *Nepenthis*, Readland Glasgow Britannicæ (D. A. BOYD).
261. **Phoma guaranitica** Speg. F. Guar. II, n. 159. — Peritheciis 5339
hinc inde laxe gregariis v. sparsis, primo epidermide velatis, dein sæpius nudis, e lenticulari subglobosis, 150-180 μ . diam., non vel vix convexulis, atris, opacis, glabris, ostiolo minuto, impresso perforatis, contextu indistincto, fuligineo; sporulis ellipticis v. ovoideis, 10-14 \approx 5-6, sæpe granuloso-farctis, hyalinis.
Hab. ad ramulos dejectos putrescentes *Enckæ Sieberi* in dumetis prope Guarapî Brasiliæ.
262. **Phoma portulacoides** Brun. Champ. Saint. VII, p. 4. — Perithe- 5340
ciis sparsis, minutis, nigris, subnitentibus, intus albis, subglobosis, tectis, dein erumpentibus; sporulis ovoideis, minutissimis, 3 μ . long., eguttatis.
Hab. in caulibus emortuis *Obiones portulacoidis*, Fouras pr. Saintes Galliæ.
263. **Phoma Polygonorum** Cooke in Grevill. XIV, p. 3. — Laxe gre- 5341
garia; peritheciis minutis, punctiformibus, epidermide ostiolo minuto perforata tectis; sporulis obtuse ellipticis, continuis, hyalinis, distincte nucleatis, 12 \approx 3.
Hab. in caulibus *Polygoni cuspidati*, Kew Britannicæ.
264. **Phoma rheina** Thüm. et Boll. Fung. lit. austr. in Soc. Adr. Sc. 5342

- Nat. 1885, p. 12, n. 440. — Peritheciis epiphyllis, minutis, gregariis, in macula subparva, subsinuosa, atris, semiimmersis, globosis, ostiolo minimo; sporulis numerosissimis, minutissimis, ovoideis, utrinque rotundatis, simplicibus, enucleatis, achrois, $1,5 \approx 1$.
Hab. in foliis vivis v. languidis Rhei Rhapontici, Goritia.
265. **Phoma picea** (Pers.) Sacc. Syll. III, p. 140 — var. **Chenopodii** 5343
 Karst. et Har. Rev. Myc. 1890, n. 47. — Sporulis botuliformibus vel elongatis, vulgo rectis, $2,5-3,5 \approx 0,5-1$.
Hab. ad caules Chenopodii in Ohio Amer. bor. (LESQUE-REUX).
266. **Phoma herbarum** Sacc. Syll. III, p. 133 — ***Ph. Tetragonie** Sacc. 5344
 et Berl. in Rev. Myc. 1886. — Peritheciis minutis, sub epidermide nidulantibus, sparsis, ostiolo minuto, vix protuberante; sporulis ovoideis, quandoque biguttatis, $5 \approx 2$, hyalinis; basidiis non visis.
Hab. in ramulis putrescentibus Tetragonie expansæ in Algeria.
267. **Phoma Mercurialis** Brunaud in Rev. Myc. 1886, pag. 140. — 5345
 Peritheciis subglobosis, depressis, diu epidermide tectis, demum erumpentibus, brunneo-nigris vel atris, pertusis; sporulis subovoideis, $8 \approx 3$, binucleatis, hyalinis; basidiis nullis vel obsoletis.
Hab. in caulibus emortuis Mercurialis annuæ, Saintes Gallie.
268. **Phoma macrocapsa** Trail Suppl. Myc. Scot. n. 3077. — Peri- 5346
 theciis subepidermicis, orbicularibus, $600-700 \mu$. diam., non ultra 250μ . (ostiolo $100-150 \mu$. long. excluso) alt., atro-brunneis; sporulis hyalinis, oblongis, subrectis, $4 \approx 1,5$.
Hab. in caulibus Mercurialis perennis in Scotia.
269. **Phoma tabifica** Prillieux Bull. Soc. Myc. Fr, fasc. I, 1891. — 5347
 Peritheciis immersis, fuscis, rotundatis vel subapplanatis, densiuscule gregariis, 180μ . circ. latis, poro papillato, $18-20 \mu$. lat. præditis; mycelio hyalino, parenchyma petioli infarciante; sporulis hyalinis, ovalibus, eguttulatis, $5-6 \approx 3\frac{1}{2}-4$; basidiis non vel vix conspicuis.
Hab. in macula dealbata fere totam paginam superiorem petioli folii Betæ vulgaris cultæ occupante; raro in maculis ex albedo lutescentibus paginæ superioris folii ejusdem, in agris Gallie satis frequens, æstate 1890.
270. **Phoma Humuli-japonici** Fautr. Rev. Myc. 1891, p. 130. — Pe- 5348
 ritheciis numerosis, aggregatis, tectis, erumpentibus, griseis, glo-

bulosis, papillato-pertusis, nucleo roseo; sporulis oblongis, 10-13 \approx 3,5-4.

Hab. in caulibus siccis Humuli japonici, Noidan Galliæ.

III. In Monocotyledoneis.

271. **Phoma plagia** Cooke et Mass. Grev. XVII, pag. 55. — Maculis 5349
determinatis, glaucescentibus, ellipticis vel confluentibus, margine
lineato circumscripto; peritheciis minutissimis, atris, emergentibus;
sporulis ellipticis, binucleatis, hyalinis, 8-9 \approx 5.

Hab. in foliis Palmarum, Daintree River Australiæ (BAILEY).

272. **Phoma palmicola** Winter in Grev. XV, pag. 92. — Peritheciis 5350
sparsis vel gregariis, mox sine macula, mox in maculis atris, li-
nearibus v. irregularibus, determinatis, usque ad 10 mm. long., in-
terdum confluentibus, immersis, depresso subconicis, vertice papil-
liformi, demum pertuso erumpentibus, atris, membranaceis, 300-
320 \approx 120-123; sporulis numerosissimis, oblongo-fusoideis, utrinque
acutiusculis, guttulis 2 magnis præditis, hyalinis, rectis, 6-7 \approx 2,5.

Hab. ad folia emortua Palmarum, Sao-Francisco Brasilæ
(ULE).

273. **Phoma Coryphæ** Cooke et Mass. Grev. XIX, p. 75. — Perithe- 5351
ciis laxè gregariis erumpentibus, conicis, basi insculptis, atris, pa-
pillatis, $\frac{1}{3}$ - $\frac{1}{4}$ mm. diam.; sporulis arcte ellipticis, utrinque rotun-
datis, hyalinis, 12 \approx 3.

Hab. in petiolis Palmarum, Ceylon Indiæ.

274. **Phoma Pritchardiæ** C. et H. — Syll. III, p. 157. — ***P. cory-** 5352
phea Sacc. F. rom. n. 38. — Peritheciis punctiformibus, gregariis,
macula epiphylla albida insidentibus; sporulis fusoides, curvulis,
9 \approx 2,5, 6-guttulatis; basidiis bacillaribus sesquolongioribus.

Hab. in foliis Coryphæ australis, Villa Patrizii Roma. —

***Ph. Phœnicis** Sacc. loc. cit.: peritheciis paullo majoribus, macula
epiphylla sordida insidentibus; sporulis oblongo-fusoideis, 7 \approx 2; ba-
sidiis bacillaribus hamatis sesquolongioribus. In foliis Phœnicis
in hortis, Roma.

275. **Phoma Magnusii** Bomm. Rouss. Contr. Myc. Belg. III, p. 15. — 5353
Peritheciis copiosis, sparsis, nigris, lenticularibus, subepidermicis,
ostiolo tantum erumpente, papillato; sporulis crebris, ellipsoideis,
hyalinis, 2-guttatis, 6-7 \approx 2,5.

Hab. in utraque pagina foliorum Phœnicis dactyliferæ
in horto botanico Gand Belgii (P. MAGNUS).

276. **Phoma cocoina** Cooke — Syll. III, pag. 156 — var. **Phœnicis** 5354

Brun. Esp. Sphærops. p. 1. — Peritheciis sparsis, globosis, nigris, tectis dein erumpentibus, reliquiis epidermidis cinctis; sporulis oblongis, hyalinis, 8-9 \approx 3, biguttatis.

Hab. in foliis emortuis Phœnicis dactyliferæ, in horto botanico Rochefort Galliæ.

277. **Phoma cocophila** Speg. F. Puigg. n. 411. — Maculis candidis, 5355
 elongatis, repando-sinuosis, subindeterminatis, 5-20 mm. long., 2-5 mm. lat.; peritheciis in maculis, laxe gregariis, epidermide velatis, non vel vix prominulis, atris, lenticularibus, 250 μ . diam., membranaceo-subcoriacellis, contextu parenchymatico, parum distincto; ostiolo vix papillulato; sporulis cylindræis vel ellipsoideo-obovatis, 8-10 \approx 2,5-3, rectis vel vix subinæquilateralibus, utrinque obtusiusculis ac sæpe minute 1-guttulatis, hyalinis, sterigmatibus cylindræis, apice attenuato-obtusiusculis, 12-15 \approx 2-2,5, concoloribus.

Hab. ad petiolos Coccoës sp. pr. Apiahy in Brasilia.

278. **Phoma Chamæropis** Cooke in Grevillea XIII, pag. 95. — Pe- 5356
 ritheciis erumpentibus, gregariis, subglobosis, atris, opacis, magnitudine inæqualibus, perforatis; sporulis ellipticis, obtusis, enucleatis, hyalinis, 4-5 \approx 2.

Hab. in petiolis Chamæropis aliarumque palmarum, Kew Britanniæ. — A *Ph. cocoïna* non dissimilis, sed sporulis duplo minoribus.

279. **Phoma trina** Passer. Diagn. F. N. IV, n. 88. — Peritheciis sub- 5357
 sparsis, tectis, punctiformibus, atris, contextu celluloso fuligineo; sporulis elongatis, utrinque rotundatis, triguttulatis, guttula intermedia septulum quasi mentiente, polaribus ampliusculis, hyalinis.

Hab. in caulibus siccis Funkiæ cordatæ in horto botanico parmensi Ital. bor.

280. **Phoma Iridis** Cooke in Grev. XV, p. 108. — Peritheciis spar- 5358
 sis, punctiformibus, cuticula tectis, convexis, nigris; sporulis anguste ellipsoideis, 1-2-guttatis, utrinque obtusis, 7 \approx 2; basidiis brevibus.

Hab. in foliis Iridis fœtidissimæ, Somerton, Breinton et Kew in Britannia.

281. **Phoma Iridum** Sacc. in Mich. II. p. 126. — Peritheciis grega- 5359
 riiis, subcutaneis, vix erumpentibus, globoso-lenticularibus, $\frac{1}{8}$ mm. diam., ostiolo obtuso, sporulis oblongis, 10 \approx 2 $\frac{1}{2}$ suffultis.

Hab. in foliis Pseudacori, Toulouse Galliæ (ROUMEGUÈRE).

282. **Phoma Symphyostemi** Speg. F. Fueg. n. 384. — Peritheciis ma- 5360
 trice late cinerescenti-nigrificata insidentibus, epidermide velatis,

lenticularibus 150-160 μ . diam., coriacellis, atris, glabris; ostiolo minuto, non vel vix papillulato; contextu densissimo, indistincto; sporulis parvulis ellipticis, utrinque obtusiusculis, 2-3 \approx 1, minute 1-guttulatis, sæpius inæquilateralibus, hyalinis; sterigmatibus subconoides, crassiusculis, 5-8 \approx 1,5.

Hab. ad scapos emortuos *Symphystemi narcissoidis* et *Sisyrrinchii filifolii* prope Shammacus et Punta anegada Fuegiæ.

283. **Phoma Engleri** Speg. F. Guar. II, n. 158. — Peritheciis hinc 5361 inde sparsis, epidermide tectis, e globoso lenticularibus, 200-250 μ . diam., atris, glabris, membranaceo-coriacellis, subastomis; contextu parum distincto, subparenchymatico, atro; sporulis ellipticis, 5-7 \approx 1,5-2, utrinque acutiuscule rotundatis, grosse 2-guttulatis, hyalinis.

Hab. ad petiolos putrescentes *Pothos pinnatifidæ* in silvis prope Guarapí Brasilæ.

284. **Phoma Acori** Cooke in Grevillea XIII, p. 95. — Foliicola; pe- 5362 ritheciis gregariis, punctiformibus, minutis, numerosis, cuticula tectis, siccis minutissimis, membranaceis, brunneis; sporulis ovoideis vel ellipticis, obtusis, 6-8 \approx 3.

Hab. in foliis emortuis *Acori Calami*, sociâ *Leptosphæriâ acorellâ*, Totteridge, Kew Britannicæ.

285. **Phoma veratrina** Sacc. et Paol. Mycet. Sibir. p. 20, fig. 20. — 5363 Peritheciis laxè gregariis, epidermide velatis, dein erumpentibus, nigris, globoso-depressis, breve papillatis, $\frac{1}{5}$ mm. diam.; sporulis oblongis, utrinque rotundatis, rectis curvulisve 13-15 \approx 3,5, 2-3-guttulatis, hyalinis; basidiis subnullis.

Hab. ad folia et caules *Veratri albi* in pratis prope Nicolskoje Sibiricæ. — Affinis *Ph. Pritchardicæ* et *Ph. macrothecæ*.

286. **Phoma tamicola** Cooke in Grevillea XIII, p. 95. — Caulicola; 5364 peritheciis gregariis, subglobosis, mox depressis, cuticula nigrescente, ostiolo minuto demum perforata tectis; sporulis obtuse fusiformibus, binucleatis, 9-10 \approx 3.

Hab. in caulibus *Tami communis*, Neatishead, Norfolk Britannicæ.

287. **Phoma Philesiæ** Speg. F. Fueg. n. 383. — Maculis nullis vel 5365 pallescentibus, indeterminatis; peritheciis epiphyllis, dense sparsis, immersis, epidermide tectis adnatisque, atris, lenticularibus, 150-160 μ . diam., levibus, glabris, coriaceo-membranaceis, ostiolo minutissimo impresso, contextu indistincto; sporulis cylindræis v. cylin-

draceo-ellipticis, utrinque obtuse rotundatis, 18-21 \approx 5-6, guttulis vel granuloso-farctis, hyalinis.

Hab. ad folia emortua *Philesiæ buxifoliæ* in Basket island Fuegiæ.

288. **Phoma Majantheri** Peck 39 Rep. p. 44. — Peritheciis minutis, 5366
175-250 μ . lat., amphigenis, subglobosis, prominulis, nigris; sporulis oblongis, utrinque subtruncatis, hyalinis, 6,25-7,5 \approx 3.

Hab. in foliis emortuis *Majantheri bifolii* Elizabethtown Amer. bor.

289. **Phoma Cladodii** Cooke et Mass. in Grev. XVI, p. 6. — Peri- 5367
theciis amphigenis, numerosissimis, minutis, punctiformibus, subcuticularibus, nigris, dense gregariis, interdum totam folii superficiem occupantibus; sporulis amygdaliformibus, continuis, hyalinis; basidiis brevibus, 10 \approx 5.

Hab. in cladodiis *Rusci Hippoglossi*, Kew Britannia.

290. **Phoma media** Ell. et Ev. Journ. Myc. 1889, p. 147. — Perithe- 5368
ciis maculam 6-8 cm. long., 1 cm. lat. occupantibus, magnis, 0,5 mm. diam., globoso-depressis vel leniter oblongis; ostiolo papilliformi mox late pertusis; sporulis fusoides, rectis, hyalinis, 2-guttatis, acutis, 10-12 \approx 2,5.

Hab. in caulibus emortuis *Asparagi*, Newfield, N.-Jersey Amer. bor. — Differt a *Ph. Asparagi* præcipue sporulis majoribus et acutis, a *Ph. lanceolata* sporulis dimidio minoribus.

291. **Phoma limnophila** Sacc., *Phoma Typhæ* Passer. Diagn. F. N. 5369
IV, n. 87, nec Pass. in Brun. — Peritheciis minutis, subglobosis, sparsis vel aggregatis, atris; contextu eximie celluloso, fumoso-violascente; sporulis ovalibus, rectis, 9-10 \approx 3,5 ad apices non guttatis, hyalinis.

Hab. in foliis siccis *Typhæ latifoliæ*, Magnana pr. Fornovo in agro parmensi Ital. bor.

292. **Phoma Typhæ** Pass. in Brun. liste Sphærops. p. 20. — Perithe- 5370
ciis sparsis, punctiformibus, depressis, nigris, primo epidermide tectis dein liberis; sporulis cylindræis, rectis, hyalinis.

Hab. in foliis *Typhæ latifoliæ*, sociâ *Pleosporâ Typhæ*, Rochefort Gallia.

293. **Phoma juncicola** Brun. Champ. Saint. p. 338. — Peritheciis nu- 5371
merosis, conicis, minutissimis, erumpentibus; sporulis ovoideis, hyalinis, continuis, 4-5 \approx 2,5-3.

Hab. in caulibus emortuis *Junci acuti*, Fouras prope Saintes Gallia.

294. **Phoma abscondita** Passer. Diagn. F. N. IV, n. 90. — Peritheciis in matrice immutata omnino immersis, subglobosis, atris, ostiolo minutissimo, fusco, lente vix perspicuo; sporulis oblongis, utrinque rotundatis, pallidissime chlorino-hyalinis, $12,5-15 \approx 3,5-4$.
Hab. in caulibus Scirpi Holoschœni, Vigheffio pr. Parma Ital. bor.
295. **Phoma depressula** Sacc. Bomm. et Rouss. Fl. Mycol. Belg. II, 5373 p. 29. — Peritheciis nigris, parum prominulis, numerosis, 100μ . diam., poro pertusis, epidermide nigrificata et nitente tectis; sporulis $15-16 \approx 4,5$, hyalinis, granulosis, subclavatis; basidiis simplicibus, brevibus, monosporis.
Hab. in foliis Scirpi cæspitosi, Westmalle Belgii.
296. **Phoma Holoschœni** Passer. Diagn. F. N. IV, n. 89. — Peritheciis punctiformibus, tectis, per epidermidem fissam vix erumpentibus, atris; sporulis elongato-subfusiformibus, rectis, continuis, polos versus guttulatis, melleis, $12-15 \approx 4-5$.
Hab. in caulibus fracidis Scirpi Holoschœni, Vigheffio pr. Parma Ital. bor.
297. **Phoma Oryzæ** Cooke et Mass. in Grev. XVI, p. 15. — Peritheciis minutis, sparsis, epidermidem perforantibus, subglobosis, nigris; sporulis ovoideis, continuis, hyalinis, $3 \approx 2$; basidiis brevibus.
Hab. in stramine ex Oryza, Calcutta.
298. **Phoma glumarum** Ell. et Tr. Journ. Myc. 1888, p. 123. — Peritheciis erumpenti-superficialibus, nigris, minutis, $90-120 \mu$. lat., supra pertusis; sporulis ellipsoideis, $3-4 \approx 2-2,5$, fumoso-hyalinis.
Hab. ad glumas virentes Oryzæ sativæ, Starkville Miss. Amer. bor. (TRACY).
299. **Phoma necatrix** Thuem. Pilze d. Reispfl. p. 12. — Peritheciis numerosissimis, confluenti-aggregatis, semiimmersis, punctiformibus, atris, parvis, membranaceis; sporulis numerosis, ovatis v. ellipsoideis, eguttatis, hyalinis, $10-12 \approx 6-8$.
Hab. in culmis, foliis vaginisque subviviis Oryzæ sativæ, Aquileja Ital. bor.
300. **Phoma Fuegiana** Speg. F. Fueg. n. 379. — Maculis nullis; peritheciis densiuscule sparsis v. subseriatis, atris, glabris, globoso-lenticularibus, $140-160 \mu$. diam., membranaceo-coriacellis; ostiolo minutissimo, papillulato, contextu parenchymatico, olivaceo; sporulis ellipticis v. ovoideis, utrinque attenuato-rotundatis, $4-5 \approx 1-2$, sæpe 1-guttulatis, rectis v. inæquilateralibus, hyalinis; sterigmatibus minutissimis, vix papillulatis.

- Hab.* ad culmos, vaginas foliaque emortua *Poæ Forsteri* in Staten island Fuegiæ.
301. **Phoma Secalis** Prill. et Delacr. in Bull. Soc. Myc. V, p. 125. 5379
(1889). — Maculis folio vix pallidioribus; peritheciis ovalibus, circ. $120 \approx 75$; sporulis hyalinis, continuis, ovato-fusoideis, 2-3-guttatis, $14 \approx 4$; basidiis minutissimis.
- Hab.* in vaginis jam flavescensibus *Secalis Cerealis*, Boissysous-St.-Yon Galliæ.
302. **Phoma festucina** Thuem. Pilz. d. Gazell. p. 5. — Peritheciis dense inordinate gregariis, subepidermicis, subconoideis, nigris, parvulis, contextu parenchymatico fuligineo; sporulis numerosissimis, breve cylindræis utrinque rotundatis, eguttatis, hyalinis, $3,5-5 \approx 2-2,2$. 5380
- Hab.* in vaginis emortuis *Festucæ erectæ* in ins. Kerguelen.
303. **Phoma Lolii** Pass. Hedw. 1887, p. 26. — Peritheciis in matrice dealbata sparsis vel subgregariis, epidermide tectis, subsphæroides, atris; sporulis, cylindræis, rectis, utrinque obtusis, plurinucleolatis, hyalinis, $12-18 \approx 2,5$. 5381
- Hab.* in spicis aridis *Lolii perennis* pr. Parma Ital. bor.
304. **Phoma Patouillardii** Sacc. *Phoma microspora* Pat. in Har. 5382
Champ. Cap Horn p. 196, nec Sacc. — Peritheciis minutis, $100-130 \mu$. diam., laxè gregariis, primo epidermide tectis, dein poro pertusis, atro-brunneis; sporulis minutissimis, $3 \approx 1$, cylindræis, hyalinis, numerosissimis.
- Hab.* in foliis *Graminacæ* (*Triodiæ antarcticæ?*) in ins. Horn (HARIOT).
305. **Phoma gyneriicola** Cooke et Mass. in Grev. XVI, p. 7. — Peritheciis minutis, sparsis v. gregariis, mox superficialibus, membranaceis, non ultra 30μ . diam., atro-brunneo, subgloboso; sporulis minutis, ellipsoideis, hyalinis, $3 \approx 1$. 5383
- Hab.* in foliis *Gynerii argentei*, Kew Britannicæ.
306. **Phoma Ammophilæ** Dur. et Mont. — Sacc. Syll. III, p. 166 (Verisimiliter). — Sporulæ ellipsoideo-oblongæ, $4-5 \approx 1,5-2$, hyalinæ.
307. **Phoma serialis** Pat. Bull. Soc. Myc. 1891, pag. 177. — Peritheciis erumpentibus seriatim dispositis, globoso-conoideis, apice pertusis, $200-300 \mu$. diam.; basidiis hyalinis, fusoideis, simplicibus, 30μ . long.; sporulis ovoideis, hyalinis, 1-guttatis, $3 \approx 2$. 5384
- Hab.* in caulibus putrescentibus *Arundinis* (?), Quito Æquatoriæ.
308. **Phoma stagonosporioides** Trail Trans. Crypt. Scot. 1889, p. 44. 5385

— Peritheciis innatis, sparsis, depresso-globosis, papillatis, 120-150 μ . diam.; sporulis ellipsoideis 10-12 \times 3-4, hyalinis, tenuiter 4-guttulatis.

Hab. in foliis emortuis Phragmitis communis Loch Achray Scotiæ occid. — Ad *Stagonosporam* accedit.

IV. In Acotyledoneis

309. **Phoma sphærosperma** Karst. in Hedw. 1885, p. 74. — Peritheciis sparsis, epidermide tectis, sphæroideo-applanatis, atro-fuscis, basi fusca, ostiolo rudi, epidermidem perforante, glabris, 0,2 mm. latis; sporulis sphæroideis, hyalinis vel dilutissime flavido-hyalinis, eguttulatis, levibus, 10-15 μ . diam. 5386

Hab. in caulibus putrescentibus Equiseti fluviatilis ad Mustiala Fenniæ.

310. **Phoma Equiseti** Desm. Sacc. Syll. III, p. 168. — Sporulæ 7,2 \times 3 (ANG. ROUMEGUÈRE).

311. **Phoma Selaginellæ** Cooke et Mass. in Grev. XVI, p. 102. — Peritheciis sparsis, immersis, parvis, punctiformibus, nigris; sporulis ellipsoideis, continuis, hyalinis, 5 \times 3. 5387

Hab. in stipite Selaginellæ Willdenowii, in horto kewensi Britanniæ.

312. **Phoma Crepini** Karst. Sphærops. Fenn. p. 57. — Peritheciis sparsis, sphæroideis, poro pertusis, atris, circ. 0,2 mm. lat.; sporulis elongatis, continuis, hyalinis, 3-4 \times 1. 5388

Hab. in bracteis emortuis Lycopodii annotini in Fennia. — Status spermogonicus *Leptosphæricæ Crepini*.

313. **Phoma Lichenis** Passer. Diagn. F. N. V, n. 29. — Peritheciis thallo adnatis, subglobosis, atris, nitidis; contextu membranaceo, parenchymatico; sporulis bacillaribus, tenuissimis 5 μ . long. 5389

Hab. in thallo Lichenis sterilis, forte Parmeliæ pulverulentæ in ramis siccis Fraxini, Vigheffio in agro parmensi Italiæ borealis.

314. **Phoma portentosa** Cooke et Mass. Grev. XVI, p. 2. — Sparsa; peritheciis innatis, cuticulâ denigratâ tectis, variabilibus, papillatis, atris, nitidis; sporulis cylindræis, utrinque obtusis, continuis, hyalinis, 8 \times 2. 5390

Hab. in pileo Polypori portentosi, Beveridge, V., Australiæ (CAMPBELL).

315. **Phoma Tremellæ** Pat. Bull. Soc. Myc. 1888, p. 120. — Peritheciis nigris, sparsis, semiimmersis, punctiformibus, 60-100 μ . diam., 5391

globosis, ostiolatis, membranaceis, parenchymaticis, intus albis; sporulis numerosissimis, minutis, 1,5-2 μ ., ovoideis, hyalinis.

Hab. ad superficiem Tremellæ cujusdam vetustæ, Atures Venezuelæ.

316. **Phoma parasitica** Ell. et Ev. Journ. Myc. 1888, p. 102. — Peritheciis sparsis, minutis, nigris; sporulis oblongo-ellipsoideis, subinæquilateralibus, 2-guttatis, hyalinis, 7-9 \approx 3. 5392

Hab. parasitica ad Taphrinam cœrulescentem in foliis vivis Quercus coccineæ, Newfield, N. J. Amer. bor.

317. **Phoma Colpomatis** Rich. Cat. Champ. Marn. p. 547. — Peritheciis sphæricis, superficialibus, nigris; sporulis ovoideis vel breve subcylindricis, 2,8 μ . long. 5393

Hab. in medio Colpomate quercino vetusto v. circumcirca in silvis St-Amand Galliæ. — *Colpomatis* spermogonium censetur.

318. **Phoma scleroticola** Pat. Bull. Soc. Myc. 1888, p. 120, t. XX, f. 4. — Peritheciis superficialibus, numerosissimis, confertis vel sparsis, brunneo-nigris, subglobosis, 100 μ . diam., ostiolatis, intus albis, in villositate e parte substrati exteriori efformata nidulantibus; sporulis numerosis, hyalinis, ovoideis, minutis, 1-2. 5394

Hab. ad Sclerotium umbilicatum, Atures Venezuelæ.

319. **Phoma Laminariæ** Cooke et Mass. in Grev. XVIII, p. 53. — Peritheciis gregariis, nigris, apice poro minuto pertusis; sporulis ellipsoideis, hyalinis, 8-10 \approx 3. 5395

Hab. in frondibus putrescentibus Laminariæ, West Kilbride, Ayrshire Britanniæ (D. A. Boyd).

V. Coprophilæ.

320. **Phoma anserina** March. Champ. copr. VI, p. 11. — Peritheciis sparsis, globulosis, superficialibus, contextu laxiuscule parenchymatico, brunneo-fuligineis, minutis, 90 μ . d., ostiolo papillato perforatis; sporulis minutis, subovoideis, 2,2 \approx 1,8, 1-guttatis, in globulum album expulsis, hyalinis, basidiis obsoletis. 5396

Hab. in stercore anserino Werbomont Belgii. — Socia adest species altera paullo major; peritheciis globoso-depressis, 120 μ . diam., late pertusis; sporulis ellipsoideis, sæpius 2-guttatis, 5-5,5 \approx 2-2,5 hyalinis, *Phoma Marchalii* dicenda.

321. **Phoma fimeti** Brun. Champ. Saint. p. 338. — Peritheciis sparsis, erumpentibus, nigris, minutissimis; sporulis ovoideis, hyalinis, continuis, 4-5 \approx 2-2,5. 5397

Hab. in fimo Arietis, Fouras pr. Saintes Galliæ.

MACROPHOMA (Sacc.) Berl. et Vogl. Add. Syll. p. 306 et in Atti Soc. Veneto-Trentina 1886, p. 172, Sacc. Syll. III, p. 90 ut subg. (Etym. *macro* longus, magnus et *Phoma*). *Phoma*, *Sphærospis*, *Sphæronema* auctorum pro parte. — Perithecia subcutanea, dein erumpentia, membranacea, subcoriacea v. subcarbonacea, globosa, erostata, ostiolo minuto, subinde obsoleto. Sporulæ ovoideæ, fusoideæ vel cylindraceæ, majusculæ vel magnæ, 15 μ . v. amplius longæ, sæpe granulose, continuæ, hyalinæ, rarissime biguttatæ. Basidia filiformia, subinde brevissima vel obsoleta, constanter simplicia.

A. *Eu-Macrophoma* sporulis ovoideis

a) *In Dicotyledoneis.*

α . Ramicolæ.

1. **Macrophoma macrosperma** (Karst.) Berl. et Vogl. Add. Syll. n. 429, et in Atti Soc. Veneto-Trentina 1886, p. 173. — *Phoma* Syll. III, pag. 173.
2. **Macrophoma excelsa** (Karst.) Berl. et Vogl. Add. Syll. n. 430 et in Atti Soc. Veneto-Trentina 1886, p. 173. — *Phoma* Syll. III, p. 74.
3. **Macrophoma Cupressi** (Cooke et Harkness) Berl. et Vogl. Add. 5398 Syll. n. 4341 et in Atti Soc. Veneto-Trentina 1886, p. 173. — *Sphærospis Cupressi* Cooke et Hark. in Grevillea XIII, p. 17. — Erumpens; peritheciis atris, obtusis, primum tectis, demum erumpentibus, epidermide circumambiente arcte adhærentibus; sporulis ellipticis, continuis, hyalinis, protoplasmate granuloso farctis, 30 \approx 10. *Hab.* in cortice Cupressi macrocarpæ in California (HARKNESS).
4. **Macrophoma Peckiana** (Thüm.) Berl. et Vogl. Add. Syll. n. 471 et in Atti Soc. Veneto-Trentina 1886, p. 174. — *Phoma* Syll. III, p. 80.
5. **Macrophoma Ampelopsidis** (C. et E.) Berl. et Vogl. Add. Syll. n. 466 et in Atti Soc. Veneto-Trentina 1886, p. 174. — *Phoma* Syll. III, pag. 79.
6. **Macrophoma dryina** (B. et C.) Berl. et Vogl. Add. Syll. n. 570 et in Atti Soc. Veneto-Trentina 1886, p. 174. — *Phoma* Syll. III, p. 96.
7. **Macrophoma Scheidweileri** (West.) Berl. et Vogl. Add. Syll. n. 543 et in Atti Soc. Veneto-Trentina 1886, p. 174. — *Phoma* Syll. III, p. 92.

8. **Macrophoma salicaria** (Sacc.) Berl. et Vogl., Add. Syll. n. 4342 539
et in Atti Soc. Veneto-Trentina 1886, p. 175, *Phoma* Sacc. in Mori
Enum. dei Funghi Modena (Giorn. Bot. Ital. 1886, n. I, p. 22). —
Peritheciis laxè gregariis, subcutaneo-erumpentibus, globoso-de-
pressis, $\frac{1}{3}$ - $\frac{1}{2}$ mm. diam., obtuse papillatis v. subinde fere umbilica-
tis, nigris; sporulis ellipsoideis, utrinque obtuse rotundatis, 28-30
= 12-14, hyalinis, nubilosis vel guttulatis.
Hab. in ramis emortuis Salicis in horto botanico mutinensi
Ital. bor.
9. **Macrophoma corticicola** (Preuss) Berl. et Vogl. Add. Syll. n. 653
et in Att. Soc. Veneto-Trentina 1886, p. 175. — *Phoma* Syll.
III, p. 110.
10. **Macrophoma corylina** (Thüm.) Berl. et Vogl. Add. Syll. n. 591
et in Atti Soc. Veneto-Trentina 1886, p. 175. — *Phoma* Syll. III,
p. 99.
11. **Macrophoma tertia** (Cooke) Berl. et Vogl. Add. Syll. n. 562 et
in Atti Soc. Veneto-Trentina 1886, p. 175. — *Phoma* Syll. III,
p. 95.
12. **Macrophoma Laburni** (West.) Berl. et Vogl. Add. Syll. n. 394 et
in Atti Soc. Veneto-Trentina 1886, p. 175, t. II, f. I. — *Phoma*
Syll. III, pag. 68.
13. **Macrophoma persicina** (B. et C.) Berl. et Vogl. Add. Syll. n. 434
et in Atti Soc. Veneto-Trentina 1886, p. 176. — *Phoma* Syll. III,
pag. 74.
14. **Macrophoma Juncei** Pass. in Brun. Mat. Myc. Saint. pag. 22. — 5400
Peritheciis approximatis, secus fibras matricis parallele et seriatim
dispositis, epidermide innatis, lenticularibus, nigris; sporulis ob-
longo-fusoideis, nubilosis, hyalinis, 15 = 5.
Hab. in ramis emortuis Spartii juncei Soubise, Saintes
Galliæ.
15. **Macrophoma spartiicola** Berl. et Vogl. F. Anconit. pag. 17, tab. I, 5401
fig. 10. — Peritheciis gregariis vel dense sparsis, minutis, conoi-
deo-depressis, poro latiusculo pertusis, 100-150 μ . diam., contextu
laxè parenchymatico, fuligineo, epidermide omnino tectis, centro
albo-punctatis; sporulis fusoideo-cylindræis vel oblongis, utrin-
que attenuatis et fere papillatis, 20-25 = 8-9, granulosis vel gut-
tatis, exosporio crassiusculo præditis, basidiis brevissimis, crassiu-
sculis fultis, hyalinis.
Hab. in ramulis emortuis Spartii juncei pr. Ancona Italiæ.
— A *Ph. Spartii* differt magnitudine sporularum.

16. **Macrophoma Xanthoxyli** Ell. et Ev. in Journ. Myc. 1888, p. 102. 5402
 — Peritheciis immersis, seriatis, intus albis, epidermidem haud rumpentibus et vix perspicuis; sporulis oblongo-fusoideis, 20-27 \approx 6.
Hab. in ramis emortuis *Xanthoxyli*, Louisiana Amer. bor. (LANGLOIS).
17. **Macrophoma Fraxini** Delacr. Bull. Soc. Myc. 1890, pag. 140. — 5403
 Peritheciis gregariis, atris, globosis, sub cortice tumefacta colloque perithecii perforato nidulantibus, 300 μ . circ. diam.; nucleo albo; sporulis hyalinis, ovatis v. ovato-cylindræis v. interdum subreniformibus, guttulis granulatisque, 24-25 \approx 10,5-12; basidiis rectis v. leniter curvatis, acutiusculis, 10-20 \approx 2.
Hab. in cortice ramulorum exsiccatorum *Fraxini excelsioris* Joinville-le-Pont pr. Paris Galliæ. — *M. salicaricæ* affinis.
18. **Macrophoma Tamaricis** Passer. Diagn. F. N. IV, n. 44. — Peri- 5404
 theciis gregariis, per corticis fissuram longitudinalem erumpentibus, globosis, atris; sporulis fusiformibus, integris, hyalinis, 18-25 \approx 5-6, endoplasmate granuloso; basidiis filiformibus.
Hab. in ramulis *Tamaricis gallicæ* in horto botanico parmensi Ital. bor.
19. **Macrophoma conica** Passer. Diagn. F. N. IV, n. 91. — Perithe- 5405
 ciis sparsis vel subgregariis, tectis, globosis; ostiolo conico erumpente; sporulis oblongo-fusiformibus, intus granulosis, hyalinis, 18-25 \approx 5-6.
Hab. in ramulis *Rubi Hoffmeisteriani* in horto botanico parmensi Ital. bor.
20. **Macrophoma minuta** Berl. F. moric. App. p. 60 et f. VI, n. 15, 5406
 tab. 48, fig. 18-21. — Peritheciis gregariis v. subsparsis, exiguis, $\frac{1}{5}$ - $\frac{1}{4}$ mm. diam., contextu parenchymatico, fuligineo, ostiolo papillato præditis, epidermide tectis, dein erumpentibus et fere liberatis, rugosiusculis, intus albo-farctis, globoso-conoideis vel sursum parum depressis, 25-26 \approx 5-6, nubiosis v. granulosis, hyalinis; basidiis sporulâ brevioribus, 14-16 \approx 3-4.
Hab. in ramulis emortuis *Mori albæ*, Padova Ital. bor. — Perithecia exigua, sporulæ proportionem magnæ.
21. **Macrophoma Camelliæ** Pass. Rev. myc. 1887, p. 145. — Perithe- 5407
 ciis sparsis, erumpentibus, atris, subglobosis, contextu celluloso fuligineo; sporulis oblongo-ellipsoideis, continuis, hyalinis, intus granulosis vel crasse 1-nucleatis, 20-30 \approx 8-12, basidiis longioribus suffultis.

Hab. in ramulis aridis *Camelliæ cultæ*, Parma. — An, observante Pass., *Diplodia* immatura?

22. **Macrophoma Citri** Celotti Mic. Montp. p. 18. — Peritheciis subgregariis epidermide tectis, demum erumpentibus, globoso-oblongis, atris, $\frac{1}{4}$ - $\frac{1}{3}$ mm. diam., contextu parenchymatico; sporulis ellipsoideis utrinque obtusis, 25-28 \approx 8-10, hyalinis, minute granulosis; basidiis brevibus, 10-14 μ . long. 5408

Hab. in ramis emortuis *Citri tripteræ* prope Montpellier Gallia.

23. **Macrophoma cornina** (Peck) Sacc. *Sphærospis* Peck 32 Rep. p. 38. 5409
— Peritheciis numerosis, non confertis, minutis, epidermide stellatim fissa fere tectis, nigris, ostiolo lato; sporulis oblongis obtusis, hyalinis, 30-40 \approx 12,5-13,75.

Hab. in ramis emortuis *Corni circinatae*, Sprakers Amer. bor. — Habitus *Sphærospidis pensylvanicæ*.

24. **Macrophoma acervata** Pat. Bull. Soc. Myc. 1888. p. 121. — Subcutanea, dein emergens, epidermidis laciniis cincta; peritheciis pluribus in stroma nigrum, tuberculoso-mamillosum orbiculare 2-4 mm. diam. confluentibus, intus albis, sepimentis parenchymaticis flavidis separatis; sporulis in quoque perithecio seu loculo numerosis, ovoideis deorsum attenuatis, hyalinis, crasse tunicatis, granulosis, 18-25 \approx 10-15; basidiis longis, hyalinis, simplicibus. 5410

Hab. in corticibus emortuis, Atures Venezuelæ. — « Meo sensu potius *Dothiorellæ* species ».

25. **Macrophoma thujana** Cooke et Mass. in Grev. XVI, p. 7. — Peritheciis sæpe sparsis, subcutaneis, globosis, epidermidem elevantibus et demum perforantibus; sporulis ellipsoideis, continuis, hyalinis, 25 \approx 10. 5411

Hab. in ramis *Thuyæ*, Kew Britannia.

β . Caulicolæ.

26. **Macrophoma xanthina** (Sacc.) Berl. et Vogl. Add. Syll. n. 702 et in Atti Soc. Veneto-Trentina 1886, pag. 176. — *Phoma* Syll. III, pag. 118.

27. **Macrophoma Heuffelii** (B. et C.) Berl. et Vogl. Add. Syll. n. 790 et in Atti Soc. Veneto-Trentina 1886, p. 176. — *Phoma* Syll. III, pag. 132.

28. **Macrophoma Janiphæ** (Thüm.) Berl. et Vogl. Add. Syll. n. 833 et in Atti Soc. Veneto-Trentina 1886, p. 176. — *Phoma* Syll. III, pag. 141.

29. **Macrophoma Ricini** (Cooke) Berl. et Vogl. Add. Syll. n. 834, et in Atti Soc. Veneto-Trentina 1886, p. 176, tab. III, fig. XV. — *Phoma* Syll. III, p. 141.
30. **Macrophoma acanthina** (Sacc. et Roum.) Berl. et Vogl. Add. Syll. n. 764 et in Atti Soc. Veneto-Trentina 1886, p. 177. — *Phoma* Syll. III, pag. 128.
31. **Macrophoma Lupini** (Cooke et Hark.) Berl. et Vogl. Add. Syll. 5412 n. 4343 et in Atti Soc. Veneto-Trentina 1886, p. 177. — *Phoma Lupini* Cooke et Hark. in Grevillea XIII, pag. 111. — Caulicola; peritheciis gregariis, subcutaneis, subglobosis, atris, epidermide nitida tectis; sporulis elongato-ellipticis, binucleatis, hyalinis, 20. μ . longis.
Hab. in caule Lupini in California (HARKNESS).
32. **Macrophoma Malcolmiae** (Sacc.) Berl. et Vogl. Add. Syll. n. 4344 5413 et in Atti Soc. Veneto-Trentina 1886, p. 177, *Phoma Malcolmiae* Sacc. in Rev. Myc. 1886. — Peritheciis gregariis, subcutaneo-erumpentibus, atris, globoso-papillatis; sporulis ellipsoideis v. ovoideis, 14-18 \approx 7-8, utrinque obtusis, granulosis, hyalinis.
Hab. in caule Malcolmiae ægyptiacæ in Algeria.
33. **Macrophoma Keckii** (Thüm.) Berl. et Vogl. Add. Syll. n. 535, et in Atti Soc. Veneto-Trentina 1886. — *Phoma* Syll. III, p. 90.
34. **Macrophoma Exaci** Pat. Bull. Soc. Myc. 1887, p. 130. — Peri- 5414 theciis sparsis, 0,5-1 mm. lat., globulosis, nigris, opacis, primo subepidermicis, dein superficialibus; ostiolo mamillato, prominulo; sporulis maximis, numerosis, 20-28 \approx 13-14, regulariter ovoideis, basi attenuatis vel medio compressis, hyalinis, granuloso-farctis; basidiis apice latis, basi acuminato-attenuatis; sporulis subæquilongis.
Hab. in caulibus emortuis Exaci, Congo.
35. **Macrophoma subconica** Ell. et Ev. Journ. Myc. 1889, p. 147. — 5415 Peritheciis innato-erumpentibus, conicis, 0,5-1 mm. altis; sporulis ellipsoideis, hyalinis, 20-22 \approx 14-16; basidiis tenuibus sporulas subæquantibus.
Hab. in caulibus emortuis Solani nigri, St. Martinsville La. Amer. bor. — Adest ibidem forma in *Alocasia esculenta*.
36. **Macrophoma Ehretiae** Cooke et Mass. in Grev. XVIII, p. 34. — 5416 Peritheciis globoso-depressis, sparsis, tectis, atris, ostiolo pertusis; sporulis ellipticis, hyalinis, utrinque rotundatis, 20-22 \approx 10, basidiis bacillaribus, simplicibus vel furcatis, suffultis.
Hab. in ramis Ehretiae formosanae, N. Coast of Formosa.
37. **Macrophoma Convolvuli** Pat. Bull. Soc. Myc. 1887, pag. 130. — 5417

Peritheciis sparsis, 0,5 mm. diam., nigris, superficialibus v. semiimmersis, ovoideis vel depresso-disciformibus; ostiolo centrali, prominulo, acuto; sporulis magnis, 21-23 \times 10-13, ovoideis vel uno apice attenuatis, hyalinis, granuloso-farctis; basidiis basi incrassatis, apice attenuatis, sporulas vix æquantibus.

Hab. in caulibus siccis *Convolvuli*, Congo.

38. **Macrophoma Ipomœæ** Passer. Diagn. F. N. IV, n. 93. — Peri-⁵⁴¹⁸theeciis sparsis, subglobosis, atris, subtectis; sporulis elongato-ellipticis vel cuneiformibus aut ovatis, endoplasmate granuloso, non guttulatis, hyalinis, basidiis crassis æquilongis vel longioribus fultis, 12-22 \times 5-7,5.

Hab. in caulibus *Ipomœæ panduratæ* in horto botanico parmensi Ital. bor.

γ. Foliicolæ.

39. **Macrophoma Taxi** (Berk.) Berl. et Vogl. Add. Syll. n. 606 et in Atti Soc. Veneto-Trentina 1886, pag. 178. — *Phoma* Syll. III, pag. 102.

40. **Macrophoma Candollei** (Berk. et Br.) Berl. et Vogl. Add. Syll. n. 624 et in Atti Soc. Veneto-Trentina 1886, p. 178. — *Phoma* Syll. III, p. 105.

41. **Macrophoma Mirbelii** (Fr.) Berl. et Vogl. Add. Syll. n. 625 et in Atti Soc. Veneto-Trentina 1886, p. 179, tab. II, fig. V. — *Phoma* Syll. III, p. 105.

42. **Macrophoma ilicella** (Sacc. et Penz.) Berl. et Vogl. Add. Syll. n. 628 et in Atti Soc. Veneto-Trentina 1886, p. 179, t. II, f. VIII. — *Phoma* Sacc. Syll. III, p. 106.

43. **Macrophoma australis** (Cooke) Berl. et Vogl. Add. Syll. n. 4345, ⁵⁴¹⁹*Phoma australis* Cooke in Grevillea XV, pag. 17. — Epiphylla; maculis fuscis, ellipticis, brunneo-cinctis, demum confluentibus; peritheciis atris, punctiformibus, semiimmersis; sporulis elongato-ellipticis, hyalinis, granulosis, 20-30 \times 6; basidiis brevibus.

Hab. in foliis *Eucalypti*, Melbourne Australiæ (H. WATTS).

44. **Macrophoma leucostigma** (D. C.) Berl. et Vogl. Add. Syll. n. 623 et in Atti Soc. Veneto-Trentina 1886, p. 179. — *Phoma* Syll. III, p. 105.

45. **Macrophoma petiolata** (Cooke) Berl. et Vogl. Add. Syll. n. 675 et in Atti Soc. Veneto-Trentina 1886, p. 179, — *Phoma* Syll. III, pag. 114.

46. **Macrophoma nobilis** (Thüm.) Berl. et Vogl. Add. Syll. n. 663 et in Atti Soc. Veneto-Trentina 1886, pag. 180. — *Phoma* Syll. III, pag. 112.
47. **Macrophoma Araliæ** Sacc. et Berl. in Rev. Myc. 1886, Berl. et Vogl. Add. Syll. n. 4346 et in Atti Soc. Veneto-Trentina 1886, p. 180, tab. V, fig. II. — Phyllogena; peritheciis maculis ochraceo-fuscis insidentibus, atris, conoideis, utramque paginam foliorum occupantibus; sporulis ovoideis vel subcylindræis, utrinque rotundatis, guttiligeris vel protoplasmate granuloso farctis, 18-20 \approx 6-8, basidiis simplicibus, continuis suffultis. 5420
- Hab.* in utraque pagina foliorum viventium? Araliæ, Algeria.
48. **Macrophoma millepunctata** (Penz.) Berl. et Vogl. Add. Syll. n. 622 et in Atti Soc. Veneto-Trentina 1886, p. 180, t. II, f. X. — *Phoma* Syll. III, p. 105 (non Lév.).
49. **Macrophoma glæosporioides** (Sacc.) Berl. et Vogl. Add. Syll. n. 693 et in Atti Soc. Veneto-Trentina 1886, p. 180, t. III, fig. XIII. *Phoma glæosporioides* Sacc. Syll. III, p. 116.
50. **Macrophoma collabens** (Cooke) Berl. et Vogl. Add. Syll. n. 4347 et in Atti Soc. Veneto-Trentina 1886, pag. 181, *Phoma collabens* Cooke in Grevillea 1885, pag. 94. — Epiphylla; peritheciis sparsis, maculas orbiculares, atras, in foliis et ramulis efformantibus, rugosis, depressis subsuperficialibus $\frac{1}{4}$ mm. diam.; sporulis ellipticis, continuis hyalinis enucleatis, 15-18 \approx 5; basidiis indistinctis. 5421
- Hab.* in foliis vivis Pruni lusitanicæ, Kew Britannicæ.
51. **Macrophoma fragilis** (Mont.) Berl. et Vogl. Add. Syll. n. 869 et in Atti Soc. Veneto-Trentina 1886, p. 181. — *Phoma* Syll. III, p. 146.
52. **Macrophoma surinamensis** (B. et C.) Berl. et Vogl. Add. Syll. n. 976 et in Atti Soc. Veneto-Trentina 1886, p. 181. — *Phoma* Syll. III, p. 163.
53. **Macrophoma Raii** (Peck) Berl. et Vogl. Add. Syll. n. 845 et in Atti Soc. Veneto-Trentina 1886, pag. 181. — *Phoma* Syll. III, pag. 143.
54. **Macrophoma Cordyline** (Thüm.) Berl. et Vogl. Add. Syll. n. 965 et in Atti Soc. Veneto-Trentina 1886, p. 182. — *Phoma* Syll. III, pag. 162.
55. **Macrophoma Vincæ** (Curr.) Berl. et Vogl. Add. Syll. n. 862 et in Atti Soc. Veneto-Trentina 1886, p. 182. — *Phoma* Syll. III, pag. 145.

56. **Macrophoma megasperma** (Speg.) Berl. et Vogl. Add. Syll. n. 509 et in Atti Soc. Veneto-Trentina 1886, p. 182. — *Phoma* Syll. III, pag. 86.
57. **Macrophoma Malpighiæ** (Mont.) Berl. et Vogl. Add. Syll. n. 688 et in Atti Soc. Veneto-Trentina 1886, p. 182. — *Phoma* Syll. III, pag. 186.
58. **Macrophoma? phyllogenata** (Link) Berl. et Vogl. Add. Syll. n. 699 et in Atti Soc. Veneto-Trentina 1886, p. 183. — *Phoma* Syll. III, pag. 117.
59. **Macrophoma erumpens** (B. et C.) Berl. et Vogl. Add. Syll. n. 701 et in Atti Soc. Veneto-Trentina 1886, p. 183. — *Phoma* Syll. III, pag. 118.
60. **Macrophoma carpinicola** Delacroix Bull. Soc. Myc. Fr. 1891, 5424 pag. 107, f. I. — Peritheciis immersis, fusco-olivaceis, latiuscule pertusis, $180 \approx 140$; sporulis oblongis, basi attenuatis, plerumque curvulis, $24 \approx 6,5$; basidiis fasciculatis $20 \approx 1,5$, fundum perithecii tantum occupantibus.
Hab. in foliis exsiccatis Carpini Betuli, Saint Emilaud Galliæ.
61. **Macrophoma Oleandri** Passer. Diagn. F. N. IV, n. 92. — Epiphyl- 5425 la; peritheciis sparsis nunquam circinnatis, tectis, globoso-depressis, atris; sporulis ellipticis, integris, hyalinis, $20-25 \approx 10$, basidiis bacillaribus, subæquantibus fultis.
Hab. in foliis dejectis Nerii Oleandri in horto botanico parmensi Ital. bor.
62. **Macrophoma Ailanthi** Brun. Champ. Saint. p. 338. — Peritheciis 5424 parallele seriatis, adproximatis, linearibus, innatis, dein rimoso-erumpentibus; sporulis ovato-oblongis, $14 \approx 7-8$, hyalinis, 2-guttatis; basidiis filiformibus, apice arcuatis, $25-30 \mu$. long.
Hab. in petiolis Ailanthi glandulosæ, Saintes Galliæ.
63. **Macrophoma japonica** Pass. Rev. Myc. 1887, p. 145. — Perithe- 5425 ciis hypophyllis, sparsis, globosis, epidermide velatis, minute papillatis, contextu celluloso, fuligineis, nucleo albo; sporulis ellipsoideis hyalinis, intus granulosis, vel 1-2-guttatis, $25-30 \approx 10$, basidiis subæquilongis crassiusculis fultis.
Hab. in foliis aridis adhuc pendulis Camelliæ cultæ, Parma Ital. bor.
64. **Macrophoma Labiatarum** Pat. Bull. Soc. Myc. 1888, pag. 121. — 5426 Peritheciis globoso-depressis, pezizoideis, 0,5-1 mm. diam., astomis (!), hyphulis brevibus, brunneis, continuis vel septatis; sporu-

lis ovoideis, crasse tunicatis, majusculis, 26-30 \approx 12-18; basidiis prælongis, clavatis, hyalinis, 50 μ . long.

Hab. in foliis Labiatarum, Caracas.

5. **Macrophoma Volkameriæ** Pat. Bull. Soc. Myc. 1887, p. 129. — 5427

Peritheciis punctiformibus, semiglobosis, nigris, nitentibus, glabris; ostiolo centrali, minuto; contextu brunneo, e cellulis radiatim elongatis efformato; sporulis magnis, ovoideis, 12-14 \approx 10, basi attenuatis; basidiis sporulâ 2-3-plo longioribus.

Hab. in foliis viventibus Volkameriæ, Franceville Congo.

6. **Macrophoma sinensis** Passer. Diagn. F. N. IV, n. 45. — Peri- 5428

theciis solitariis, subcutaneis, per epidermidem longitrorsus fissam vix erumpentibus, fuscis; sporulis oblongis subfusiformibus, rectis, eguttulatis, hyalinis, 13-20 \approx 5, sterigmatibus crassiusculis, rectis, æquantibus vel longioribus fultis.

Hab. in foliis emortuis Cunninghamiæ sinensis in horto botanico parmensi Ital. bor.

δ. In fructibus, seminibus, fimo etc.

7. **Macrophoma samaricola** (Sacc.) Berl. et Vogl. Add. Syll. n. 910 et in Atti Soc. Veneto-Trentina 1886, p. 183. — *Phoma* Sacc. Syll. III, pag. 153.

8. **Macrophoma Triacanthi** (Sacc.) Berl. et Vogl. Add. Syll. n. 875 et in Atti Soc. Veneto-Trentina 1886, p. 184. — *Phoma* Sacc. Syll. III, pag. 147.

9. **Macrophoma clitoricarpa** (Cooke) Berl. et Vogl. Add. Syll. n. 872 et in Atti Soc. Veneto-Trentina 1886, p. 183. — *Phoma* Syll. III, pag. 147.

10. **Macrophoma Malorum** (Berk.) Berl. et Vogl. Add. Syll. n. 908 et in Atti Soc. Veneto-Trentina 1886, pag. 184. — *Phoma* Syll. III, pag. 152.

11. **Macrophoma seminalis** (B. et C.) Berl. et Vogl. Add. Syll. III, n. 886 et in Atti Soc. Veneto-Trentina 1886, p. 184. — *Phoma* Syll. III, pag. 149.

12. **Macrophoma Pandani** (Lév.) Berl. et Vogl. Add. Syll. n. 939 et in Atti Soc. Veneto-Trentina 1886, p. 184. — *Phoma* Syll. III, pag. 157.

13. **Macrophoma micromegala** (B. et C.) Berl. et Vogl. Add. Syll. n. 428 et in Atti Soc. Veneto-Trentina 1886, p. 185. — *Phoma* Syll. III, pag. 73.

74. **Macrophoma fimicola** (West.) Berl. et Vogl. Add. Syll. n. 1010 5429
et in Atti Soc. Veneto-Trentina 1886, p. 185. — *Phoma* Syll. III,
pag. 169.
75. **Macrophoma acinorum** Pass. N. G. B. I. 1890, n. 1, pag. 48. — 5430
Maculis subdiscoideis, fuscis; peritheciis sparsis vel subgregariis,
punctiformibus, erumpentibus, fuscidulis, nitidis, acutis; contextu
submembranaceo, minute celluloso; sporulis elongato-fusiformibus,
integris, nubilosis, hyalinis, pluriguttatis, 20-28 \approx 6-7,5; basidiis fi-
liformibus, sporulas subæquantibus.
Hab. in baccis maturis *Vitis viniferæ*, Vigheffio pr. Par-
mam Ital. bor.
76. **Macrophoma flaccida** (Vial. et Rav.) Cavara Bitt. Rot. pag. 27, 5431
tab. V, fig. 11-12, *Phoma* Vial. et Rav. Black-Rot. pag. 81
c. icon. — Peritheciis sparsis, globoso-depressis, subepidermicis,
atris, ostiolo prominulo albicante; sporulis fusoideis, utrinque acu-
tiusculis, hyalinis, 16-18 \approx 5-6; basidiis bacillaribus, sporulâ bre-
vioribus.
Hab. in baccis siccis *Vitis viniferæ* in Pyrenæis et Stra-
della et Voghera Italiæ. — *Phomæ rimisedæ* affinis, sed ostiolo
epapillato, sporulis et basidiis minoribus diversa.
77. **Macrophoma Byrsonimæ** Pat. Bull. Soc. Myc. 1888, p. 121. — 5432
Peritheciis nigris, globulosis, ostiolatis, initio immersis, dein inter
epidermidis rimas conspicuis; sporulis ovoideis v. fusoideis, 20-30
 \approx 8-10; basidiis linearibus sporulam subæquantibus.
Hab. in fructibus *Byrsonimæ crassifoliæ*, Puerto Zamuro
Venezuelæ.
78. **Macrophoma pinea** Passer. Diagn. F. N. IV, n. 94. — Peritheciis 5433
minutis, erumpentibus, globosis, atris, nucleo albo; sporulis elon-
gato-fusiformibus, continuis, hyalinis, 22,5 \approx 7,5; basidiis longiu-
sculis.
Hab. in squamis strobili *Pini austriacæ* in horto botanico
parmensi Ital. bor.
79. **Macrophoma magnifrutua** (Peck) Sacc., *Phoma* Peck 40 Rep. 5434
p. 59. — Peritheciis minutis, 120-150 μ . diam., sparsis, subglobo-
sis, erumpentibus, nigris; sporulis oblongo-fusoideis, 23-30 \approx 7-10;
basidiis brevibus.
Hab. in conis *Thuja occidentalis*, Keene Essex county
Amer. bor.
80. **Macrophoma Passerinii** Sacc., *Sphærospis Lagenariæ* Pass. in 5435
Erb. critt. ital. II, n. 1197, an et Thüm.? — Peritheciis carbona-

ceis, subglobosis tectis dein ostiolo obtuso erumpentibus; sporulis oblongis, avicularibus, apicibus acutis v. rotundatis, integris, endoplasmate opaco hyalinis.

Hab. in pericarpio arido *Lagenariæ vulgaris*, in horto bot. pr. Parmam Ital. bor.

b) *In Monocotyledoneis parasiticæ.*

81. **Macrophoma caricina** (Thüm.) Berl. et Vogl. Add. Syll. n. 980 et in Atti Soc. Veneto-Trentina 1886, p. 185. — *Phoma* Syll. III, p. 164.
82. **Macrophoma crustosa** Sacc. et Berl. in Misc. Myc. II, p. 30 et 5436 Berl. et Vogl. Add. Syll. n. 4348, et in Atti Soc. Veneto-Trentina 1886, pag. 185, t. III, fig. XX. — Peritheciis ad nodos culmorum dense crustaceo-aggregatis, nigris, globulosis, vix papillatis, $\frac{1}{5}$ mm. diam.; sporulis oblongo-ellipsoideis, 28-32 \approx 10-12, granulosi, hyalinis; basidiis filiformibus, paulo brevioribus suffultis.
- Hab.* in culmis *Triticis sativi* ad nodos, Fiumicello Ital. bor. — *Macrophomæ Sacchari* affinis.
83. **Macrophoma Sacchari** (Cooke) Berl. et Vogl. Add. Syll. n. 994 5437 et in Atti Soc. Veneto-Trentina 1886, p. 186. — *Phoma* Syll. III, p. 166.
84. **Macrophoma Palmarum** (Cooke) Berl. et Vogl. Add. Syll. n. 947 et in Atti Soc. Veneto-Trentina 1886, p. 186. — *Phoma* Syll. III, p. 157.
85. **Macrophoma Gladioli** (Cooke) Berl. et Vogl. Add. Syll. n. 933 et in Atti Soc. Veneto-Trentina 1886, p. 186. — *Phoma* Syll. III, p. 159.
86. **Macrophoma brevipes** (Penz. et Sacc.) Berl. et Vogl. Add. Syll. n. 957 in in Atti Soc. Veneto-Trentina 1886, p. 186, t. III, f. XVI. — *Phoma* Syll. III, p. 160.
87. **Macrophoma Hippoglossi** (Mont.) Berl. et Vogl. Add. Syll. n. 972 et in Atti Soc. Veneto-Trentina 1886, p. 187. — *Phoma* Syll. III, p. 162.
88. **Macrophoma Musæ** (Cooke) Berl. et Vogl. Add. Syll. n. 969 et in Atti Soc. Veneto-Trentina 1886, p. 187. — *Phoma* Syll. III, p. 163.
89. **Macrophoma Cocos** Passer. Diagn. F. N. IV, n. 95. — Perithe- 5438 ciis crebre sparsis, tectis, minute pustuliformi-erumpentibus, ostiolo fusco vix visibili; sporulis oblongis, elliptico-lanceolatis v. pirifor-