

lata, interdum tantum in margine barbata plerumque extus fusco-strigosa.

Hab. in frustulis ligni dejecti, Bethlehem Amer. bor.

32. **Lachnella maculicola** (Schw.) Sacc. *Peziza maculicola* Schw. Syn. 1646
ops. pag. 174. — Gregaria, 2 mm. diam. excedens, sessilis, basi nigra nuda rugosa, versus marginem strigosissima, tomento strigoso ferrugineo-rufo, subpulverulento; disco primum clauso (tum ascomate globoso), demum aperto, corneo-rufo; cupulis in macula subconcentricis.

Hab. in maculis determinatis albidis omnino tamen non crustaceis, in lignis decorticatis ramorum, aggregata, Bethlehem et Buffalo Americæ borealis. — A *L. flammea*, teste Berk., non satis differt.

33. **Lachnella farinosa** (Wallr.) Sacc. *Peziza farinosa* Wallr. Fl. 1647
crypt. n. 2441. — Ascomatibus sessilibus, molliter carnosulis, siccis clausis globosis, extus pilis propexis tenerrimis dilute cinnamomeis sparsis confertisve iisque apice farinula albida adspersis undique vestitis similiterque in stratum tenue intertextis, humectis discum concavum dilute-carneum margine inflexo cinctum recludentibus.

Hab. ad lignorum cæsum frustula humi jacentia, Fraxini, Tiliæ, Fagi in Thuringia passim. — Cum *P. rufiberbi* Alb. et Schw. et Fr. syst. II, p. 107, forsitan comparanda.

34. **Lachnella ascoboloidea** (Schw.) Sacc. *Peziza ascoboloidea* Schw. 1648
Syn. p. 175. — Minutissima, sparsa, extus fibrosa, candida, turbinata, sed vix stipitata, disco subcarneo quasi ascis ascoboloideis punctato, subconvexulo, siccitate clauso.

Hab. in ramis corticis *Vitis Labruscæ* etc., Bethlehem Amer. bor. — 1 mm. circ. lat.

35. **Lachnella tumida** (Pers.) Sacc. *Peziza tumida* Pers. Eur. I, p. 269, 1649
Fr. Syst. Myc. II, p. 97. — Sessilis, subcoriacea, depresso ventricosa, leviter tomentosa, opaca, gilvo-pallida, disco tumido nigrescente.

Hab. in sarmenis *Vitis viniferæ* rarissime (CHAILLET) et in Thuringia (WALLR.). — Ab initio tota clausa videtur, saltem tomento involuta, in medio dein aperitur ore circulari; discus tandem conspicitur, qui est superficialis seu prominens, rugulosus quasi et immarginatus; latitudo linearis.

36. **Lachnella fusco-barbata** (Schw.) Sacc. *Peziza fusco-barbata* Schw. 1650
Syn. p. 173. — Patellæformis, extus duriuscula et in basi nigri-

cans, 2-4 mm. diam., margine densim fusco-barbata, disco eleganter carneo, sparsa, siccitate clausa, extra barbam nuda rugosa.

Hab. in caulibus valde corruptis *Verbasci*, Bethlehem Americæ borealis.

37. **Lachnella solitaria** (Schw.) Sacc. *Peziza solitaria* Schw. Syn. 1651 p. 175. — Sessilis, solitaria, majuscula ad 6 mm. lata, applanata, firma, crassa, margine tumido obtuso glabro, colore chalybeo; disco undulatim inæquali; cupula extus vestita fibris quibusdam paucis albescentibus.

Hab. in stipitibus tenerrimis, Bethlehem Amer. bor.

38. **Lachnella extricata** (B. et C.) Sacc. *Peziza extricata* B. et C. 1652 North Am. Fungi n. 719. — Erumpens, congesta margine undulato; extus pallide umbrina sericeo-tomentosa, intus albida.

Hab. in caulibus emortuis *Umbelliferarum*, Alabama Amer. bor. (PETERS). — Pulchra species, sed immatura observata.

TRICHOPEZIZA Fuck. Symb. p. 295 (1869) [Etym. *thrix* capillus et *Peziza*], *Peziza* sect. *Dasyscypha* Fr. Syst. Myc. II, p. 89, *Lachnella* Sacc. e. p. *Hyalopeziza* Fuck. — Ascoma ceraceum, sessile vel subsessile, ex urceolato scutellatum, extus pilosum v. margine distinctius ciliatum, nunc minutum tenacellum, nunc minutissimum, tenerius. Asci tereti-fusoidei, 4-8-spori. Sporidia tereti-oblonga vel fusoidea, continua hyalina. Paraphyses sæpius bacillari-fusoideæ, crassiusculæ. — Species quædam aptius ad *Pseudohelotium* et *Dasyscypham* referri possent.

A. Species fructificatione cognita.

1. Caulicolæ.

1. **Trichopeziza sulphurea** (Pers.) Fuck. Symb. p. 296, *Lachnum sulphureum* Karst. M. F. I, p. 176, *Peziza sulphurea* Pers. Disp. p. 33, Fr. S. M. II, p. 104, Pat. Tab. 280, Greg. t. 83, *P. citrinella* DC. Franc. VI, p. 24, *Lachnea* Gill. Disc. c. ic. — Sparsa vel gregaria, sessilis, hemisphærica, pallida, sulphureo-strigoso-villosa, vetustate et siccitate sæpe fuscescens, ferrugineo-fusco-villosa, disco pallido vel albido, 1 mm. lat.; ascis cylindræo-clavatis, 65-73 \approx 5-6; sporidiis fusoideo-filiformibus guttulatis vel spurie tenuiter uni-triseptatis aut eguttulatis, 20-34 \approx 2-2,5; paraphysibus apice acutiusculis 4,5 μ . cr.

Hab. ad caules putrescentes *Urticæ* dioicæ, *Cerefolii* silvestris, *Solani* tuberosi, *Sambuci* *Ebuli*, *Antirrhini*.

ni in Fennia, Britannia, Belgio, Gallia, Sibiria asiatica, Amer. bor. — Teste Fuck., stat. conidicus est *Tricholeconium roseum* Corda.

2. **Trichopeziza leucophæa** (Pers.) Rehm Ascom. n. 65, *Peziza sulphurea* var. *leucophæa* Pers. Myc. eur. I, p. 250, *P. leucophæa* Nyl. Obs. p. 31, *P. sulphurea* Auct. pr. p., *Lachnum leucophæum* Karst. M. F. I, p. 177. — Sparsa vel gregaria, sessilis, hemisphærica, pallida, albicanti- v. sulphureo-strigoso-villosa, siccitate et vetustate ferrugineo-fusco-villosa, disco albido, 1 mm. lat., pilis flavis septatis, scabris 4-5 μ . cr.; ascis cylindraceo-subclavatis, 50-60 \simeq 4-5; sporidiis fusoideo-filiformibus simplicibus, 7-16 \simeq 1,5-2 distichis; paraphysibus fusoideis supra acutiusculis, 3,5-4 μ . cr.

Hab. ad caules putrescentes Umbelliferarum majorum, Urticæ dioicæ, Aristolochiæ, Arunci, Artemisiæ vulgaris etc. in Fennia, Lapponia, Germania, Gallia, Italia. — Forma **alpestris** Rehm Asc. n. 308. Extus sulphurea vel viridi-sulphurea, disco flavidulo, hirta vel strigosa, 2-3 mm. diam. explanata; ascis 60 \simeq 5; sporidiis 12-15 \simeq 1,5. Ad caules putridos Cirsii spinosissimi, in alpibus tyrolensibus juxta glaciem æternam.

3. **Trichopeziza relicina** (Fr.) Fuck. Symb. p. 296, *Peziza relicina* Fr. Syst. Myc. II, p. 103, Pat. Tab. p. 282, *P. Atropæ* A. S. Lus. p. 320, *Excipula phæotricha* Rabenh., *Lachnum relicinum* (Fr.) Karst. M. F. I, p. 182. — Badio-fusca, sparsa vel subgregaria, sessilis v. brevissime stipitata, obconica (sicca), pilis erectis, confertis, badiis strigosa, 4-5 mm. lat.; ascis clavatis, apice incrassatis, 8-sporis, 60-70 \simeq 6-8; sporidiis oblongis, obtusis, rectis vel subcurvatis, hyalinis, 1-cellularibus, 12-15 \simeq 2,5-3, distichis; paraphysibus lanceolatis, apice acuminatis, c. 2,5 μ . cr., ascos superantibus.

Hab. in caulibus Artemisiæ, Urticæ, Aconiti, Chenopodii, Sonchi, Cacaliæ in Fennia, Suecia, Gallia, Helvetia, Germania, Italia, Hungaria, Amer. bor. — Pili distincte articulati, fusci, apice vix incrassato, 180-220 \simeq 4,5-6 mm. long. A *T. Nidulo* affini cupulis minoribus, pilis erectis longioribus et tenuioribus diversa.

4. **Trichopeziza nidulans** (Quél.) Sacc. *Lachnella nidulans* Quél. II 1656 Suppl. p. 20, t. XII, f. 5. — Ascomate sessili, ovoideo, applanato, 1-2 mm. diam., humido, tenui, ceraceo, ciliato-hirto, brunneo vel fulvo, basi subiculo e filamentis arachnoideis, albis prædito; hymenio concavo incarnato-pallescente; sporidiis fusoideis, 12-15 μ . longis, septatis.

Hab. gregatim in caulibus majoribus Urticæ, Eupatorii in Jura. — Affinis *T. Nidulo* et *T. relicinæ*.

5. **Trichopeziza mollissima** (Lasch) Fuck. Symb. myc. p. 296, *Peziza mollissima* Lasch in Reb. H. M. II, n. 708, *Lachnum mollissimum* Karst. M. F. I, p. 174, *Peziza ovina* Lib. Herb. — Sparsa v. gregaria, sessilis, albida vel pallida ex hemisphærico applanata, sicca hemisphærica vel subsphæroideo-contracta, colore immutata, albobiliosa, margine sericeo-fimbriato, 0,5 mm. lat.; ascis subclavato-cylindræcis 50-66 \approx 4-4,5; sporidiis filiformi-fusoideis, vulgo eguttulatis, 8-14 \approx 1,5; paraphysibus 4-5 μ . cr., apice cuspidatis.

Hab. ad caules Urticæ dioicæ, Umbelliferarum variarum, Eupatorii, Actææ, Valerianæ et Artemisiæ vulgaris putrescentes, in Fennia meridionali et media et in Gallia, Germania, Hungaria.

6. **Trichopeziza subglobosa** (Saut.) Sacc. *Peziza subglobosa* Saut. 1658 Pilz. Salzb. p. 10, Wint. Hedw. 1881, p. 132. — Globosa, tenera, albido-pallens, margine ciliato; ascis cylindræceo-clavatis, 8-sporis, 44-50 \approx 5; sporidiis cylindræcis, utrinque rotundatis, continuis, hyalinis, 9-12 \approx 2; paraphysibus filiformibus.

Hab. in caulibus Urticæ emortuis, Mittersill Salzburg.

7. **Trichopeziza urticina** (Peck) Sacc. *Peziza urticina* Peck Bull. N. 1659 Y. Mus. 1887, p. 21. — Ascomate minuto, 170-350 μ . diam., sessili, subgloboso, primo albo, udo labiis conniventibus, sicco pilosofurfuræceo, albescente; ascis subfusiformibus; sporidiis stipatis v. distichis, fusiformibus, 10-13 μ . longis; paraphysibus filiformibus.

Hab. in caulibus emortuis Urticæ (Laportææ) canadensis, Catskill Amer. bor. — Pili madore sunt approximati et ascoma longitudinaliter striatum videtur. Discus in sicco sæpe absconditus.

8. **Trichopeziza rubicunda** (Saut.) Sacc. *Peziza rubicunda* Saut. Flor. 1660 Salzb. p. 8, Wint. Hedw. 1881, p. 130. — Sessilis, irregularis, applanata, submembranacea, flavens, disco miniato; ascis elongato-clavatis, 8-sporis, 35-40 \approx 5; sporidiis oblique distichis, cylindræcis, utrinque rotundatis, sæpe parum curvatis, continuis, hyalinis, 6-7 \approx 2.

Hab. in caulibus putridis Urticæ prope Mittersill Salzburg. — Ex Winter *Moll. chlorinellæ* Ces. affinis, sed vix, cum inter vestitas ab auctore locetur.

9. **Trichopeziza crispula** (Karst.) Sacc. *Hel. crispulum* Karst. M. F. 1661 I, p. 161. — Gregaria vel subsparsa, sessilis, urceolata, tomento-

sa, albida, 0,2-0,3 mm. lat.; ascis cylindraceutis vel fusoido-cylindraceutis, 25-36 \times 4-4,5, obturaculo minutissimo jodo leviter cœrulescente; sporidiis fusoido-elongatis, rectis, 2-4-guttulatis, 6-10 \times 1,5-2; paraphysibus gracilibus, 0,5 μ . cr.

Hab. ad caules emortuos Chenopodii Boni Henrici, Artemisiæ vulgaris, Rumicis et Cerefolii silvestris in Fennia australi et Nordcap Norvegiæ. — Pili flexuoso-curvati, inarticulati, apicem versus attenuati, 100 \times 3-6. Forma, colore et magnitudine ascomatum cum *Pseudohel. scrupuloso* convenit. Vergit ad *Mollisiam*.

10. **Trichopeziza brevipila** (Rob. et Desm.) Sacc. *Peziza brevipila* 1662
Rob. in Desm. 17 Not. pag. 36. — Caulicola, erumpens, sparsa, sessilis, minuta, orbicularis vel suboblunga, pallide grisea, externe hirsuta; pilis brevibus, nigris; disco plano vel concaviusculo, pallido; ascis tubulosis, 55 μ . longis; sporidiis elongatis, linearibus, rectis vel curvulis; guttulis 4-6 globosis.

Hab. in caulibus siccis Centaureæ, in Gallia (DESMAZIÈRES). — Discus apertus 700-750 μ . æquans.

11. **Trichopeziza Bernardiana** Sacc. et Let. Misc. mycol. I, p. 8. — 1663
Ascomatibus gregariis, sessilibus, cupularibus, totis pallide carneo-luteolis, $\frac{1}{3}$ - $\frac{1}{2}$ mm. diam., subceraceis, extus pilis exiguis asperulis lutescentibus ornatis; ascis teretiusculis, brevissime stipitatis, filiformi-paraphysatis, 50-60 \times 6, octosporis; sporidiis distichis fusoido-cylindraceutis, lenissime curvulis, utrinque obtusiusculis, 10-13 \times 1,7-2, hyalinis.

Hab. in caule emortuo Cirsii palustris prope Rouen (LE-TENDRE). — Generi *Helotio* affinis.

12. **Trichopeziza subnidulans** Røhm Ascom. Alp. n. 15. — Plerumque gregaria, sessilis, primitus globosa, extus flavido-brunnea, strigosa, humida explanata, margine fimbriata, subtus nuda fusca, disco livido-pallido, c. 0,7-8 μ . diam., orbicularis, parenchymatico-contexta, pilis marginalibus mediocribus, 6-7 μ . cr., fuscis, apice subclavatis, obtusis, hyalinis, anguste septatis, simplicibus; ascis clavatis 8-sporis, 45 \times 5, apice jodo cœrulescente; sporidiis oblongatis, obtusis, 1-cellularibus, hyalinis, distichis, 6-7 \times 4,5; paraphysibus lanceolatis, apice acutatis, basi 5 μ . cr.

Hab. ad caules putridos Adenostylidis alpinæ in monte Bauernalpkopf alpium Allgovix c. 1500 m. alt. (BRITZELMAYR). — *Trichopezizæ Nidulo* affinis.

13. **Trichopeziza cirrata** (Cr.) Sacc. *Peziza cirrata* Cr. Fin. p. 51. 1665

— Ascomate $\frac{1}{5}$ mm. diam., albo, sessili, subsphærico, concavo, villosulo; pilis brevibus, fragilibus, continuis, sursum attenuatis tecto; ascis oblongis, 8-sporis; sporidiis subcylindræis, hyalinis; paraphysibus filiformibus punctulatis.

Hab. in caule Eupatorii cannabini, Brest Galliæ (DE GUERNISAC).

14. **Trichopeziza carneo-rubra** (Ell.) Sacc. *Peziza carneo-rubra* 1666
Ellis in Cooke Disc. U. S. II, p. 22. — Sessilis, rosea, 1 mm. lat.; sporidiis linearibus bi-nucleatis.

Hab. in caule Erigeronis, New Jersey Amer. bor. (ELLIS).

15. **Trichopeziza spirotricha** (Oud.) Sacc. *Pez. spirotricha* Oud. mat. 1667
pour. fl. myc. Neerl. II, Hedw. 1874, p. 91, *Das. Rehm Asc. n. 510*, *Peziza asterostoma* Phill. in Grev. VII, p. 140. — Gregaria, primitus globosa, dein apice applanato-globosa, sessilis, primitus punctiformiter aperta, dein stictioidea, concava, urceolata, margine albo, sicca albella, humida carnea, dein albido-flavidula, 0,3-4 mm. diam., contextu parenchymatico, hyalino; cellulis magnis tenerrimis; pilis creberrimis, gregariis, hyalinis, glabris, acutis, simplicibus, longis, basi ampliatis et spiraliter contortis 4 μ . crassis obsessa; ascis clavatis, apice incrassatis, 8-sporis, 36 \approx 6 apice jodo cœrulescente; sporidiis ellipticis vel elongato-ovoideis, rectis, hyalinis, 1-cellularibus, interdum 2 nucleolis præditis, distichis, 9 \approx 2,5; paraphysibus teneris, filiformibus, superne subincrassatis.

Hab. ad caules putridos Alliaris, Adenostylidis albifrontis in Hollandia, Britannia, Tyrolia. — Sporidia sec. Phill.

7 \approx 1,5; pili 70 μ . long., plerumque marginales; ascoma usque 2 mm.

16. **Trichopeziza elegantula** (Karst.) Sacc. *Lachn. elegantula* Karst. 1668
Rev. monogr. pag. 122, *Helotium elegantulum* Karst. M. F. I, p. 132. — Sparsa vel aggregata, sessilis vel brevissime stipitata, obovoidea, dein hemisphærico-applanata, margine connivente inflexo, nigra, villo purpurascenti-fusco, facile demum secedente, obvelata, 0,6 mm. lat.; ascis cylindræis, 50-70 \approx 5; sporidiis fusoido-oblongatis vel fusoido-elongatis, rectis, 6-13 \approx 2, eguttulatis; paraphysibus filiformibus 1-1,5 μ . crass.

Hab. ad caules Epilobii angustifolii, Solidaginis, Virgaureæ et Umbelliferarum putrescentes in par. Lempälä prov. Tavastland Fennis et in Lapponia orientali. — Pili cupulæ flexuosi, fusci, haud vel obsolete articulati, 3 μ . cr.

17. **Trichopeziza Hyperici** (Schröt.) Sacc. *Velutaria Hyperici* Schröt. 1669
Bericht. Schles. Ges. 1875, p. 37. — Subsessilis, sparsa vel 2-3-

aggregata, erumpens, extus brunneo-flava, farinosa; disco olivaceo-brunneo; ascis teretibus, 8-sporis; sporidiis ellipsoideis v. ovoideis, continuis, 11-12 \approx 7.

Hab. in caulibus emortuis *Hyperici perforati*, Baden.

18. **Trichopeziza chlorospleniella** Rehm Ascom. Alp. n. 11. — Sparsa, 1670

sessilis, sphæroidea, dein urceolata, nigrella, extus nigro-pilosa, humida urceolato-concava, margine involuto sublacero, subrugosa, fusco-atra, disco hyalinello, c. 1 mm. diam., prosenchymatico-fusco-contexta, pilis brevibus, septatis, fuscis, obtusis, glabris, sparsis, c. 4 μ . cr., obsessa, in caule longe lateque æruginoso-tincto sessilis; ascis clavatis, 8-sporis, 36 \approx 5, apice jodo cœrulescente; paraphysibus ascos superantibus, lanceolato-acutatis, basi c. 6 μ . cr.

Hab. ad caulem putridum *Aconiti variegati*, Kartel-Gletscher in valle Moos alpium tyrolensium, c. 2000 m. alt. (BRITZELMAYR).

19. **Trichopeziza leucostoma** (Rehm) Sacc. *Dasyscypha leucostoma* 1671

Rehm Ascom. n. 205 et F. Lojk. n. 27. — Gregaria, sessilis, globosa, urceolata, extus fusco-brunnea v. fusco-nigra, hirta, ore conivente albo, ex fibris hyalinis constituto, humido aperto, disco dein conspicuo, concavo pallido, 0,4 mm. diam., prosenchymatico-fusco-contexta, pilis longis, fuscidulis, obtusis, subscabris, simplicibus, c. 3 μ . cr. obsessa; ascis cylindraneo-clavatis, apice incrassatis, 80-90 \approx 5, 8-sporis, apice jodo cœrulescente; sporidiis oblongis v. subfusiformibus, plerumque rectis, 1-cellularibus, hyalinis, distichis, 10-16 \approx 1,5-2; paraphysibus apice haud clavatis.

Hab. ad caules putridos *Aconiti Napelli* aliarumque herbarum circa lacum Zenoga in alpiibus edit. transsylvanicis (LOJKA) in Helvetia et Tyrolia (REHM).

20. **Trichopeziza lanata** (Rehm) Sacc. *Dasyscypha lanata* Rehm 1672

Ascom. Lojk. n. 25. — Aperta, explanata, sessilis, solitaria, sicca corrugata, humida, disco flavo plano, extus hirta, alba, parenchymatico-flavido-contexta, pilis septatis, hyalinis, glabris, simplicibus, obtusis, longis, c. 4 μ . cr. obsessa, 1,2-2 mm. diam.; ascis clavatis, 8-sporis, 6 \approx 4, apice jodo cœrulescente; sporidiis bacilliformibus, obtusis, rectis v. subcurvatis, 1-2-cellularibus, 9-15 \approx 1-1,5, hyalinis, distichis; paraphysibus filiformibus, teneris, apice, subincrassatis.

Hab. ad caules putrescentes *Aconiti Napelli* infra alpem Retyezát Hunyad Transsylvaniæ (LOJKA). — Species videtur propria, ad *T. leucophæam* vergens.

21. **Trichopeziza Berkeleyi** (Blox.) Sacc. *Peziza Berkeleyi* Blox. in 1673
B. et Br. Ann. N. H. n. 770. — Gregaria, minuta sessilis; ascomatibus hemisphæricis, furfuraceo-floccosis, plerumque pruinosis, margine primo inflexo, hymenio concavo alutaceo; ascis clavatis; sporidiis oblongis v. subcymbiformibus, 7-10 μ . longis (Berk.), 5-8 \simeq 2 (Phill.).

Hab. in caulibus emortuis Umbelliferarum in Britannia. — Ascoma juvenile ore radiato-lineolato. Pili ascom. brevissimi, squamulis amorphis intermixti.

22. **Trichopeziza Grevillei** (Berk) Sacc. *P. Grevillei* Berk. Engl. Fl. 1674
V, p. 198, *Mollisia Grevillei* (Berk.) Phill. Disc. p. 180. — Sessilis, gregaria, minuta, ascomatibus farinoso-tomentosis (subhirsutis), pallide umbrinis, margine pallidiore fimbriato; disco concolore; ascis tereti-clavatis; sporidiis oblongo-fusoideis, rectis curvulisve, 3-guttulatis, 6-8 \simeq 2; paraphysibus filiformibus.

Hab. in caule emortuo Umbelliferarum pr. Edinburg et Berwick in Britannia.

23. **Trichopeziza pilimoniliformis** (Cr.) Sacc. *Peziza pilimoniliformis* 1675
Cr. Fin. p. 50. — Ascomatibus 1-2 mm. diam., griseo-brunneis, sessilibus, concavis, costatis, costis e pilis moniliformibus formatis; ascis clavatis, octosporis; sporidiis subpiriformibus; paraphysibus filiformibus.

Hab. in caulibus emortuis *Ceananthes crocatæ* et *Rubi*, Finistère Galliæ.

24. **Trichopeziza setigera** (Phill.) *Peziza setigera* Phill. Grev. VII, 1676
p. 22. — Gregaria, sessilis, minuta, concava, extus pilis brunneis, septatis, rigidis tecta; disco brunneo, carneo; ascis clavatis, octosporis; sporidiis oblongis, 16 \simeq 3,5; paraphysibus latis, asco longioribus, sursum acutis.

Hab. in caulibus emortuis *Araliæ* in California Amer. bor.

25. **Trichopeziza pulveracea** Fuck. Symb. mycol. pag. 297, non *Peziza* 1677
Pteridis Alb. et Schw. — Punctiformis, ceraceo-mollis, intus flavidula, extus atro-olivacea, granuloso-puberula, madore aperta, sicca urceolata; ascis oblongis, sessilibus, 8-sporis, 24 \simeq 6; sporidiis oblongo-clavatis, hyalinis, 8-10 μ . long.

Hab. in caulibus siccis *Spirææ Ulmarie* in Germania, Helvetia, Belgio.

26. **Trichopeziza candidata** (Cooke) Sacc. *Peziza candidata* Cooke 1678
Grev. I, p. 130. — Niveo-alba, sessilis, mollis, sparsa v. subgregaria, mox plana, margine sæpe lobato atque irregulari leniter

elevato, extus setulis mollibus tomentosus ornata; ascis subclavatis; sporidiis minutis $7 \approx 1,5$, obtusis, hyalinis.

Hab. in sarmentis Rubi, Highgate Britannia.

27. **Trichopeziza Ulmariaë** (Lasch) Lamb. Myc. Belg. II, p. 524, *Pez.* 1679

Ulmariaë Lasch in Herb. myc. n. 1723 et in Flora 1853, p. 201.

— Sparsa, minuta; ascomate subgloboso, dein aperto umbrino, pilis brevibus villosis; disco melino; ascis cylindratis; sporidiis cylindratis, minutis.

Hab. in caulibus emortuis *Spirææ Ulmariaë* in Germania, Britannia et Belgio. — *T. Spirææ* Kirchn. Lot. 1856, pag. 246: affinis sed major. Cl. Phillips ut var. *Pyren. atrataë* censet. Cfr.

28. **Trichopeziza cinerella** (Cr.) Sacc. *Pez. cinerella* Cr. Fin. p. 51. 1680

— Ascomate 1-2 mm. diam., griseo, tomentoso, sessili, primo sphaeroideo, dein hemisphaerico; ascis clavatis, 8-sporis; sporidiis piriformibus, hyalinis; paraphysibus subcylindratis.

Hab. in caulibus emortuis Ruborum, Finistère Gallia.

29. **Trichopeziza subochracea** (C. et P.) Sacc. *Peziza subochracea* 1681

C. et P. Grev. I, p. 6, t. I, fig. 4. — Sessilis, sparsa, subglobosa, dein expansa, margine incurvo lutescente, tomentosa, disco obscuriori vel nitide ochraceo-lutescente; ascis cylindratis; sporidiis acute fusiformibus v. subcylindratis, 12μ . longis.

Hab. in caulibus Rubi odorati, Adirondack Amer. bor.

30. **Trichopeziza Nidulus** (S. et K.) Fuck. Symb. p. 297, *Peziza Ni-* 1682

dulus Schm. et Kunze exs. n. 72, Fr. Syst. Myc. II, pag. 104,

Lachnum Nidulus (S. et K.) Karst. M. F. I, pag. 181, *Lachnea*

Nidulus Gill. Disc. c. icon. — Sparsa aut subgregaria, sessilis,

subhemisphaerica, badio-strigoso-hirtella, disco pallido-flavescente,

margine obtusiusculo connivente, subfimbriato, 0,6 mm. lat.; ascis

cylindratis-subclavatis, $40-60 \approx 4-4,5$; sporidiis fusiformibus v. fusiformibus

v. fusiformibus-elongatis, rectis, distichis, $8-12 \approx 1-1,5$; paraphy-

sibus supra acutis, $3,5-4,5 \mu$. cr.

Hab. ad caules putrescentes *Spirææ Ulmariaë*, Rubi sax-

atilis Polygonati, Epilobii angustifolii in Fennia,

Suecia, Germania, Gallia, Belgio, Italia, Helvetia, Britannia. —

Pili crebri septati, recti, brunnei, sursum incrassati, obtusi, $70-$

$120 \approx 5-8$.

31. **Trichopeziza Tami** (Lamy) Sacc. *Peziza Tami* Lamy in Desm. 1683

Descr. Espec. Nouv. 1836, p. 10. — Sparsa, sessilis, minutissima,

globoso-applanata, tenerrima, subtomentosa, primo albo-hyalina,

dein fulva; ascis cylindratis; sporidiis ovoideis.....

Hab. ad caules putrescentes *Tami communis* in Gallia. —

Var. **Humuli** Phill. Disc. p. 270: gregaria sessilis, hemisphærica, dein expansa, putrescens, alba v. pallide-flava; ascis clavatis; sporidiis fusoides vel suboblongis, $8 \approx 2$; paraphysibus filiformibus parcis. In caulibus *Humuli Lupuli*, Darenth Britanniaë. Ascoma 200–400 μ . lat. Pili brevissimi, hyalini, continui.

32. **Trichopeziza ustulata** (Boud.) Sacc. *Helotium ustulatum* Boud. 1684

in B. S. Fr. 1881, p. 94, t. III, f. 5. — Ascomate applanato, late marginato, margine inæqualiter dentato, 0,6–1 mm. lat., extus ochraceo pilisque articulatis adpressis et in costulas subfuscis coniventibus; carne grisea; disco plano, livido vel ochraceo-plumbeo; ascis minutis octosporis, subfusoides, $76-80 \approx 10$; sporidiis fusoides-elongatis, rectis, curvulisve, utrinque 5–7-guttulatis, $18-22 \approx 3-5$; paraphysibus bacillaribus.

Hab. in caule putri *Polygonati multiflori* gregatim Montmorency Galliaë.

33. **Trichopeziza earoleuca** (B. et Br.) Sacc. *Pez. earoleuca* B. et 1685

Br. Fung. of Ceyl. n. 943. — Sessilis, e globoso aperta, extus villosa, nivea; disco carneo, demum convexo; sporidiis minimis, oblongis 4 μ . longis.

Hab. in caulibus herbaceis, ramentis in ins. Ceylon. — Minuta, gregaria.

2. Ramicolæ et corticolæ.

34. **Trichopeziza myricacea** (Peck) Sacc. *Peziza myricacea* Peck 30 1686

Rep. p. 59. — Ascomatibus minutis, siccis, 500–700 μ . diam., sessilibus v. substipitatis, alutaceo-brunneis v. subcervinis, dense pilosis, udis expansis et discum albescentem ostendentibus; ascis subcylindræis, circiter 40 μ . longis; sporidiis minutis, spermatoideis; paraphysibus ascum latitudine æquantibus et multo longioribus, sursum acutis.

Hab. in ramis *Myricæ* Gales, Adirondack Amer. bor. — Affinis *T. brunneolæ* a qua magnitudine differt. Pili longi, continui apice non incrassati. Sicca, omnino clausa.

35. **Trichopeziza antarctica** (Speg.) Sacc. *Lachnella antarctica* Speg. 1687

F. Fueg. n. 319. — Densiuscule sparsa, sessilis v. vix substipitata, minutissima, uda applanato-concava, 0,5–1 mm. diam., sicca globuloso-contracta, candida, villosula, pilis longiusculis cylindraceis 150–250 $\approx 4-5$ μ . apice obtusiusculis basi non incrassatis parcissime septulatis levissimis flexuosulis dense vestita; disco levi

albo-ceraceo; ascis cylindraceo-subfusoideis, apice truncatis, deorsum breviuscule crasseque pedicellatis, 60-65 \approx 5, octosporis, pseudo-paraphysibus clavulatis, apice longiuscule attenuatis acutissimis non v. vix longioribus, 65-70 \approx 3-4, hyalinis parce obvallatis; sporidiis subfusoideis, utrinque acutiusculis, 10 \approx 1-1,5, rectis v. curvulis, continuis, hyalinis.

Hab. in ramulis emortuis decorticatis Mayteni magellanicae in Gebel island. — Contextus excipuli subprosenchymaticus, pallide melleus; jodi vis nulla. Species *Cyphellæ albo-violascenti* simillima, partibus fructificationis inspectis tantum dignoscenda; peraffinis etiam *T. mollissimæ* Karst.

36. **Trichopeziza obscura** (Cooke) Sacc. *Peziza obscura* Cooke Grev. 1688
VII, pag. 3. — Sessilis, sparsa, atro-fuliginosa; cupula pubescens, demum applanata, margine elevato, disco aquoso-cinereo, $\frac{1}{2}$ -1 mm.; ascis cylindraceis; sporidiis linearibus, 10 μ . long.; paraphysibus filiformibus.

Hab. in ramis Quercus, Sierra Nevada Californiæ.

37. **Trichopeziza bellula** (Karst.) Sacc. *Lachnum bellulum* Karst. 1689
M. F. I. pag. 177. — Sparsa v. subgregaria, sessilis, planiuscula, sicca concava, sulphureo-strigoso-villosa, disco pallido, 1 mm. lat.; ascis cylindraceo-clavatis, 60-66 \approx 5,5-6; sporidiis fusoideo-filiformibus, rectis v. leviter curvulis, guttulis 2-6 majusculis foetis, 8-18 \approx 1-2; paraphysibus apice acutiusculis, 3 μ . cr.

Hab. ad ramulos decorticatos Fraxini excelsioris prope Observatorium oppidi Abo in Fennia.

38. **Trichopeziza grandinea** (Quél.) Sacc. *Lachnea grandinea* Quél. 1690
10 Suppl. p. 12, t. XI, f. 3 et Grev. 1879, p. 37. — Ascomatibus turbinatis, 1 mm. diam., granuliformibus, firmis, costulatis, subtiliter lanosis, albo-niveis; hymenio concavo, albo; sporidiis bacillaribus 12 μ . longis, 5-guttulatis spurieque septatis.

Hab. gregatim in corticibus Populi tremulæ, Jura.

39. **Trichopeziza glandulosa** (Gill.) Sacc. *Lachnea glandulosa* Gill. 1691
Disc. pag. 83, c. ic. — Sessilis, hemisphærica, orbicularis, rarius subovata, uda mox aperta, sordide alba vel subrosea, pilis apice capitato-glandulosis albidis præcipue margine obsessa, 1 mm. diam., disco pallido; ascis teretiusculis; sporidiis fusoideo-ellipsoideis, 2-3-guttulatis, hyalinis; paraphysibus filiformibus.

Hab. in ramis emortuis Cerasi, gregatim, in Gallia. bor. — An *Lachnellæ papillaris* forma?

40. **Trichopeziza nectrioidea** Rehm Ascom. Alp. n. 14. — Sparsa v. 1692

gregaria, sessilis, primitus globosa, dein basi applanata, extus alba-pilosa, sicca clausa, humida urceolata, margine albido, subtilissime fimbriato, primitus clausa, disco hyalino, c. 0,3-5 mm. diam., contextu prosenchymatico, flavidulo, pilis creberrimis, simplicibus, acutis, basi septatis ibique 4-5 μ . cr., rectis, glabris, hyalinis obsessa; linis obsessa; ascis clavatis, 8-sporis, 45 \approx 7; sporidiis ovatis, hyalinis, 1-cellularibus, 1-2-stichis, 6-7 \approx 3; paraphysibus filiformibus.

Hab. ad ramulum siccum *Rhododendri ferruginei*, Peischlkopf in alpe tyrolensibus, c. 1800 m. alt. (BRITZELMAYR).

41. **Trichopeziza fusco-hyalina** Rehm *Ascom. Alp. n. 13.* — Gre. 1693

gregaria, sessilis, primitus globoso-urceolata, dein subdilata, strigosa, fusca, quasi villo subexplanato insidens, humida explanata orbicularis, concavula, disco et margine hyalino, 1-1½ mm. diam., contextu fusco, prosenchymatico, pilis simplicibus, longis, septatis, fuscis, subundulatis, glabris, c. 4 μ . cr. obsessa; ascis clavatis, apice obtuse acuminatis, 8-sporis, 45 \approx 8; sporidiis oblongis, obtusis, rectis, 1-cellularibus, hyalinis, distichis, 9 \approx 4; paraphysibus filiformibus, simplicibus, c. 4 μ . cr., haud clavatis.

Hab. ad ramum siccum *Rhododendri ferruginei*, Peischlkopf in alpe tyrolensibus c. 1800 alt. (BRITZELMAYR).

42. **Trichopeziza Kalmiæ** (Peck) Sacc. *Peziza Kalmiæ* Peck 25 Rep. 1694

p. 99. — Ascomatibus minutis, sessilibus vix planis, marginatis, extus furfuraceis et obscure griseis, margine primo incurvo; disco rufo-brunneo; sporidiis ellipsoideis, sæpe nucleatis, 10 \approx 5.

Hab. in ramis *Kalmiæ angustifoliæ*, Sandlake Amer. bor.

43. **Trichopeziza concolor** (Speg.) Sacc. *Peziza concolor* Speg. F. 1695

Arg. Pug. IV, p. 87. — Sessilis, appanato-patellaris, minor 0,5-0,8 mm. diam., margine repando, disco ceraceo-pallescente, excipulo fusco-fulvescente, puberula, contextu celluloso-parenchymatico, in pilis concoloribus, parvulis 40-70 \approx 5, 1-2-septulatis producto; ascis cylindræis, apice truncatis, basi longiuscule attenuato-stipitatis, 70-75 \approx 5-7; paraphysibus filiformibus obvallatis, octo-sporis; sporidiis distichis, cylindræis rectis vel inæquilateralibus, utrinque obtusiusculis, granuloso-farctis vel 2-guttulatis, 12 \approx 2-3, hyalinis; obturaculo minutissimo ascorum iodi ope cœrulescente.

Hab. in ramis corticatis dejectis *Cephalanthi sarandi*, in dumetis uliginosis, Conchas Argentinæ. — Forte ad *Pirotteam* vergit.

44. **Trichopeziza chrysotricha** (Berk.) Sacc. *Peziza chrysotricha* 1696

Berk. Fl. New. Zeal. p. 201, t. CV, f. 7. — Cupula sessili, pri-

mum globosa, demum subhemisphærica, aurea, floccis innatis intricatis vestita subpulverulenta; ascis crasse cylindraceutis; sporidiis brevibus cymbiformibus, 11-12 \approx 4.

Hab. in ramis pr. Waikare Lake Novæ Zelandiæ (COLENSO). — Ascoma 2-3 mm. lat.

45. **Trichopeziza Cookii** (Pass.) Sacc. *Peziza Cookii* Pass. Diagn. 1697

Fung. nuovi p. 258. — Minuta, subgregaria, sessilis, mollis, pallide rosea; cupula demum applanata, extus margineque floccis brevibus hyalinis fasciculatis obsita, disco concavo; ascis parvis cylindrico-clavatis, sæpe longe et flexuose stipitatis; sporidiis linearibus, minutis, spermatoideis.

Hab. in cortice interiore emortuo Piri Mali, prope Parma Ital. bor. — Mollitie *Mollisiam* appropinquat, sed indumenti gratiâ ad *Trichopezizas* adscribenda.

46. **Trichopeziza cœrulescens** (Rehm) Sacc. *Dasyscypha cœrulescens* 1698

Rehm Ascom. Lojk. n. 24. — Gregaria, sessilis, primitus globosa, dein urceolata, denique applanata, margine spurio circumdata, cœrulescens, c. 0,5-6 mm. diam. prosenchymatico-contexta, pilis brevibus, scabris, obtusis, simplicibus, 4-6 μ . cr. obsessa; ascis clavatis, 24-30 \approx 3-4, 8-sporis, jodi ope apice cœrulescente; sporidiis oblongatis, obtusis, 1-cellularibus, hyalinis, 4-5 \approx 1, distichis; paraphysibus simplicibus, filiformibus, teneris, haud clavatis.

Hab. ad corticem Betulæ prope Chodowice, Stryj, Galiciæ australis (LOJKA).

47. **Trichopeziza ulmicola** (Cr.) Sacc. *Peziza ulmicola* Cr. Fin. p. 52. 1699

— Ascomate $\frac{1}{2}$ mm. diam., sessili, carneo, dein ferrugineo et parum lobato, margine pilis coloratis, uncinatis, fasciculatis ciliato; ascis subclavatis, 8-sporis, ovoideis, binucleatis; paraphysibus filiformibus, asco longioribus.

Hab. in cortice emortuo Ulmi, Finistère Galliæ.

48. **Trichopeziza cæsio-lutea** (B. et Br.) Sacc. *Peziza cæsio-lutea* 1700

B. et Br. Fung. of Ceyl. n. 948. — Sessilis, sæpe congesta, crispata, e strato tenui nigro oriunda, extus cœruleo-tomentosa; hymenio flavo; ascis clavatis 25 μ . long.; sporidiis minutis, monostichis, 5 μ . long.

Hab. in corticibus, Central provinciæ Ceylon. — *L. Godroniana* affinis dicitur.

3. Lignicolæ.

49. **Trichopeziza albo-lutea** (Pers.) Sacc. *Hel. albo-luteum* (Pers.) 1701

Karst. M. F. I, p. 160, *Peziza albo-lutea* Pers. Icon. et descr. Fung. p. 31, t. 8, f. 4 et 5, *Pez. varicolor* Fr. Syst. Myc. II, p. 100, *P. sulphureo-cæsia* Schum. Flor. Saell. p. 432, *P. hydnoidea* Sow. t. 178. — Gregaria, sessilis, hemisphærica, sicca clausa, sulphureo- vel luteo-virescenti-villosa, disco concaviusculo vel demum plano, pallido vel albo-pallescente, 0,5-1,1 mm. lat.; ascis cylindræo-clavatis, 45-50 \approx 6; sporidiis oblongatis, eguttulatis, 7-11 \approx 2-3; paraphysibus gracilibus.

Hab. supra lignum putridum locis humidis in Fennia, Suecia, Dania, Germania, Italia, Gallia, Belgio, Amer. bor., Cuba. — Pili cupulæ flavi, 2,5-3 μ . cr. Defectu subiculi, ut opinor, a *Tapesia fusco-umbrina* distinguenda. Cfr. hanc speciem.

50. **Trichopeziza grisella** (Cooke et Phill.) Sacc. *Lachnella grisella* 1702
C. et Ph. Disc. p. 260. — Gregaria, sessilis, rarius substipitata, turbinata dein hemisphærica, dilutissime brunnea, furfuræo-tomentosa, longitrorsum striatula; margine albido fimbriato; disco brunneo; ascis clavatis; sporidiis oblongo-fusoideis, 4-7 \approx 1-1,5; paraphysibus filiformibus.

Hab. in ligno emortuo decorticato in Britannia (CARMICHAEL). — Ascoma 100-500 μ . lat.; pili vix colorati hinc parum conspicui.

51. **Trichopeziza flavo-fuliginea** (A. et S.) Sacc. *Peziza flavo-fuliginea* 1703
A. et S. p. 319, t. XI, f. 7, Pers. Eur. p. 251, *Dasyscypha flavo-fuliginea* Fuck. Symb. App. I, pag. 137. — Sessilis, dilatata, planiuscula, mollis, strigoso-hirta, læte sulphurea, intus olivaceo-fuliginea; ascis oblique stipitatis, cylindræis, 8-sporis, 88 \approx 8; sporidiis in asci superiori parte conglobatis, cylindræo-fusiformibus, sed utrinque obtusis, rectis, continuis, hyalinis 10 \approx 3; paraphysibus filiformibus.

Hab. ad lignorum frusta, folia etc. madida putrida dejecta in paludosis silvarum in Germania et Carolina. — Gregaria nitidula, initio cupularis, dein varie flexuosa applanata, 2-5 mm. lata, suborbicularis, oblonga etc. Colore et substantia tenera ab affinibus differt.

52. **Trichopeziza crossata** (Ellis) Sacc. *Lachnella crossata* Ellis Bull. 1704
Torr. Cl. 1881, p. 124. — Sessilis, grisea, primo sphæroidea et ore minuto aperta, dein expansa et concava, margine pilis griseis, rectis, 4-6-septatis, obtusis circiter 75 \approx 7 fimbriato; disco udo livido, sicco pallide griseo; ascis cylindræis, in stipitem brevem abrupte desinentibus; paraphysibus linearibus, obscure septatis, fir-

mis sursum non incrassatis; sporidiis allantoideis, oblongis, hyalinis, continuis, 7-9 \approx 3.

Hab. in ligno vetusto, New Mexico Amer. bor.

53. **Trichopeziza confusa** Sacc. *T. punctiformis* Rehm Asc. n. 309, 1705
Sacc. Mich. I, p. 66 nec II, pag. 140, *Peziza punctiformis* Pat. Tab. f. 89. — Gregaria, punctiformis, alba, ex urceolato scutellata, sessilis, vix $\frac{1}{3}$ mm. lat., villosa; pilis simplicibus, fragilibus, acutis, rugulosis, hyalinis, 6 μ . cr.; ascis clavatis, 8-sporis 18 \approx 7; sporidiis distichis oblongis, rectis, non guttulatis, 6 \approx 3; paraphysibus (ex Pat.) filiformibus.

Hab. in ligno putri in Germania, Gallia et Italia bor.

54. **Trichopeziza vitricolor** (B. et Br.) Sacc. *Peziza vitricolor* B. et 1706
Br. Ann. N. H. n. 1321, t. XIX, f. 14. — Ascomatibus brevissime stipitatis vel sessilibus, carnosio-ceraceis, turbinatis, tenuiter tomentosus, citrinis; ascis 85-100 μ . longis; sporidiis fusiformibus guttulis oleosis præditis 20-25 \approx 5-6; paraphysibus linearibus.

Hab. in ligno putri in Britannia. — Ascoma 2 mm. lat.

55. **Trichopeziza dematiicola** (B. et Br.) Sacc. *Peziza dematiicola* 1707
B. et Br. Ann. N. H. n. 1070, t. 15, f. 20. — Gregaria, minuta; ascomate hemisphærico, umbrino, pilis longis hyalinis puberulo ciliatoque; disco cinereo; ascis breviusculis; sporidiis subcymbiformibus, hyalinis, 10 \approx 2,5; paraphysibus filiformibus.

Hab. in ligno putri inter hyphas *Helminthosporii* speciei in Britannia. — Ascoma 100-500 μ . diam.

56. **Trichopeziza viridicoma** (Peck) Sacc. *Peziza viridicoma* Peck 1708
31 Rep. p. 46. — Ascomatibus villosis, minutis, sessilibus, viridilutescentibus; sporidiis stipitatis vel distichis, oblongis vel subfusiformibus, 12-15 \approx 5-6.

Hab. in ligno putri dejecto, Sandlake Amer. bor.

57. **Trichopeziza leuconica** (Cooke) Sacc. *Lachnella leuconica* Cooke 1709
in Phill. Disc. p. 267. — Gregaria, sessilis, expansa, submembranacea, alba; pilis longis tenuibus attenuatis, flexuosis obsessa; margine elevato-ciliato; ascis tereti-clavatis; sporidiis oblongis vel oblongo-ellipsoideis rectis curvulisve 8 \approx 2; paraphysibus filiformibus.

Hab. in ligno putri, Clove Britannia. — Ascoma 0,5-1 mm. lat. sinuosum tenue; pili hyalini continui.

58. **Trichopeziza fusca** (Schum.) Sacc. *Peziza Schumacheri* Fr. S. 1710
M. II, p. 98, Fl. Dan. t. 1755, *Lachnella Schumacheri* (Fr.) Phill. Disc. p. 262, *P. fusca* Schum. Saell. p. 434 nec Pers. *P. cærulescens* Schum. loc. cit. (disco cæruleo tantum recedit), Pers. Myc.

Eur. p. 252, *P. plumbea* Grev. t. 11 (disco plumbeo). — Sessilis, exigua, hemisphærica, tomentosa, fusca, disco planiusculo fusco-purpurascente; ascis tereti-clavatis; sporidiis fusoideis v. tereti-fusoideis, rectis curvulisve, 8-13 \approx 2-3; paraphysibus filiformibus.

Hab. in ligno putrido Betulæ etc. in Dania, Britannia. — Conferta, 1-1,5 mm. lat., margine humido elevato integro cincta. Habitus omnino *Mollisiæ cinereæ*.

59. **Trichopeziza Richonii** (Boud.) Sacc. *Urceolella Richonis* Boud. 1711
Bull. Soc. Myc. IV, pag. 82, t. 17, f. 3. — Minutissima, 0,2-0,5 mm. lata, tota rubra, pubescens, gregaria, sessilis, carnosâ, urceolata, extus præcipue ad marginem villosa, pilis acutis, septatis, 50-120 μ . longis, ad basim 3-5 crassis, apice dilutioribus, hymenio et carne concoloribus; paraphysibus tenuibus, filiformibus, parum septatis, ad apicem non incrassatis, hyalinis, 2 μ . circiter crassis; ascis minoribus, late clavatis, octosporis, 40-45 \approx 9; sporidiis minutis, elliptico-fusoideis, intus biguttulatis 5-7 \approx 2-2,5.

Hab. lignum putridum Populi in Gallia (RICHON).

60. **Trichopeziza venatoria** (Speg.) Sacc. *Peziza venatoria* Speg. F. 1712
Arg. IV, n. 222. — Sessilis, uda applanato-patellaris, 0,7-1,5 mm. diam., disco concaviusculo roseo-pallescens, sicca margine inflexo albo, disco sordide rufo-fulvescente, crassiuscula, extus fuligineo-grisea, puberula; contextu excipuli celluloso-parenchymatico; pilis plus minusve elongatis, sæpius brevissimis et subclavulatis, parce septulatis, pallide fuligineis; ascis octosporis, cylindræis vel cylindræo-clavatis, apice truncato-rotundatis, deorsum longe attenuato-stipitatis 8,5 \approx 6-7; paraphysibus filiformibus guttulatis obvallatis; sporidiis distichis, cylindræo-ellipticis, utrinque rotundato-truncatis, eguttulatis, 8-11 \approx 3, continuis hyalinis.

Hab. in trunco putrescente decorticato dejecto Erythrinæ Cristæ-galli in nemorosis uliginosis, Conchas Argentinæ.

61. **Trichopeziza paradoxa** (Karst.) Sacc. *Lachnum paradoxum* 1713
Karst. M. F. I, p. 168. — Gregaria, ut plurimum confluens, sessilis, tuberculosa, fulvo-vel rufo-testacea vel subtestacea, 0,2-0,6 mm. lat.; ascis fusoideo-cylindræis 30-36 \approx 4; sporidiis vulgo distichis filiformibus vel bacillaribus, guttulas plures, plerumque 4 foveantibus vel spurie tenuiter septatis, 6-10 \approx 1-1,5; paraphysibus parum notabilibus.

Hab. supra lignum Quercus vetustum in insula Runsala pr. oppid. Abo Fennicæ.

62. **Trichopeziza albo-viridis** (Cooke) Sacc. *Pez. albo-viridis* Cooke 1714

in Grev. VII, p. 47. — Sparsa, sessilis, villosa; cupulis hemisphæricis, ærugineo-villosis, $\frac{1}{2}$ - $\frac{3}{4}$ mm.; margine albido, disco ochraceo, concavo; pilis asperulis, septatis, viridi-tinctis; ascis cylindraceutis; sporidiis linearibus, obtusis, rectis 8-10 μ . longis; paraphysibus filiformibus.

Hab. in trunco decorticato vel corticis rimis Myricæ, Aiken Carolinæ.

4. Fructicolæ et foliicolæ.

63. *Trichopeziza Aranea* (De Not.) Sacc. Mich. I, p. 253, f. XIII, P. 171

Aranea De Not. Micr. ital. Dec. I, n. 1. — Cupulis sessilibus, minutis apertis, candidis, 200-300 μ . diam., extus pilis hyalinis, flexuosis longiusculis undique vestitis, excipulo prosenchymatico hyalino; ascis oblongo-clavatis, brevissime noduloso-stipitatis, 35-40 \approx 5 $\frac{1}{2}$ -6; paraphysibus filiformibus longioribus, 50-55 \approx 1, obvalatis, octosporis; sporidiis distichis oblongis, 7-8 \approx 1-2, utrinque obtusiusculis, hyalinis.

Hab. in capsulis dejectis putrescentibus Castaneæ vescæ, præcipue ad parietes interiores in Italia bor., Gallia, Britannia et Amer. bor. — Forma americana præbet ascos 65-70 \approx 6-7; sporidia tereti-clavulata 8 \approx 2,5.

64. *Trichopeziza punctiformis* (Fr.) Fuck. Symb. myc. p. 296, Sacc. 171

F. it. f. 1494, *Peziza punctiformis* Fr. Syst. Myc. II, p. 105, P. *dryophila* Pers. M. E. I, p. 265. — Sessilis, perexigua, punctiformis, subfugax, villosa, ore subconnivente; pilis filiformibus, apice capitulato, septulato, albido; ascis clavulatis, octosporis, 25-28 \approx 4; sporidiis distichis, tereti-oblongis rectis curvulisve, 3-guttulatis, hyalinis, 5-6 \approx 1-1,5; paraphysibus filiformibus.

Hab. ad folia decidua putrescentia Myricæ, Alni, Quercus in Germania, Belgio, Italia, Amer. bor. — Gregaria, superficialis, minus persistens, semper fere clausa, alba, demum badio-fuscens. Typus speciei est foliicola.

65. *Trichopeziza pollinaria* (Cooke) Sacc. *Peziza pollinaria* Cooke 171

Disc. Un. St. I, p. 292. — Epiphylla, subgregaria, minuta, sessilis, pallida, pilis albis pulveraceis, brevibus, farinam albam simulantibus tecta, ascomate globoso, dein poro centrali minuto pertusa; ascis cylindraceutis; sporidiis ellipsoideis, minutis.

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

66. *Trichopeziza marginata* (Cooke) Sacc. *Peziza marginata* Cooke 171

Hedw. 1875, p. 82, Disc. U. S. I, p. 292. — Epiphylla sparsa v.

gregaria, subbrunnea, sessilis, cupula turbinata, dein aperta, minuta, margine floccis septatis, brunneis ornata, disco pallidiore; ascis cylindræis; sporidiis minutis linearibus, spermatoideis.

Hab. ad folia decidua *Quercus*, *Andromedæ* etc. New Jersey Amer. bor. (ELLIS).

67. **Trichopeziza capitata** (Peck) Sacc. *Peziza capitata* Peck 30 Rep. 1719 p. 60 et in M. U. n. 813. — Cupulis minutis, sessilibus, candidis, in siccitate clausis et subglobosis, madefactis apertis et explanatis, extus pilis candidis capitatis vestitis; disco albido vel flavido; ascis cylindricis, 30 μ . long.; sporidiis acicularibus 5-7 μ . long.; paraphysibus crassis, ascis longioribus, apice acuminatis.

Hab. ad folia arida *Quercus albæ*, Albany N. Y. Amer. bor. — Pili basi incrassata septata, apice capitata.

68. **Trichopeziza acerina** (C. et E.) Sacc. *Peziza acerina* C. et E. 1720 Grev. VII, pag. 40. — Hypophylla, sparsa, punctiformis; cupulis sessilibus, tenuibus, fuscis $\frac{1}{5}$ mm.; margine albopilosis; ascis subclavatis; sporidiis linearibus, 6 μ . long.

Hab. in foliis *Aceris*, New Jersey Amer. bor. — Pili marginales minute rugulosi.

69. **Trichopeziza araneo-cincta** (Phill.) Sacc. *Lachnella araneo-cincta* Phill. Disc. p. 271. — Minuta sparsa, sessilis, concava, tenuis, pallide lutea, margine setis longis, flexuosis, acutis, hyalinis ornato; ascis late clavatis, octosporis; sporidiis distichis, stricte fusiformibus, utrinque acutis, 10-13 \simeq 1-1,5.

Hab. in foliis emortuis *Betulæ*, Clifton, Bristol Britannicæ (C. BUCKNALL). — Ascoma 200-300 μ . lat.

70. **Trichopeziza Karstenii** Sacc. *Lachnum radians* Karst. M. F. I. 1722 p. 177, nec Saut. — Sparsa, sessilis, tenuis, convexula, sicca concaviuscula et subanguloso-contracta, subtus fuscescens, sulphureo-strigoso-villosa, disco pallido, 0,5-1 mm. lat.; ascis cylindræo-subclavatis, 60-66 \simeq 4-5,5; sporidiis fusoido-elongatis, simplicibus plerumque leniter curvulis, 8-11 \simeq 1,5-2; paraphysibus apice acutiusculis, 3 μ . cr.

Hab. supra folia *Populi tremulæ* semiputrida prope Muustiala Fennicæ.

71. **Trichopeziza ciliata** (Fuck.) Sacc. *Hyalopeziza ciliata* Fuck. 1723 Symb. mycol. p. 298. — Cupulis sparsis, sessilibus, carnosis, usque 1 mm. ad latis, primo globosis, demum applanatis, dilute carneoflavis, disco parum obscuriore, glabris sed margine longissime patenter ciliatis, ciliis cupulæ diametro longioribus, hyalinis; ascis ob-

longis, curvato-stipitatis, 8-sporis, $32 \approx 6 \mu$. cr.; sporidiis oblique monostichis, oblongo-ovatis, $6 \approx 3$, hyalinis.

Hab. in foliis siccis Carpini Betuli, raro, pr. Reichartshausen Rhenogoviæ.

72. **Trichopeziza lachnobrachya** (Desm.) Sacc. *Peziza lachnobrachya* 1724

Desm. 19 Not. pag. 27. — Amphigena, sparsa aut laxe gregaria, sessilis, minutissima, tenerrima, albido-hyalina, primo concava, dein applanata, extus villo delicatissimo albo vestita, subtus puncto nigro affixa; ascis clavatis, brevibus, subcrassis, 30-35 μ . long.; sporidiis ellipsoideis.

Hab. in foliis exsiccatis arborum in Gallia. — Ascoma $\frac{1}{4}$ mm. diam.

73. **Trichopeziza eximia** Mont. et Sacc. (sp. nov.). — Ascomatibus 1725

gregariis, obconico-cupulatis, subsessilibus, $\frac{1}{2}$ - $\frac{3}{4}$ mm. diam., palide citrinis, pilis capitatis rubro-aurantiis eximie ciliatis; ascis subteretibus $40 \approx 3$; sporidiis subovoideis 6-7 $\approx 1,5$ hyalinis.

Hab. in acubus putrescentibus ramulorum resectorum Pini silvestris prope Liege Belgii. — A *L. solfatara* C. et Ell. ascomatibus subcitrinis pilorumque capitulis amœne rubro-aurantiis differre videtur.

74. **Trichopeziza misella** (Rob. et Desm.) Sacc. Mich. II, p. 80, *Pe-* 1726

ziza misella Rob. et Desm. 14 Not. p. 186. — Hypophylla, sessilis, minuta, numerosa, primo globosa, dein aperta, suborbicularis, extus pilis nigris brevioribus hirsuta, disco plano, dein convexiusculo, cinereo-pallescente; margine sinuoso ciliato albo; ascis clavatis; sporidiis oblongis.

Hab. in foliis exsiccatis Rubi fruticosi in Gallia. — Ascomata (in exempl. pr. Rouen lect. a cl. MALBRANCHE) minutissima, subsessilia, aperta, albida dein subargillacea, prope marginem pilis fuligineis 5-6 μ . cr. vestita; asci cylindranei 48 ≈ 5 , aparaphysati, subsessiles; sporidia cylindraneo-clavulata, 7-8 $\approx 1\frac{1}{2}$ -2 hyalina.

75. **Trichopeziza dumorum** (Desm.) Sacc. Mich. II, p. 80, Rehm Asc. 1727

n. 611, *Peziza dumorum* Rob. et Desm. XVIII, Not. pag. 4. — Ascomatibus sparsis, minutissimis, subsessilibus, plano-umbilicatis, brunneo-lividis margine albicante, extus pilis brunneis hirtellis, disco concavo, pallido; ascis clavulatis 27-29 ≈ 4 -5; sporidiis subfusoides 5-8 $\approx 1\frac{1}{2}$ -2, hyalinis; paraphysibus filiformibus.

Hab. in pag. infer. foliorum emortuorum v. languidorum Rubi fruticosi in Gallia, Britannia, Germania. — Ascoma $\frac{1}{5}$ - $\frac{1}{3}$ mm. lat. Affinis *T. misellæ*.

76. **Trichopeziza labrosa** (Phill. et Harkn.) Sacc. *Lachnella labrosa* 1728

Phill. et Harkn. Calif. p. 1. — Sparsa, sessilis, olivaceo-brunnea, pilis brevibus, brunneis, septatis tecta, margine involuto; disco pallide lutescente; ascis cylindraceo-clavatis octosporis; sporidiis ovoideis, 10-14 \approx 3-6; paraphysibus linearibus.

Hab. in utraque pagina foliorum emortuorum *Arctostaphyli pungentis* in California. — Ascoma 1 mm. diam., siccum nigrescens compressum.

77. **Trichopeziza venturioides** (E. et E.) Sacc. *Lachnella venturioides* 1729

E. et E. Journ. Myc. 88, pag. 99. — Gregaria, sessilis, $\frac{1}{4}$ mm. diam., disco albescente, extus pilis rigidis, acutis, continuis, rectis, nigris, 60-80 \approx 4-5 tecta; ascis sessilibus, sursum obtusis, circiter 30 \approx 6; paraphysibus filiformibus; sporidiis distichis, clavato-fusoideis vel clavato-oblongis, hyalinis, continuis, circiter 10-12 \approx 1,5-2.

Hab. in foliis emortuis *Gaylussaciæ dumosæ*, Newfield in America boreali.

5. In Gramineis et Cyperaceis (culmi-follicolæ).

78. **Trichopeziza albo-testacea** (Desm.) Sacc. Misc. myc. I, p. 8, *Peziza* 1730

albo-testacea Desm. 10 Not. p. 34, *Lachnum albo-testaceum* Karst. M. F. I, p. 175. — Sparsa, brevissime stipitata aut sessilis e subsphæroideo hemisphærica, sicca clausa, albo-testacea, albido-vel testaceo-ferrugineo-tomentoso-villosa, 1 mm. lat.; ascis cylindraceo-subclavatis, 45-60 \approx 4-5; sporidiis distichis vel oblique monostichis, fusoideo-filiformibus vel fusoideo-elongatis, rectis, interdum levissime curvulis guttulatis, 8-19, plerumque 9-12 \approx 1,5-2; paraphysibus grandiusculis, 4-5 μ . cr., apice acuto.

Hab. ad culmos *Secalis Cerealis*, *Airæ cæspitosæ*, *Baldingeræ arundinacæ* et *Calamagrostidum* etc. putrescentes in Gallia, Fennia, Germania et Britannia. — Est quasi *Das. patens* sed subsessilis.

79. **Trichopeziza Secalis** (Lib.) Sacc. Mich. II, p. 330, *Peziza Seca-* 1731

lis Lib. Cooke Grevill. VIII, pag. 84. — Minuta, sparsa, sessilis, globosa, strigoso-tomentosa, sulphureo-fuscescens, disco roseo; sporidiis linearibus, minutis.

Hab. in culmis *Secalis Cerealis* in Arduennis. — Cl. Speg. et Roum. ducunt (Reliq. Lib. I, n. 651) ad *Lachnellam flammeam*, quæ robustior, lignicola. Teste Cooke, *Tap. mutabili* affinis. Ipse ascos maturos non vidi.

80. **Trichopeziza pyrostoma** (Mont.) Sacc. *Peziza pyrostoma* Mont. Cent. V, n. 87, Syll. Crypt. n. 626. — Caulicola, sparsa, minuta, badia, pilis appressis obtectis subglabra; ore connivente, pilis lutescenti-rufis clauso; ascis longe cylindricis, 70-80 μ . longis; sporidiis distichis oblongis, 3-guttulatis, 12 \approx 2,5.
- Hab.* in culmis secalinis, in Gallia centrali, apud Lemovicem (LAMY). — Ascoma $\frac{1}{2}$ mm. lat. *T. Nidulo* affinis.
81. **Trichopeziza prasina** (Quél.) Sacc. *Lachnella prasina* Quél. As- 1732
soc. Franc. 1880, p. 13, t. IX, f. 5, Phill. Disc. p. 261. — Ascomatibus sessilibus, applanatis, tenuibus, ceraceis, olivaceis, pilis flexuosis, hyalinis, demum luteo-igneis, disco plano viridi-brunneo, dein amœne viridi demum pallido; ascis tereti-clavatis; sporidiis fusiformibus, curvatis, 10-15 \approx 2-3.
- Hab.* in culmis Glyceriæ fluitantis in Normandia (LE BRETON), Phalaridis arundinacææ, Cheddar Britannicæ (BUCKALL).
82. **Trichopeziza Winteri** (Cooke) Sacc. *Pez. Winteri* Cooke Grev. IV, 1733
pag. 67, *Dasyscypha Kneiffii* Rehm Ascom. n. 113, nec *Peziza Kneiffii* Wallr. — Ascomatibus gregariis, sessilibus urceolatis, argillaceis, $\frac{1}{2}$ mm. diam., extus tomentosis; pilis continuis, luteolis, 6 μ . cr.; ascis clavatis, octosporis, 45 \approx 7, apice jodo cœrulescentibus; sporidiis hyalinis, bacillaribus, rectis, continuis, 9 \approx 1,5, paraphysibus fusiformibus, acutis, hyalinis, 5 μ . crass.
- Hab.* in culmis putridis Phragmitis communis, Leipzig Germanicæ (WINTER).
83. **Trichopeziza horridula** (Desm.) Sacc. Mich. II, p. 80, *Peziza hor-* 1734
ridula Desm. 14 Not. p. 185. — Caulicola, sessilis, sparsa, minuta, subglobosa, sæpius clausa subconnivens, strigoso-hirta; pilis longis, rectis, septatis rufis, apice albis; disco pallescente; ascis parvis, cylindricis, hyalinis, 50 \approx 5.
- Hab.* in culmis siccis Tritici, Magny Gallicæ (BOUTEILLE).
84. **Trichopeziza insularis** (Speg.) Sacc. *Lachnella insularis* Speg. 1735
Fung. Fueg. n. 321. — Hinc inde laxe gregaria, sessilis, uda applanato-concava 0,5-1,5 mm. diam. sicca subgloboso-contracta, extus sordide rufescenti-vel griseo-testacea, contextu parenchymatico hyalino, pilis longiusculis gracilibus 200-300 \approx 3 cylindraceis flexuosulis rigidulis sursum non attenuatis apice obtusis basi non incrassatis 6-12-septatis non constrictis rufo-fuliginis; disco sordide ceraceo; ascis clavulatis, sursum cuneatis apiceque subtruncatulis, deorsum longiuscule attenuato-pedicellatis p. sp. 85 \approx 5, ped.

15-20 \approx 2-3, octosporis, pseudoparaphysibus longiusculis subclavulatis apice acutissimis 110-120 \approx 2-3 hyalinis obvallatis; sporidiis recte distichis v. oblique monostichis subfusoideis, utrinque attenuato-obtusatis 9-11 \approx 1,5 rectis v. subinæquilateralibus, hyalinis, continuis; an per ætatem medio 1-septatis?

Hab. ad culmos vaginasque emortua putrescentia Hierochloæ antarcticæ prope Penguin rookery in Staten island Fuegiæ. — Obturaculum ascorum minutissimum, iodi ope dilute cœrulescens.

85. **Trichopeziza agrostina** (Peck) Sacc. *Peziza agrostina* Peck 29 Rep. 1736
p. 55. — Ascomatibus sparsis, minutis, in sicco 500-750 μ . diam., sessilibus hemisphæricis vel subglobosis, externe setosis, extus roseo-coloratis, setis marginalibus introflexis (udis) sæpe apice subulatis, longioribus, ceteris non subulatis, sæpe rugosis plus minusve septatis, disco pallido vel lutescente; ascis cylindræis; sporidiis subcylindræis, 6-8 μ . longis; paraphysibus asco longioribus, sursum attenuatis.

Hab. in culmis Calamagrostidis canadensis, West Albany. — Paraphysibus sursum attenuatis *Das. hapalæ*, *D. brunneolæ* affinis.

86. **Trichopeziza distincta** (Peck) Sacc. *Pez. distincta* Peck 30 Rep. 1737
p. 60, t. I, f. 9-13. — Ascomatibus minutis $\frac{3}{4}$ -1 mm. diam., sessilibus vel puncto centrali affinis, extus nigrescentibus; margine tomentoso-piloso, pallide alutaceis vel olivaceis, disco udo rufo, sicco aurantiaco; ascis clavatis, sæpe tetrasporis, sporidiis oblongo-fusiformibus, rectis vel curvatis, 20-25 μ . longis.

Hab. in culmis Andropogonis furcati, Center Am. bor. — Margo in sicco inflexus et ascomata tum *Hysterium* simulantia.

87. **Trichopeziza nigro-cincta** (B. et C.) Sacc. *Peziza nigro-cincta* 1738
B. et C. North Am. Fung. n. 730. — Minuta punctiformis, plana coccinea, extus pilis brevibus, nigris hispidula; ascis clavatis; sporidiis oblongis curvatis.

Hab. in vaginis graminum in Carolina iuf. Americæ borealis (RAVENEL).

88. **Trichopeziza fuegiana** (Speg.) Sacc. *Lachnella fuegiana* Speg. F. 1739
Fueg. n. 322. — Hinc inde laxe gregaria superficialis sessilis vel vix subpedicellata, uda applanato-concava, 500-600 μ . diam., sicca globoso-contracta, candida, extus pilis biformibus intermixtis vestita, aliis longioribus, 200-300 \approx 4 deorsum cylindræis non vel 1-2-septulatis sursum continuis attenuatis apice acutiuscule rotundatis medio densiuscule noduloso-asperulis, aliis brevioribus, 80-

100 \approx 5, cylindræis 1-3-septatis apice obtusis non attenuatis (ubique levibus); disco albo-ceraceo; ascis cylindræo-subclavatis apice late rotundatis non v. lenissime angulato-acutatis, deorsum breviter crasseque pedicellatis, 45-48 \approx 5-6, octosporis, pseudoparaphysibus tenuibus nonnihil longioribus, 50-60 \approx 3 apice incrassatulis et cuneato-acutissimis parce obvallatis; sporidiis recte v. oblique monostichis, cylindræo-subfusoideis, utrinque attenuato-obtusatis, 8-10 \approx 1,5-2, inæquilateralibus, continuis, hyalinis.

Hab. ad folia emortua putrescentia Poæ Forsteri in scopulis prope Port Cook in Staten island Fuegiæ. — Obturaculus ascorum minutissimum intense jodi ope cœrulescit.

89. **Trichopeziza hystriacula** (Karst.) Sacc. *Lachnum hystriculum* 1740

Karst. M. F. I, p. 182. — Sparsa vel subsparsa, sessilis, planiuscula, v. concaviuscula, pallida, pilis erectis, fuscis v. badiis, confertis strigosa, 0,1 mm. lat.; ascis cylindræo-clavatis, 45-50 \approx 6; sporidiis distichis, fusoideo-elongatis, rectis v. leniter curvulis, guttulis, 10-14 \approx 2-3; paraphysibus 2-3 μ . cr., apice acutiusculis.

Hab. in foliis Caricis acutæ prope Mustiala Fenniæ. — Pili distincte articulati, fusci, apice dilutiores et subinde leviter attenuati, 130-200 \approx 8. Sicca obconica.

90. **Trichopeziza amœna** (Boud.) Sacc. *Coronella amœna* Boud. Bull. 1741

Soc. Myc. IV, p. 82, t. 17, f. 4. — Minutissima, pulchella, sparsa, 0,2-0,3 mm. lata, brevissime hirta, atrata, disco et margine late albo-cœrulescentibus, cupula hemisphærica initio turbinata, pediculo brevissimo punctiformi, extus ochracea, pilis brevissimis obtusis, continuis, nigro-olivaceis, 30-40 \approx 5-7, conspersa, margine pilis hyalinis, erectis, parallelis, subpulverulentis, continuis, longioribus, coronam latam, albo-cyanescentem formantibus; hymenio etiam albido-cœrulescente, primitus vix urceolato, denique plano aut paullulum convexo, marginem vix superantè; paraphysibus crassioribus, septatis, ad apicem incrassatis et intus granulis oleosis repletis, 5-7 μ . cr.; ascis sat amplis, octosporis, clavatis, 120-130 \approx 12-13; sporidiis oblongo-fusiformibus, rectis aut vix curvulis, subclavatis, intus sporidiolis duobus et granulis oleosis donatis, 17-20 \approx 4-5.

Hab. ad folia Graminum et Caricum humi strata, Montmorency Galliæ.

91. **Trichopeziza Stipæ** Fuck. Symb. mycol. p. 297. — Cupulis gre- 1742

gariis sparsive, punctiformibus, sessilibus, primo clausis, globosis, demum apertis, subturbinatis, extus rugulosis, atro-fuscis, gla-

bris, margine pallidiore, connivente, disco pallide fusco; ascis cylindræis, sessilibus, 8-sporis, $34 \approx 6$; sporidiis subdistichis, oblongis, utrinque obtusis, simplicibus, $8 \approx 4$, hyalinis; paraphysibus simplicibus, asci longitudine.

Hab. in foliis siccis adhuc stantibus *Stipæ capillatæ* in silvis Budenheim Rhenogoviæ.

92. **Trichopeziza badiella** (Karst.) Sacc. *Lachnum badiellum* Karst. 1743
M. F. I, p. 182. — Sparsa, sessilis, subobconica, badio-strigoso-hirtella, 0,2 mm. lat.; ascis cylindræo-clavatis, $36-44 \approx 5-6$; sporidiis fusoidæo-elongatis, rectis, guttulatis, $8-10 \approx 2$; paraphysibus gracilescentibus, $2-3 \mu$. cr., supra acutiusculis.

Hab. ad calamos *Scirpi lacustris* putridos prope oppid. Wasa Fenniæ. — Pili fusci v. lutescenti-fusci, distincte articulati, $80-100 \approx 5-6$, apice sæpissime attenuato.

93. **Trichopeziza fugiens** (Phill.) Sacc. *Lachnella fugiens* Phill. Disc. 1744
pag. 268. — Sparsa, sessilis, globosa dein expansa, tenuis, alba, villosa; ascis tereti-clavatis v. subfusoidæis, 4-8-sporis, $20 \approx 5$; sporidiis tereti-oblongis v. ellipsoideis rectis curvulisve $7 \approx 2$.

Hab. in calamis *Junci* in paludibus prope Bristol Britanniæ (BUCKNALL). — Ascoma 50μ . lat.; pili brevissimi continui hyalini.

6. Cryptogamicolæ.

94. **Trichopeziza Pteridis** (A. et S.) Rehm Ascom. n. 411, *Lachnella* 1745
Pteridis (A. S.) Phill. Disc. p. 256, t. VIII, f. 47, *P. Pteridis* A. S. p. 338, t. 12, f. 7. Pers. Myc. Eur. p. 300, Fr. Syst. Myc. II, p. 144, *Tric. pulveracea* Fuck. et Auct. p. p. — Sessilis, minima, ceraceo-mollis, cupularis, intus sordide lutescens, extus subgranulosa olivascens, margine crenato; ascis clavatis, $30 \approx 7$; sporidiis obtuse clavulatis, continuis, hyalinis, $8 \approx 2,5$, distichis; paraphysibus filiformibus.

Hab. ad stipites *Pteridis aquilinæ*, *Osmundæ* in Suecia, Britannia, Germania, Gallia, Italia, Belgio, Amer. bor. — Sparsa v. gregaria, punctiformis, $200-500 \mu$. lat., basi subapplanata, humida mollis aperta, sicca contrahitur, rugulosa, olivaceo-nigricans. Margo subinde lacinulatus. Excipulum sec. Rehm constat ex fibrillis, 4μ . cr., septatis, rugulosis, obtusis supra liberatis et ascoma pilosulum reddentibus.

95. **Trichopeziza Osmundæ** (C. et E.) Sacc. *Peziza Osmundæ* C. et 1746
E. Grev. VII, p. 7. — Sparsa, minuta, nivea; cupulis demum ap-

planatis, margine dentatis, subtus leniter pubescentibus; ascis clavatis; sporidiis linearibus, 5 μ . long.

Hab. in petiolis foliisque *Osmundæ*, New Jersey Amer. bor. — Ascoma $\frac{1}{10}$ mm. lat.

96. **Trichopeziza Aspidii** (Lib.) Fuck. Symb. p. 297, *Peziza Aspidii* 1747

Lib. Exs. n. 226, *Lachnum Aspidii* (Lib.) Karst. Symb. Myc. Fenn. XXVI, pag. 27. — Ascomatibus sparsis, sessilibus, minutis, punctiformibus, globosis, velutinis, albescentibus; ascis fusoideo-oblongis, 34-40 \simeq 6; sporidiis bacillari-fusoideis, 8-10 \simeq 1-1,5; paraphysibus filiformibus.

Hab. in stipitibus et frondibus putridis *Aspidii aculeati* in Arduennis, Fennia, Belgio et Rhenogovia. — Pili circ. 50 \simeq 3.

97. **Trichopeziza hexagona** Fuck. Symb. myc. pag. 297. — Sparsa, 1748

subsessilis, punctiformis, alba; cupulis globosis, diaphanis, ore constricto, hexagono-radiato-ciliato, ciliis candidis; ascis stipitatis, elongatis, 8-sporis, 24 \simeq 4; sporidiis oblongis cylindraceutisve, hyalinis, 4 \simeq 2.

Hab. in stipitibus putridis *Aspidii Filicis-maris* prope Æstrich Rhenogoviæ.

98. **Trichopeziza inquilina** (Karst.) Sacc. *Helot. inquilinum* Karst. 1749

M. F. I, p. 147, *Lachnella* Karst. Rev. p. 132. — Sparsa v. gregaria, sessilis v. substipitata, planiuscula, sicca hemisphærico-vel subsphæroideo-contracta, alba, tomentella, 0,6 mm. lat.; ascis cydraceo-clavatis, 36-40 \simeq 5-5,5, obturaculo minutissimo obsolete v. vix jodo cœrulescente; sporidiis fusoideo-elongatis, guttulatis, 7-8 \simeq 1-2,5; paraphysibus 2 μ . cr., sursum incrassatulis, apice attenuato.

Hab. ad stipites *Equiseti silvatici* vetustos in Mustiala Fenniæ. — Pili cupulæ brevissimi, articulati, apice obtusi, 4-6 μ . cr.

99. **Trichopeziza stereicola** (Cooke) Sacc. *Pez. stereicola* Cooke Grev. 1750

I, p. 130, *Calloria stereicola* Phill. Disc. p. 328. — Gregaria, minuta; ascomate globoso, dein cupuliformi, carnosoceraceo, extus villosa, sicco delicate roseo; disco concolori; ascis subclavatis; sporidiis minutis, cylindraceutis, obtusis, 7 \simeq 1,5.

Hab. in hymenio *Stereii*, Scotland, Birmingham North Wales, — Ascoma 300-700 μ . lat.

100. **Trichopeziza Œdema** (Desm.) Sacc. *Peziza Œdema* Desm. XVIII 1751

Not. p. 4, *Lachnella* Phill. Disc. p. 271. — Hypophylla, sessilis, minutissima, subinde stipata, globosa, leniter pubescens, albo-grisea, subtremellosa; ascomatibus 1-1,5 mm. diam., subiculo brunneo

insidentibus; ascis minutis clavatis, sæpe curvis, octosporis; spori-
diis distichis, fusiformibus, 6-9 \approx 2; paraphysibus filiformibus.

Hab. parasitica in Phragmidio, in foliis emortuis Rubi in
Britannia et Gallia. — Ascoma $\frac{1}{7}$ mm. lat.

B. Species fructificatione ignota.

101. **Trichopeziza Veronicæ** (Lasch) Sacc. *Peziza Veronicæ* Lasch 1752
in Klotzsch H. M. n. 632 et in Bot. Zeit. 1845, p. 65. — Sessilis
e turbinato subglobosa, applanata, strigoso-villosa, fusco-cervina,
villis longissimis, superne albidis, interioribus albis v. lutescenti-
bus, disco albo.

Hab. in caulibus Veronicæ pr. Driesen Germaniæ.

102. **Trichopeziza Scrophulariæ** (Lasch) Sacc. *Peziza Scrophulariæ* 1753
Lasch in Kl. Herb. myc. n. 1816 et in Flora 1854, pag. 203. —
Sessilis, minuta, subtremellosa, ex applanato leniter convexa, in-
cano-pallida flavescens, subtus puberula.

Hab. ad caules Scrophulariæ, Driesen Germaniæ (LASCH).

103. **Trichopeziza Aconiti** (Saut.) Sacc. *Peziza Aconiti* Saut. in Ra- 1754
benh. D. C. Fl. p. 344, n. 2637. — Erumpens, sparsa, punctifor-
mis, subclausa, primo quasi trochiformis, dein globoso-depressa,
brunneolo-flava, secedens, rugulosa, margine involuto.

Hab. in caulibus emortuis Aconiti in agro salisburgensi Ger-
maniæ (SAUTER).

104. **Trichopeziza Sauteri** Sacc. *Pez. mollissima* Saut. Salz. p. 8 1755
nec Lasch. — Sessilis, hemisphærico-applanata, villosa, tota nivea.

Hab. in caulibus emortuis putrescentibus Urticæ prope Mit-
tersill. — *T. sulphurææ* propinqua, differt a colore albo margine-
que longiore.

105. **Trichopeziza plano-umbilicata** (Grev.) Sacc. *Peziza plano-um-* 1756
bilicata Grev. Fl. Ed. p. 420. — Minuta, sessilis, gregaria, alba,
globoso-concava, demum plana, margine pilis horizontalibus, albis,
ciliato, regulari, disco umbilicato.

Hab. in caulibus Urticæ emortuis in Britannia.

106. **Trichopeziza adpressa** (Wallr.) Sacc. *Pez. adpressa* Wallr. Fl. 1757
crypt. n. 2424. — Ascomatibus primum subsessilibus rotundis ocuis
jam in discum planum vitellino-lutescentem pallescentem reclusis
iisque adpressis planis lenticularibus majusculis, subtus parce to-
mentosus, margine pilis brevissimis rectis parcis prominulis pallide
sulphureis fimbriatis.

Hab. ad caules *Helianthi* annui siccos in agro Northusano Germaniæ (WALLR.).

107. **Trichopeziza Eupatorii** (Schw.) Sacc. *Peziza Eupatorii* Schw. 1758

Syn. pag. 174. — Gregaria, cupulis 4–6 mm. diam., madefactis explanatis, disco subconvexo, margine fere oblitterato, siccitate connivens, sed non clausa, rufo-carnea, extus pilis nigro-fuscis, apice albescentibus fasciculatim obsita.

Hab. versus radices in maximis caulibus emortuis *Eupatorii* purpurei et *E. maculati*, Bethlehem Amer. bor.

108. **Trichopeziza Absinthii** (Lasch) Sacc. *Peziza Absinthii* Lasch 1759

in Klotzsch Herb. myc. n. 1317 (nec 1417.) et in Flora 1850, p. 282. — Ex flavido fuscescens, sessilis, subrotunda, ruguloso-fibrillosa, margine inflexo albo fimbriata, disco dilutior flavido.

Hab. in caulibus *Artemisiæ Absinthii* in agro Driesensi Germaniæ (LASCH.).

109. **Trichopeziza Galegæ** (Ces.) Sacc. *Pez. Galegæ* Ces. in Klotzsch 1760

Herb. myc. n. 1614 et in Flora 1852, p. 395. — Gregaria, sessilis primitus clausa, depresso-globularis, amœne cæsia, dense flocculosa, serius urceolata nigrescens, disco pallido; fructificans explanata, irregularis, disco virente luteo v. rufescente.

Hab. ad caules *Galegæ* Vercelli Italiæ borealis (CESATI). — Valde insignis dicitur et pro ætate varians.

110. **Trichopeziza floccosa** (Lasch) Sacc. *Peziza floccosa* Lasch in 1761

Klotzsch Herb. Myc. n. 1225, Bot. Zeit. 1849, p. 293 nec Schw. — Sessilis, floccosa, membranacea, tenuis, extus sericeo-floccosa, nivea, disco incano.

Hab. in caulibus emortuis *Spartii scoparii*, Driesen Germaniæ.

111. **Trichopeziza rufiberbis** (Schw.) Sacc. *Peziza rufiberbis* Schw. 1762

Syn. p. 173. — Applanata patellæformis, siccitate ob cupulæ teneritatem irregulariter contracta, ceterum orbicularis et madefacta valde explanata rubella, carnosâ, extus fasciculis pilorum brevium ruforum eximie barbata, 2-5 mm. diametro.

Hab. in stipitibus plurimis teneris dejectis (gregatim crescens), Bethlehem Amer. bor.

112. **Trichopeziza subglobosa** (Saut.) Sacc. *Peziza subglobosa* Sauter 1763

in Rabenh. D. C. Fl. p. 344, n. 2638. — Erumpens, socialis, flavo-brunnea v. rufescens, primo globosa, minutissima, dein aperta, scutellata, margine erecto, passim fisso, extrorsum e tomentoso pilosa.

Hab. in caulibus putrescentibus herbarum in agro salisburgensi (SAUTER).

113. **Trichopeziza varians** (Saut.) Sacc. *Peziza varians* Sauter in 1764 Flora 1845, p. 133. — Sessilis, subcarnosa, 1-1,5 mm. diam., excavata, demum applanata, extus villosa, nivea, disco pallido.

Hab. in caulibus udis vetustis in agro Urbis Stiriaë. — *Trichopezizæ adpressæ* Wallr. proxima.

114. **Trichopeziza virescens** (Schum.) Sacc. *Pez. virescens* Schum. 1765 Sael. p. 433, Fl. Dan. t. 1785, f. 2, Fr. Syst. Myc. II, p. 104. — Sessilis, hemisphærica, tomentosa, fusco-olivacea, disco albido-carneo.

Hab. in caulibus herbarum majorum in Saellandia. — Minuta, sparsa, plana, margine tumido elevato, carne albida.

115. **Trichopeziza pellucens** (Ces.) Sacc. *Peziza pellucens* Ces. in 1766 Klotzsch Herb. Myc. n. 1620 et in Flora 1852, p. 396. — Microscopica, hyalina, extus puberula, cito explanata.

Hab. in caulibus (?) in agro vercellensi Ital. bor. (CESATI).

116. **Trichopeziza occulta** (Ces.) Sacc. *Peziza* Ces. in Klotzsch Herb. 1767 myc. n. 1922, et in Flora 1855, p. 267. — Gregaria, membranacea, hinc in sicco contracta, cyathiformis, puncto adfixa, extus furfurilla, e viridi luteola, ore flocculoso albicante.

Hab. ad caules (?) Vercelli Italiaë borealis (CESATI). — Minutissima sed denso grege facile conspicua.

117. **Trichopeziza syringeæ** (Wallr.) Fuck. Symb. myc. App. III, 1768 pag. 31, *P. syringeæ* Wallr. Fl. crypt. n. 2443. — Ascomatibus sessilibus sparsis carnosus, extus villo propexo rigidulo candido (asbestino) vestitis, intus fuscescentibus, primum (et in siccando) conniventibus globosis punctiformibus, dein discum pallidum recludentibus deplanatis ascosque pulverulentos pallide-stramineos eructantibus.

Hab. ad ramos Syringæ vulgaris, Loniceraë Caprifolii, in Thuringia et Rhenogovia. — Discus pallidus, demum ascis emersis et pulveris pallide-straminei instar profusis conspersus. An *Cyphella*?

118. **Trichopeziza velutina** (Wallr.) Sacc. *Pez. velutina* Wallr. Fl. 1769 crypt. n. 2565. — Ascomatibus sessilibus exiguis, extus fibris terribus rigidulis, furfuraceis spadiceo-castaneis adspersis, primum subrotundo-globosis in osculum circinatum marginibus inflexis cinctum, dein in discum subconcolorem concavum reclusis patellaribus, siccis connivendo varieque contrahendo 2-3-angularibus.

Hab. ad ramulos coryleos in Thuringia (WALLR.).

119. **Trichopeziza venustula** (Desm.) Sacc. *Peziza* (Lachnea) *venustula* Desm. in Gill. Disc. pag. 80. — Ascomate minuto, sessili, superficiali, globuloso, dein applanato, pressione mutua compresso v. anguloso, tomento niveo-albo, udo aperto, disco albo. 1770

Hab. gregaria in ramis et ramulis exsiccatis Aceris Negundinis in Gallia. — Affinis *T. punctiformi*.

120. **Trichopeziza Tiliæ** (Peck) Sacc. *Pez.* *Tiliæ* Peck 24 Rep. p. 96. 1771
— Gregaria, minuta, sessilis, concava, extus dense albo-pilosa, minuta, disco palide lutescente, sæpe pilis inflexis celato.

Hab. in ramis Tiliæ americanæ, Knowersville Amer. bor. — Ab *L. tiliacea* distincta.

121. **Trichopeziza melaxantha** (Fr.) Sacc. *P. melaxantha* Fr. S. M. 1772
II, p. 97 nec p. 150, *P. melanotheja* Fr. S. M. II, p. 611 (index). — Sessilis, minuta, extus farinaceo-villosa helvolo-lutea, disco concaviusculo nigro.

Hab. ad ramos prostratos decorticatos Fagi, in Suecia, Britannia et Carolina inf. — Inter minimas, sed pulchra. Gregaria, sicca, granuliformis, disco demum plano opaco, margine parum prominente integro.

122. **Trichopeziza involuta** (Lagg.) Sacc. *Peziza involuta* Lager in 1773
Flora 1836, I, p. 236. — Sessilis, gregaria vix 1 mm. diam., obscure olivacea, intus albida vel subcæspitosa, cupulis subglobosis, pilis longis basi insertis strigosis.

Hab. ad ramulos fagineos et quercinos in Helvetia.

123. **Trichopeziza roseo-alba** (Schw.) Sacc. *P. roseo-alba* Schwein. 1774
Carol. n. 1244, Fr. Syst. Myc. II, pag. 114. — Sessilis, ceracea, subglobosa, rubra, margine crenato, extus albo-villosa.

Hab. frequens in cortice Corni floridæ in Carolina Amer. bor. — Minuta, sparsa. Cupula primum fere globosa, demum dilatata et difformis, 2-5 mm. lata.

124. **Trichopeziza cruenta** (Wallr.) Sacc. *Pez. cruenta* Wallr. Fl. 1775
crypt. n. 2438. — Ascomatibus sessilibus mollibus, extus pilis villosis tortuosis laxè adpressis vestitis ferrugineo-cruentis, primum clausis dein discum albo-pallidum cum compage interna concolorem recludentibus.

Hab. ad ramulos siccos Corni masculæ agri badensis (KNEIFF), thuringiensis (WALLR.). — Habitu *L. flammeam* æmulatur, villi colore ferrugineo-cruento et disci compagisque internæ pallore affatim differt.

125. **Trichopeziza Opulifoliæ** (Schw.) Sacc. *Peziza Opulifoliæ* Schw. 1776
 Syn. pag. 175. — Sessilis, sparsa, e globoso-turbinata, regularis, margine tumido inflexo, brunnea, extus fibroso-striata, margine albescenti, disco pallido, diametro 2 mm.
Hab. frequens in ramis emortuis *Spirææ opulifoliæ*, Bethlehem Amer. bor.
126. **Trichopeziza penicillata** (Schw.) Sacc. *P. penicillata* Schwein. 1777
 Carol. p. 94, Fr. Syst. Myc. II, pag. 102. — Sessilis, perexigua, concava, alba, extus pilis longis cinereis.
Hab. in rimis corticis *Vitis* in Carolina Amer. bor. — Punctiformis, madido tempore aperta, margine crinito, siccitate contrahitur, ita ut pili longi cinerei penicillatim, byssi instar, ligno insidere videantur. Gregaria persistens.
127. **Trichopeziza pomicolor** (B. et Rav.) Sacc. *Peziza pomicolor* 1778
 B. et Rav. in Cooke Disc. Un. St. I, p. 294. — Sparsa, subhemisphærica, mox aperta, extus pomicolor furfuracea; disco olivaceo.
Hab. in cortice *Taxodii* in Car. inf. (RAVENEL).
128. **Trichopeziza radians** (Saut.) Sacc. *Peziza radians* Saut. Salz. 1779
 p. 8. — Exigua sparsa, sessilis, alba, globosa, tomentosa, basi villis radiantibus cincta, disco poriformi.
Hab. in ramis *Berberidis vulgaris* prope Mittersill. — Ascoma $\frac{1}{2}$ μ . long. A *L. Berberidis* distincta.
129. **Trichopeziza tryblidioides** (Rabenh.) Sacc. *Peziza tryblidioides* 1780
 Rabenh. in Kl. Herb. myc. n. 1130 et in Flora 1848, p. 508, Str. in Flora 1850, p. 111. — Sessilis, globosa, applanata, villosa-tomentosa, connivens, fusca, disco albida.
Hab. ad *Berberidis* ramulos in Stiria (SAUTER).
130. **Trichopeziza roseola** (Fr.) Sacc. *P. roseola* Fr. Syst. Myc. II, 1781
 p. 101. — Sessilis, concava, flexuosa, mollis, albido-puberula, disco incarnato-roseo.
Hab. ad cortices ramulorum dejectorum *Juglandis* etc. rarior in Suecia. — Substantia tenera, fragilis, quare in statu exsiccato difformis et passim lacerata, sed margo non dentatus. Villus tenerrimus, demum evanescens.
131. **Trichopeziza Vitis** (Schw.) Sacc. *Pez. Vitis* Schw. Syn. p. 173. 1782
 — Minuta, difformiter globosa, clausa, carnea, sed villo albo extus laxius involuta, margine crenulato-plicato; disco pallido punctiformi.
Hab. in rimis corticis *Vitis*, Bethlehem Amer. bor.
132. **Trichopeziza abnormis** Mont. Fl. J. Fern. n. 26 et Fl. Chil. VII, 1783

- p. 401. — Sessilis, applanata, confluens, albida, subtus hirta; disco villosulo; ascis..... ignotis.
- Hab.* ad cortices arborum in montibus, Juan Fernandez (BERTERO). — An *Hymenomycetis* species?
133. **Trichopeziza umbilicata** (B. et C.) Sacc. *Peziza umbilicata* B. 1784 et C. North Am. Fungi n. 734, *Peziza Curtisii* Cooke Disc. U. S. II, p. 22. — Depresse subglobosa; ore minuto umbilicata umbrino-gilva.
- Hab.* in ramis decorticatis Rosarum, Pennsylvania (MICHENER). — Ascoma 1-2 mm. lat. Asci ignoti.
134. **Trichopeziza leonina** (Schw.) Sacc. *Peziza leonina* Schwein. 1785 Carol. p. 93, Fr. Syst. Myc. II, p. 101. — Sessilis, concava, hirsuta, utrinque fulva, margine crenulato.
- Hab.* in ligno Ulmi maxime putrido Carolinæ. — Cupulæ 2-3 mm. latæ, siccitate minutissimæ fiunt; sæpe tomento fulvo insident; pili sparsi, breves, colore magis rubro.
135. **Trichopeziza Gmelini** (Weinm.) Sacc. *Peziza Gmelini* Weinm. 1786 Hym. Gaster. p. 447. — Sparsa confertaque, sessilis, exigua; ascomate carnosulo, pallide stramineo, extus tomento albo, brevissimo obducto, margine elevato integro.
- Hab.* ad ligna decorticata Alni incanæ in Rossia. — Ascoma primo exacte globosum, apertum, album, mox pallide stramineum, dein discus applanatus, dilutissime cinerescens.
136. **Trichopeziza triformis** (Fr.) Sacc. *Peziza triformis* Fr. in Fl. 1787 Dan. t. 1620, fig. sup. et S. M. II, p. 101. — Sessilis, primo granuliformis, villosa alba, dein aperta, disco concavo fulvo, tandem convexo aurantiaco marginem obliterante.
- Hab.* ad ligna putrida in Dania. — Inter minimas, gregaria, non satis nota.
137. **Trichopeziza inconspicua** (B. et C.) Sacc. *Peziza inconspicua* 1788 B. et C. North Pac. Exp. n. 153. — Subsessilis; cupula hemisphærica, margine incurvo, extus albo-pruinoso, initio luteolo.
- Hab.* in ligno putri, Bonin Islands.
138. **Trichopeziza gracillima** (Weinm.) Sacc. *Pez. gracillima* Weinm. 1789 Hym. Gaster. p. 445. — Gregaria, minuta, subsessilis; ascomate globoso-turbinato, aquose albido, extus pilis tenerrimis vestito.
- Hab.* in lignis carie consumptis post largas pluvias æstivales in Rossia. — Ascoma regulare, excavatum, margine semper involuto. — Stipes fere papillæformis.
139. **Trichopeziza fulvo-cana** (Schw.) Sacc. *Peziza fulvo-cana* Schw. 1790

Carol. p. 94, Fr. Syst. Myc. II, p. 101. — Semiimmersa, conico-globosa, tomentosa, luteo-fulva, ore subconnivente incano.

Hab. rarior, sed distinctissima in frustulis succosis in arborum cæsarum disco in Carolina Amer. bor. — 2 mm. lata, intus incana; tomento intense piloso extus tecta, pilis crassioribus in lignum irrepentibus.

140. **Trichopeziza Martini** (Pers.) Sacc. *Peziza Martini* Pers. Myc. 1791 Eur. p. 251, Fr. Syst. Myc. II, p. 100. — Sessilis, depressa, orbicularis, cervina, disco applanato lutescente.

Hab. ad ligna prope Taurinum Ital. bor. — Gregaria, majuscula, 4 mm. fere lata. An a *T. variicolore* vere diversa?

141. **Trichopeziza comata** (Schw.) Sacc. *Peziza comata* Schw. Syn. 1792 p. 173. — Minutissima, sessilis, candidissima, extus pilis longis densis candidis eleganter comata, sparsa.

Hab. epiphylla in foliis quercinis dejectis, Bethlehem Americæ borealis.

142. **Trichopeziza jucundissima** (Desm.) Sacc. *Peziza jucundissima* 1793 Desm. 14 Not. p. 186. — Amphigena, sparsa, sessilis, minuta, utrinque nivea, membranacea, primo infundibuliformis, tandem plana friabilis, extus pilis longissimis, rigidulis vestita, margine flexuoso.

Hab. ad folia dejecta populina in Gallia bor. — Ascoma 1 mm. lat. Asci ignoti. An *Cyphella*?

143. **Trichopeziza Platani** (Pers.) Sacc. *Peziza Platani* Pers. Obs. 1794 2, p. 87, Fr. Syst. Myc. II, p. 103. — Sessilis, pusilla, orbicularis, setosa, nigra, disco plano albido.

Hab. rarissime in foliis deciduis Aceris Platanoidis in Germania. — Cupula sicca connivet, humida folio adpressa; setæ strictæ marginem præprimis occupant.

144. **Trichopeziza Piceæ** (Pers.) Sacc. *Peziza Piceæ* Pers. Myc. Eur. 1795 p. 269, Fr. Syst. Myc. II, p. 97, *Cenangium regulare* Fr. Elench. II, p. 22. — Sessilis, minuta, suburceolata, pulveraceo-pubescens grisea, disco plano nigrescente.

Hab. in Pini Piceæ foliis in montibus Juræ (CHAILLET). — Sparsa, dilute cinerea.

145. **Trichopeziza Arundinis** (Fr.) Sacc. *Peziza Arundinis* Fr. Syst. 1796 Myc. II, p. 105. — Sessilis, perexigua, punctiformis, fuscescens, subferrugineo-pilosa, disco fuligineo-pallente.

Hab. in culmis exsiccatis Phragmitis, Arundinis in Germania (KUNZE). — Gregaria, tenuis, non innata; primo sistit puncta minuta globosa, dein aperta cupulata, demum pili secedunt;

color in siccis totus fuscus, sed humectatus expallens, præcipue discus.

146. **Trichopeziza cyathiformis** (Wallr.) Sacc. *Peziza cyathiformis* 1797

Wallr. Fl. crypt. n. 2568. — Ascomatibus tenerrime membranaceis concoloribus subsessilibus, sparsis, obconico-campanulatis, extus fibris furfuraceis stipatis vestitis, in discum subconcolorem patulum levem, marginibus inflexis cinctum reclusis.

Hab. ad gramina putria in tectorum grumis nec non inter Populi ligni fibras in Thuringia (WALLR.).

147. **Trichopeziza Struthiopteridis** (Saut.) Sacc. *Peziza Struthiopteridis* 1798

Saut. Pilz. Salz. p. 8. — Perexigua, sessilis punctiformis, subvillosa; ascomatibus subglobosis, ore connivente, ciliato.

Hab. in stipitibus senescentibus Struthiopteris prope Mittersill. — *P. punctiformi* affinis.

148. **Trichopeziza episphæria** (Mart.) Lamb. Myc. Belg. II, p. 524, 1798

Peziza episphæria Mart. Erl. p. 465, Fr. Syst. Myc. II, p. 100. — Sessilis, plana, extus alba, pilis longis ciliato-pilosis obsessa, disco dilute lutescente.

Hab. in Ustulina, Hypoxylo multiformi, Diatrypella verruciformi in Germania, Britannia, Belgio. — Minuta, gregaria, conferta.

149. **Trichopeziza pulverulenta** (Saut.) Sacc. *Peziza pulverulenta* 1800

Saut. Salz. p. 8. — Sessilis minuta hemisphærica, suburceolata, albo-pulverulenta, disco concaviusculo fulvo.

Hab. ad viam (Amtshauschlucht) prope Mittersill. — 1 mm. lata. *T. melaxanthæ* affinis.

DASYSCYPHA Fr. Syst. Myc. II, p. 89 (ut sect.) [1822] emend. Fuck.

Symb. mycol. p. 304 (Etym. *dasys* pilosus et *scyphos* poculum),

Lachnella Sacc. e. p. — Ascoma ceraceum, distincte stipitatum,

ex urceolato scutellatum, extus pilosum v. margine distinctius ciliatum nunc minutum tenacellum, nunc minutissimum tenerius

(*Hyalopeziza*, si mavis). Asci tereti-fusoidei, 4-8-spori. Sporidia

tereti-oblonga vel fusoidea, continua, hyalina. Paraphyses sæpius

bacillari-fusoideæ, crassiusculæ, apice acutæ, plerumque ascos superantes.

A. Pili ascomatis hyalini vel pallidi.

I. In truncis, lignis, ramis.

1. **Dasyscypha virginea** (Batsch) Fuck. Symb. p. 305, Sacc. F. it. 1801

fig. 1314 (f. *candida* et f. *longipes*) et fig. 1315 (f. *brevipes*), *Fungoides minimum* Mich. gen. p. 205, t. 36, f. 15, *Lachnum agaricinum* Retz Scand. p. 329, *Peziza parvula* Fl. Dan. t. 1016, f. 4, *P. virginea* Batsch Elench. p. 125, Holmsk. Ot. II, p. 31, t. 14, *P. nivea* Sowerb. fung. t. 65. — Stipitata, candida, cupula hemisphærica, extus pilis confertis patulis obsessa; ascis cylindraceis 42 = 4-5, octosporis; sporidiis fusoides, hyalinis, continuis, 6-7 = 2 (Rehm), 10 = 1 (Fuck.).

Hab. ad ligna, cortices, pericarpia, folia etc. in fagetis alibi- que in Suecia, Britannia, Fennia, Gallia, Belgio, Germania, Italia, Amer. bor., Fuegia, Tasmania. — Gregaria, 2 mm. alta discussque demum totus explanatus æque latus. Variat lutescens et flavus (Holmsk. loc. cit. f. dextr.). Stipes tenuis, æqualis, etiam subvillosus, raro obliterated. Pili longi, strigosi, in margine ciliares. —

***D. carpophila** Pers. et Fr. subturbinata minor, magis villosa. Iisdem fere locis et tempore. — ***D. testacea** Sacc. F. it. f. 131: cupulis quam in typo amplioribus, usque 1¼ mm. diam., disco saturate testaceo; ascis cylindraceis, 50 = 5; sporidiis fusoides vel clavatis, 7-8 = 2, eguttulatis hyalinis. In lignis cariosis, Padova.

2. **Dasyscypha chamæleontina** (Peck) Sacc. *Peziza chamæleontina* 1802 Peck 30 Rep. pag. 60. — Ascomatibus minutis, 160-375 μ . diam., primo globosis, dein expansis, disco plano, vix furfuraceo, albo, vix tacto flavescens dein rubescens, stipite brevi; ascis clavatis, 25-35 μ . longis; sporidiis stipatis, oblongo-ovatis vel subclavatis, 5 μ . long.

Hab. in ligno Abietis canadensis dejectis, Sandlake Amer. bor. — Pubescentia parcissima, hinc ad *Phialeam* abit.

3. **Dasyscypha pudibunda** (Quél.) Sacc. *Erinella pudibunda* Quél. 1803 XIV Suppl. p. 9, tab. XII, fig. 23. — Ascomatibus cyathiformibus, albo-niveis, dein roseis, subtiliter velutinis; pilis mollibus, albis tectis, tenuibus, flexuosis, 2-3 mm. diam., stipite tenui 1-1,5 mm. longo; hymenio demum roseo-amethysteo; sporidiis bacillaribus, 8 μ . longis.

Hab. gregarie in ligno saligno in turfosis Morvan Juræ. — Affinis *D. virgineæ* et *D. niveæ*.

4. **Dasyscypha lachnoderma** (Berk.) Rehm Ascom. n. 303, *Peziza* 1804 *lachnoderma* Berk. Fl. Tasm. p. 274. — Cupula subhemisphærica breviter stipitata extus nivea tomentosa intus miniata; ascis longis clavatis; sporidiis fusoides-filiformibus curvatis, 25-26 μ .

Hab. in cortice emortuo in Tasmania (ARCHER), Africa austral.

(MAC-OWAN) et Amer. bor. (ELLIS). — Habitus *D. calycinae* sed sporidia omnino diversa. Ascoma 4 mm. lat. Sec. Rehm asci 60 \approx 7; sporidia 18 \approx 3; paraphyses filiformes asco longiores; pili simplices, asperi, 6 μ . cr. luteoli, apice hyalini.

5. **Dasyscypha distinguenda** (Karst.) Sacc. *Lachnella* Karst. Rev. 1805 monogr. p. 131, *Helotium* Karst. M. F. I, p. 156. — Gregaria vel subsparsa, stipitata, alba, villosula; cupula planiuscula, sicca hemisphærico-contracta, disco albo, sicco sublutescente, 1-1,5 mm. lat.; stipite firmulo, æquali vel sæpius sursum incrassato, brevi, 0,4-0,6 mm. alt.; ascis subclavato-cylindræis 60-70 \approx 4,5-5,5; sporidiis fusoido-oblongatis, rectis, eguttulatis, 6-12 \approx 2-3; paraphysibus filiformibus, 1,5 μ . cr.

Hab. supra lignum vetustum pineum in Mustiala Fenniæ.

6. **Dasyscypha latebrosa** (Ellis) Sacc. *Lachnella latebrosa* Ellis Torr. 1806 Bot. Cl. 1882, pag. 18. — Stipitata, luteo-alba, 400 μ . alta, pilis glandularibus, brevibus tecta; disco concavo, 250 μ . lat., obscure albescente vel pallide roseo, margine incurvato, pilis rectis, rugosis, sursum obscure septatis, apice obtusis vel leniter inflatis, 50 μ . longis ciliato; ascis cylindræo-clavatis, 25-35 \approx 3,5; paraphysibus linearibus, sursum non acutis; sporidiis distichis, simplicibus, hyalinis, 3-5,5 μ . longis.

Hab. ad ligna pinea fabrefacta mucida in cellis in America boreali. — *D. virginæ* similis, sed pilis non capitatis et paraphysibus apice non acutis sporidiisque minoribus præcipue distincta.

7. **Dasyscypha papyracea** (Karst.) Sacc. *Lachnum papyraceum* 1807 Karst. M. F. I, p. 169. — Gregaria, stipitata, alba vel albida; cupula tenui, planiuscula, sicca concaviuscula, tomentella vel villosula, disco lutescente, 1-3 mm. lat.; stipite tenui æquali, pilis patulis obsessis, 0,7-1 mm. alt.; ascis subclavato-cylindræis, 35-50 \approx 3-4; sporidiis fusoido-elongatis, rectis, 3-7 \approx 1-1,5; paraphysibus 3-4 μ . cr., apice acuto.

Hab. supra asseres pineos putrescentes locis stercoratis in Mustiala Fenniæ. — *D. virginæ* affinis, sed cupulis majusculis, tomentellis sporidiisque minutis diversa; pili cupulæ 3-4 μ . cr., apice subclavato-obtuso.

8. **Dasyscypha globuligera** Fuck. Symb. myc. App. II, p. 60. — Cu- 1808 pulis demum aut in globulorum conidiophororum singulorum latere, aut in globulorum confluentium centro ortis, stipitatis, stipitibus 1-2 mm. altis, cupulis, primo subclausis, demum magis ex-

planatis, necnon concavis, 1-3 mm. latis, orbicularibus, integris, albis, extus stipiteque albo striato-hirtis, margine distincto, disco albo, demum lutescente; ascis cylindraceutis, substipitatis, 8-sporis, 72 \approx 8; sporidiis oblique monostichis, clavato-fusciformibus, rectis, continuis, 10-12 \approx 4.

Hab. in ligno putri Salicis ad Rhenum pr. Æstrich Rheno-goviæ. — Fungus conidiophorus adest: globulis sessilibus, gelatinosis, mollibus, diaphanis, sordidis, $\frac{1}{2}$ -1 mm. diam., sparsis seu 2-4 confluentibus, intus filamentosis, hyphis ramosis conidiophoris; conidiis numerosis, cylindraceutis, rectis, continuis, 8-10 \approx 2.

9. **Dasyscypha decolorans** (Wallr.) Sacc. *P. decolorans* Wallr. Fl. 1809 crypt. n. 2578. — Ascomatibus gregariis stipato-carnosis, intus croceo-rubentibus, extus fibrillis teneris rigidulis adpressis, marginem versus seriatis albis vestitis, primum turbinatis, dein in discum pallide vitellinum, mox flavo-croceum incusum, margine inflexo discoloro cinctum reclusis, hypocrateriformibus abrupte stipitatis.

Hab. ad ligna putrida Salicis capreæ in Thuringia (WALLR).

10. **Dasyscypha dryina** (Karst.) Sacc. *Lachnella* Karst. Rev. mon. 1810 p. 131, *Helotium* Karst. M. F. I, p. 155. — Sparsa, stipitata, sublutea, albido-tomentella; cupula cyathoidea, sicca obovoideo-sphæroidea, ore connivente, circiter 1 mm. lat.; stipite firmulo, cupula brevior; ascis cylindraceuto-subclavatis, 60-75 \approx 4-5, apice jodo non tinctis; sporidiis fusoideo-elongatis, rectis vel leviter curvulis, eguttulatis vel guttulas paucas minutas foventibus, 7-11 \approx 1,5-2,5; paraphysibus filiformibus, 1,5-2 μ . cr.

Hab. in ligno betulino in Fennia.

11. **Dasyscypha rorida** (Wallr.) Sacc. *Pez. rorida* Wallr. Fl. crypt. 1811 n. 2451, Fuck. Symb. p. 306. — Ascomatibus semiglobosis parvis albo-pallescentibus in discum concolorem v. lutescentem concavum reclusis, extus cum stipite brevi in basin tenuato pilis teneris apice crystallino-granulosis adpersis; ascis linearibus, substipitatis, 8-sporis, 28 \approx 4; sporidiis distichis, cylindraceutis, subrectis, 6 \approx 2 hyalinis.

Hab. ad ligna sicca faginea in Thuringia et Rhenogovia. — Ascomata persistenter alba. *D. crystallinæ* affinis.

12. **Dasyscypha torva** (Wallr.) Sacc. *P. torva* Wallr. Fl. crypt. 1812 n. 2446. — Ascomatibus minutissimis, albis, primum e basi tenuata stipitifirmi adpresso-pilosa penicilliformibus, dein subglobosis stipitem occultantibus, in discum urceolatum lutescentem reclusis, extus pilis porrectis rigidulis patulis torvis.

Hab. ad ligna Piri communis arida passim in Germania.

13. **Dasyscypha striatula** (Wallr.) Sacc. *Pez. striatula* Wallr. Fl. 1813
crypt. n. 2452. — Ascomatibus stipitatis, obconico-turbinatis, parvis albis dein stramineis, vertice depresso in osculum angustum marginibus inflexis cinctum reclusis, extus cum stipite filiformi striato firmo producto, pilis rigidulis patulis brevibus fragilibus caudicis torvis.

Hab. ad ligna Cratægi Oxycanthæ in Thuringia rarius. — Habitus *Soleniace anomalæ*, at stipite striato et pilis mollioribus, laxioribus et fragilioribus diversa.

14. **Dasyscypha lactea** (E. et E.) Sacc. *Helotium lacteum* E. et E. 1814
in Journ. of Myc. 1888, p. 56. — Ascomatibus gregariis, stipitatis, tomentosus, albo-lacteis, plano-convexis, subimmarginatis, extus minute tomentosus, 0,5 mm. crass., stipite cylindrico, æquali, brevi 170 μ . long. et cr., tomentoso; ascis tereti-clavatis, 75 \approx 6-7, filiformi-paraphysatis; sporidiis distichis, fusoideis, acutis, curvulis, 15-17 \approx 2,5-3, hyalinis.

Hab. in ligno putri, Cazenovia N. Y. Amer. bor.

15. **Dasyscypha soleniiformis** (E. et E.) Sacc. *Lachnella soleniiformis* 1815
E. et E. Journ. Myc. 1888 p. 55. — Gregaria, brunnea, breviter stipitata, primo hemisphærica, cupuliformis et fere clausa, ob marginem incurvatum, dein expansa et vix plana, extus setis rectis, albis, sursum rugosis, disco sordide albo, lutescente vel aquose carneo, $\frac{1}{2}$ -1 mm. diam.; ascis circiter 40 \approx 3-3,5, clavato-cylindræis, rectis; paraphysibus superantibus, obtuse lanceolatis; sporidiis subdistichis, clavato-oblongis, hyalinis, continuis, 5-8 \approx 2,5 (subinde 10-12 μ . longis).

Hab. in ligno emortuo Cazenovia New York Amer. bor. — Pili marginales 70-80 \approx 3, luteo-brunnei.

16. **Dasyscypha pygmæa** (Fr.) Sacc. *Peziza pygmæa* Fr. Syst. Myc. 1816
II, p. 79, *Helotium* Karst. M. F. I, p. 153, *Lachnella* Phill. Disc. p. 242. — Sparsa vel subgregaria, stipitata, flocculoso-furfurella lutescens, sicca subferruginea, cupula patelliformi, disco luteo subinde demum convexiusculo, 1,5-3 mm. lat.; stipite subæquali, 1-7 mm. alt.; ascis cylindræo-clavatis, 65-75 \approx 5-6; sporidiis monostichis, fusoideo-elongatis, rectis, plerumque guttulatis, 5-10 \approx 1,5-2 (Karst.), 11 \approx 2,5 (Phill.); paraphysibus gracilibus.

Hab. ad truncos, ramos infossos, ad terram arenosam inter muscos et radices terra tectas, locis umbrosis in Suecia, Fennia, Britannia. — Forma **prolifera** Berk. Som. New. Fung. tab. 55,

f. 7-13: cupulis subinde disco cupulas minores generantibus armeni-
niacis, margine pallidiore. In Britannia.

17. **Dasyscypha calicioides** (DC.) Sacc. *Pez. calicioides* DC. Fr. 2, 1817
p. 81, Fr. Syst. Myc. II, p. 115 nec Rehm. — Cupula planiuscula,
margine fimbriato, extus stipiteque gracili sursum dilatato rugo-
so-scabris.

Hab. ad cortices Galliae. — Variat alba et sulphurea.

18. **Dasyscypha Crucibulum** (Fr.) Sacc. *P. Crucibulum* Fr. Syst. Myc. 1818
II, p. 112, Fl. Dan. t. 1784, f. 1? (nec Batsch), *P. crucibulifor-*
mis Fr. II, p. 610. — Turbinata, albido-pallida, extus pilis con-
fertis adpressis fibrosa, margine lato inflexo, stipite brevi firmo.

Hab. in trunco putrido fagineo in Suecia. — Sec. Rostrup
icon Fl. Dan. citata potius *Cyathi* speciem sistit. Solitaria, major,
2 mm. alta, firmula subpiriformis, villo non soluto tecta, ad mar-
ginem in velum submembranaceo-contextum extenso. Stipes vix
2 mm. longus, rugosus.

19. **Dasyscypha viridula** (Schrad.) Sacc. *P. viridula* Schrad. Journ. 1819
p. 63, Fr. syst. II, p. 91. — Ascomatibus stipitatis cyathiformi-
bus viridulis, extus albido-villosis.

Hab. ad truncos putres nemoris Sollingensis (SCHRADER).

20. **Dasyscypha inspersa** (B. et C.) Sacc. *Peziza inspersa* B. et C. 1820
Cub. Fung. n. 684. — Cupula subglobosa, extus stipiteque brevi
crassiuscula dense albo-farinaceis; hymenio carneo.

Hab. in ligno emortuo in insula Cuba. — Minuta, gregaria.

21. **Dasyscypha nivea** (Hedw.) Sacc. *Pez. nivea* Fr. syst. II, 90, *P.* 1821
virginea Flor. dan. tab. 1440, fig. 1, *Octospora nivea* Hedw. fil.
t. VIII, f. B, *Trichopeziza* Fuck. Sacc. F. ital. f. 1436, *Lachnella*
Phill. Disc. p. 245, Pat. Tab. f. 169. — Ascomatibus breviter sti-
pitis candidis villosito-tomentosis, turbinatis, pilis tenuibus, hya-
linis, septatis, obtusis; ascis cylindratis; sporidiis fusoidis v. ob-
longo-fusoidis, distichis, 8-10 \approx 2; paraphysibus filiformibus.

Hab. ad ramulos locis udis dejectos et ligna putrida in Suecia,
Britannia, Gallia, Belgio, Italia, Amer. bor. Nov. Zeland.

22. **Dasyscypha calycina** (Schum.) Fuck. Symb. p. 305, *Pez. calycina* 1822
Schum. Sael. p. 424, saltem p. p. nec Nyl. Karst. *P. calycina* var.
Laricis Cooke Handb. pag. 685, *Peziza Willkomii* Hartig Lehrb.
p. 118, t. XI, f. 10-19. — Gregaria v. sparsa, sæpissime cæspi-
tosa, stipitata, albo-villosula; cupula expansa, sicca concava, disco
aurantiaco-luteo v. aurantiaco, concaviusculo vel planiusculo, 1-2
mm. lat.; stipite brevi crassiusculo, in cupulam dilatato; ascis sub-

cylindræis, $120 \approx 9$, octosporis; sporidiis elongatis, obtusis, continuis, monostichis, $16-22 \approx 6-7$, hyalinis; paraphysibus filiformibus, hyalinis, sursum incrassatulis, pilis hyalinis, $2,5 \mu$. crassis.

Hab. in cortice Laricis et Pini silvestris in Germania, Britannia, Gallia, Italia. — Var. **Trevelyani** Cooke Grev. III, p. 121: sporidiis majoribus, $30-35 \mu$. long., pseudoseptatis. In Britannia.

23. **Dasyscypha subtilissima** (Cooke) Sacc. *Peziza subtilissima* Cooke 1823 Grev. III, p. 121, f. 167, *Peziza calycina* Fr. Scl. Suec. n. 360, Nyl. Pez. p. 24, e. p. nec Schum. Fuck. Rehm, *Helotium* Karst. M. F. I, pag. 154, *Erinella* Pat. Tab. 592, *Dasys. bruyeriensis* Sacc. Mich. II, p. 330, (sp. 7-1,5-2). — Gregaria v. sparsa, stipitata, initio globosa, dein hemisphærica, demum expansa, ceracea, extus albo-villosa; disco aurantio-flavo, margine integro; stipite brevi; ascis subclavatis; sporidiis cylindræis, curvis, minutis, hyalinis, $10-12 \approx 2$.

Hab. in cortice Abietis et Pini silvestris in Scotia, Suecia, Fennia, Gallia et West Albany Amer. bor.

24. **Dasyscypha Abietis** (Karst.) Sacc. *Hel. Abietis* Karst. M. F. I, 1824 p. 154, *Peziza calycina* Auctt. pr. p. *Peziza calycina* β . *Abietis* Fr. Syst. Myc. l. c. saltem pr. p. — *D. subtilissima* sat similis sed ascomatibus magis villosis v. tomentosis; ascis clavatis, $70 \approx 8-10$; sporidiis distichis, fusoideo-oblongatis v. fusoideo-elongatis, rectis v. curvulis, guttulis 2 majusculis præditis v. spurie tenuiter uniseptatis, $11-14 \approx 2,5-3,5$.

Hab. ad ramulos Abietis excelsæ siccis in Fennia saltem meridionali autumnove vere sat frequens.

25. **Dasyscypha Agassizii** (B. et C.) Sacc. *Peziza Agassizii* B. et C. 1825 North Am. Fungi n. 713. — Fasciculata, erumpens; cupula extus tomentosa candida, intus aurantia, breviter stipitata; margine undulato; ascis subcylindræis; sporidiis ellipsoideo-ovatis v. subfusiformibus, levibus, minutis, $6,5-7,5 \approx 4$.

Hab. in corticibus Abietis Lake superior. (AGASSIZ), New England (OAKES) Amer. bor. — Subinde stipes longiusculus. Affinis *D. subtilissima*. — Var. **rufipes** Phill. Grev.: stipite rufescente. In Pino contorta, California.

26. **Dasyscypha resinaria** (C. et Phill.) Rehm Ascom. Lojk. n. 30, 1826 *Lachnella* C. et Phill. Disc. p. 242. — Gregaria, stipitata; cupula initio turbinata, dein aperta, $\frac{1}{2}-1$ mm. lat., extus stipiteque brevi pilis albo-hyalinis scabris simplicibus, 4μ . cr. obsessa; margine

inflexo; disco pallide flavo-aurantio; ascis cylindraceo-clavatis, 30-36 \approx 3-4; sporidiis ellipsoideis, 5 \approx 2,5; paraphysibus filiformibus.

Hab. in resina Abietis excelsæ, North Wales Britanniae et in cortice abietino prope Teplicska Hungariae. — Sec. Rehm sporidia subrotunda, nempe 2,5 \approx 2: an species diversa et ad *Lachnellulam* referenda?

27. **Dasyscypha bicolor** (Bull.) Fuck. Symb. mycol. p. 305, *Peziza* 1827 Bull. Champ. pag. 243, tab. 410, f. 3, *Lachnum* Karst. M. F. I, p. 172, *P. minuta* Fl. Dan. t. 779, fig. 2. — Sparsa v. conferta, stipitata v. sessilis, albo-tomentosa v. dilutissime roseo-villosa, cupula humida planiuscula, sicca sphæroideo-contracta, disco aurantiaco-luteo v. aurantiaco v. subcinnabarino, 1-2 mm. lat.; stipite tenui, brevi vel indistincto; ascis cylindraceo-subclavatis, 45-60 \approx 4,5-5; sporidiis fusoido-elongatis, 6-9 \approx 1,5-2; paraphysibus apice acutis, 3-4 μ . cr.

Hab. ad ramulos, rarius ligna arborum frondosarum, praesertim Coryli, Quercus, Betulae, Rubi, Myricae, Crataegi in Suecia, Britannia, Gallia, Italia, Belgio, Germania, Amer. bor. — Cellulae excipuli dilutissime fuscidulae, ellipticae, 8 \approx 5, pili cylindracei subechinulati, hinc illinc septato-constricti, 100-200 \approx 5. — Variat: a. disco coccineo aurantiaco, *P. Oxyacanthæ* Pers. Obs. I, p. 41, *P. pulchella* Myc. Eur. p. 260: b. disco luteo, *Pez. transparens* Pers. Obs. 2, p. 84, *P. quercina* Myc. Eur. p. 260: c. disco sordide pallido, Nees Syst. f. 204. — Var. **Rhododendri** Rehm Ascom. n. 110: cupulis subglobosis, dein breviter stipitatis, erumpentibus, dein sessilibus, pilosellis, extus hyalino-rosellis, disco rubicundo, 2-3 congregatis, 0,8 mm. diam., senilibus disco evanido persistentibus; pilis cupulae brevibus, scabris, simplicibus, flavidulis, obtusis, septatis, 3,5 μ . diam.; ascis clavatis, 8-sporis, 50 \approx 7; sporidiis ellipticis, rectis v. subcurvatis, 1-cellularibus, primitus nucleis 2 parvulis praeditis, 8 \approx 2,5, distichis; paraphysibus sublanceolatis, ascos superantibus, apice obtusis, c. 3-4 μ . diam. Ad ramulos siccos *Rhododendri ferruginei* imprimis in alpibus editis tyrolensibus. — Var. **alpina** Rehm Ascom. n. 568: sporidiis ellipsoideis obtusulis, rectis, 6-8 \approx 2,5, pilis ascomatis sublevibus; paraphysibus flavidis. In ramis Alni viridis. In Tyrolia.

28. **Dasyscypha translucida** (B. et C.) Sacc. *Peziza translucida* B. 1828 et C. North Am. Fungi n. 728. — Minuta, hyalina, gregaria; cupulis hemisphaericis margine inflexo; stipite brevissimo.

Hab. in ramis Castaneae in Pennsylvania (MICHENER).

29. **Dasyscypha crystallina** (Fuck.) Sacc. *P. crystallina* Fuck. Symb. 1829 p. 306. — Cupulis gregariis, pallide fuscis, in stipitem crassum, cupulam æquantem, sensim attenuatis, 2 mm. latis, primo clausis, demum apertis, margine inflexo, extus stipiteque tenuissime candido-villosis, intermixtis multis pilis glanduliferis, firmioribus, glandulis hyalino-crystallinis, demum lucido-aureis, disco concavo, pallido; ascis linearibus, stipitatis, 8-sporis, $62 \approx 4$; sporidiis distichis in ascis superiore parte, cylindraceis, rectis, hyalinis, $8 \approx 2$.

Hab. in ramis putridis *Quercus* pr. Æstrich Rhénogoviæ. — Habitus *Phialeæ cyathoides*, speciosissima. — Subiculum delicatissimum, ex hyphis ramosis, fuscis contextum, quandoque adest.

30. **Dasyscypha luteola** (Curr.) Sacc. *Helotium* Curr. Linn. Trans. 1830 XXIV, p. 153, t. 25, f. 11-12, 18, *Lachnella* Phill. Disc. p. 248. — Cæspitosa, pallide lutea; stipite circiter 4-5 mm. longo, disco 1-2 mm. lat., primo cavo, dein expanso et convexo, margine pilis parallelis, minutis, albis tecto et subsulcato; sporidiis rectis v. vix curvulis, hyalinis, $10-12 \approx 2$ longis; paraphysibus clavato-elongatis, acuminatis, subinde septatis.

Hab. in ramo *Ulicis* partim limo palustri immerso, Paul's Cray Britannia. — Habitu cæspitoso et subramoso distincta species.

31. **Dasyscypha Ulicis** (De Guern.) Sacc. *Pez. Ulicis* De Guern. in 1831 Cr. Finist. p. 52 et Rev. mycol. vol. VI, p. 99. — Ascomate stipitato 5 mm. usque 1 mm., intus amœne luteo, extus pallidiore, albo-tomentoso, margine integro parum lobato, subconcavo vel convexo; ascis subcylindraceis, octosporis; sporidiis oblongis; paraphysibus subfusiformibus.

Hab. in ramis emortuis *Ulicis* et *Salicis* repentis Brest et Morlaix Gallia. — Contextus excipuli e cellulis rotundis et pilis tenuissimis anastomosantibus formatus.

32. **Dasyscypha Comitissæ** (Cooke) Sacc. *P. Comitissæ* Cooke Grev. 1832 IV, p. 111. — Cæspitosa vel gregaria, nitide aureo-lutea, extus pallescente et tomentosa, stipitata, stipite communi, sursum ramoso; ascomate primo clavato, dein expanso et cupulato; ascis cylindraceis, $50-60 \mu$. long.; sporidiis minutis, fusoides-linearibus rectis vel curvulis, $6-7,5 \approx 2,5$; paraphysibus filiformibus.

Hab. in ramis putridis Dupplin Castle, Perth Britannia. — Affinis, stipite sursum ramoso, *Dasys. pygmaea*.

33. **Dasyscypha crucifera** (Phill.) Sacc. *Peziza crucifera* Phill. Gard. 1833 Chron. 1878, p. 397, f. 71. — Minuta, gregaria, stipitata, alba; ascomatibus primo globosis, dein expansis, setulis hyalinis, septa-

tis, brevibus, apice clavatis, crystallis cruciformibus coronatis tectis; stipite longo, basi villosa; ascis cylindraceo-clavatis octosporis; sporidiis cylindraceis vel stricte fusiformibus, rectis, 6-8 \approx 1; paraphysibusasco longioribus sursum acuminatis.

Hab. in ramulis emortuis *Myricæ* *Gales*, Capel Curig, North Wales, Norfolk et Scotia. — Totus fungus 5 mm. alt.

34. **Dasyscypha lætior** (Karst.) Sacc. *Lachnum lætius* Karst. M. F. 1834 I, p. 174. — *D. acutipilæ* affinis; cupulis sessilibus, paullo majoribus, 0,7-1 mm. lat., siccis difformiter contractis, disco dilute luteo, sicco luteo; sporidiis nonnihil majoribus 10-20 \approx 1-2.

Hab. in sarmentis *Rubi idæi* emortuis in Mustiala Fenniae.

35. **Dasyscypha albipes** (Wallr.) Sacc. *P. albipes* Wallr. Fr. Crypt. 1835 n. 2574. — Ascomatibus minutissimis, e basi stipitiformi crassa brevissima glabra alba hemisphaericis, osculo angusto circinato hiantibus, pallide griseis, extus scobe farinosa cum fibrillulis intermixtis vestitis.

Hab. ad ramulos decorticatos *Ligustri vulgaris* in agro northusano Germaniae, rarius (WALLR.).

II. In Dicotyledoneis herbaceis.

36. **Dasyscypha gracilescens** (Karst.) Sacc. *Lachnum gracilescens* 1836 Karst. M. F. I, p. 171. — Sparsa vel subgregaria, stipitata, alba, pilosula; cupula hemisphaerica vel humida planiuscula, sicca subsphaeroideo-contracta, pilis sat sparsis patulis brevibus obsita, circiter 0,6 mm. lat.; stipite tenui, aequali, 0,6 mm. alt.; ascis subclavato-cylindraceis, 45-50 \approx 4; sporidiis fusoideo-filiformibus, vulgo rectis 10-16 \approx 1-1,5; paraphysibus superne acutiusculis, 3 μ . cr.

Hab. supra caules herbarum putrescentes in Mustiala Fenniae. — Pili cupulae 4 μ . cr., apice subclavato-obtuso; discus in statu sicco saepe lutescens; sporidiis majoribus a *D. virginea* mox dignoscitur. — Var. β . **longicaudata** Karst. loc. cit. A *D. gracilescenti* recedit stipite longiore (1-2 mm. alt.), sporidiis 6-14 \approx 1-1,5 et paraphysibus crassioribus (5-6 μ . cr.). Ad caules *Ranunculi acris* putrescentes prope Mustiala Fenniae.

37. **Dasyscypha aurorina** (Quél.) Sacc. *Erinella aurorina* Quél. Esp. 1837 nouv. Champ. Fr. 1878, p. 291 et X Suppl. p. 12, tab. IX, f. 2. — Ascomatibus planis, 1 mm. diam., puberulis incarnatisque, stipite piliformi pubescente, concolori, 3-4 mm. longo; hymenio roseo-aurantiaco; sporidiis fusiformibus, acicularibus, 8 μ . longis.

Hab. in frustulis herbaceis putrescentibus, Jura.

38. **Dasyscypha nudipes** (Fuck.) Sacc. *Pez. nudipes* Fuck. Symb. 1838
mycol. p. 306, *Helotium* Sacc. Mich. II, p. 612. — Gregaria, 3
mm. alta; stipite tenui, gracili, sordido cupulaque dense hyalino-
puberulo, basi nudo, obscuriore; cupulis late turbinatis, excavatis,
marginatis, disco flavescente, concavo, siccis margine connivente;
ascis lineari-clavatis; sporidiis 8, distichis, cylindræis, hyalinis
10 \approx 2.

Hab. ad caules siccos Spirææ Ulmariaæ, rarius, pr. Œstrich
Rhenogoviæ et in Helvetia. — Affinis *Ph. crystallinæ*, statura
Ph. cyathoidæ.

39. **Dasyscypha spiræicola** (Karst.) Sacc. *Lachnum spiræicola* Karst. 1839
M. F. I, pag. 170. — *Das. virginææ* sat similis, sed cupula alba,
villosula, disco lutescente vel albido, demum sæpe pallido, sicco
subluteo vel subaurantiaco-luteo, 0,5-1,5 mm. lat., stipite tenui,
0,3-1 mm. alt.; ascis 48-55 \approx 4; sporidiis 6-12 \approx 1-1,5; paraphy-
sibus 4-5 μ . cr.

Hab. ad caules Spirææ Ulmariaæ putrescentes in Fennia
saltem australi frequentissima.

40. **Dasyscypha labiata** (R. et D.) Sacc. *Peziza labiata* Rob. et Desm. 1840
14 Not. p. 184. — Sparsa vel vix gregaria, minima, stipitata, ju-
nior globosa, adulta plana, sicca plicato-labiata, extus furfuracea,
grisea, substricta disco helvolo, margine integro, stipite brevi gla-
bro crassiusculo; ascis subclavatis, 50 μ . longis; sporidiis oblon-
gis, 10 μ . long.

Hab. in foliis aridis, pedunculis, paleis etc. variarum planta-
rum, præsertim Eryngii campestris, Carlinæ in Gallia. —
Stipes $\frac{1}{2}$ mm. alt., ascoma $\frac{2}{3}$ - $\frac{3}{4}$ mm. lat.

41. **Dasyscypha montana** (Quél. et Pat.) Sacc. *Erinella montana* 1841
Quél. et Pat. Tab. An. II, p. 35, fig. 589. — Ascomate turbinato,
stipitato, extus albescente et lanoso, 5-7 mm. diam.; disco car-
neo-ochraceo; ascis elongatis; paraphysibus linearibus obtusis, api-
ce parum incrassatis; sporidiis ovoideis, 7-10 \approx 3, hyalinis.

Hab. gregarie in capitulis Cirsii, Montée de la Dole Jura
Galliæ.

42. **Dasyscypha vernalis** (Schum.) Sacc. *Pez. vernalis* Schum. Saell. 1842
p. 425, Fr. S. M. II, pag. 89. — Firmula, cinereo-pallida, cupula
hemisphærica extus stipiteque elongato filiformi flexuoso villosis.

Hab. in stipitibus dejectis in Saellandia. — Majuscula in hac
tribu, stipite 18-20 mm. long., cupula 5 mm. fere lata. Margo
primo involutus, demum patulo-erectus.

III. Foliicolæ.

43. **Dasyscypha ciliaris** (Schrad.) Sacc. *Peziza* Schrad. Journ. 1799, 1843

II, p. 63, Fr. Syst. Myc. II, p. 89, Pat. Tab. 88 (*patula*), *Hyalopeziza* Fuck. Symb. p. 298, *Trichopeziza* Rehm Ascom. n. 258. — Stipitata, cyathiformis, nivea, extrinsecus pilis sparsis longis capitatis obsessa, disco albido; ascis clavato-oblongis, oblique stipitatis, 8-sporis, 50-56 \approx 6-8; sporidiis subdistichis vel oblique monostichis, fusiformibus, rectis vel curvatis, hyalinis, 18 \approx 2,5-3; paraphysibus filiformibus acutis, 2 μ . cr.

Hab. supra folia dejecta quercina, faginea et Myricæ Gales in Suecia, Gallia, Belgio, Italia, Austria, Britannia. — Facie convenit cum *P. virginica*, sed multo gracilior. Pili septulati, 80-100 \approx 7, capitulo crystalligero terminati. *Das. echinulatæ* et *D. capitata* et *patulæ* peraffinis. — ***H. pulchella** Sacc. Mich. I, pag. 428, ascomatibus ut in typo sed disco amœne flavo; setulis asperulis, articulatis, 70-80 \approx 5-7; ascis cylindraceo-clavatis 60-70 \approx 7-8, paraphysatis, 8-sporis; sporidiis distichis, fusoideis, utrinque acutiusculis 24-27 \approx 2-3, 2-guttulatis, hyalinis. In foliis dejectis quercinis, Conegliano Ital. bor. (SPEGAZZINI).

44. **Dasyscypha patula** (Pers.) Sacc. *Peziza patula* Pers. syn. 654, 1844

Nees syst. f. 285, Fr. syst. II, 91, Pat. Tab. f. 87 (*ciliaris*), *Lachnella* Phill. Disc. pag. 151 *Hyalopeziza* Fuck. Symb. pag. 298, Sacc. F. ital. t. 1370. — Ascomatibus exiguis stipitatis extus dense villosis albis, primum hemisphæricis dein in discum planum lutescentem apertis, pilis longis tenuibus hyalinis, continuis, acutis, patulis; ascis cylindraceo-clavatis, 50-60 \approx 7, octosporis; sporidiis oblongo-clavulatis v. subfusoideis, 8-10 \approx 2-3, hyalinis; paraphysibus lanceolatis, ascos superantibus.

Hab. ad folia quercina, populina et betulina dejecta in Suecia, Germania, Britannia, Italia, Gallia, Belgio, Amer. bor. — Ascoma $\frac{2}{3}$ - $\frac{1}{2}$ mm. lat., brevissime stipitatum.

45. **Dasyscypha acuum** (A. et S.) Sacc. *Peziza* A. et S. Lus. p. 330, 1845

Helotium Fr. Summa p. 355, Karst. M. F. I, p. 147, *Lachnella* Phill. Disc. pag. 246. — Gregaria v. sparsa, stipitata, tenera, albidula, cupula planiuscula, obsolete villosula v. pilosula, circiter 0,2 mm. lat., stipite tenui, plus minus elongato, subinde 1 mm. æquante; ascis cylindraceo-clavatis, 26-30 \approx 4-5; sporidiis oblique monostichis v. distichis, fusoideo-elongatis v. fusoideo-oblongatis, 4-6 \approx 1,5.

Hab. ad acus Pini silvestris, Abietis excelsæ et pe-

etinatae locis umbrosis humidis in Fennia, Suecia, Germania, Britannia, in foliis Sequoiae in California. — Var. **carnea** Fuck. Symb. pag. 315: sporidiis angustioribus, teretibus, 4-5 \approx 1. Cum typo.

46. **Dasyscypha serinella** (Quél.) Sacc. *Erinella serinella* Quél. XIV, 1846
Suppl. pag. 9, t. XII, f. 24. — Ascomatibus cyathiformibus, pilis granulosis ornatis, velutinis, nitide luteis, urceolatis, 500-700 μ . diam., margine luteo v. albo, stipite tenui, 600-800 μ . longo, hymenio pallide citrino, dein aureo; sporidiis acicularibus, fusiformibus, 10 μ . longis, guttulatis.

Hab. in acubus abietinis, Vosges Galliae. — Affinis *D. patulae*.

47. **Dasyscypha puberula** (Quél.) Sacc. *Erinella puberula* Quél. XIII 1847
Suppl. p. 9, t. VIII, fig. 21. — Ascomatibus cyathiformibus, 100-200 μ . diam., breviter stipitatis, ceraceis, luteis, velutinis, hyalino-ciliatis; hymenio plano, citrino; sporidiis fusiformibus, acicularibus, 5 μ . longis (?), guttulatis, hyalinis.

Hab. in foliis putrescentibus *Pini maritimae*, Saintonge Galliae (P. BRUNAUD). — Videtur affinis *D. eurotiodi* et *D. Galbulæ*.

48. **Dasyscypha echinulata** (Rehm) Sacc. *Trichopeziza echinulata* 1848
Rehm Ascom. n. 259 (non Auersw.). — Stipitata, solitaria, sparsa, *D. ciliari* simillima, fere hyalina, parenchymatica, pilis hyalinis, fere ascomatis longitudinis, 3-4 μ . cr., simplicibus, apice obtuso crystallis oxalatis calcis conglomeratis obsesso, minutissimo; ascis clavatis, 8-sporis, 27 \approx 4, apice jodo cœrulescente; sporidiis ellipticis, hyalinis, 1-cellularibus, rectis, 3-4,5 \approx 1-1,5, distichis; paraphysibus apice acutatis, ascos multo superantibus, c. 5 μ . cr.

Hab. ad folia putrida *Tiliae* in silva Harth prope Lipsiam (DR. G. WINTER).

49. **Dasyscypha virginella** (Cooke) Sacc. *Peziza virginella* Cooke 1849
Grev. IV, p. 178 (nomen), Ellis et Everh. N. A. Fungi n. 2141. — Ascomatibus sparsis, niveis tomentellis, longiuscule stipitatis; pilis hyalinis crystallino-capitatis, 40-50 μ . longis; ascis teretibus clavatis, 40 \approx 4-5, breve stipitatis; sporidiis fusoides v. fusoideoclavulatis, exiguis, 6-7 \approx 1 (an immaturis?); paraphysibus lanceolatis acutis.

Hab. in foliis dejectis *Vaccinii*, amphigena, Newfield Amer. bor. — Ascoma cum stipite $\frac{1}{2}$ mm. alt., cupula $\frac{1}{3}$ mm. lat. Diagnosis ex exempl. Ellisianis erui.

50. **Dasyscypha perforata** (Saut.) Sacc. *Peziza perforata* Saut. Pilz. 1850

Salzb. pag. 8. — Minima, stipitata, alba, cupula globosa, villosa, disco punctiformi luteo.

Hab. in foliis Alni putrescentibus, prope Stuhlfelden. — Inter *D. biclorem* et *D. cerinam* media. Vix visibilis, stipite altitudinem ascomatis in longitudine æquante.

51. **Dasyscypha hystricula** (E. et E.) Sacc. *Lachnella hystricula* E. 1851 et E. Journ. Myc. 1888, p. 99. — Minuta, alba, sparsa, substipitata, sicca clausa, setis rectis, continuis v. obsolete septatis, rugosis, 50-75 \times 4-5; ascis oblongo-clavatis, sessilibus, 25 \times 7-8; paraphysibus non visis; sporidiis superne distichis et verisimiliter subfusoides, (spurie?) 3-septatis, circiter 12 \times 2 (immaturis visis).

Hab. in pagina inferiore foliorum Magnoliæ grandifloræ St. Martinsville Amer. bor. (LANGLOIS).

52. **Dasyscypha albo-pileata** (Cooke) Sacc. *Peziza albo-pileata* Cooke 1852 Hedw. 1875, p. 82, Grev. III, f. 182. — Epiphylla sparsa v. subgregaria, stipitata, candida dein ochracea, stipite gracili subnudo, cupula mox expansa extus floccis hyalinis, albidis, brevibus ornata, disco obscuriore; ascis cylindraceis; sporidiis linearibus minutis.

Hab. ad folia decidua Magnoliæ, New Jersey Amer. bor. (ELLIS). — Affinis *D. ciliari* sed major.

53. **Dasyscypha australis** (Speg.) Sacc. *Lachnella australis* Speg. 1853 F. Fung. n. 320. — Hypophylla, hinc inde (3-8) laxe gregaria, minutissima, uda turbinato-applanata, 400-500 μ . diam., sicca non v. vix contracta, margine involuta, deorsum attenuata ac in pedicellum glabrum, rigidulum concolorem, 500-800 \times 50-80, desinens, extus sordide alba, densiuscule villosula, pilis breviusculis rectis vel flexuosulis cylindraceis, 60-80 \times 3, apice non attenuatis obtuseque rotundatis 3-5-septatis sæpeque ad septa constrictis dense minuteque papillulosis hyalinis vestita; disco pallescenti-ceraceo; ascis cylindraceo-subclavatis, antice attenuatis, vertice non v. vix subtruncatulis ac minute 1-foveolatis, postice longe crasseque attenuato-pedicellatis, 45 \times 2,5-3, octosporis, pseudoparaphysibus longioribus, 65-75 \times 2,5, utrinque attenuatis, apice acutissimis, parce obvallatis; sporidiis acicularibus vel subclavulatis, utrinque attenuato-acutatis, 10 \times 0,7-0,8, continuis, hyalinis.

Hab. ad folia dejecta putrescentia Berberidis ilicifoliæ in silvis in Staten island Fuegiæ.

54. **Dasyscypha tautilla** (Ph. et H.) Sacc. *Lachnella tautilla* Phill. 1854 et Harkn. Calif. p. 1. — Sparsa, stipitata, minuta, alba, cupuli-

formis, basi pilis gracilibus tecta; ascis late clavatis, octosporis; sporidiis ovoideis, $4 \approx 1$; paraphysibus gracilibus filiformibus.

Hab. in pagina inferiore foliorum Garryæ ellipticæ in California.

55. **Dasyscypha albo-citrina** (Cooke) Sacc. *Peziza albo-citrina* Cooke 1855
Grev. VII, pag. 47. — Stipitata, villosa, alba; cupulis turbinatis, demum expansis, $\frac{3}{4}$ mm., stipite brevi; disco citrino; ascis cylindraceis; sporidiis linearibus, rectis, 10 μ . long.; paraphysibus acuminatis.

Hab. in foliis Vaccinii, Darien Georgia Amer. bor. — Peraffinis *D. virginellæ*.

IV. In Monocotyledoneis.

56. **Dasyscypha imbecillis** (Karst.) Sacc. *Lachnum imbecille* Karst. 1856
M. F. I, p. 172. — Sparsa, stipitata, albo-tomentosa, cupula concava, disco luteo, 0,3-0,4 mm. lat., stipite latitudine cupulæ longiori, subæquali tenui; ascis cylindraceo-subclavatis; sporidiis distichis, fusoido-bacillaribus, guttulatis, 10-16 \approx 1,5-2; paraphysibus 5-6 μ . cr., apice acutis.

Hab. ad culmos et folia Airæ cæspitosæ et Eriophori vaginati putrescentes prope Mustiala Fennicæ.

57. **Dasyscypha elatior** (Karst.) Sacc. *Lachnum elatius* Karst. M. 1857
F. I, p. 171. — *D. virginicæ* sat similis sed major, cupula 1 mm. lat., disco dilutissime luteo stipiteque 1,5 mm. alt.; ascis 5 μ . cr.; sporidiis 8-14 \approx 2-2,5; paraphysibus 4 μ . cr.

Hab. ad culmos graminum, terra tectos, in Mustiala Fennicæ.

58. **Dasyscypha caduca** (Rehm) Sacc. *Trichopeziza caduca* Rehm 1858
Ascom. n. 160, an *Lachnum acutipilum* Karsten myc. fenn. I, p. 173 cfr.: Cooke in Grevillea III, p. 128, tab. 41, f. 189. — Plerumque sparsa, stipitata, turbinata, albido-flavescens, sicca plerumque collapsa et clausa, humida rigida, stipite brevi, crasso, disco dilatato concavo, flavido-rosello, piloso-hirta, 0,5 mm. diam.; pilis longis, acutis, vix scabris, simplicibus, hyalinis, c. 3-4 μ . crassis obsessa; ascis clavatis, 8-sporis, 50-60 \approx 6-8, apice jodo cœrulescente; sporidiis fusoido-ellipticis, rectis vel subcurvatis, interdum uno apice obtusis, 1-cellularibus, sæpe 2 nucleolis præditis, hyalinis, distichis, 10-15 \approx 2-2,5; paraphysibus lanceolatis, ascos superantibus, basi 4 μ . cr.

Hab. ad calamos siccos Nardi strictæ in alpibus editioribus tyrolensibus, juxta glaciem æternam.

59. **Dasyscypha carneola** Sacc. *Hyalopeziza* Sacc. Mich I, p. 253, 1859

F. ital. f. 1371. — Gregaria, brevissime stipitata, pallida, disco concaviusculo, carneo v. subaurantiaco, usque $\frac{1}{2}$ mm. diam., extus, præcipue margine, velutina, pilis apice subincrassatis, subhyalinis; ascis cylindræis, $40 \approx 5$, brevissime stipitatis, 8-sporis; paraphysibus (?) cylindræis, sursum cuspidatis, $70-80 \approx 6$ obvallatis; sporidiis minutissimis, cylindræis v. clavulatis, rectis curvulisve, $5-6 \approx 1$, hyalinis.

Hab. in foliis putrescentibus Moliniæ cœruleæ, Conegliano Ital. bor. (SPEGAZZINI). — Cum *D. deminuta*, *D. patenti*, *D. Caricis*, *D. rosea* pluribus notis convenit, tamen diversa videtur. —

***H rhodoleuca** Sacc. Mich. II, p. 79: ascomatibus sessilibus concaviusculis, $\frac{1}{6}$ mm. d., extus pilis non septatis capitatis hyalinis, $50 \approx 5$, capitulo 10 d., vestitis; disco amœne roseo; ascis cylindræis sessilibus, apice rotundatis $40-45 \approx 6$; paraphysibus longioribus, utrinque cuspidatis, roseo-guttulatis, obvallatis, octosporis; sporidiis fusoides, $10-11 \approx 1-2\frac{1}{2}$, hyalinis. In culmis graminum in Gallia (BRUNAUD). *Peziza graminum* B. et Br. forte huc spectat, sed, ignota fructificatione, dubia. A typo differt sporidiis duplo longioribus ceterisque.

60. **Dasyscypha acutipila** (Karst.) Sacc. *Lachnum acutipilum* Karst. 1860

M. F. I, p. 173. — Gregaria vel sparsa, stipitata, alba vel albida, villosa; cupula planiuscula vel convexiuscula, sicca concava, margine piloso-fimbriato, circiter 0,8 mm. lat.; stipite brevissimo, circiter 0,2 mm. alt.; ascis cylindræo-clavatis, $40-48 \approx 4-5$; sporidiis fusoides-filiformibus, vulgo rectis, ut plurimum guttulatis, $8-16 \approx 1-1,5$; paraphysibus $4-5 \mu$. cr., apice acutis.

Hab. ad caules graminum, præprimis Phragmitis communis, putrescentes in Fennia australi et media præsertim Wasa. — Pili cupulæ articulati, apice longe cuspidati, (basin versus) 4μ . cr., discus interdum lutescens; cupula primitus sphæroidea, clausa.

61. **Dasyscypha controversa** (Cooke) Rehm Ascom. n. 114 Phill. Exs. 1861

n. 70, *Peziza* Cooke in Grev. IV, p. 41, t. 51, f. 264. — Breve stipitata, gregaria, cupula subhemisphærica; pilis filiformibus, obtusis, hyalinis, $4-5 \mu$. cr. obsessa; disco rubescente; ascis clavatis, $36 \approx 5$, octosporis; sporidiis ellipsoideis, rectis, unicellularibus, $6 \approx 1,5$; paraphysibus lanceolato-acuminatis, hyalinis.

Hab. ad culmos Phragmitis in Germania et Britannia. — Ascoma $\frac{1}{4}-\frac{1}{3}$ mm. lat. Desideratur in Phillipsii Man. Brit. Disc.

- Var. **albescens** Rehm Ascom. n. 907: ascomatibus breve vel vix stipitatis albido-roseis, pilis flavidulis, septatis asperulis, 60 \approx 4-5 obsessis; ascis 40-45 \approx 5; sporidiis 6-9 \approx 1,5-2. In culmis Phragmitis pr. Berlin (SYDOW).
62. **Dasyscypha Arundinariæ** (Berk.) Sacc. *Peziza Arundinariæ* B. 1862
North Am. Fungi n. 727, *Pez. cannea* Cooke Disc. U. S. I, p. 293.
— Parva, cupula cyathiformi extus albo-tomentosa; stipite demum glabrato discoque concavo pallide umbrinis.
Hab. in culmis emortuis Arundinariæ in Carolina infer. Amer. bor.
63. **Dasyscypha pudica** (B. et R.) Sacc. *Peziza pudica* Bomm. et 1863
Rouss. Fl. Myc. Brux. pag. 126. — Ascomatibus stipitatis, albis, extus villosis, disco concavo albo, stipite villosulo compactiusculo; ascis cylindratis; paraphysibus linearibus; sporidiis fusiformibus.
Hab. in foliis et radicibus Holci mollis in Belgio. — Fungillus fractus leviter cruentatus.
64. **Dasyscypha plagopus** (Wormsk.) Sacc. *Pez. plagopus* Wormsk. 1864
fl. Camtsch. ined. et in Fr. Syst. Myc. II, p. 93. — Pusilla, breviter stipitata, turbinato-infundibuliformis, extus villo sericeo adpresso, circa marginem piloso, disco luteo.
Hab. in foliis gramineis Kamtschatkæ. — Proximis minor, $\frac{1}{2}$ mm. alta et lata. Stipes brevis, cum cupula turbinata omnino confluens. Villus stramineus adpressus, sed ad marginem regularem subinflexum pili rigidi subflexuosi vel crispatis, longius extantes. β . stipite evidentiore, villo albo discum occultante. In ramulis dejectis Rubi triflori ibidem.
65. **Dasyscypha rufula** Quél. X Suppl. p. 12, tab. IX, fig. 4. — Asco- 1865
matibus cyathiformibus, 1 mm. diam., tenuibus, tenacibus, diaphanis, lanosis, carneis, ciliis serrulatis, albis præditis; stipite brevissimo, 100 μ . longo; hymenio concavo, albo; sporidiis subcylindraceo-fusiformibus, 12 μ . longis, 1-2-guttulatis, hyalinis.
Hab. in cæspitibus Graminearum exsiccatis, Jura.
66. **Dasyscypha Eriophori** (Quél.) Sacc. *Erinella* Quél. X Suppl. 1866
(1880), p. 12, t. XI, f. 1. — Ascomatibus urceolatis, dein apertis, 500-700 μ . diam., villosis, subtiliter denticulato-ciliatis, albis dein roseis; stipite brevi, basi attenuato, concolori, hymenio plano, pallide roseo-ochraceo; sporidiis fusoides, acicularibus, 16 μ . longis.
Hab. ad basim culmorum exsiccatorum Eriophori angustifolii, Normandia (A. LE BRETON). — Sec. Le Breton (Excurs. Crypt. p. 15), asci cylindratis, sessilibus, apice rotundatis jodoque

cœrulescentes, 50-70 \approx 6,5-8; sporidia 13-20 \approx 1,5-3; paraphyses ascos superantes lanceolato-auctæ.

67. **Dasyscypha hyalina** (Phill.) Sacc. *Peziza hyalina* Phill. Grev. 1867

IV, p. 51, f. 266. — Gregaria vel sparsa, breviter stipitata, minuta, pubescens, disco pallide lutescente, plano, marginato; ascis clavatis, octosporis; sporidiis fusiformibus, rectis vel vix curvis, 12-20 \approx 5-6; paraphysibus linearibus.

Hab. ad basim foliorum emortuorum *Luzulæ silvaticæ*, Conway, North Wales Britannicæ.

68. **Dasyscypha rosea** Rehm Ascom. n. 157. cfr. Cooke in Grevillea III, p. 128, tab. 41, f. 192. — 1868

Plerumque sparsa, interdum binata, brevissime stipitata, cyathoidea, pilosa, sicca plerumque complicata vel urceolata, albido-rosea, humida concava, urceolata, disco roseo, margine albido-fimbriato, c. 1 mm. diam., prosenchymatico-contexta, c. 0,5 mm. diam.; pilis brevibus, subscabris, septatis, apice subincrassatis et sæpe crystallis conglomeratis coronatis, hyalinis, 5-6 μ . cr. obsessa; ascis clavatis, 8-sporis, 45-50 \approx 6, apice jodo cœrulescente; sporidiis oblongo-ellipticis, plerumque nucleis 2 parvulis præditis, rectis obtusis, hyalinis, 1-cellularibus, distichis 20-24 \approx 1,5; paraphysibus lanceolatis, acutis, ascos superantibus, hyalinis, basi c. 4 μ .

Hab. ad calamos siccos in alpibus tyrolensibus juxta glaciem æternam.

69. **Dasyscypha luteo-disca** (Peck) Sacc. *Lachnella luteo-disca* Peck 1869

33 Rep. p. 31. — Ascomate minuto, 350-700 μ . diam., expansa, plana vel vix concava, marginata, extus furfuraceo-pubescens, alba, vel disco lutescente, sicco subaurantiaco; stipite brevi vel obsoleto; ascis subcylindræis; sporidiis stipatis vel distichis, fusoides, 10-12 μ . longis.

Hab. in calamis emortuis *Scirpi* validi, Manlius Amer. bor.

70. **Dasyscypha deminuta** (Rob. et Desm.) Sacc. *Peziza deminuta* 1870

Rob. et Desm. 14 Not. p. 185, *Lachnella* Phill. Disc. pag. 253, *Lachnum* Rehm Asc. n. 707. — Minutissima, sparsa vel conferta, breviter stipitata $\frac{1}{2}$ mm. diam., extus albo-tomentosa, primo globosa, dein aperta hemisphærica; disco concavo, luteo, aureo vel aurantiaco; ascis tereti-clavatis; sporidiis oblongis 12 \approx 2 (Phill.); paraphysibus filiformibus.

Hab. in calamis siccis *Junci* in Gallia, Belgio, Germania, Britannia. — Ascomatis pili exteriores longi et tenues. Sec. Rehm loc.

cit. asci $36 \approx 5$; sporidia $5-6 \approx 1,5$; paraphyses fusoido-acutæ; hinc diversa species videtur.

71. **Dasyscypha curvipila** (Karst.) Sacc. *Helotium curvipilum* Karst. 1871

M. F. I, p. 162. — E *sclerotio* sicco rufo, foliis innato, gregatim enata, breviter stipitata, albida, cupula e sphæroideo hemisphærica, sicco sphæroideo-contracta, pilis flexuoso-curvatis, albidis dense vestita, 0,2 mm. lat., stipite brevi vel brevissimo, in cupulam abeunte; ascis cylindræo-clavatis $32-36 \approx 4-5$; sporidiis distichis, fusoido-elongatis, vulgo rectis, guttulatis $7-8 \approx 5$; paraphysibus filiformibus.

Hab. ad folia *Caricis vesicariæ* emortua locis udis prope Mustiala Fenniæ.

72. **Dasyscypha crinella** (E. et E.) Sacc. *Lachnella crinella* Ell. et 1872

Everh. in Bull. Torr. Cl. 1883, p. 76. — Sparsa, stipitata, pruinosa, alba, tenuis, delicata, disco 250-375 μ . diam., margine pilis brevibus ciliato; stipite longitudine circiter diametrum disci æquante; ascis oblongo-cylindræis, $38-40 \approx 4-5$, sessilibus; paraphysibus non visis; sporidiis distichis, clavato-fusoidis, $9-12 \approx 2$, hyalinis.

Hab. in foliis emortuis *Caricis crinitæ*, West Chester Am. bor. — Differt a *P. caricinella* ascis acutioribus, sporidiis simplicibus minoribus clavatis, et a *P. Caricis* sporidiis oblongo-cylindræis.

73. **Dasyscypha Caricis** (Desm.) Sacc. *Peziza* Desm. in Ann. S. N. 1873

1840, p. 12. — Perexigua, sicca globulosa v. sabglobulosa, uda cupulata vel hemisphærica extus pilis albido-griseis minutis tomentosa, $1/2$ mm. diam.; disco planiusculo flavo-aureo; stipite gracili, pilosulo; ascis.....

Hab. in utraque pagina foliorum aridorum *Caricum* in Gallia.

74. **Dasyscypha caricicola** Sacc. *Hyalopeziza Caricis* (Desm.?) Sacc. 1874

F. Ven. Ser. IV, n. 82, F. ital. fig. 112. — Albo-lutescens, minuta, gregaria, mediocriter stipitata, undique pilosa margineque longius ciliata, pilis pallidis subcapitatis, disco concaviusculo (in sicco) nigricante-olivaceo; ascis cylindræo-subclavatis basi vix attenuatis, $38 \approx 4-4\frac{1}{2}$; paraphysibus nullis obvallatis, 8-sporis; sporidiis subdistichis, cylindræis, $6 \approx 1$, rectis curvulisve, hyalinis.

Hab. in pagina inferiore foliorum emortuorum *Caricis silvaticæ* in silva Montello, Treviso Ital. bor. — *Peziza Caricis* Desm. eadem ac mea esse posset, sed ejus fructificatio mihi ignota et cupulæ discus subaurantiacus.

75. **Dasyscypha callimorpha** (Karst.) Sacc. *Lachnum callimorphum* 1875

Karst. M. F. I, p. 173. — Gregaria, sessilis vel breviter stipitata, tomentosa; cupula planiuscula, sicca sphæroideo- vel hemisphærico-contracta, disco luteo vel aurantiaco-luteo, 0,3-0,5 mm. lat.; ascis subclavato-cylindræcis 35-15 \times 5; sporidiis fusoideo-bacillaribus, guttulis 6-8 præditis vel spurie pluriseptatis, rectis, 17-20 \times 1,5-2; paraphysibus subulatis, 3 μ . cr.

Hab. ad folia Caricis ericetorum exsiccata in Fennia saltem australi et ad folia Eriophori angustifolii (spor. 14-19 \times 2-4) pr. Aberdeen Britannicæ (TRAIL). — Pili breviusculi, inarticulati, apice attenuati vel acuti, 3-4 μ . cr.

76. **Dasyscypha glabrescens** (C. et Ph.) Sacc. *Peziza glabrescens* 1876

C. et Phil. Grev. VIII, p. 62. — Sparsa, stipitata, candida; cupulis 0,5-1 mm. cyathiformibus, primitus subvillosis, demum nudis, glabris; ascis clavatis; sporidiis lanceolatis, utrinque rotundatis, guttulis, 15-19 \times 3-4; paraphysibus filiformibus.

Hab. in Rhipogono (?) Melbourne Australiæ.

77. **Dasyscypha pudicella** (Quél.) Sacc. *Erinella pudicella* Quél. XIII 1877

Suppl. p. 9, t. VIII, f. 25. — Ascomatibus cyathiformibus, velutino-gossypinis, pilis granulosis præditis, albo-niveis, dein roseo-maculatis 300-500 μ . diam.; stipite tenui, 300 μ . alto, hymenio albo, dein reseo; sporidiis acicularibus, 10-11 μ . longis.

Hab. gregaria in graminaceis minoribus Jura Galliæ.

V. In Acotyledoneis.

78. **Dasyscypha aspidiicola** (B. et Br.) Sacc. *Peziza* B. et Br. Ann. 1878

N. H. n. 771, *Helotium aspidiicolum* Rehm Asc. n. 560. — Ascomatibus minimis, cir. 0,2 mm. diam. et alt., cyathoideis vel globuloso-stipitatis, gregariis vel sparsis, subscabris, albis, siccis alutaceis, extus floccoso-furfuraceis subhemisphæricis; ascis brevibus, gracilibus, clavatis, 20 \times 6, octosporis; sporidiis elongatis, subclavatis obtusis, rectis vel curvulis, continuis, hyalinis 6 \times 2; paraphysibus filiformibus.

Hab. in rhizomate Aspidii Filicis-maris in Britannia, Germania, Austria et Belgio.

79. **Dasyscypha filicea** (C. et Ph.) Sacc. *Peziza filicea* C. et Phil. 1879

Discom. p. 254. — Nivea, stipitata, sparsa; cupulis 0,1-0,2 mm. lat., parvulis, villosis, turbinatis, in stipitem brevem productis; ascis clavato-cylindricis; sporidiis fusiformibus, biseriatis, guttulis,

demum pseudo-septatis 15-20 \approx 2-3; paraphysibus elongato-fusiformibus, acutis.

Hab. in Filicibus, Dunedin et Chedder Britannia. — Pili septati, leves, apice granuloso-capitati.

80. **Dasyscypha fimbriifera** (B. et C.) Sacc. *Pez. fimbriifera* B. et C. Cub. Fung. n. 681. — Nivea, minuta; stipite brevi decolorante pruinoso; cupulis extus farinoso-tomentosis marginem versus flocis longis rectis ornatis. 1880

Hab. in stipitibus Filicum in insula Cuba.

81. **Dasyscypha Carestiana** (Rabenh.) Sacc. *Pez. Carestiana* Rabenh. F. Eur. n. 913, Hedw. V, p. 189, *Helotium* Karst. M. F. I, p. 161. — Sparsa vel subgregaria, stipitata, alba, sicca pallida vel luteola cupula concava, sicca subsphæroideo-contracta, pilis flexuoso-curvatis, remote articulatis, subæqualibus, albidis dense vestita, 0,1 mm. lat., stipite brevissimo in cupulam abeunte; ascis cylindraceuto-clavatis, 32 \approx 4,5; sporidiis distichis, aciculari-elongatis vel aciculari-oblongatis, guttulatis, 6-8 \approx 1,5-2; paraphysibus filiformibus, sursum leviter incrassatis, 1 μ . cr. 1881

Hab. in Asplenio Filice-femina, in Italia bor. et Fennia.

82. **Dasyscypha Filicis-maris** (Saut.) Sacc. *Pez. Filicis-maris* Saut. Pilz. Salz. p. 9, Wint. Hedw. 1881, p. 132. — Pusilla, ceracea, albidula, turbinato-cupularis, disco punctiformi, stipite brevi æquali; ascis anguste clavatis, 30-35 \approx 3,5-5; sporidiis 8, distichis, oblongo-clavatis, continuis, hyalinis, circ. 5 \approx 1. 1882

Hab. in stipite vetusto Aspidii Filicis-maris, Mittersill Salzburg. — Cupula pilis dense tecta, 1 mm. lat.; stipes vix visibilis.

83. **Dasyscypha Ulei** (Winter) Sacc. *Peziza Ulei* Winter in Hedw. 1885, p. 258. — Hypophylla, sparsa, primitus globosa, clausa, dein aperta, cupulæformis, margine in sicco semper connivente, humectata magis erecta, intense rubicunda, 260-340 μ . lata, pilis niveis, longis asperulis densissime obsita, stipite brevi pallido prædita; ascis cylindrico-subclavatis vertice rotundatis, deorsum parum attenuatis, sessilibus, 8-sporis, 47-65 \approx 5-7; sporidiis subdistichis, fusiformibus utrinque acutis, parum inæquilateralibus, hyalinis, continuis, 15-18 \approx 2,5; paraphysibus sublinearibus lanceolatis i. e. e basi cylindrica sursum parum incrassatis, apicem versus iterum attenuatis et subacutatis, ascos superantibus plerumque parce ramosis. 1883

Hab. ad folia viva Gleicheniæ dichotomæ prope S. Francisco in Brasilia (E. ULE).

84. **Dasyscypha ericina** (Quél.) Sacc. *Erinella ericina* Quél. XIV 1884

Suppl. p. 9, t. XII, f. 22. — Ascomatibus cyathiformibus, subtiliter velutinis, niveo-albis, 2-3 mm. diam., tenuibus; stipite filiformi, flexuoso, 2-6 mm. longo; hymenio luteo; sporidiis lanceolatis, 11 μ . longis, 2-3-guttulatis.

Hab. in muscis et in residuis vegetabilium in ericetis Alsatia.

85. **Dasyscypha erythrostigma** (B. et Br.) Sacc. *Peziza* B. et Br. 1885

Ann. N. H. 1866, n. 1168, t. IV, f. 31, nec Mont. — Minuta, stipitata, punctiformis, pallide rufa, pilis delicatis vestita; disco demum convexo; stipite curvato, distincte celluloso; ascis clavatis; sporidiis minutis, subglobosis vel ellipsoideis.

Hab. parasitica in *Chætosphæria phæostroma* in Britannia. — Stipes curvulus, distincte cellulosis. Quoad genus dubia.

86. **Dasyscypha Rhytismatis** (Phill.) Sacc. *Lachnella* Phill. Disc. 1886

p. 250. — Minuta, gregaria, stipitata, alba; ascomate primo globoso dein expanso, pilis sursum capitellatis tecto, stipite longiusculo, basi villosa; ascis cylindratis, octosporis; sporidiis oblongo-fusiformibus 3-5 \approx 1; paraphysibusasco longioribus, acute terminatis.

Hab. in *Rhytisma acerino*, Forres in Scotia (REV. JAMES KEITH). — Habitatione, sporidiis, pilis capitatis mox dignoscenda. Ascoma 300 μ . lat., stipes 400 μ . long.

B. Pili ascomatis colorati.

I. Trunci-lignicolæ.

87. **Dasyscypha cerina** (Pers.) Fuck. Symb. p. 305, Sacc. F. ital. 1887

fig. 1316, *Pez. cerina* Pers. Syn. pag. 651, Fr. Syst. Myc. II, p. 92, Nees Syst. f. 283, *Pez. marginata* Holmsk. Ot. II, p. 39, t. 20, ses. spec., *Pez. bicolor* Schum. Saell. p. 423, *P. lutescens* Pers. in Roem. Bot. Mag. p. 113, *P. pulchellæ* var. Pers. Myc. Eur. p. 261, *P. biformis* Fl. Dan. t. 1620, fig. inf., *Lachnella* Phill. Disc. p. 233, t. VII, f. 44, Pat. Tab. 170. — Hemisphærica, furfuraceo-villosa, lutescenti-olivacea, disco concavo luteo; pilis simplicibus, obtusis, septatis, asperulis, brunneis, 4-5 μ . cr.; ascis clavatis, 40 \approx 5; sporidiis ellipsoideis, continuis, hyalinis, 5-8 \approx 2,5-3.

Hab. ad ligna putrida frequens in Suecia, Fennia, Britannia, Italia, Gallia, Belgio, Amer. bor. — Stipes nunc distinctus, brevis 1 mm. fere long., crassus, sursum fere attenuatus, glaber, ater; nunc omnino nullus; cupula sæpe connivens, colore expallente, etiam in

disco, qui junior obscurus, demum subochraceus; sapor amarus.

— ***D. grisea** Pers. Myc. I, p. 264: minuta, sessilis, lutescenti-grisea, cupulis globosis duriusculis pubescentibus, ore minuto aperto.

Ad ligna. Levis varietas. — ***D. cerinella** Speg. F. Arg. II. p. 91

(*Helotium*): laxe gregaria, sessilis, villosula, hemisphærica, sicca globoso-contracta, minuta $\frac{1}{3}$ - $\frac{1}{2}$ mm., griseo-fulvescens, disco ce-

raceo, roseo-alutaceo; ascis cylindræo-subclavatis, 40-45 \approx 3-5,

paraphysibus filiformibus vix longioribus obvallatis, obturaculo iodi

ope dilute cœrulescente; sporidiis distichis, elliptico-elongatis, utrin-

que acute rotundatis, 7-8 \approx 3-3 $\frac{1}{2}$, primo continuis, dein medio (spu-

rie?) uniseptatis, hyalinis. In fragmentis ligneis salicinis putre-

scitibus en la Boca del Riachuelo, Argentina.

88. **Dasyscypha calyculæformis** (Schum.) Rehm Ascom. n. 111, *Peziza* 1888

Schum. Saell. p. 425 et in Fl. Dan. t. 2032, f. 2, *Lachnum*

Karst. M. F. I, p. 178. — Sparsa, stipitata, villosa, subinfundibu-

liformis, umbrino-fusca, disco lutescenti-fusco vel sordide lute-

scit-fusco vel sordide lutescente, 1,5 mm. lat., stipite crassiu-

sculo, cupula brevior; ascis cylindræo-subclavatis, 60-60 \approx 4-6;

sporidiis distichis, eguttulatis, vulgo rectis, 10-12 \approx 2 (Karst.), 9 \approx

2 (Rehm); paraphysibus apice acutis, ascos superantibus.

Hab. ad lignum vetustum salicinum etc. in Dania, Fennia,

Britannia, Germania, Africa austr. — Stipes in specim. britanni-

cis atro-brunneus, glaber. — Var. **latebricola** Rehm Ascom. n. 111,

cfr. Cooke in Grevillea III, p. 128, t. 41, f. 180: differt a forma

normali: sporidiis ellipticis, laud acuminatis, 1-cellularibus, hya-

linis, 6-7 \approx 2,5, distichis in ascis clavatis 40-45 \approx 6, 8-sporis; pa-

raphysibus lanceolatis, apice acuminatis et ascos superantibus 4

μ . cr.; pilis ascomatis filiformibus, obtusis, scabris, fuscis, 6 μ . cr.

Ad ramulos putridos imprimis Rhododendri ferruginei in

alpibus editis tyrolensibus.

89. **Dasyscypha Stevensoni** (B. et Br.) Sacc. *Peziza Stevensoni* B. 1889

et Br. Ann. N. H. n. 1485. — Minuta subglobosa, colore rubente,

extus minute granuloso-puberula; stipite brevissimo, superne in-

crassato; sporidiis minutis, subcymbiformibus 12-13 μ . longis.

Hab. in ligno decorticato, Glamis Britannia. — Simul adsunt

hyphæ repentes albæ, ramos erectos exserentes, in quorum apice

conidia generantur obovata, 25 μ . long. Sec. Phill. Disc. p. 235;

ascoma 200 μ . lat.; stipes longiusculus vel subnullus; asci clava-

ti; sporidia oblongo-fusoidea, 8 \approx 2; paraphyses filiformes; pili de-

licati, hyalini.

90. **Dasyscypha crassipes** (Wallr.) Sacc. *Pez. crassipes* Wallr. Fl. 1890
crypt. n. 2572. — Ascomatibus obconico-piriformibus fusco-rufescentibus, vertice primum in osculum subrotundum, dein in discum concavum rufum reclusis, extus fibrillis parcis brevibus pallide-griseis obsitis, intus stipiteque curto crasso rufescentibus.
Hab. ad caudices Carpini cæsos in Thuringia (WALLR.).
91. **Dasyscypha atro-olivacea** Fuck. Symb. mycol. App. I, p. 337. 1891
— Cupulis gregariis, 1 mm. diam., in stipitem deorsum attenuatis, subturbinatis, quandoque obliquis, pilis densis, olivaceis, articulatis obsitis, antice subglobosis, ore connivente, umbilicato, albo-marginato, disco minuto, concavo, fusco; ascis stipitatis, cylindraceutis 8-sporis, $48 \approx 8$; sporidiis oblique monostichis, ovatis, utrinque subapiculatis, continuis, hyalinis $6 \approx 3$; paraphysibus filiformibus.
Hab. in caudicibus putridis Aceris Pseudoplatani pr. Reichartshausen Rhenogoviæ. — *D. cerinæ* affinis.
92. **Dasyscypha ochracea** (Schw.) Sacc. *Peziza ochracea* Schw. Syn. 1892
p. 172. — Major quam *D. virginea*, eleganter ochracea, extus villosa villis concoloribus, stipite mediocri; cupula dilatata, primum contractim subclausa, disco vivide ochraceo.
Hab. in ligno pineo Kaign's Point, Philadelphia Amer. bor. — Gregibus latis lignum non corruptum occupat.
93. **Dasyscypha arida** (Phill.) Sacc. *Peziza arida* Phill. Grev. V, 1893
p. 117, t. 89, fig. 13. — Stipitata, sparsa, globosa, dein expansa, firma, extus setis tuberculatis, brunneis, septatis vestita; stipite brevi, gracili, brunneo; ascis cylindraceutis, octosporis; sporidiis ovoideis, $7 \approx 4$; paraphysibus filiformibus.
Hab. in cortice Pini, Blue Canon, Sierra Nevada Amer. bor. — Ascomata 8 mm. diam., in sicco *Hysterium* simulantia.
94. **Dasyscypha variegata** Fuck. Symb. Myc. App. II, p. 61 et App. 1894
III, p. 31. — Cupulis gregariis, plus minusve dense stipatis, carnosocoriaceis, primo globosis, clausis, demum disco concavo, sordido vel dilutissime rubello-fusco apertis, breviter sed distincte stipitatis, 1-2 mm. lat., orbicularibus seu pressione irregularibus, marginatis, siccis margine involuto clausis, extus stipiteque pilis crispulo-subtomentosis, primo fuscis, demum, præcipue marginem versus, albo-variegatis obsitis; ascis oblongo-cylindraceutis, stipitatis, 8-sporis, $80 \approx 8$; sporidiis primo distichis, demum in asci superiore parte oblique monostichis, fusiformibus, parum inæquilateralibus, continuis, hyalinis, $12 \approx 4$; paraphysibus simplicibus, utrinque attenuatis.

Hab. in truncis putridis Fraxini Reichartshausen Rhenogoviæ. — Status conidicus, teste Fuck., sistit *Sarcopodii* speciem acervulis plerumque effusis confluentibusque, tomento saturatiore rubello-fusco, margine albo, conidiis $8 \approx 1$ in sporophororum simplicium verticalium apicibus orientibus.

95. **Dasyscypha vix-visibilis** (Schw.) Sacc. *Pez. vix-visibilis* Schw. 1895

Syn. p. 175. — Minutissima subfasciculatim proveniens, fusca, subbrillosa, obconica, abiens in stipitem brevem, margine albo pruinoso involuto, disco cinereo-fusco ascigero, ore semper contracto.

Hab. in fibris interioribus corticis Castaneæ, Bethlehem Amer. bor. — Vix nisi per lentem detegenda. Provenit circum *Sphaerocnema parabolicum*.

96. **Dasyscypha turbinulata** (Schw.) Sacc. *Peziza turbinulata* Schw. 1896

Syn. p. 173. — Stipitata, gracilis, sparsa, turbinata, extus eleganter sulphurea pilosa, stipite versus basim subnudo subsulcato, disco vivide aurantio-rubro.

Hab. in rimis corticalibus Castaneæ in Amer. bor. — Vix 1 mm. alta.

97. **Dasyscypha uncinata** (Phill.) Sacc. *Peziza uncinata* Phill. Grev. 1897

V. pag. 117. — Minuta, stipitata, sparsa, pilis brevibus cinereis, sursum incurvis tecta; disco cœruleo-griseo; ascis cylindraceis v. subclavatis, $30 \approx 4$; sporidiis fusiformibus rectis v. vix curvis, $6 \approx 1$.

Hab. in ligno quercino et in acubus Pini, Blue Canon, Sierra Nevada, in montuosis Amer. bor.

98. **Dasyscypha prolificans** (Schw.) Sacc. *Peziza prolificans* Schw. 1898

Syn. p. 172. — Minuta, stipite tenui crassiusculo, subfasciculata, sicca clausa et sphæriomorpha, extus æruginoso-farinacea, pubescens, uda aperta, disco atro-viridi, sæpe proliferante (i. e. cupula in cupula crescenti), limbo plerumque undulato, margine tumido.

Hab. in disco cæso ramorum et truncorum, Salem Amer. bor.

99. **Dasyscypha sericea** (A. et S.) Sacc. *Pez. sericea* A. et S. Lus. 1899

p. 325, t. III, f. 7, Fr. Syst. Myc. II, p. 93. — Cupularis, breviter stipitata, extus villo viridi circa marginem albicante sericeo-nitente adpresso tecta, intus ochraceo-ferrugineo.

Hab. in lignis nudis duris virore late tinctis, locis silvaticis umbrosis madidis in Lusatia. — Color initio totus pulchre viridis, extus profundior subfuscescens; sed in adultis in ochraceo-ferrugineum, nonnumquam sordide olivascens intus mutatur, villorumque simul apices una cum cupulæ margine introflexo albescunt. Stipes firmus, crassus. Cupula 2-6 mm. lata, demum tota hians.

100. **Dasyscypha membranata** (Schw.) Sacc. *Peziza membranata* 1900
Schw. Syn. p. 175. — Submembranacea, extus rugulosa, fibris adpressis, tota nigra, statu sicciori e stipite longiusculo abiens in cupulam tubæformem, irregulariter limbo lobatam, intus cinerescens, statu madido tota cinerescens.
Hab. rara ad ligna dejecta, Bethlehem Amer. bor.
101. **Dasyscypha annulata** (Holms.) Sacc. *L. annulata* Holms. Ot. II, 1901
p. 30, t. 13, Fr. Syst. Myc. II, p. 106. — Stipitata, conferta, cupulis subglobosis furfuraceis obscure cinereis, stipite annulato, disco depresso nigro.
Hab. ad ligna putrida autumnno in Dania. — Species dubii loci. Stipes 5 mm. longus, annulo furfuraceo cinctus. Cupula globosa, subclausa, cinereo-nigrescens, margine subconnivente.
102. **Dasyscypha armeniaca** (Pers.) Sacc. *P. armeniaca* Pers. Myc. 1902
Eur. p. 268, Fr. S. M. II, p. 95. — Gregaria, substipitata; ascomatibus globoso-turbinatis, pubescenti-farinaceis, subcinnamomeis.
Hab. rarissime ad ligna exsiccata in Gallia. — Junior subglobosa, villosa albicans, adulta magis pulveracea, subfulva.
103. **Dasyscypha borealis** (E. et H.) Sacc. *Lachnella borealis* Ell. 1903
et Holw. in Arthur Bull. III, Minn. p. 35. — Breviter stipitata, circiter 1 mm. diam., globosa et vix aperta, dense tomentosa, sicca atque pilis griseis (marginalibus 80-100 \approx 2½) tecta; disco pallido; ascis cylindraceis, sessilibus, 75-80 \approx 7-8; paraphysibus validis, 2,5 μ . crass., apice acutis, asco parum longioribus; sporidiis clavato-fusoideis, nucleolatis, hyalinis, rectis vel leniter curvis, distichis, 20-22 \approx 3-4.
Hab. in ligno putri in America boreali. — Sicca *Cyphellam Ravenelii* in mentem revocat.
104. **Dasyscypha luteo-alba** (Schw.) Sacc. *Peziza luteo-alba* Schw. 1904
Syn. p. 173. — Minuta, stipite gracili, in cupulam latiusculam expanso, extus cum cupula luteo-villosa, disco aperto candido.
Hab. ad cortices Bethlehem Amer. bor.
105. **Dasyscypha illota** (B. et C.) Sacc. *Peziza illota* B. et C. Cub. 1905
Fungi n. 682. — Stipite brevi solido; cupula crateriformi, tomentosa. cervina; hymenio rufo.
Hab. ad cortices in insula Cuba. — Ascoma 12 mm. diam. describitur; an revera *Dasyscypha*?

II. Ramicolæ

106. **Dasyscypha clandestina** (Bull.) Fuck. Symb. mycol. pag. 305, 1906

Peziza clandestina Bull. Champ. p. 251, Fr. Syst. Myc. II, p. 94, *Lachnum* Karst. M. F. I, pag. 178, Pat. Tab. 283. — Gregaria, stipitata, cervina v. griseo-lurida, furfuraceo-villosa; cupula turbinato-cyathoidea, disco pallido, 0,5-1 mm. lat.; stipite subæquali breviusculo circiter 0,4-0,5 mm. alt., firmulo; ascis cylindraceo-clavatis, 42-45 \approx 4-5; sporidiis fusoido-oblongatis v. fusoido-oblongatis, rectis, 5-8 \approx 1,5; paraphysibus grandiusculis, apice acutis, 5-6 μ . cr.

Hab. ad caules et ramos dejectos putrescentes, præsertim Rubi idæi, fruticosi, Sambuci, Solani, Quercus in Suecia, Fennia, Germania, Gallia, Belgio, Amer. bor. — Pili articulati, fusci, 4,5-5 mm. crass., apice subclavato.

107. **Dasyscypha albo-furfuracea** (Saut.) Sacc. *Pez. albo-furfuracea* Saut. Pilzfl. Salz. p. 8. — Subhemisphærica, furfuraceo-villosa, albida, margine inflexo, disco planiusculo, albo, stipite lineari. 1907

Hab. in sarmentis Rubi idæi pr. Mittersill Salzburg. — $\frac{1}{2}$ -1 mm. crassa, *P. cerinæ* propinqua, teste Saut.; sed sec. Wint. Hedw. 1881, p. 130 vix diversa a *D. clandestina*

108. **Dasyscypha scabro-villosa** (Phill.) Sacc. *Peziza* Phill. Grev. VII, pag. 22. — Gregaria, stipitata; disco albo-lutescente; ascomatibus extus pilis longis, rugosis, sæpe capitato-granulosis tectis; ascis cylindraceis, octosporis; sporidiis fusiformibus, 15-21 \approx 2-3; paraphysibus latis, sursum acutis,asco longioribus. 1908

Hab. in sarmentis Rubi nutkani in California.

109. **Dasyscypha Lentaginis** (Schw.) Sacc. *Peziza Lentaginis* Schw. Syn. p. 115. — Sparsim gregaria, breve stipitata, stipite tenuiusculo, concolore, cupula dilatata, extus tenuissime fibrosa, badia, subpulverulenta, disco rotundo aut flexuoso marginato, pallide fusco-badio; tota 2-4 mm. lat. 1909

Hab. in ramis Viburni Lentaginis, Hope Jersey Amer. bor. vulgata.

110. **Dasyscypha epixantha** (Cooke) Sacc. *Peziza epixantha* Cooke Grev. VII, p. 3. — Stipitata, brunnea, extus floccosa; cupula cyathiformi, 1 mm., disco pallidior; ascis cylindraceis; sporidiis linearibus, 0,1 mm.; paraphysibus fusiformibus, utrinque acutis. 1910

Hab. in ramis quercinis in California Am. bor. (HARKNESS). — Pili brunnei septati sursum pallidiores, capitulo subgloboso ruguloso hyalino deciduo ornati.

111. **Dasyscypha succinea** (Phill.) Sacc. *Peziza succinea* Phill. Grev. VI, p. 116, t. 89, f. 12. — Stipitata, sparsa vel aggregata, glo- 1911

bosa, dein expansa, concava, firma, extus floccis lutescentibus tecta; stipite brevi, rufo-brunneo, disco carneo; ascis cylindraceutis, octosporis; sporidiis ovatis, 10-14 \approx 3-5, paraphysibus linearibus, septatis.

Hab. in ramis emortuis quercinis, Blue Canon, Sierra Nevada in montuosis Amer. bor. — Ascomata 5 mm. diam.

112. **Dasyscypha sulphurella** (Peck) Sacc. *Peziza sulphurella* Peck 1912
30 Rep. p. 59. — Pallide lutea; ascomatibus minutis, numerosis, stipitatis, siccis clausis, pilosis, pilis septatis, rugosis, capitatis; ascis cylindraceutis; sporidiis oblongis vel subcylindraceutis, 7,5 μ . longis; paraphysibusasco longioribus sursum acutis.

Hab. in ramis Myricæ Gales, Adirondack Amer. bor. — Differt a *D. brunneola* colore atque stipite piloso. Totus fungus quam *D. myricacea* valde minor.

113. **Dasyscypha Ellisiana** (Rehm) Sacc. *Peziza Ellisiana* Rehm in 1913
Grev. IV, p. 169, *P. calycina* Schwz. in Herb. Soc. Nat. Philadelphia sec. Ellis Myc. univ. n. 716. — Sparsa, primitus hemisphærica, dein breviter stipitata atque dilatata, 1-2 mm. lata, luteo-villosa, disco aurantiaco-concaviusculo; sporidiis fusiformibus, utrinque acuminatis, simplicibus, hyalinis, 18 \approx 2,5, biseriatis; ascis clavatis, sessilibus, 45-60 \approx 6-7; paraphysibus filiformibus, ascos superantibus, septatis, 2 μ . cr.

Hab. in ramulis aridis Pini rigidæ Newfield N. J. Amer. bor. (J. B. ELLIS). — Pili ascomatis dilute viridi-lutescentes, obtusi, simplices, scabri, 6 mm. crass. Apex ascorum jodii ope cœrulescit.

114. **Dasyscypha fusco-sanguinea** Rehm Ascom. n. 112, Cooke Grev. 1914
III, p. 122, t. 41, f. 179, *Lachnella* Karst. Symb. XXIV, p. 16. — Sparsa, primitus globosa, hirta, dein breviter stipitata; stipite circ. 1 mm. longo, patellæformis, extus cum stipite parum crasso fusco-badia, villosa, sicca vario modo complicata, humectata explanata, disco plano, recenti sanguineo-roseo, exsiccato roseo-flavido, 3 mm. diam., orbicularis, prosenchymatico-contexta, pilis brevibus, scabris, obtusis, simplicibus, fuscis, septatis, 0,5 μ . crassis obsessa, margine flavido-ciliata; ascis clavatis, 8-sporis 70 \approx 10; sporidiis obtuse ellipticis vel ovato-elongatis, interdum subbiscoctiformibus, 1-cellularibus, hyalinis, distichis, 15 \approx 5, rectis; paraphysibus rigidis, filiformibus, haud clavatis, fuscidulis, 2 μ . cr.

Hab. ad ramos siccos Pini Cembrae et pumilionis in alpidibus editis tyrolensibus et Pini silvestris in Fennia. — Sec.

Karst. ascoma albido-tomentellum; asci 90-100 \approx 9; sporidia 15-20 \approx 6. An species diversa? Teste Rehm *D. arida* Phill. est hujus varietas.

115. **Dasyscypha flavo-virens** Bres. Trid. p. 92, t. 104, f. 1, Rehm 1915
 Ascom. n. 762. — Stipitata ex hemisphærico plano-concava, 2-4 mm. lata, extus brunneo-olivacea, hirsuta, disco aureo-vitellino; stipite fusco-olivaceo, villosa, 1-1½ mm. longo, ½ mm. crasso, substantia ceracea, albida; ascis cylindræis basi parum constrictis jodo haud tinctis 70-80 \approx 7-8, (50 \approx 7 sec. Rehm); paraphysibus filiformibus, septatis, ramosis, apice subincrassatis, 2 μ . latis; sporidiis late ovatis, hyalinis, 7-8 \approx 4-5, pili ascomatibus sub micr. fuscidulis, septatis, granulis minutis concoloribus conspersis, 120 \approx 4 mm.

Hab. ad ramulos Laricis laxè gregaria in silvis alpinis tridentinis et germanicis. — A concolore *D. cerina*, et ab affinibus *D. fusco-sanguinea*, *D. calyculiformi* sporidiis præsertim distinguitur. Excipulum grosse parenchymaticum, brunneum; pili asperuli, septati, obtusuli, brunnei, 120 \approx 6.

III. Foliicolæ.

116. **Dasyscypha brunneola** (Desm.) Sacc. *Peziza* Desm. Crypt. Fr. 1916
 I, n. 1156, Grev. III, p. 125, t. 42, f. 2, *Lachnum* Karst. M. F. I, p. 180, *P. dryophila* Pers., Pat. Tab. fig. 284. — Sparsa, stipitata, cupula juniore subsphæroidea, dein (humida) plana, marginata, brunneo-villosa, disco albido vel albido-pallescente, circ. 0,7 mm. lat.; stipite glabro, eburneo, brevi vel brevissimo; ascis cylindræo-clavatis, 38-42 \approx 4,5-5,5 jodo non cœrulescentibus; sporidiis fusoidèo-elongatis vel fusoidèo-oblongatis, vulgo rectis et eguttulatis, 6-11 \approx 2-2,5; paraphysibus apice acutis, circ. 4 μ . cr.

Hab. supra folia exsiccata *Quercus* et *Æsculi* in Gallia, Italia, Britannia, Fennia, Amer. bor. — Var. **fagicola** Phill. Disc. p. 238: multo obscurior, pilis obtusioribus intusque granulosis; ascis tereti-clavatis; spor. 7-10 \approx 2. In foliis *Fagi* prope Bristol Britannia.

117. **Dasyscypha parvula** (Bomm. et Rouss.) Sacc. *Lachnella* par- 1917
vula Bomm. et Rouss. Fl. mycol. p. 127. — Ascomatibus minutis, sessilibus vel breviter stipitatis, amœne citrinis, extus pilis brevibus concoloribus tectis; ascis clavatis, 33 \approx 3; sporidiis linearibus, minutis.

Hab. in foliis emortuis *quercinis*, Watermael in Belgio.

118. **Dasyscypha fuscescens** (Pers.) Rehm Ascom. n. 457 (nec 458), 1918

Peziza fuscescens Pers. Syn. p. 654, Myc. Eur. p. 265, Fr. Syst. Myc. II, p. 95, Grev. III, t. 40, f. 154. — Stipitata, fuscescens, cupula hemisphærico-globosa, extus pilis badiis obsita; pilis marginalibus simplicibus, septatis brunneis, apice capitulo hyalino crystallophoro, 7-8 μ . cr. terminatis; ascis clavatis 42 \approx 6; sporidiis tereti-oblongis, obtusis rectiusculis, hyalinis, 10 \approx 1 (Phill.) v. 8 \approx 2 (Fuck.); paraphysibus filiformibus.

Hab. ad folia dejecta Fagi in umbrosis Sueciæ, Germaniæ, Britanniæ, Amer. bor. — Gregaria, pusilla, humida semipatula, sicca globosa clausa. Pili præcipue circa marginem regularem ciliati. Sec. Phill. a *D. brunneola* differt præsertim paraphysibus filiformibus nec lanceolatis. Teste Fuck. st. conidioph. est *Sphæridium vitellinum* Fres.

119. **Dasyscypha phæotricha** Dur. et Lév. Expl. Sc. Alg. t. 28, f. 5 1919

(*Pez.*) [absque diagnosi]. — Gregaria, cupulata, stipitata, villosula lateritio-fusca, margine incurvo, disco nigricante; pilis clavulatis septatis, fuscis; ascis fusoideis..... immaturis.

Hab. in foliis emortuis, dejectis Quercus Ilicis, in Algeria. — Ascoma 1 mm. lat., stipes subæquilongus, tenuis, badio-fuscus.

120. **Dasyscypha capillaris** (Fr.) Sacc. *Peziza capillaris* Fr. Syst. 1920

Myc. II, p. 89. — Tenera, fusco-pallida, cupula subhemisphærica, extus stipiteque longo capillari deorsum nigricante villosis.

Hab. inter folia dejecta Fagi locis irriguis in Suecia. — Stipes gracilis, longitudine varius, 3-4 mm. longus et ultra, flexuosus. Cupula primo globoso-clavata, dein hemisphærico-concava, demum planiuscula, subpellucida, 2-3 mm. lata. Color virens.

121. **Dasyscypha puberula** (B. et C.) Sacc. *Peziza puberula* B. et C. 1921

North Am. Fungi n. 729. — Cupulis globosis, cervinis, furfureo-tomentosis; pedicello brevi pallido; disco concolore, sero expanso, lætiore.

Hab. in areis decoloratis foliorum dejectorum Fraxini in Carolina inf. (RAVENEL).

122. **Dasyscypha Vincæ** (Lib.) Sacc. *Peziza Lib. exsicc.* n. 325, *He-* 1922

lotium Fuck. Symb. p. 316 et Lambotte Fl. Belg. II, p. 547. — Ascomatibus sparsis, minutis, planis, orbicularibus, carnosoceraeis, rufo-brunneis, extus griseolis, pilosis, stipite brevissimo, papilliformi, nigro; ascis elongatis, stipitatis, octosporis, 54 \approx 6; sporidiis oblique distichis, ovato-oblongis, rectis curvatisve, 10 \approx 4.

Hab. in foliis Vincæ minoris in Arduennis, Belgio et Germania.

123. **Dasyscypha callochætetes** (E. et E.) Sacc. *Lachnella callochætetes* E. et E. Journ. Myc. 1888, pag. 99. — Stipitata, 1 mm. alta, $\frac{1}{2}$ - $\frac{3}{4}$ mm. lat. extus stipiteque pilis rectis, nigris, fragilibus, obscure septatis, 150-200 \approx 6-7, sursum pallidis, basi vix incrassatis tecta; ascis clavato-cylindræis, 60-70 \approx 7-8, paraphysibus copiosis filiformibus cinctis; sporidiis distichis, oblongo-fusoideis, hyalinis, plasmate imperfecte 1-2-partito, 12-14 \approx 2,5-3, inæquilateralibus. 1923

Hab. in foliis delapsis Myricæ ceriferæ, Newfield in America boreali.

124. **Dasyscypha Eucalypti** (Berk.) Sacc. *Peziza Eucalypti* Berk. Fl. Tasm. pag. 274, t. CLXXXIII, f. 13. — Pallide olivacea, cupula plana, margine pilis rigidis, atro-purpureis ciliato, stipite cylindrico; sporidiis 10-11 μ . longis, oblongo-cymbiformibus. 1924

Hab. in foliis Eucalypti in Tasmania (ARCHER). — Cum *P. misella* Desm. comparanda, etsi certe diversa.

125. **Dasyscypha fuscidula** (Cooke) Sacc. *Peziza fuscidula* Cooke 1925
Disc. U. S. II, p. 22. — Sparsa vel subgregaria, brunnea, stipitata, pilis septatis brunneolis margine fimbriata, disco pallido; ascis cylindræis minutis; sporidiis spermatioideis.

Hab. in foliis Andromedæ New Jersey Amer. bor. — Differt a *Trich. marginata* Cooke statura majore, stipite distincto, pilis diversis, paraphysibus acutis, disco pallidior. Stipes vero variat subinde brevior.

126. **Dasyscypha subhirta** (Schw.) Sacc. *Peziza subhirta* Schw. Syn. p. 173. — Minutissima, substipitata, sparsa, lutea, extus minutim hirsuta, ascomate dilatato. 1926

Hab. epiphylla, Bethlehem Amer. bor.

127. **Dasyscypha trichodea** (Ph. et Plowr.) Sacc. *Peziza* Ph. et Pl. 1927
Grev. III, pag. 125, t. 42, f. 4, *Lachnella* Phill. Disc. p. 234. — Gregaria vel sparsa, stipite brevi; ascomate primo globoso, dein cupulato, pallide brunneo, pilis rigidis, longis fulvis extus tecto, disco pallide albo; ascis tereti-clavatis 30 \approx 5; sporidiis distichis, oblongis, 7 \approx 1,5 binucleatis.

Hab. in foliis emortuis subputridis Pini silvestris, Trefriw, North Wales Britannicæ. — Ascoma 200-300 μ . lat., pili basi incrassati, continui.

128. **Dasyscypha pulverulenta** (Lib.) Sacc. *Peziza pulverulenta* Lib. 1928

Plant. Arduenn. n. 125, *Lachnum* Karst. M. F. I, p. 175, *Trichopeziza* Fuck. Symb. p. 297. — Gregaria aut subconferta, breviter stipitata vel subsessilis, alba vel albida, villosa; cupula primum subsphæroidea, dein planiuscula, sicca subsphæroideo-contracta, villo sulphureo-albo, aureo-pulverulento obsessa, 0,7-1 mm. lat.; stipite brevissimo vel fere nullo; ascis cylindraceo-subclavatis, 30-34 \approx 3-4; sporidiis fusoido-oblongatis vel fusoido-elongatis, 6-8 \approx 1,5-2; paraphysibus apice acutis.

Hab. ad folia Pini silvestris putrescentia in Gallia, Germania, Belgio, ad folia Pini rigidæ N. Y. Amer. bor. — Pili ascomatum 3 mm. crass., apice subclavato-obtuso.

129. **Dasyscypha solfatara** (C. et Ell.) Sacc. *Peziza solfatara* C. et E. Grev. VII, p. 7, Phill. Disc. p. 246. — Sparsa; cupulis hemisphæricis, citrinis, subtus papillato-affixis v. breve stipitatis, tomentosus, pilis asperulis, granulato-capitatis; ascis cylindraceis; sporidiis linearibus, 8 \approx 1; paraphysibus filiformibus. 1929

Hab. in foliis pineis, New Jersey Amer. bor. et pr. Bristol et Carlisle Britannia.

IV. Caulicolæ.

130. **Dasyscypha caulicola** (Fr.) Sacc. *Peziza caulicola* Fr. Syst. Myc. II, p. 94, *Helotium caulicola* (Fr.) Karst. M. F. I, p. 134, *P. albomarginata* Schum. Saell. p. 436, *P. Serratulæ* Pers. Myc. Eur. I, p. 263. — Lutescenti-fusca, pallida, cupula turbinato-globosa farinoso-pubescente, stipite brevi firmo glabro; ascis cylindraceo-clavatis; sporidiis oblongo-fusoides, 7 \approx 1-1,5, hyalinis; paraphysibus fusoido-acutis, ascos excedentibus. 1930

Hab. ad caules plantarum frequens in Suecia, Fennia, Britannia, Germania, Belgio, Italia, in Arundinaria Amer. bor., in foliis Palmarum Cuba. — Minuta, gregaria, firmula persistens, demum glabrescens; tum ægre dignoscitur a *Phialea cyathoidea*, cum qua convenit loci, substantiæ, formæ et coloris mutationibus. Color pallescens, sordide et opace lutescens, pallide umbrinus etc. Discus ob marginem inflexum suboccultatus.

131. **Dasyscypha longipila** (Peck) Sacc. *Peziza longipila* Peck Bull. N. Y. Mus. 1887, p. 20, t. II, f. 15-19. — Ascomate minuto, 350-500 μ . diam., inferne in stipitem brevem attenuato, pilis rigidis, erectis, septatis, alutaceo-brunneis, longis (superioribus 250-350 \approx 3), dense tecto; disco albescente, setis marginalibus in sicco abs-

condito; ascis cylindræis, 65-75 \approx 6,5-7,5; sporidiis oblongis vel subfusiformibus, rectis vel vix curvis, 7,5-10 \approx 2-3, hyalinis.

Hab. in caulibus *Eupatorii maculati*, Adirondack Amer. bor. — A *Tr. relicina* ascomate stipitato non castaneo differt.

132. **Dasyscypha fuscata** (Rehm) Sacc. *Helotium fuscatum* Rehm 1932
 Ascom. Alp. n. 5. — Sparsa v. gregaria, crasse stipitata, c. 1 mm. alt., primitus globosa, dein turbinata, demum cyathiformis, extus flavido-puberula, margine subinvoluta, striatulo, humida explanata, urceolata; disco rubro-fusco, c. 1-2 mm. diam., parenchymatico-fuscidulo-contexta, fibris marginalibus brevibus, obtusis, subscabris, flavidulis, distantibus, c. 3 μ . cr.; ascis clavatis, 8-sporis, 50 \approx 5, apice jodo dilute cœrulescente; sporidiis elongatis, obtusis, rectis, 1-cellularibus, hyalinis, distichis, 6 \approx 2; paraphysibus hyalinis filiformibus.

Hab. ad caules putridos *Aconiti Napelli* prope glaciem æternam, Taschach-Gletscher in valle Piz alpium tyrolensium 2000 m. alt. (DR. REHM).

133. **Dasyscypha cyphelioides** (Rehm) Sacc. *Trichopeziza cyphelioides* Rehm 1933
 Ascom. Alp. n. 12. — Gregaria, interdum sparsa, lentiformiter-globosa, breviter stipitata, dein fere sessilis, nigro-purpurea, hirta, parenchymatico-fusco-contexta, pilis longis, fusco-purpureis, simplicibus, subscabris, obtusis, c. 5 μ . cr., obsessa, primitus subclausa, humida urceolato-aperta, disco pallido, 1 mm. diam.; ascis clavatis, apice incrassatis, 8-sporis, 45 \approx 6, apice jodo cœrulescente; sporidiis fusiformibus, rectis vel subcurvatis, subobtusis, distichis, 1-cellularibus, interdum 2 nucleis instructis, hyalinis, 10 \approx 5; paraphysibus ascos superantibus, filiformibus, circ. 2 μ . diam.

Hab. ad caules putridos *Aconiti Napelli* juxta glaciem æternam alpium tyrolens. Taschach-Gletscher in valle Piz, alt. 2000 m. (DR. REHM), Kartel-Gletscher in valle Moos (BRITZELMAYR). — Color ascomatis in aqua solubilis.

134. **Dasyscypha vestita** (Quél.) Sacc. *Helotium vestitum* Quél. 11, 1934
 Suppl. p. 22, t. XII, fig. 13. — Tubiformis, ceracea, citrina, velo furfuraceo, brunneo vestita; stipite basi attenuato, flexuoso, 4-5 mm. longo, hymenio plano, 3 mm. lato, citrino, fimbriis veli marginato; sporidiis cuneatis, elongatis, 22-24 μ . longis, guttulato-granulosis.

Hab. fasciculatim in caulibus plantarum exsiccatis in Jura.

135. **Dasyscypha Cyathula** (Pers.) Pez. *Cyathula* Pers. Mycol. Eu- 1935

rop. I, p. 265, Weinm. 444, *P. caulicola* β . *Cyathula* Fr. Syst. Myc. 2, p. 95. — Gregaria sparsaque, firmula, ascomate subferugineo, infundibuliformi, extus tomentoso; stipite sursum incrassato, demum glabro.

Hab. ad stipites dejectos plantarum in Rossia minore: legit Dr. BONGARD (Herb. Ac. Sc. Petrop.). — Species pulchella! Ascoma primo clausum, dein satis late apertum, intus parum dilutius, margine subintumescente subinvoluta. Stipes initio villosus, concolor, dein glaber, basi nigrescens.

136. **Dasyscypha stipiticola** (Schw.) Sacc. *Peziza stipiticola* Schw. 1936
Syn. p. 172. — Minuta, subsparsa, substipitata; cupulis globosoturbinate in stipitem crassum abeuntibus, primum clausis, extus farinaceo-pubescentibus, margine albescentibus; pilis ceterum cervinis; disco pallido.

Hab. in stipitibus dejectis, Bethlehem Amer. bor.

V. In Monocotyledoneis.

137. **Dasyscypha groenlandica** (Rost.) Sacc. *Lachnella groenlandica* 1937
Rostr. Fungi Groenl. p. 537. — Gregaria, brevi stipitata, badiostrigosa, turbinato-cyathoidea, 0,5–1 mm. alt.; ascis anguste cylindraceo-clavatis, circiter $64 \approx 5$; sporidiis fusoido-elongatis, $9-10 \approx 1,2$, hyalinis, continuis; paraphysibus filiformibus.

Hab. ad caules exsiccatos *Platantheræ hyperboreæ*, Kobbefford Groenlandiæ.

138. **Dasyscypha lanariceps** (B. et Ph.) Sacc. *Peziza lanariceps* C. 1938
et Phill. Grev. VIII, p. 62. — Sparsa, stipitata, ochraceo-fusca; cupulis turbinatis, demum apertis, 0,2 mm. diam., villosis, granulis purpureis conspersis; ascis clavatis; sporidiis cylindricis, utrinque attenuatis, $15-20 \approx 3$; paraphysibus elongato-fusiformibus, acutis.

Hab. in *Rhipogono* (?) Melbourne Australiæ. — Pili exteriores $80-90 \mu$. long., rugulosi, granulis purpureis mixti.

139. **Dasyscypha Oncospermatis** (B. et Br.) Sacc. *Pez. Oncospermatis* 1939
B. et Br. Fung. of Ceyl. n. 942. — Cupulis breviter stipitatis cyathiformibus, tomentosis, luteis; sporidiis fusiformibus angustis, hinc acutis illinc obtusiusculis $20-25 \mu$. long.

Hab. ad *Oncosperma fasciculatum*, Habgalla Ceylon. — Minuta, pallide flava, sparsa, 300μ . alta.

140. **Dasyscypha Staritzii** (Rehm) Sacc. *Lachnella Staritzii* Rehm 1940
Ascom. Ill. et Exs. n. 709. — Brevissime stipitata, patellaris, primitus subglobosa, dein urceolata, disco aurantiaco-rubro, extus ro-

seo hirtello, margine imprimis pallidiore, subpruinoso, gregaria, flavido-rubra, prosenchymatico-contexta, c. 0,5-8 mm. diam., pilis crebris, simplicibus, obtusis, subscabris, hyalinis v. rubro-fuscidulis, 30 \approx 4-5 obsessa; ascis clavatis, 45 \approx 6, 8-sporis; sporidiis fusiformibus v. bacillaribus, plerumque rectis, 1-cellularibus, hyalinis, 10-12 \approx 1,5; paraphysibus lanciformiter acutatis, ascos longe superantibus, basi 5-6 μ . cr.

Hab. ad calamos Junci siccos prope Königstein a. d. Elbe Saxoniae.

141. **Dasyscypha Rehmii** (Star.) Sacc. *Trichopeziza Rehmii* Staritz 1941
in Rehm Ascom. n. 658. — Sparsa, sublentiformis, calyciformiter tenuiter stipitata, circ. 1 mm. alta, sicca ore involuto, pilis fuscis obsesso subclausa, humida usque ad 1-1½ mm. diam. dilatata, disco pallide fuscidulo, concavo, extus nigro-fusca, hirtella, contextu prosenchymatico chalybeo, pilis rectis longiusculis, simplicibus, obtusis, vix septatis, scabris, fuscis, basi sæpe chalybeis, c. 4-5 μ . cr. circa osculum obsessa; ascis cylindraceutis, sessilibus, 8-sporis, 45 \approx 8; sporidiis distichis, ellipticis, rectis, 1-cellularibus, plerumque binucleatis, hyalinis, 12 \approx 2-2,5; paraphysibus lanciformibus, acutatis, hyalinis, basi 5-6 μ . cr. ascosque longe superantibus.

Hab. ad calamos siccos Junci conglomerati, Keulenberg prope Königsbrück Saxoniae (STARITZ). — Ascomatis contextu chalybeo pilis brunneis mox dignoscenda species.

142. **Dasyscypha patens** (Fr.) Rehm Ascom. n. 156, *Peziza clandestina* β . *patens* Fr. Syst. Myc. II, p. 94, *Lachnum patens* Karst. M. T. I, p. 179, *Trichopeziza* Sacc. Mich. II, p. 330, *Pez. palearum* Desm. Ann. S. N. 1846, p. 365, *Lachnella* Phill. Disc. p. 239. — 1942
Sparsa vel subgregaria, stipitata, lutescenti-pallescentis vel albido-fulva, furfuraceo-tomentosa, cupula turbinato-cyathoidea v. acetaliformis, disco pallescente, circiter 0,5 mm. lat., stipite subæquali aut sursum paullulum incrassato, 0,4-0,6 mm. alt.; ascis cylindraceuto-subclavatis, 35-46 \approx 4-5; sporidiis fusoides-elongatis, rectis, plerumque guttulatis, 10-12 \approx 1,5-2; paraphysibus grandiusculis, apice acutis, 4-5 μ . cr.

Hab. in culmis Airæ, Psammæ, Tritici in Gallia, Germania, Fennia, Britannia, Belgio.

143. **Dasyscypha sphærocephala** (Wallr.) Rehm Ascom. n. 263 (ut 1943
var.), *Peziza* Wallr. Fl. crypt. p. 456, *D. patens* var. *sphærocephala* Rehm, *Lachnum patens* β . *sphærocephalum* Karst. M. F. I, p. 180, *D. cephaloidea* Fuck. Symb. myc. pag. 306. — Sparsa,

stipitata, 2 mm. alta; stipitibus crassiusculis, parum curvatis, adpresso-pilosis, griseis; cupulis globosis, seminis Papaveris magnitudine, undique pilis patulis, brevibus, lutescentibus, siccis pallidis clavatis, septatis obsitis, semper clausis v. humectatis ore regulari, pusillo apertis, disco pallido; ascis linearibus, acuminatis, 8-sporis, 45-48 \approx 4-5; sporidiis fusiformibus, hyalinis, 6-8 \approx 2; paraphysibus lanceolato-acutis, ascos superantibus, 5-6 μ . cr.

Hab. in culmis siccis adhuc stantibus Tritici repentis, Secalis, Calamagrostidis in Thuringia pr. Æstrich ad Rhenum et in Fennia. — *D. clandestinæ* affinis. Pili sæpe apice crystallifero, 6 \approx 5.

144. **Dasyscypha calycioides** (Rehm) Sacc. *Peziza calycioides* Rehm 1944

Ascom. n. 159. — Sparsa, distincte plus minusve stipitata, stipite filiformi, plerumque curvato, nigro-fuscidulo, 0,3-8 mm. long. cyathoidea, badio-strigosa, c. 0,3 mm. diam.; disco flavidulo, prosenchymatico-flavidulo contexta; pilis fuscis, distincte articulatis, obtusis, apice subscabris, c. 6 μ . cr., longis obsessa; ascis clavatis, 8-sporis, 36-45 \approx 6, apice jodo cœrulescente; sporidiis ellipticis plerumque rectis, 1-cellularibus, hyalinis, distichis, 9-12 \approx 2-2,5; paraphysibus lanceolatis, ascos longe superantibus, hyalinis, basi c. 5 μ . cr.

Hab. ad calamos siccos Nardi strictæ in alpibus editioribus tyrolensibus juxta glaciem æternam. — Var. **microspora** Rehm Ascom. n. 567: sporidiis 6 \approx 1,5. In culmis ibidem. Fugax, ægre observanda.

VI. In Acotyledoneis et ad terram.

145. **Dasyscypha grisella** (Rehm) Sacc. *Helotium grisellum* Rehm 1945

Ascom. n. 766. — Sparsa, imprimis in pagina inferiore frondium, turbinata; stipite brevi, fuscidulo; cupula grisella, subfurfuracea, circ. 0,3-4 mm. alt. et 0,2-3 mm. diam., subclausa, fuscidula sive subhyalina, prosenchymatico-contexta, pilis fuscidulis v. subhyalinis, undulatis, simplicibus, 60 \approx 3, obsessa; ascis clavatis, apice subacutatis, lata basi sessilibus, sæpe subcurvatis, 8-sporis, 30 \approx 6-7; sporidiis bacilliformibus, oblongis, rectis v. subcurvatis, 1-cellularibus, hyalinis 6-8 \approx 1-1,5, 2-3-stichis; paraphysibus filiformibus, teneris, hyalinis, haud clavatis.

Hab. ad frondes emortuas, putrescentes Pteridis aquilinæ Königstein a. d. Elbe Saxonix (KRIEGER).

146. **Dasyscypha seminis** (C. et Ph.) Sacc. *Peziza seminis* Cooke 1946

et Phil. Grev. IX, p. 104. — Ochracea, stipitata; cupulis clavatis, demum concavis $\frac{1}{2}$ -1 mm. diam., extus tomentosis; stipite crasso, vix deorsum attenuato 1 mm. long.; ascis clavatis; sporidiis arcte ellipticis, minutis $5 \approx 2,5$.

Hab. in Sclerotio semine in Arduennis (LIBERT).

147. **Dasyscypha terrestris** (B. et Br.) Sacc. *Helotium terrestre* B. 1947
et Br. Fung. Brisb. p. 69, t. XV, f. 15-17. — Ascomate stipitato parvo, planiusculo, cornicolori, lurido, extus villosa; ascis elongatis; sporidiis monostichis, ellipticis, utrinque breviter appendiculatis uniguttulatisque, 10 μ . longis; paraphysibus filiformi-clavulatis.

Hab. ad terram udam, Brisbane Australiæ. — Ascoma 4-5 mm. lat., stipes 1 mm. longus.

COMESIA Sacc. Consp. gen. Discom. p. 6 (1884) [Etym. a cl. botanico et mycologo neapolit. HOR. COMES], *Helotii* spec. Auct. — Ascomata obconica, sessilia vel brevissime stipitata, disco plano, glabra v. minute ciliata, carnosio-ceracea. Asci crassi, polyspori, paraphysati. Sporidia continua, hyalina, oblonga v. (in subg. *Comesiella*) subglobosa. ? *Peziza*?

I. *Eu-Comesia*. Sporidia tereti-oblonga.

1. **Comesia Felicitatis** (Crouan) Sacc. Consp. gen. Discom. p. 6, *Helotium Felicitatis* Cr. Finist. p. 48, t. ult. fig. 20. — Sessilis, initio hemisphærica dein subcylindræa, carnea, disco plano; ascis fusoides, polysporis; sporidiis cylindræis utrinque truncatis, 4-5-guttulatis; paraphysibus capillaribus sursum lenissime incrassatis; contextu excipuli minute celluloso.

Hab. ad terram inter muscos et Glæocapsas, Finistère Galliæ (Domina FELICITAS CROUAN). — Ascoma 1 mm. lat.

2. **Comesia cunicularia** (Boud.) Sacc. *Peziza cunicularia* Boud. 1949
Ascob. p. 68. — Minutissima, tota alba, sparsa, substipitata v. piriformis, extus glabra, margine minute ciliato, disco plano; ascis crassis subcurvatis, fissura bilabiata dehiscentibus; sporidiis numerosis (48-64), oblongo-fusoides, hyalinis; paraphysibus septatis ascos subæquantibus.

Hab. ad stercus Cuniculorum locis argillosis pr. Montmorency Galliæ. — Ascoma $\frac{1}{4}$ - $\frac{1}{2}$ mm. lat. Cfr. *Ryparobius argenteus*.

3. **Comesia Leveillei** (Crouan) Sacc. *Ascobolus Leveillei* Cr. Finist. 1950
p. 57, tab. ult. f. I, Boud. Ascob. p. 68. — Ascomate niveo, gla-

bro hemisphærico, stipite brevissimo cylindræo, tomentoso; ascis clavatis, curvis; sporidiis 48 subcylindræo-oblongis, utrinque rotundatis, intus tenuiter granulosis et plasmate fere bipartito; paraphysibus filiformibus erectis ascos superantibus, septatis.

Hab. in fimo Muli inter folia dejecta, Finistère Gallia. — Ascoma $\frac{1}{2}$ mm. lat. An *Ryparobius*?

II. *Comesiella* Sacc. Sporidia globulosa.

4. **Comesia fusca** (Crouan) Sacc. *Helotium fuscum* Cr. Finist. p. 47. 1951

— Sparsa; ascomate 1 mm. diam. metiente, brunneo, sessili, subhemisphærico, convexo; ascis oblongo-clavatis, 16-sporis; sporidiis rotundatis, granulosis; paraphysibus filiformibus, apice brunneis.

Hab. ad terram nudam, Brest Gallia.

TROMERA Mass. in Arnold Flora 1858, p. 507, Körb. Par. p. 453 (Etym. *tromeros* tremulus). *Pezizæ* sp. Fr., *Peziculæ* et *Retinocycli* sp. Fuck. *Biatorella* Mudd. — Ascomata superficialia sessilia v. subsessilia, obconico-patellata, submarginata, excipulo discoque concaviusculo subceraceis, hypothecio subcarnoso. Asci oblongi, polyspori, paraphysati. Sporidia continua, hyalina globulosa v. oblonga. Pycnidia nectrioidea, sphærospora, teste Fuck. — Genus anceps, hic Lichenibus hinc Dermateis accedens.

1. **Tromera resinæ** (Fr.) Körb. Par. p. 453, Karst. Rev. p. 153, *Lecidea* Fr. Obs. I, p. 180, *Peziza* Fr. S. M. II, p. 149, *Pez. myriospora* Hepp. *Tromera myr.* Anzi, *Tr. xanthostigma* Mass. 1952

Biatorella resinæ Mudd., *Retinocyclus flavus* Fuck. Symb. App. I, p. 332. — Sessilis, primo urceolato-concava et margine dilutiore crasso cincta, dein planiuscula, margine evanescente, crassiuscula, dura, firma, rufo-aurantiaca, minuta, ascis clavatis seu elongato-ventricosis, 90 = 18 jodo intense cærulescentibus; sporidiis numerosissimis, sphæroideis, continuis, flavescentibus vel subhyalinis, 3 μ . diam.; paraphysibus filiformibus, clavulatis, articulatis.

Hab. in resina et in cortice Abietis excelsæ, Pini silvestris etc. in Suecia, Fennia, Britannia, Germania, Gallia, Italia et America boreali. — Teste Fuckel, *Nectria Resinæ* Fr. (sporulis globosis flavidis 3 μ . diam.) sistit st. pycnidicum. — Var. **stipitulata** Karst. l. c. provenit in Fennia.

2. **Tromera difformis** (Fr.) Rehm Asc. n. 577, Karst. Rev. p. 154, 1953

Peziza Fr. S. M. II, pag. 151, *Lecidea* Nyl., *Tromera sarcogynoides* Mass., *Biatorella difformis* Wainio, *Tromera myriospora*

var. *sarcogynoides* Anzi. — Sessilis, firma, plana vel convexiuscula, marginata vel immarginata, irregularis, nuda, opaca, nigra, 0,5-0,8 mm. lata, disco fuscescente; ascis subclavatis, $50 \approx 12$; sporidiis numerosis (50-80 circ.) sphæroideis, hyalinis, 2-2,5 μ . diam.; paraphysibus filiformibus, apice subramosis, incrassatis fuscidulisque.

Hab. in cortice et ligno resinoso Abietum in Italia, Suecia, Fennia, Germania, Austria, Helvetia. — Gelatina hymenialis jodo intense cœrulescit. — A *Tr. resinæ* ascomatibus junioribus atrocœruleis mox dignoscenda.

3. **Tromera lignaria** Karst. Symb. Myc. Fenn. XXV, p. 23. — Superficialis, solitaria, raro in cœspitulos sociata (plerumque 3 insimul), sessilis, rarius basis constricta, aperta, concaviuscula, demum plana vel convexiuscula, margine obtuso, demum subimmarginata, nuda, atra, rugulosa, 0,3 mm. lat.; ascis clavatis obtusis, jodo dilute cœrulescentibus, $80-100 \approx 12-14$, myriosporis; sporidiis ellipsoideo-sphæroideis, hyalinis, $1,5-2 \approx 1,5$ vel 1,5 μ . diam.; paraphysibus filiformibus 1 μ . cr. 1954

Hab. ad lignum abietinum vetustum prope Mustiala Fenniae. — An *Tympanidi* adscribenda?

4. **Tromera microtheca** Karst. Symb. Myc. Fenn. XXV, p. 22. — Superficialis, sessilis, gregaria, solitaria, rarissime in cœspitulos sociata (2-3 insimul), nuda, nigra, opaca, subrugulosa, aperta, plano-orbicularis vel ovalis, tenuiter marginata, vix 0,3 mm. lata; ascis clavatis, obtusissimis, jodo dilute cœrulescentibus, $36-40 \approx 10-12$, myriosporis; sporidiis oblongatis vel elongatis, rectis, hyalinis, $2-3,5 \approx 1,5$; paraphysibus haud bene discretis; hymenio jodo fulvescente. 1955

Hab. in ligno vetusto abietino ad Mustiala, Fenniae. A præcedente, cui proxime accedit, præcipue ascis minoribus, sporidiis longioribus cupulisque minoribus et tenuius marginatis recedit.

5. **Tromera olivacea** (Fuck.) Sacc. *R. olivaceus* Fuck. Symb. mycol. App. I, p. 332. — Cupulis resina et plerumque villo olivaceo insidentibus, ceterum glabris, subgregariis, carnosis, subsessilibus, usque ad 2 mm. latis, primo clausis, margine distincto, atro, olivaceove, involuto, demum planis, disco carnosio, olivaceo, sicco atro; ascis elongatis, sessilibus, polysporis, $120 \approx 14$; sporidiis minutissimis, perfecte globosis, simplicibus, hyalinis seu dilute flavescentibus, 3 μ . diam. 1956

Hab. in ligno vetusto molli Laricis pr. Aepfelbach et Hall-

garten Rhenogoviæ — Sec. Rehm Ascom. n. 577 ad *Tympanidem* species hæc pertineret.

Sect. 2. **Phæosporæ** Sacc.

PHÆOPEZIA Sacc. Mich. I, p. 71 (1877) Consp. gen. Disc. p. 6 (1884) [Etym. *phaios* obscurus et *Peziza*). — Ascomata carnosæ v. subceraceæ, sessilia v. subsessilia, cupulata v. scutellata, fusca, rarius læte colorata, glabra v. pilosula. Asci elongati, paraphysati, 6-8-spori. Sporidia continua, globosa, ellipsoidea v. oblonga, fusca. — Genus hucusque paucas species continens, quæ vero series plures, hyalosporarum parallelas, constituunt; si species numerosæ innotuerint, dividendum.

I. *Eu-Phæopezia*. Sporidia globosa.

1. **Phæopezia murina** (Fuck.) Sacc. Consp. gen. Disc. pag. 6, March. 1957
Copr. p. 38, *Plicaria* Fuck. Symb. pag. 326, *Peziza* Fuck. F. R. n. 1597, Cooke Myc. f. 76. — Cupulis valde aggregatis, carnosis, pallide rufis, planis, in stipitem brevem, crassum attenuatis, margine crenulato, vix elevato, extus rugulosis, basi fibrillis repentibus, fuscis cinctis; ascis longissimis, cylindræis, 8-sporis, longitudinaliter plicatis et demum quasi laceratis, $92 \approx 12$ (parte sporifer.); sporidiis in asci superiori parte monostichis, perfecte globosis, 12μ . diam. episporio crasso, granuloso-tuberculato, fusco.
Hab. in stercore putri murino et vulpino culmisque proximis in Rhenogovia et Belgio. — Cellulæ excipuli exacte hexagonæ. Ascomata, teste Marchel, sessilia v. subsessilia, 1-1,5 mm. lat., initio alba dein violacea; paraphysesasco longiores, $3,5-5 \mu$. cr., septatæ, hyalinæ, sursum subinde divisæ; asci 150-180 \approx 16-17.
2. **Phæopezia melanosperma** Cr. Fin. pag. 50. — Sessilis, brunneo- 1958
atra, subhemisphærica, fragilis, 1-2 cm. lat., margine lobato, disco brunneo, initio concaviusculo, dein convexo; ascis cylindræis, octosporis; sporidiis globosis, nigricantibus, granulosis; paraphysibus filiformibus, sursum furcatis, apice filiformi, brunneo.
Hab. ad terram adustam, Morlaix Galliæ. — Cellulæ excipuli globosæ, majusculæ, in filamenta septata, nodulosa abeuntes.
3. **Phæopezia Radula** B. et Br. Ann. N. H. XVIII, pag. 77, Cooke 1959
Mycogr. fig. 293. — Magna, sessilis, cupula hemisphærica, demum depressa, extus verrucosa, atra, intus atro-vinosa; ascis cylindræis; sporidiis globosis, episporio tuberculatis, brunneis, $22-25 \mu$. diam.; paraphysibus septatis, sursum clavatis.

Hab. ad terram in silvis prope Bristol Britannia. — Ascoma 2-3 cm. diam., extus verrucosum; verrucæ subconoideæ secedentes.

4. **Phæopezia atro-spora** (Fuck.) Sacc. *Pez. atro-spora* Fuck. F. rhen. 1960
n. 1224, Cooke Myc. f. 294, *Ph. ferruginea* Fuck. Symb. mycol.
p. 326. — Ascomatibus sessilibus, primo globosis, clausis, dein
hemisphæricis, margine involuto, subapplanatis, usque ad 2,5 cm.
latis, extus verrucosis, ferrugineis, disco levi, obscuriori; ascis cy-
lindræis; sporidiis globosis, verrucosis, brunneis, 18-20 μ . diam.;
paraphysibus filiformibus.

Hab. ad terram udam in silvis pr. Rabenkopf Germaniæ.

5. **Phæopezia scabrosa** (Cooke) Sacc. *Peziza scabrosa* Cooke My- 1961
cogr. p. 170, f. 295. — Sessilis; cupula concava, demum expansa,
atro-brunnea, extus verrucosa; margine primo subincurvo, regu-
lari; ascis cylindræis; sporidiis globosis, 15 μ . diam.; episporio
tuberculatis, brunneis; paraphysibus supra clavatis.

Hab. ad terram pr. Portland Maine Amer. bor. (BOLLAS). —
Ascoma 12-15 mm. lat.

6. **Phæopezia albo-fusca** (Cr.) Sacc. *Peziza albofusca* Cr. Fin. p. 54. 1962
— Ascomate 1 mm. diam., albo, basi filamentis mycelicis cincto,
sessili, hemisphærico, dein concavo, margine tenui, translucido,
erecto; hymenio brunneo; ascis cylindræis, octosporis; sporidiis
sphæroideis, granulosis, primo hyalinis dein brunneis; paraphysi-
bus filiformibus.

Hab. in fimo muli ad Sphagna, Finistère Galliæ.

II. *Aleurina* Sacc. Sporidia ellipsoidea v. oblonga.

7. **Phæopezia retiderma** (Cooke) Sacc. *Peziza retiderma* Cooke My- 1963
cogr. p. 176, f. 306. — Sessilis, badia, cupula hemisphærica, in-
terdum contorta, integra, carnosâ, extus reticulato-venosa, circa
marginem pallidiore; ascis cylindræis; sporidiis ellipticis, brun-
neis, verrucosis, 14 \approx 7; paraphysibus numerosis, septatis, lineari-
bus, sursum brunneis.

Hab. ad terram, Portland Maine Amer. bor. (FULLER). — Asco-
ma 2-4 cm. lat.

8. **Phæopezia applanata** (Rab. et Gonn.) Sacc. Consp. gen. Disc. p. 6, 1964
Peziza Rabenh. et Gonn. Myc. Eur. t. VI, f. 5 (absque diagnosi)
nec Fr. — Ascomatibus sessilibus scutellato-cupulatis, glabris, pal-
lide castaneis, disco atro-castaneo, concavo; ascis cylindræis, basi
nodulosis, octosporis; sporidiis in asci parte sup. oblique monosti-
chis ellipsoideis, leniter inæquilateralibus, utrinque rotundatis, fu-

ligineis; paraphysibus filiformibus, sæpe e basi furcatis, apice lenissime clavulatis.

Hab. ad terram in Germania (?). — Ascoma ex icone 2 cm. lat.

9. **Phæopezia Puiggarii** Speg. Fung. Arg. IV, n. 220. — Uda appla- 1965
nato-scutellata 3-5 mm. diam., sicca varie contracto-corrugata, tenuiuscule submembranacea, gelatinoso-coraciusecula, glaberrima, extus intusque aterrima; ascis cylindraceutis, sursum obtuse rotundatis crasseque tunicatis, deorsum longe attenuato-stipitatis, 80-100 \approx 6-6,5, octosporis, aparamphysatis, cito diffluentibus, muco obvallatis; sporidiis oblique monostichis, ellipticis, sæpe inæquilateralibus, utrinque obtusulis, 9-10 \approx 4-5, olivaceis, eguttulatis, continuis, corpusculis (spermatiis?) globosis vel ellipticis 3-3,5 \approx 1,5, hyalinis immixtis.

Hab. ad ramenta putrida coacervata prope Apiaty Brasiliæ meridionalis (DR. J. PUIGGARI).

10. **Phæopezia apiculata** (Cooke) Sacc. Mich. I, p. 71, *Peziza* Cooke 1966
Mycogr. fig. 79. — Cupulis sessilibus, scutellatis, circ. 2-6 mm. diam., carnosotenacellis, atris, levibus, glabris, disco concavo, margine integro; ascis cylindraceutis, deorsum crassiuscule attenuatis, apice subtruncatis, 200 \approx 18; paraphysibus filiformibus, septulatis apice fuscidulis obvallatis; sporidiis oblique monostichis, oblongo-ellipsoideis, utrinque breve mucronatis, 20-25 \approx 10-11, atro-fuscis; mucronibus tandem fuscis.

Hab. ad cortices putres et humum, Lucca et Padova Italiæ.

11. **Phæopezia elastica** Pat. et Gaill. in Bull. Soc. Myc. Fr. IV, p. 99. 1967
— Cupulis sessilibus, 1-3 mm. diam., sparsis vel gregariis, extus brunneo-fuscis rugosis, intus atris, matrici per fibrillas brunneas, hyphis septatis conflatas adfixis, margine crasso, excipulo compacto, elastico, bulgarioideo; ascis brunneis, cylindraceutis, elongatis, arcute adpressis, octosporis; sporidiis monostichis, 13-15 \approx 6-7, brunneis, ovoideo-obtusis, levibus, biguttulatis; paraphysibus? indistinctis.

Hab. ad lignum emortuum Mapire Amer. austr. (GAILLARD).

— Pars exterior cupulæ fit cellulis magnis angulatis rugosa.

12. **Phæopezia phæospora** (Hazsl.) Sacc. *Pyronema phæosporum* Hazsl. 1968
Eing. Disc. pag. 16. — Carnosa, concava, albo-flavida, mediocris, mycelio albo inserta; disco brunneo-flavo, farinoso; ascis cylindraceutis, in stipitem tenuem sensim attenuatis, 80 μ . long. dein clavatis; sporidiis senis (semper?), ovoideis, brunneis, 12-16 \approx 6-7.

Hab. in horto botanico Buda-Pest Hungariæ (Doct. DIETZ).

13. **Phæopezia crinita** (Bull.) Sacc. *Peziza crinita* Bull. ch. p. 249, 1969
t. 416, f. 2, Pers. Myc. Eur. pag. 255, Fr. Syst. Myc. II, p. 86,
Cooke Mycogr. f. 361. — Exigua, hemisphærica, ciliata, subtus
cinerea, disco rubro-purpureo; ascis cylindraceutis; sporidiis ellipsoi-
deis asperulis, dilute fuligineis, $20 \approx 12$; paraphysibus sursum cla-
vulatis, fuscellis.

Hab. ad ligna putrida in Gallia (BULLIARD, LIMMINGHE). — Pla-
ne sessilis, sed non applanata, inferne, sed præcipue ad marginem
pilis confertis nigris septatis, 300 μ . longis, hirta, 4-5 mm. lat.
Caro alba.

14. **Phæopezia fuscocarpa** (E. et Hol.) Sacc. *Peziza fuscocarpa* E. et 1970
Hol. in Journ. of Myc. I, pag. 5. — Sessilis orbicularis, 3-4 mm.
diam, extus pruinoso-tomentosa, olivaceo-flava, disco concavo, atro-
olivaceo, margine incurvo; ascis linearibus 65-80 \approx 4,5-5; para-
physibus filiformibus; sporidiis monostichis, ovato-oblongis, brun-
neis, binucleatis, 7-8 \approx 3-3,5.

Hab. in lignis vetustis, Jowa Amer. bor.

Sect. 3. **Hyalodidymæ**. Sacc.

HELOTIELLA Sacc. Consp. gen. Disc. p. 6, 1884 (Etym. demin. ab
Helotio), *Pezizæ*, *Helotii* et *Mollisiæ* sp. Auct. — Ascomata mi-
nuta, ceracea, sessilia, plerumque pallida vel læticoloria, discoidea
scutellata vel urceolata, glabra, scabra vel margine breve ciliata.
Asci typice octospori, paraphysati. Sporidia ovata, oblonga, vel
fusoidea, 1-septata, hyalina.

I. *Eu-Helotiella*. Ascomata margine pilosula vel scabra.

1. **Helotiella Citri** (Penz.) Sacc. Consp. Disc. p. 6, *Peziza Citri* Penz. 1971
Mich. II, p. 399, F. ital. fig. 1130. — Ascomatibus gregariis, ses-
silibus, convexulis, lentiformibus, immarginatis, extus marginem
versus pilosiusculis, candidis, 0,2-0,4 mm. lat.; ascis cylindraceuto-
clavatis, sessilibus, 50-60 \approx 10-20, paraphysibusque jodi ope cœru-
lescentibus; sporidiis in asco distichis fusoideo-ellipticis, obtusiu-
sculis, plerumque medio septatis ibique haud constrictis, 2-4-gut-
tulatis, hyalinis, 9-12 \approx 4-5,5.

Hab. in cortice ramorum Citri Limonum in frigidariis, Strà
prope Patavium (O. PENZIG).

2. **Helotiella cornuta** (Ell.) Sacc. *Peziza cornuta* Ellis Torr. Cl. 1882, 1972
p. 73. — Gregaria, minuta, sordide alba, sicca, carnea, sessilis,
tenui-membranacea, subfibrosa, margine pilis 4-5-septatis, albis,

sparse fimbriata; ascis clavato-cylindræis, 50-60 \approx 8-10, filiformi-paraphysatis; sporidiis distichis, fusoideis, trinucleatis, demum uni-septatis, 12 \approx 3-4, hyalinis, utrinque appendicula brevi auctis.

Hab. in ligno dejecto Castaneæ, Westcester Pennsylvania Amer. bor.

3. **Helotiella carnosula** (Rehm) Sacc. *Peziza carnosula* Rehm Ascom. 1973

Alp. n. 4 (*Helotium*). — Gregaria, sessilis, primitus subglobosa, mox explanata, sicca vario modo complicata et urceolata, carneo-vitellina, extus pallidior, albo-scabra, humida dilatata, plana, circ. 1 mm. diam., hyalino-prosenchymatico-contexta; ascis clavatis, apice incrassatis, 8-sporis, 90 \approx 9; sporidiis oblongis, obtusis, hyalinis, 1, demum distincte 2-cellularibus, rectis, distichis, 10-12 \approx 5; paraphysibus filiformibus, subdichotomis, apice in clavam irregularem, hyalinam, c. 3 μ . crassam exeuntibus.

Hab. ad caules putridos Aconiti Napelli et Cirsii spinosiss. prope glaciem æternam, Alpeiner-Gletscher in valle Stubai et Taschach-Gletscher in valle Piz in alpibus tyrolensibus (DR. REHM).

II. *Helotinia*. Sacc. Ascomata glabra.

4. **Helotiella Vaccinii** (Rehm) Sacc. *Helotium Vaccinii* Rehm Ascom. 1974

Alp. n. 8 — Gregaria orbicularis, primitus subglobosa, concava, extus fusca, humida disco explanato concaviusculo, una cum margine hyalino, circ. 1 mm. diam., sessilis, hyphis longis, fuscis, septatis, circ. 3 μ . crassis, simplicibus basi circumdata, prosenchymatico-contexta; ascis clavatis, apice incrassatis jodoque cœrulescentibus, 8-sporis, 45 \approx 8; sporidiis oblongo-ellipticis, rectis vel subcurvatis, hyalinis, 1-2-cellularibus, distichis, 14 \approx 3; paraphysibus ascos superantibus, filiformibus, apice sensim 4 μ . cr. hyalinis.

Hab. ad ramum siccum Vaccinii uliginosi, Peischlkopf in alpibus tyrolensibus (BRITZELMAYR).

5. **Helotiella citrinella** (Rehm) Sacc. *Niptera citrinella* Rehm Ascom. 1975

n. 262. — Gregaria, in cortice interiore sessilis et per rimas epidermidis fissæ protuberans, patellæformis, primitus orbicularis, dein irregularis et confluens, plana, margine tenui concolori cineta, flava vel citrinella vel æruginea, circ. 1 mm. diam., contextu parenchymatico flavo; ascis clavatis, apice incrassatis, 8-sporis, 90 \approx 9, apice jodo cœrulescente; sporidiis fusoideo-elongatis, acutatis, plerumque subcurvatis, 2-cellularibus, hyalinis, distichis, 21-24 \approx 3;

paraphysibus filiformibus, haud clavatis, ascos superantibus, guttulatis, 3-4 μ . cr. hyalinis.

Hab. ad ramos putridos pendulos Alni viridis in albis editoribus tyrolensibus.

6. **Helotiella Russellii** (B. et C.) Sacc. *Peziza Russellii* B. et C. North 1976
Am. Fung. n. 739, Cooke Disc. U. S. I, p. 296. — Erumpens, sessilis, fasciculata, lateritia; margine obtuso; disco leviter concavo; ascis clavatis; sporidiis biseriatis, oblongis, utrinque angustatis, demum uniseptatis, 15 μ . longis.

Hab. in corticibus New England Amer. bor. (RUSSELL). — Primo obtutu *Nectriam* collapsam refert. Hymenium in sicco pulverulentum.

7. **Helotiella Mercurialis** (Boud.) Sacc. *Pseudopeziza Mercurialis* 1977
Boud. Bull. Soc. Myc. IV, pag. 84, tab. 17, f. 6. — Minutissima, erumpens, sparsa aut subcæspitosa, luteo-ochracea, 0,2-0,4 mm. lata, lenticularis aut hemisphærica, margine tenuissimo fulvo, sessilis, intus et extus concolor, regularis, margine fulvescente; paraphysibus gracilibus dichotomo-ramosis, non aut vix septatis, ramulorum apicibus non incrassatis 1,5 μ . rarius 2 μ . cr.; ascis octosporis, clavatis, 60-65 \approx 10-11, vacuis foramine vix conspicuo; sporidiis hyalinis, oblongo-fusiformibus subcurvatis aut flexuosis, primo continuis denique medio septatis et subconstrictis, intus paululum granulosus præcipue ad extremitates, 11-15 \approx 4-5.

Hab. ad caules exsiccatos Mercurialis perennis in umbrosis Montmorency Galliæ.

8. **Helotiella drosodes** (Rehm) Sacc. *Helot. drosodes* Rehm Ascom. 1978
n. 566. — Gregaria, orbicularis, hemisphærica vel subcyathoidea, sicca fuscens vel flavidula, urceolata, humectata subexplanata, marginata, fere hyalina, 1 (1-2) mm. diam., inter *Torulam* aliquam nidulans, prosenchymatico-flavidulo-contexta; ascis clavatis, apice incrassatis, 8-sporis, 60 \approx 8 jodoque violascentibus; sporidiis ellipticis, subacutis, rectis vel navicularibus, hyalinis, 2-cellularibus, 10-13,3; paraphysibus filiformibus, apice subincrassatis.

Hab. ad basim caulium putridorum Adenostylidis alpinae, Bauernalpkopf alpium Allgoviae (BRITZELMAYR).

9. **Helotiella erythrostigma** (Rehm) Sacc. *Mollisia erythrostigma* 1979
Rehm in Voss Mat. Krains V, p. 225, fig. 6, a, b. — Sparsa vel gregaria in pagina superiore foliorum dealbatorum, contextu parenchymatico-hyalino vel rubidulo, primitus globosa, clausa, dein patellaris, tenerrime marginata, glabra, humida hyalino-flavidula

vel rubidula, sicca demum cinnabarino-rubra, 0,15-0,35 mm. diam.; ascis clavatis, $90 \approx 10-12$; sporidiis ellipticis vel subfusoides, primitus 1-cellularibus, nucleolis 2 instructis, dein 2-cellularibus, rectis hyalinis, $12-17 \approx 6$, distichis; paraphysibus filiformibus 1,5-2 μ . cr. superne dichotomis, hyalinis.

Hab. in foliis languidis anni præteriti *Cerastii alpini* in ober. Bärenthale Carniolæ. — *Calloriæ Primulæ* affinis dicitur.

10. **Helotiella herpotricha** (Berk.) Sacc. *Peziza herpotricha* Berk. 1980

Dec. n. 304, t. I, f. 2. — Cupulis convexis pallide rufis dein obscurioribus, glabris, immarginatis, hyphis ramosis repentibus insidentibus; ascis brevibus clavatis; sporidiis oblongis curvulis 1-septatis sæpius biguttulatis, polystichis.

Hab. in foliis viventibus, sæpius epiphylla, Caripi in Brasilia. — Ramuli hypharum breves clavati basi uniseptati; asci ex icon. 8-spori.

SOLENOPEZIA Sacc. (Etym. *Solenia* et *Peziza*). — Ascomata sessilia, minuta, urceolata, urceolato-oblonga, rarius hemisphærica, ceracea, extus villosa vel pilosa, brunnea vel læticoloria. Asci typice octospori, paraphysati. Sporidia ovoidea, oblonga vel subfusoides, 1-septata, hyalina.

1. **Solenopezia Solenia** (Peck) Sacc. *Peziza Solenia* Peck 25 Rep. 1981

p. 99. — Ascomatibus minutis, fere cylindræis, pilosis, brunneis, margine contracto apertis; sporidiis oblongis, stipatis vel distichis, uniseptatis, sæpe 4-nucleatis, subhyalinis, 12 μ . longis, paraphysibus filiformibus.

Hab. in caulibus emortuis *Eupatorii ageratoidis*, Watkins Glen Amer. bor. — Ascomatibus elongatis *Soleniam* in mentem revocat. Teste auctore, a *P. Eupatorii* Schw., ad quam quidam mycologus retulit, satis diversa.

2. **Solenopezia trabinelloides** (Rehm) Sacc. *Helotium trabinelloides* 1982

Rehm Ascom. n. 853. — Gregaria vel conferta, sessilis, primitus globosa, clausa, dein urceolata, rubro-aurantiaca, margine integro cincta, 0,2-1,5 mm. diam., extus puberula hyphis fasciculatis, subobtusis, flavidis, septatis, asperulis, creberrimis, $60-70 \approx 5$, e pariete externa excipuli parenchymatici abeuntibus; ascis clavatis, subcurvatis, apice obtusis, 8-sporis, $90 \approx 7-9$; sporidiis oblongis vel oblongo-fusiformibus, obtusis, rectis vel subcurvatis, hyalinis, 2-cellularibus, $10-17 \approx 4$, distichis; paraphysibus filiformibus,

1 μ . cr., apice rotundatis et sæpe subcurvatis, 2 μ . cr. plasmate oleoso rubro impletis.

Hab. ad truncum decorticatum fagineum prope balnea Herculis Hungariæ (LOJKA). — Jodii ope ascoma paraphysesque, imprimis porus ascorum, cœruleo tinguntur.

3. **Solenopezia vulpina** (Cooke) Sacc. *Pez.* Cooke Hedw. 1875, p. 82. 1983

— Gregaria, sessilis, punctiformis, vulpino-rubra, sicca testacea; cupula subglobosa, plano-depressa, primum leniter tomentosa, demum subglabra 0,5 mm. lata, margine tumido; ascis cylindraceutis; sporidiis ellipticis, minutis, binucleatis, deinde uniseptatis, hyalinis.

Hab. ad lignum cariosum, New Jersey (ELLIS), Buffalo (CLINTON).

4. **Solenopezia Britzelmayriana** (Rehm) Sacc. *Trichopeziza Britzelmayriana* Rehm Ascom. Alp. n. 10. — Gregaria sessilis, globosa, primitus subclausa, dein urceolata, extus cervino-fuscidula, disco pallido, demum subdilato, 1 mm. diam., strigosa, prosenchymatico-contexta; pilis simplicibus, longissimis, septatis, rectis, p. p. spiraliter contortis, obtusis, dilute fuscis, circ. 3–5 μ . crassis; ascis clavatis, 8-sporis, 90 \approx 6, apice jodo cœrulescente; sporidiis cylindricis, obtusis, rectis, hyalinis, 2-cellularibus, distichis, 10–11 \approx 2; paraphysibus ascos superantibus, hyalinis, basi circ. 5 μ . diam., apice acutatis. 1984

Hab. ad crates prope ripam fluvii juxta Augustam-Vindelicorum seu Augsburg (BRITZELMAYR).

5. **Solenopezia Dorcas** (B. et Br.) Sacc. *Peziza Dorcas* B. et Br. 1985

Fung. of Ceyl. n. 944. — Sessilis, sparsa, globosa, aperta, extus cervina tomentosa; hymenio fusco; sporidiis subellipticis, medio constrictis, biseriatis uniseptatis binucleatis, 12 μ . longis.

Hab. in plantis quibusdam monocotyledoneis in ins. Ceylon. — Primitus Sphæriaceam villosam imitatur.

6. **Solenopezia consimilis** (Oud. et Rehm) Sacc. *Lachnum consimile* 1986

Oud. et Rehm in Oud. Contr. mycol. XII, p. 25. — Ascomatibus sparsis vel approximatis, sessilibus, $\frac{2}{3}$ mm. diam., hemisphæricis, solidis, undique pilis articulatis vel plus minusve sinuosis, basi brunneis, sursum pallidioribus et apice hyalinis ornatis; hymenio leniter brunneolo; ascis cylindraceutis vel clavatis, 25 \approx 4; sporidiis monostichis, cylindraceutis, curvis, utrinque obtusis, 1-septatis, loculis inæqualibus, 12–15 \approx 2; paraphysibus asco longioribus, fusiformibus.

Hab. in ligno putri in Nederlandia (DESTREE).

7. **Solenopezia columbina** (Kalch. et C.) Sacc. *Peziza columbina* K. 1987

et C. Grevillea X, p. 144. — Sessilis, pallide griseo-fusca; cupulis hemisphæricis, pilis acutis, hyalinis, mollibus, dense obsitis; disco obscuriore, $\frac{1}{2}$ mm. diam., margine incurvo; ascis clavato-cylindricis; sporidiis lanceolatis, distincte uniseptatis, hyalinis, $14 \approx 3,5$; paraphysibus filiformibus.

Hab. ad cortices in Africa australi (MAC-OWAN).

BISPORELLA Sacc. Consp. gen. Disc. pag. 6 (1884) *Bispora* Fuck. Symb. p. 310 nec Corda (Etym. a *Bispora*, cujus videtur status ascophorus). — Ascomata initio subclavata dein cupulata, stipitata, ceracea, glabra, subiculo conidiophoro *Bisporæ moniloidis* insidentia. Asci octospori, paraphysati. Sporidia oblonga, 1-septata, hyalina.

1. **Bisporella monilifera** (Fuck.) Sacc. Consp. gen. Disc. p. 6, *Bispora* 1988 Fuck. Symb. pag. 310, t. IV, fig. 54, *Hymenoscypha* Phill. Disc. p. 130. — Cupulis 1-3 mm. altis, 1-2 mm. lat. in fungi conidiophori mycelio ortis, primo stipitiformibus, subclavatis, plerumque curvatis, demum antice magis magisque dilatatis, disco concavo, maturis patellæformibus v. planis, marginatis, ceraceis, longe firmeque stipitatis, glabris, pallide fuscis, disco parum obscuriori, sparsis subcæspitosisque, quandoque basi connatis; ascis oblongis elongatisve, 8-sporis, $64-68 \approx 8$; sporidiis primo distichis, demum in asco valde elongato submonostichis, oblongis, utrinque parum attenuatis, sed obtusis, distincte uniseptatis, $12 \approx 4$, loculis unigutulatis, hyalinis; paraphysibus filiformibus, simplicibus subclavatis.

Hab. in ligno putrescente Fagi et Carpini in Germania et Britannia. — Fungus conidiophorus sistit *Bisporam moniloidem* Corda: mycelium primo in ligno mucido, maculas griseas sublinitatas formans, ramosissimum. Conidia demum in stipitibus hyalinis orta, catenulata, singula oblongo-lanceolata, utrinque obtusa, uniseptata, primo hyalina, demum fusca opacaque.

LANZIA Sacc. Consp. gen. Disc. p. 6 [1884] (Etym. ab egregio mycologo et diatomologo doct. M. LANZI, romano). — Ascomata stipitata, patellata, ceracea, disco plano v. concavo, stipite plerumque longitrorsum plicatulo. Asci elongati, octospori. Sporidia oblonga, demum 1-septata, hyalina.

1. **Lanzia flavo-rufa** (Sacc.) Consp. gen. Disc. pag. 6, *Helotium* 1989 *flavo-rufum* Sacc. Fung. Ven. ser. IV, n. 99, F. ital. f. 116. — Cupulis ceraceis, gregariis, discoideo-patellatis, $\frac{1}{2}-\frac{3}{4}$ mm. diam.,

subtus convexulis et in stipitem subæquilongum productis, glabris, intus albis, disco jugiter plano purpureo-ferrugineo, margine initio luteolo non elevato, extus stipiteque longitudinaliter (præcipue senio) plicatis, flavo-cerinis; excipuli contextu molli tenuiter areolato, flavescente, cellulis marginalibus elongato-clavatis; ascis cylindræo-clavatis basi breve attenuatis, apice subtruncatis, 60-65 \approx 5-6, pseudoparaphysibus crassitudine variis obvallatis, 8-sporis; sporidiis oblongis, 8-12 \approx 3 $\frac{1}{2}$ -5, utrinque obtusis, medio tenuissime constrictis ibique (spurie?) 1-septatis, hyalinis.

Hab. in truncis putrescentibus udis Robiniæ Pseudacaciæ Patavii Ital. bor. (G. BIZZOZERO). — Cupulæ insident tapeto velutino atro-fuligineo conidiophoro cum *Lanzia* forte metagenetice connexo et *Chalaram Ampullulam* Sacc. Syll. IV, pag. 334, sistente.

2. **Lanzia rugipes** (Peck) Sacc. *Helotium rugipes* Peck 26 Rep. p. 82. 1900
— Ascomatibus concavis, dein expansis, sæpe minute umbilicatis, extus brunneo-flavidis, disco viridulo-brunneo vel flavido, stipite brevi, deorsum attenuato, usque ad cupulam plicato-lacunoso; ascis cylindræis, tenuibus; sporidiis monostichis, uniseptatis, ellipticis, 7-8 \approx 3-4.

Hab. in ligno putri, Worcester Americæ borealis. — Ascoma 4-8 mm. lat.

3. **Lanzia crassipes** (Pat.) Sacc. *Peziza crassipes* Pat. Tab. An. Fung. 1901 p. 124, f. 279. — Tenuis, concava, dein plana, 1-2 mm. lat. intus brunneo-rufescens, extus albo-rubida, margine recto, stipite basi incrassato, albo vix rubescente, 4-6 mm. long.; ascis brevibus, deorsum abrupte attenuatis, octosporis; sporidiis distichis, ellipsoideo-fusoideis, 12-14 μ . long., hyalinis, inæqualiter bilocularibus; paraphysibus acicularibus, rubello-guttulatis.

Hab. ad terram in quercetis, Polygny Jura.

NIPTERA Fr. Summa Veg. pag. 359 (1849) em. De Not. Prof. Disc. p. 375, Sacc. Consp. gen. Disc. pag. 6, nec Fuck. (Ety. *nipter* malluvium, vas). — Ascomata cupulato-patellata, sessilia v. subsessilia, superficialia, minuta, ceracea, excipulo cellulis arctis fuscis contexto. Asci elongati, octospori, paraphysati. Sporidia oblonga v. fusioidea, 1-septata, hyalina-luteola. — Est *Mollisia* didymospora.

1. **Niptera Raineri** (De Not) Comm. Critt. I, pag. 375, *Cenangium* 1902 *Raineri* De Not. Micr. Dec. I, n. 4, f. 4. — Nitens, seriatim gregaria, obconico-subsessilis, ex urceolato cupulata, sicca vix rugulosa, fu-

ligineo-nigra, arescendo subclausa vel rimose dehiscens, $\frac{1}{2}$ mm. diam., disco pallide cinereo; ascis tereti-clavatis, subsessilibus, apice rotundatis, octosporis; sporidiis distichis, fusoideis, utrinque acutis, constricto-1-septatis, ex hyalino fuscillis, 11-12 \approx 3-4; paraphysibus bacillari-clavulatis.

Hab. ad ramulos siccos *Cytisi radiati* in montibus Lariensibus Ital. bor. (DE RAINER).

2. **Niptera Vossii** (Rehm) Voss Mater. IV, pag. 13, f. 6, *a, b*, *Mollisia Vossii* Rehm Ascom. Ill. et Exs. n. 710. — Gregaria, emergens, dein lata basi sessilis, orbicularis, patellariformis, plana, c. 1 mm. diam., sicca margine subplicata, extus nigro-fusca, disco livido, fusco-parenchymatica; cellulis marginalibus interdum subelongatis; ascis clavatis, apice obtuse acutatis, 8-sporis, 75 \approx 12; sporidiis clavatis, 2-cellularibus, cellula superiore latiore, medio haud constrictis, rectis, interdum subcurvatis, hyalinis, 2-stichis, 21-25 \approx 6; paraphysibus filiformibus, hyalinis, versus apice sensim incrassatis.

Hab. ad ramulos emortuos *Cytisi radiati*, Oberkauth juxta Niedertiefenbach prope Gottschee Carnioliae (Prof. Voss).

3. **Niptera Saliceti** (Rehm) Sacc. *Mollisia Saliceti* Rehm Ascom. Alp. n. 20. — Gregaria, in rimis epidermidis cortici inferiori fuscatae insidens, sicca fusca complicata, humida explanata, patellæformis, concava, demum plana, vix marginata, extus fuscidula, disco cinereo-albido, c. 0,8-1 mm. diam.; ascis clavatis, subcurvatis, 8-sporis, 50 \approx 8; sporidiis obtusis, oblongis, 2-cellularibus, rectis v. subcurvatis, hyalinis, distichis, 10-12 \approx 3-5; paraphysibus filiformibus, apice sensim 3 μ . incrassatis, hyalinis.

Hab. ad ramum siccum *Salicis* cujusdam apud glaciem æternam. Taschach-Gletscher in valle Piz alpium tyrolens. c. 2000 m. alt. (DR. REHM). — Habitus *Pyrenop. ligni*.

4. **Niptera laricina** (Rehm) Sacc. *Pyrenopeziza laricina* Rehm Asc. Ill. n. 511. — Sessilis, gregaria, primitus subclausa, dein patellaris, sicca atra, extus rugulosa, varie plicata, sæpe hysteriformis, humida extus atra, explanata, disco pallido, parenchymatico-fusco-contexta, circ. 0,5 mm. diam.; ascis clavatis, 8-sporis, 40-50 \approx 9; sporidiis obovatis vel biscociformibus, rectis vel subcurvatis, 1-2-cellularibus, distichis, hyalinis, 10-12 \approx 5; paraphysibus filiformibus, superne vix incrassatis.

Hab. ad ramulos siccos *Laricis europææ* in monte Arlberg

- tyrolensi, c. 1300 m. (BRITZELMAYR), ad ramulos emortuos *Abietis* in silva Cansilio Ital. bor. (SPEGAZZINI).
5. **Niptera exsiliens** Speg. Mich. I, p. 472. — Sessilis v. brevissime 1996
pedicellata, solitaria v. gregaria, hinc inde per epidermidem ramulorum erumpens, extus atro-cærulea, disco pallidior griseo, linea candida marginato, magnitudine valde ludens, $\frac{1}{4}$ -1 mm. diam., contextu parenchymatico, marginem versus prosenchymatico, densissimo, membranaceo, ascis cylindræco-subclavatis, apice obtusiusculis, in pedicellum crassum desinentibus, 55-65 \approx 5-7, 8-sporis; paraphysibus guttulatis, crassiusculis; sporidiis clavulatis medio uniseptatis, ad septum non vel vix constrictis, hyalinis, 10-15 \approx 2-3.
Hab. in ramulis emortuis dejectis *Quercuum*, quandoque parasitica in *Colpomate quercino*, Conegliano Ital. bor.
6. **Niptera Rhododendri** (Ces.) De Not. Comm. Critt. I, pag. 375. — 1997
Sparsa, sessilis, cupulata, arescendo hysterioideo-subclausa, coriaceo-ceracea, fuligineo-atra, $\frac{3}{4}$ -1 mm. lat., glabra; ascis clavatis, 75 \approx 12; sporidiis oblongis, obtusis, rarius ovoideis, rectis curvulisve medio constricto-1-septatis, 16-18 \approx 6, distichis, hyalinis; paraphysibus filiformibus, apice clava ovoidea brunnea, 6 μ . crass. terminatis.
Hab. in capsulis siccis (et in ramulis?) *Rhododendri ferruginei* in Italia boreali et Tyroli.
7. **Niptera Rollandii** Boud. Bull. Soc. Myc. IV, p. 83, t. 17, f. 5. — 1998
Minutissima, sessilis, hemisphærica, alba, 0,2-0,4 mm. lata, crassa levis v. vix pruinosa, alba, hymenio concolore plano dein convexo, margine crasso vix superante cincto; paraphysibus gracilibus, simplicibus aut ad basim tantum divisus, continuis, sed ad apicem clava oblonga, tri-septata, 15 \approx 4-5 terminatis; ascis elongato-fusoideis, octosporis, 90-100 \approx 8-9; sporidiis oblongo-fusiformibus, hyalinis, quadri-guttulatis, guttulis oleosis, sæpe divisus et tunc plus minusve granulosus, primo continuis, denique medio septatis et paullulum constrictis, 13-15 \approx 4.
Hab. ad cortices *Alni glutinosæ* prope Isle-Adam Gallie (ROLLAND). — An *Helotiella*?
8. **Niptera subbiatorina** Rehm Ascom. n. 858. — Sparsa, sessilis, pri- 1999
mitus globosa, dein patellaris, ceracea, extus flavidula, glabra, contextu parenchymatico, flavidulo, versus marginem album hyalina, disco hyalino-flavidulo, subplano, 0,1-0,3 mm. diam.; ascis cylindræcis, apice rotundatis, 8-sporis, 60-66 \approx 5-6; sporidiis oblongis vel oblongo-ellipticis, obtusis, rectis, hyalinis, 2-cellularibus, 7-9

≈ 3, distichis; paraphysibus vix 1 μ . cr., apice subramosis, dilute flavidulis et conglutinatis.

Hab. ad truncum decorticatum *Castaneæ vescæ*, Gratsch prope Meran Tyrol (DR. EGGERTH). — *Biatorinæ* subaffinis sed gonidia nulla.

9. **Niptera castanea** (Sacc.) *Pyrenopeziza? castanea* Sacc. Mich. I, 2000 p. 422, F. ital. f. 1400. — Ascomatibus gregariis superficialibus, sessilibus, $\frac{1}{3}$ - $\frac{1}{2}$ mm. diam., concavis, obtuse marginatis siccis non contractis, hyphis repentibus basi cinctis, excipuli contextu parenchymatico ad marginem prosenchymatico; ascis cylindraceo-clavatis, breve stipitatis, 70-80 ≈ 9-10, apice rotundatis; paraphysibus filiformibus obvallatis, octosporis; sporidiis distichis fusoidis rectis curvulisve, 15 ≈ 4 (spurie?) 1-septatis, non constrictis, hyalinis.

Hab. in ligno decorticato putrescente *Castaneæ vescæ* in Euganeis ad Bressò Ital. bor.

10. **Niptera hypogæa** (Bres.) Sacc. *Mollisia hypogæa* Bres. Trid. 2001 p. 69 et 105, t. 75, f. 1. — Sessilis, carnosio-ceracea, explanato-concava, extus nigra, margine albo, puberulo-tomentoso, ut plurimum undulato-repando, disco e fuscidulo vel cinereo subolivaceo albido, 1-1 $\frac{1}{2}$ mm. lata; substantia subconcolore, inodora; ascis fusoidis, jodo haud tinctis, 70-100 ≈ 10-14; paraphysibus numerosis,asco longioribus, apice subincrassatis v. subacutatis, ramosis, 2 μ . latis; sporidiis hyalinis fusoidis, pluriguttulatis, demum 1-septatis, 15-25 ≈ 3-4, distichis v. conglobatis.

Hab. subterranea in rhizomatibus adhuc vivis *Adenostylidis* alpinæ var. albifrontis, quæ nigrificat, juxta rivulos subalpinos Valle di Sole, Trento.

11. **Niptera umbrinella** (Desm.) Sacc. *Peziza umbrinella* Desm. 10, 2002 Not. p. 36. — Sessilis, erumpens, ceraceo-mollis, sparsa, minuta, orbicularis, glabra, umbrino-pallens, plano-convexa, sicca concava, margine acuto, brunneo, integerrimo, vix prominente; ascis clavatis; sporidiis hyalinis, uniseptatis, oblongis, subfusiformibus, 12-14 μ . long.; paraphysibus capitellatis.

Hab. ad caules *Solidaginis* in Gallia bor. — Ascoma $\frac{2}{3}$ mm. lat.

12. **Niptera leucostoma** (Karst.) Sacc. *Mollisia leucostoma* Karst. M. 2003 F. I, p. 203. — Conferta, innato-erumpens, hemisphærica v. mutua pressione difformis, cinereo-pallida, margine fimbriato, albicante vel subalbo, sicca subsphæroideo-depressa, nigricans v. fuliginosa, ore contracto sæpeque angulato flexo, 0,3-0,5 mm. lat.; ascis fu-

soideo-cylindræis, 40-50 \approx 5,5-6, 4-sporis, obturaculo minutissimo vix vel obsoletissime cærulescente; sporidiis aciculari-raro fusoido-bacillaribus, rectis vel subrectis, vulgo uniseptatis, 12-27 \approx 2-3; paraphysibus gracilescentibus apicem versus incrassatis.

Hab. ad caules Artemisiæ vulgaris exsiccatos in Fennia australi.

13. **Niptera Coriariæ** (Pass.) Sacc. *Peziza coriariæ* Pass. Diagn. 2004
nuov. funghi n. 16. — Sparsa v. gregaria, sessilis, firma, madore discoideo-applanata, disco subconcavo, cinereo-violacea, in statu sicco contracta, difformis, fusco-nigrescens; ascis breviusculis clavatis, stipitatis, 8-sporis; sporidiis distichis, tereti-oblongis, tenuibus, hyalinis, endoplasmate granuloso, medio tandem tenuiter diviso; paraphysibus crassiusculis, subclavatis, intus granulosis, ascos æquantibus.

Hab. in caulibus siccis decorticatis Coriariæ myrtifoliæ, Rocca Prebalza pr. Berceto in Appennino parmensi. — An *Patellea*?

14. **Niptera lacustris** (Fr.) Summa p. 359, *Pez. lacustris* Fr. Syst. 2005
Myc. II, p. 143. — Sessilis, applanata, orbicularis, ceraceo-mollis, plano-convexa, e fuligineo-nigricans; ascis clavatis; sporidiis oblongo-ellipsoideis, 12-15 μ . long. (Curr.), v. 22-30 \approx 6-9, 1-3-septatis (Nyl.); paraphysibus filiformi-clavulatis.

Hab. ad calamos emortuos Scirpi lacustris (et Alismatis?) in Suecia, Britannia, Germania, Belgio. — Junior adnata, plano-convexa, $\frac{1}{2}$ -1 mm. lata, levis, glabra, atra, dein dilatata, applanata, tamen subtus libera et unico puncto centrali tantum fixa, extus fuligineo-nigricans, sicca tota âtra. Margo primo connivens, dein apertus, inflexus, non omnino integer; demum vere omnino regularis, integer, parum prominens. Discus turgidus, mollis, humidus fuligineo-pallidus, siccus nigricans. « An *Belonii* species? ».

15. **Niptera caricinella** Peck 30 Rep. p. 61, t. I, fig. 5-8. — Asco- 2006
mate minuto, 0,5-0,7 mm. lat., sessili, rubescente vel ochraceo-brunneo (udo), nigro v. nigricante (sicco), disco plano v. subconcavo; ascis clavatis; sporidiis oblongis, confertis, obtusis, uniseptatis, hyalinis, 20-25 μ . longis.

Hab. in foliis Caricis utriculatae, Adirondack Amer. bor. 2007

16. **Niptera phæa** (Rehm) Sacc. *Mollisia phæa* Rehm Ascom. Ill. et Exs. n. 713. — Subgregaria, sessilis, hemisphærico-urceolata vel patellaris, vix v. tenuiter obscurius marginata, plana, extus fusca,

disco pallidiorè, c. 0,3-5 mm. diam., contextu parenchymatico fuscidulo; ascis clavatis, subcurvatis, apice obtuse acutatis, 8-sporis, apice jodo cœrulescente, 70-80 \approx 10-12; sporidiis oblongo-ellipticis, obtusis, hyalinis, primitus 2-cellularibus, medio haud constrictis, 15-18 \approx 5-6; paraphysibus teneris, dichotomis, apice 5 μ . cr., clavatis et dilute flavidis, itaque ascos superantibus et discum (ope kalii caust. adhibiti solutum et decoloratum) formantibus.

Hab. ad calamos Junci siccos in silva prope Königstein an der Elbe Saxoniae.

17. **Niptera melatephroides** (Rehm) Sacc. *Mollisia melatephroides* 2008

Rehm Ascom. n. 655. — Gregaria, sessilis, patellariformis, sicca suburceolata, humida plana, irregulariter marginata, scabra, extus nigro-fusca, disco pallide luteolo, c. 1 mm. diam., contextu parenchymatico, fusco; ascis clavatis, apice obtuse acutatis, subcurvatis, 8-sporis, 120 \approx 18, apice jodo dilute cœrulescente; sporidiis ellipticis, subobtusis, rectis, 2-cellularibus v. bipartitis, quaque cellula binucleata, hyalinis, 18-21 \approx 4, episporio gelatinoso c. 6 μ . crasso circumdatis; paraphysibus dichotomis, apice clava plus minusve rotunda, c. 6 μ . crassa, hyalina instructis.

Hab. ad culmos siccos Moliniæ cœruleæ in silvis prope Pulsnitz Saxoniae (STARITZ), — Differt a *Mollisia melatephra* in primis sporidiis 1-septatis, episporio mucoso crasso, paraphysibus dichotomis, apice clavatis.

18. **Niptera Punctum** (Rehm) Sacc. *Micropeziza Punctum* Rehm 2009

Ascom. n. 261. — Minutissima, primo punctiformis, dein orbiculariter basi late adnata, sessilis, subhemisphærica, concaviuscula, margine elevato, disco humido fuscidulo, sicca atra, contextu parenchymatico, fusco, margine prosenchymatico viridi-fusco, sparsa, c. 0,3 mm. diam.; ascis clavatis, subcurvatis, 8-sporis, 55 \approx 12; sporidiis oblongis, obtusis, interdum elongato-dacryoideis, rectis, rarius subcurvatis, hyalinis, 2-cellularibus, utraque cellula binucleata, distichis, 15-17 \approx 4,5; paraphysibus filiformibus, apice subincrassatis et fuscidulis, sæpe subincurvatis.

Hab. ad folia sicca Nardi strictæ pr. Teplitz in Bohemia (THÜMEN).

19. **Niptera antarctica** Speg. Fung. Fueg. n. 342. — Cupulis sparsis 2010

v. hinc inde laxè gregariis, primo epidermide tectis, dein, ea sedente, denudato-superficialibus, hemisphærico-cupulatis, 200-250 μ . diam., atris, glabris; contextu margine prosenchymatico (an fimbriatulo?) ceterum parenchymatico olivaceo-fusco; ascis cylin-

draceis v. subfusoideis, antice truncato-rotundatis, crassiuscule tunicatis minutissime bifoveolatis, postice brevissime crasseque attenuato-pedicellatis, 65-80 \approx 5, octosporis; paraphysibus paucis guttulatis obvallatis; jodi ope obturaculo ascorum intense cœrulescente; sporidiis recte distichis, cylindraceo-fusoideis, utrinque obtusiusculis, 17-18 \approx 1,5-2, medio 1-septatis non constrictis, hyalinis.

Hab. ad culmos emortuos Rostkoviæ grandifloræ in pratis uliginosis in Staten island Fuegiæ. — Species vere pusilla ascomatibus quandoque matrice fere immersis nonnihil ad genus *Fabræa* vergens.

20. **Niptera lichenicola** (Speg.) Sacc. *Pyrenopeziza lichenicola* Speg. 2011

Mich. I, p. 472. — Ascomatibus laxè gregariis, minutissimis, vix $\frac{1}{10}$ - $\frac{1}{8}$ mm. diam., atris, disco dilutiore, siccis subsphæroideis, humidis patellaribus, contextu excipuli densissime parenchymatico atro; ascis clavato-ellipticis, crasse tunicatis, aparaphysatis (?), octosporis, jodi ope apice intense cœrulescentibus, 30-35 \approx 12-15; sporidiis didymis, primo muco obvolutis, dein liberis, loculo superiore crassiore, hyalinis, ad septum constrictis, 6-8 \approx 3-4.

Hab. in thallo emortuo Parmeliæ caperatae in Monte Cerva prope Belluno Ital. bor.

SCUTULA Tul. Mem. Lich. p. 118 (1844) nec Lour. (Etym. *scutum*).

— Ascomata plano-scutellata, sessilia, ceracea, excipulo distincto prædita, tandem immarginata, deformia. Asci octospori, paraphysibus subconglutinatis obvallati. Sporidia ovato-oblonga, 1-septata, hyalina. — Genus hinc Lichenibus, illinc Dermateis affine, habitatione in Lichenibus parasitica peculiare.

1. **Scutula Stereocaulorum** (Anzi) Körb. Parerg. p. 455, Karst. Revis. 2012

p. 151, *Lecidea* Anzi Menip. p. 26, *Biatorina* Th. Fr. Lich. Arct. p. 188. — Congesta, adpressa, primitus concava et marginata, dein planiuscula, immarginata, regularis, nigricans vel obscure carneola vel pallens intus obscura, 0,3-0,4 mm. lata; ascis clavatis, crasse tunicatis, 50 \approx 10, jodo intense cœrulescentibus, octosporis; sporidiis distichis, ovoideo-oblongis, uniseptatis, biguttatis, hyalinis, 13-19 \approx 4-6; paraphysibus filiformibus, apice clava luteo-fusca 6 μ . crass. terminatis.

Hab. in Stereocauli speciebus in Italia boreali, Helvetia, Fennia, Germania. — Hypothecium flavidum.

2. **Scutula miliaris** (Wallr.) Karst. Rev. mon. p. 149, *Peziza* Wallr. 2013

Crypt. p. 499, *Scutula Wallrothii* Tul. Mem. Lich. p. 119, t. 14, f. 14, *Biatorina miliaris* Th. Fr. *Lecidea epigena* Nyl. in Flora 1865, p. 5, *Calloria Peltigeræ* Fuck. Symb. p. 283. — Conferta, plana vel concaviuscula et marginata, dein convexa immarginata, primo pallida v. testaceo-pallida, mox denigrata, 0,3–0,4 mm. diam.; ascis clavatis, octosporis; sporidiis distichis, ovoideis vel ellipsoideis, uniseptatis, hyalinis, 11–15 \approx 5–7; paraphysibus coalescentibus.

Hab. in thallo *Peltigeræ caninæ* et *Peltigeræ rufescentis* in Lapponia, Germania, Helvetia, Italia, Gallia. — Gelatina hymenea jodo dilute cœrulescens, dein vinose rubens. —

* **S. Heerii** (Hepp.) Karst. l. c. *Lecidea Heerii* Hepp. in Nyl. Lich. Lapp. 152, *Scutula epigena* Rehm Ascom. n. 20: sporidiis minoribus, nempe 8–12 \approx 4–5. In thallo *Peltigeræ rufescentis*, *P. aphthosæ*, *P. rufescentis*, *Nephromii tomentosii* in Lapponia, Fennia, Germania, Helvetia.

3. **Scutula solorinaria** (Nyl.) Karst. Rev. Mon. p. 150, *Lecidea* Nyl. 2014 Lich. Delph. p. 402. — Affinis *Scutulæ oxysporæ* sed ascomatibus convexis, sporidiis minoribus, 13–14 \approx 3,5–4,5, gelatina hymeniali jodo vinoso-rubente.

Hab. in thallo *Solorinæ bisporæ* in Fennia. — Var. **solorinicola** (Weinm.) Karst. l. c., *Lecidea* Wainio Add. Lich. Lapp. II, p. 30: ascis clavatis 14 μ . crassis, sporidiis 9–12 \approx 3–3,5, gelatina jodo vinoso-rubente vel sublutescente. In thallo *Solorinæ saccatæ* pr. Kongäs ad mare glaciale.

4. **Scutula Krempelhuberi** Körb. Parerg. p. 455. — Ascomatibus sub-2015 minutis, sessilibus, patellaribus, jam primitus atris, disco plano dein convexiusculo marginem tenuem concolorem æquante, tandem superante; ascis anguste clavatis, octosporis; sporidiis minutis ellipsoideis e monoblasto typice biblastis, diametro $2\frac{1}{2}$ –3-plo longioribus, hyalinis.

Hab. in thallo *Solorinæ saccatæ* in Berechtsgaden (KREMPELHUBER). — Hymenium sub microscopio cerasino-brunneolum.

5. **Scutula oxyspora** (Tul.) Karst. Revis. Mon. p. 150, *Abrothallus* 2016 Tul. Mem. Lich. pag. 116, t. 16, f. 27, *Lecidea* Nyl. *Nesolechia* Mass. — Plana v. convexiuscula, nigra v. fusco-nigra, intus fuscescens v. obscura, 0,2 mm. diam.; sporidiis ellipsoideo-fusififormibus, uniseptatis, hyalinis, 14–20 \approx 5–7; paraphysibus haud discretis; gelatina hymeniali, præsertim ascorum, jodo cœrulescente.

Hab. in thallo *Platysmatis*, *Parmeliæ*, *Cetrariæ*, *Imbricariæ* in Gallia, Italia, Fennia, Britannia, Suecia.

Sect. 4. *Phragmosporæ* Sacc.

MASSEEA Sacc. (Etym. a cl. mycologo britannico G. MASSEE). — Ascomata subcarnosa, scutellaria, sessilia, quasi *Humaricæ*. Asci teretiv-clavati, paraphysati, octospori. Sporidia fusioidea, 3-4-septata, hyalina.

1. **Masseea quisquiliarum** (B. et C.) Sacc. *P. quisquiliarum* B. et C. 2017
Cub. Fungi n. 670, Cooke Mycogr. f. 37. — Lutea, crateriformis, sessilis, margine inflexo; ascis teretiv-clavatis, filiformi-paraphysatis; sporidiis fusiformibus curvatis 3-4-septatis, 25 \approx 6-7, hyalinis, levibus.

Hab. ad ramos emortuos in ins. Cuba. — Ascoma 2-5 mm. lat.

VELUTARIA Fuck. Symb. mycol. p. 300 [1869] (Etym. *vellus* v. *velum*). — Ascomata media magnitudine, ceracea, sessilia, aperta, extus pulveraceo-tomentosa, disco colorato, concavo. Asci stipitati, elongato-oblongi, 8-spori. Sporidia ovata oblongave, 2-pluriseptata, hyalina. Paraphyses filiformes.

1. **Velutaria griseo-vitellina** Fuck. Symb. mycol. p. 300. — Cupulis 2018
gregariis sparsisve, sessilibus, carnosoceraceis, difformibus, usque ad 2 mm. latis, extus margineque elevato, repando, pulveraceotomentosis, griseis, disco plano concavove, vitellino, marginem versus dilute æruginoso; ascis stipitatis, oblongis, 8-sporis, 100 \approx 10; sporidiis distichis, oblongis, utrinque parum attenuatis, rectis curvatisve, triseptatis, hyalinis, 24 \approx 5.

Hab. in sarmentis humidis, putridis Rubi fruticosi prope Æstrich Rhenogoviæ.

2. **Velutaria atro-citrina** (B. et Br.) Sacc. *Pez. atro-citrina* B. et 2019
Br. Fung. of Ceyl. n. 945. — Sessilis, subhemisphærica, extus floccis citrinis granulatis villosa; hymenio atro; sporidiis clavatis septatis, 45-50 μ . long.

Hab. in ligno putri in insula Ceylon.

3. **Velutaria nephrodigena** (Phill.) Sacc. *Peziza nephrodigena* Phill. 2020
in Grev. XV, p. 17. — Gregaria v. sparsa, sessilis, globosa, dein hemisphærica, primo tenuiter pubescens, dein glabra, alba, ceracea, firma, 200-400 μ . diam.; disco concavo, castaneo-brunneo, margine inflexo; ascis clavatis; sporidiis oblongo-fusiformibus, utrinque rotundatis triseptatis ad septa constrictis, 12-15 \approx 4-5; paraphysibus non visis.

Hab. in frondibus subemortuis *Nephrodii hispidi*, New Zealand (KIRK).

DERMATELLA Karst. M. F. I, p. 209 [1871] (Etym. a *Dermatea*), *Dermateæ* et *Peziculæ* spec. Auct. — Ascomata ceraceo-durioscula, patellata, erumpenti-superficialia, glabra vel puberula. Asci elongati, paraphysati, 4-8-spori. Sporidia majuscula ovato-oblonga, 2-pluriseptata ex hyalino flavida. — Est *Pezicula* sporidiis septatis, sed species adsunt spurie septatæ, hinc ambiguæ *). In *Dermateam* et *Scleroderrin* *Dermatearum* sensim transit.

I. *Eu-Dermatella*. Sporidia transverse tantum septata.

1. **Dermatella Frangulæ** (Fr.) Karst. M. F. I, pag. 209, *Tympanis* 2021
Frangulæ Fr. Syst. Myc. II, p. 174, *Pezicula* Fuck. Symb. p. 279, t. IV, f. 46, *Dermatea* Tul. Carp. III, p. 161. — Sessilis turbinate-truncata, rotundata, opaca, nigrescens; disco atro, margine obsolete; ascis abrupte longe stipitatis, oblongis, 4-sporis, $66 \approx 11$ (parte sporifer.); sporidiis monostichis, ovatis, utrinque, obtusis, 3-4-septatis loculis uniguttulatis, $16-20 \approx 7-8$; paraphysibus filiformi-clavulatis.

*) *Peziculis* genuinis supra, p. 310, descriptis addendæ sunt sequentes:

1. **Pezicula amœna** Tul. Carp. III, p. 184, t. XXI, f. 1-9, *Dermatea* Tul. 2022
Bot. Zeit. 1853, pag. 54. — Erumpens, cæspitosa gregariaque, subiculo oblongo, initio crassiusculo et quidem intus locellato, postea maxime attenuato; cupulis obconicis, disco immarginato-plano, dilute aurantiacis; ascis amplis, $128 \approx 13$, octosporis; sporidiis ovato-oblongis, continuis, pellucidis, curvulis, $16-19 \approx 6,5$; paraphysibus.....

Hab. in ramis *quercinis* corticatis circa Parisios Galliæ et in Britannia.

2. **Pezicula Coryli** Tul. Carp. III, p. 183, *Dermatea Coryli* Tul. in Bot. 2023
Zeit. 1853, pag. 54. — Erumpens, cæspitosa, turbinata, exigua, straminea, disco tandem plano vel convexiusculo, immarginato; ascis oblongis, octosporis, $100 \approx 16$; sporidiis ovato-cylindræis, curvulis, continuis, utrinque obtusis, $23-27 \approx 8-10$; paraphysibus filiformibus, apice clavula obovata, $16-19 \approx 5-6$, terminatis.

Hab. in ramis cæsis *Coryli Avellanæ* circa Parisios Galliæ. — Ad sunt stylosporæ obovato-oblongæ ocellatæ et spermatia recta, exilissima.

3. **Pezicula conigena** (Phill.) Sacc. *Dermatea* Phill. Rev. mycol. 1883, n. X, 2024
p. 23. — Sparsa, coriacea vel subcornea, atro-carnea, discoideo-convexa, 0,25-1 mm. diam.; sporidiis ellipsoideis, 2-guttatis, $18-20 \approx 5-8$; paraphysibus divisus, filiformibus, hyalinis.

Hab. in strobilis *Pini* in Arduennis — An diversa a *Pezicula nectroides* Phill. (n. 1301)?

Hab. in ramis emortuis Rhamni Frangulæ in Suecia, Germania, Belgio, Italia, Britannia. — Quoad pycnidia et spermogonia cfr. l. c. Sec. Fuck. sporidia subinde muriformia fusca.

2. **Dermatella quercina** (Fuck.) Sacc. *Pezicula quercina* Fuck. Symb. myc. p. 279. — Cupulis in cæspitulos gregarios erumpentibus, fasciculatis, stipitatis, disco emarginato, convexo, 1 mm. lato, primo fusco, pulverulento, pellucido, demum ochraceo; ascis oblongis, 8-sporis; sporidiis oblongis, plerumque rectis, 3-guttulatis, demum 3-septatis, hyalinis, 24-28 \approx 5-8. 2025

Hab. in ramis corticatis siccis Quercus ad Judensand prope Æstrich Rhenogoviæ. Sec. Rehm a *Pezic. cinnamomea* vix differt. — Var. **Alni** Fuck. Symb. App. II, pag. 56, Rehm Ascom. n. 463: ascis 75 \approx 9; sporidiis 18-26 \approx 6-7, 1-3-septatis, hyalinis; cupulis flavidis prosenchymaticis. Ad ramos Alni in Germania. — Var. **Aceris** Rehm Disc. p. 252: cupulis in cæspitulos seriatos copiosioribus (usque 30); disco flavo-brunneo, margine pallidiore. In trunco Aceris Pseudoplalani, Berlin Germaniæ.

3. **Dermatella Pumilionis** (Rehm) Sacc. *Pezicula Pumilionis* Rehm Alp. n. 28. — Sessilia, plana, rotunda, dein irregulariter explanata, livido-cinerea, margine haud distincto pallidiore, minutissima, perparum conspicua, gregaria, contextu prosenchymatico, flavido; ascis clavatis, superne subacuminatis, 8-sporis, 60 \approx 12; sporidiis vermicularibus, fusoideo-filiformibus, 4-6-cellularibus, curvatis, hyalinis, parallelis, 36 \approx 2,5; paraphysibus filiformibus. 2026

Hab. ad conos putrescentes Pini Pumilionis Haspelmoos prope Augusta Vindelicorum (BRITZELMAYR). — « An potius *Belonidium?* »

4. **Dermatella livida** (B. et Br.) Sacc. *Patellaria livida* B. et Br. Ann. N. H. n. 775, *Dermatea* (B. et Br.) Phill. Disc. pag. 340, *Pezicula livida* B. et Br. Rehm Ascom. n. 462. — Minuta, gregaria, sæpe conferta, subhemisphærica, sessilis, olivaceo-flavida; disco plano, margine albido, minute squamuloso; ascis subfusoides v. clavatis, 8-sporis; sporidiis oblongo-ellipsoideis, 3-4-guttatis, dein 1-3-pseudoseptatis, 22-25 \approx 5. 2027

Hab. in truncis pineis emortuis, Leicestershire Britanniae. — Ascoma $\frac{1}{2}$ -1 mm. lat. in sicco griseo-albidum. — ***D. pachyspora**: cfr. Sacc. F. Gall. n. 2223: ascis tereti-clavatis, breve stipitatis, paraphysatis, octosporis, 130 \approx 20; sporidiis oblongis, utrinque obtusiusculis, 30 \approx 10, 4-nucleatis, tandem tenuiter 3-septatis, ad septa non, nisi medium, constrictis. In cortice Pini in Arduennis

(LIBERT). — Var. **tetraspora** Rehm Ascom. n. 462: sporidiis oblongo-ellipticis, subcurvatis, 1-pseudo 2-cellularibus, 2-4 nucleis magnis instructis, hyalinis, 28-30 \approx 7, quaternis biseriatis in ascis clavatis, apice incrassatis jodoque violascentibus, subcurvatis, 90 \approx 14; paraphysibus teneris, superne furcatis. Ad ramum putridum, adustum pineum prope Augustam Vindelicorum (BRITZELMAYR).

5. **Dermatella rosella** (Rehm) Sacc. *Dermatea* Rehm Disc. p. 257. 2028

— Gregaria, erumpens, globosa clausa, dein applanata, patellaris, fere immarginata, convexula, disco rosea, extus brunnea, sicca pallidius marginata, 1-2 mm., coriacea; ascis clavatis, supra obtuse acutatis, 75-90 \approx 7-9, 8-sporis; sporidiis fusoides, rectis curvulisve, continuis, dein 1-septatis, hyalinis, 18-25 \approx 2,5-3, distichis; paraphysibus filiformibus 2,5 μ . cr., septatis, sursum 4 μ . crass., flavidis.

Hab. in ramis querciuſ putrescentibus prope Sugenheim in Franconia. — Typus aberrans.

6. **Dermatella eucrita** (Karst.) Sacc. *Pezicula eucrita* Karst. M. F. 2029

I, p. 166, *Dermatea abietina* Auersw. Tauschv. 1865. — Solitaria vel sæpius cæspitosa, brevissime obconico-stipitata, pallide ochracea v. sordide ochraceo-pallescentis, cupula planiuscula 0,4-1 mm. lat.; ascis oblongato-clavatis, 95 \approx 15-18, obturaculo apicali jodo violaceo-fuscescente; sporidiis distichis, oblongatis v. fusoides-oblongatis, curvulis v. rectis, plerumque guttulis, 4-7 majusculis, præditis v. spurie 3-6-septatis, 28-36 \approx 7-9; paraphysibus numerosis, simplicibus v. ramosis, 1,5-2 μ . apice clavatis.

Hab. ad corticem Pini silvestris in Mustiala et Germania. — Sec. Rehm Ascom. n. 865, asci 75 \approx 12-15; sporidia 27-33 \approx 6-7, demum 3-5-septata; paraphyses septatæ.

7. **Dermatella australis** (Rehm) Sacc. *Dermatea* Rehm Disc. p. 254. 2030

— Sparsa vel gregaria, erumpens, dein sessilis, globosa clausa dein expansa applanata, vix marginata, 0,1-0,8 mm. lat., uda flavo-rubescens, sicca subpulveracea, ceraceo-coriacea; ascis clavatis, 75-80 \approx 21, 8-sporis; sporidiis elongatis vel fusoides, initio continuis 1-guttatis demum 3-septatis, 18-24 \approx 6-7, distichis, hyalinis; paraphysibus tenuibus, divisis, apice incrassatis, flavis.

Hab. in cortice Cytisi nigricantis in Carniolia (Voss).

8. **Dermatella dissepta** (Tul.) Sacc. Consp. gen. Disc. p. 7, *Pezicula* 2031

dissepta Tul. Carp. III, p. 186. — Ascomatibus bysso hypodermeâ fuscâ subindeque pulvinulo stromatico vix protuberante insertis, cæspitosis, erumpentibus, turbinatis, luteolis, tandem late

apertis planisque; ascis oblongis, octosporis; sporidiis ovato-oblongis, curvulis, pallidis, 4-5-ocularibus, 20-29 \approx 7-10; paraphysibusasco longioribus, apice bifurcatis, crassiusculis, subaureis.

Hab. in cortice Castaneæ et Alni circa Parisios Galliae. — Ex bysso conidia obovato-oblonga continua obtusa stipitata oriuntur. His sæpe commixta spermatia breve filiformia, 5-7 μ . long.

9. **Dermatella Houghtonii** (Phill.) Sacc. *Dermatea* Phill. Disc. p. 342. 2032

— Solitaria v. sæpius cæspitosa, erumpens, cupulis primo globosis, dein turbinatis, stromate communi sæpe insertis, sordide flavis, dein brunneis, disco plano vel convexo, immarginato, pruinoso; ascis late clavatis, octosporis; sporidiis oblongo-ellipsoideis, sæpe inæquilateralibus, chlorino-hyalinis, triguttatis, dein bi-tri-pseudo-septatis, 27 \approx 6-9; paraphysibus filiformibus, ramulosis.

Hab. in ramis emortuis Pini lusitanicæ, Lilleshall, Salop Britanniae (V. HOUGHTON). — Stroma intus flavo-cinnamomeum.

II. *Dermatina*. Sacc. Sporidia submuriformia. Cfr. *D. Frangulæ*.

10. **Dermatella Fagi** (Phill.) Sacc. *Dermatea* Phill. Disc. p. 344. — 2033

Erumpens, cæspitosa, 3-20 mm. lata, cupulis planis vel leniter convexis, plerumque immarginatis, udis aurantiaco-flavis, siccis ferrugineo-flavis, pruinosis, in stromate evidenti dense confertis, stipite (ubi adest) valido, cum stromate continuo; ascis late clavatis, octosporis; sporidiis ellipticis v. oblongo-ellipticis, plasmate grosse granuloso-farctis, subinde muriformibus, 18-23 \approx 9-12; paraphysibus subtiliter filiformibus, copiosissimis.

Hab. ia ramulis Fagi silvicæ ad Kingcausie pr. Aberdeen Scotiæ. — Cupulæ 0,5-1 mm. latæ; conidia oblongo-elliptica v. elliptica, 10-20 \approx 7-9, sporophoris clavatis suffulta et in superficie stromatis inter cupulas stratum pallidum efficientia. — **D. cucurbitaria** Cooke in Grev. (in Moro in Amer. bor.), sporidiis fenestratis, brunneis, 30-35 μ . long., huic affinis videtur, sed diagnosis deest.

BELONIUM Sacc. Consp. gen. Disc. p. 7 [1884] (Etym. *belone* acus),

Belonidii spec. Auct. — Ascomata sessilia v. breve stipitata, ceraceo-coriacea, scutellata, sicca subinde hysterioideo-compressa, atra vel brunnea, sæpe margine minuto atro-setulosa, glabra vel pilosula v. byssiseda. Asci elongati, typice paraphysati, octospori. Sporidia elongata v. teretiuscula, 2-pluriseptata, hyalina. — Ad gen. *Belonidium* et sect. *Belonopsis* Mollisiæ sensim abit.

I. *Eu-Belonium*. Ascomata glabrescentia, bysso nulla.

1. **Belonium graminis** (Desm.) Sacc. Consp. gen. Disc. pag. 7, *Peziza* 2034
Desm. VIII, Not. p. 5, *Belonidium Hystrix* De Not. Prof. Disc. p. 381, *Pyrenopeziza hysterina* Sacc. Mich. II, p. 244, *Belonidium* Speg. in M. N. n. 920, *Pyrenopeziza gram.* Sacc. F. ital. f. 1398 (sporidia juvenilia). — Cupulis erumpentibus, scutellaribus, sessilibus, $\frac{1}{4}$ - $\frac{1}{3}$ mm. diam., glabris, ceraceo-coriaceis, siccis compresso-clausis, udis apertis, nigris, disco cinerescente; excipulo solidiusculo, fuligineo, parenchymatico, ad marginem prosenchymatico setulisque brunneis obtusis, 5 μ . cr., coronato; ascis cylindraceo-clavatis, apice rotundatis, 60-70 \approx 10-12, breve stipitatis; paraphysibus filiformibus articulatis obvallatis, 8-sporis; sporidiis subfusoides, curvulis, 18 \approx 3,5-4, 4-guttulatis, dein 3-septatis, hyalinis.
Hab. in culmis vaginisque Moliniæ cœruleæ putrescentibus in Ital. bor., Gallia, Germania, Belgio. — Sporidia subinde initio tantum 2-guttata.
2. **Belonium Andropogonis** (B. et C.) Sacc. *Peziza Andropogonis* B. 2035
et C. North Am. Fungi n. 743, Cooke Disc. U. S. 1, p. 297. — Cupulis initio clausis, nigris, demum expansis, placentæformibus, margine undulato, disco flavo-badio; ascis clavatis; sporidiis distichis, oblongis, utrinque angustatis, 3-septatis, 15 μ . longis.
Hab. in caulibus Andropogonis in Carolina Americæ bor. (CURTIS).
3. **Belonium subgibbosum** (Ellis) Sacc. *Peziza subgibbosa* Ellis Bull. 2036
Torr. Club. 1876, p. 108. — Cupulis sparsis, stipitatis, minutis, vix 2 mm. alt., aquose albidis, siccis obscurioribus, disco convexo, pallido, margine erecto, angusto cincto; ascis cylindraceis, octo-sporis; sporidiis oblongis, obtusis, hyalinis, demum triseptatis, 20-25 μ . longis, curvulis.
Hab. in culmis emortuis Andropogonis, New Jersey Amer. bor. — *Bel. vexato* peraffine. Excipulum fibrosum, tenuiter striatum, subpubescens.
4. **Belonium aberrans** (Peck) Sacc. *Peziza aberrans* Peck Geolog. 2037
Surv. p. 14, Febr. 1875. — Minutum ceraceum, erumpens, subrotundum v. ellipticum, in sicco hysteroideum, disco pallido v. subaurantio, margine angusto nigricante cincto; ascis subfusoides, majusculis; sporidiis biseriatis v. stipatis, oblongis v. oblongo-clavatis, obscure 3-septatis, hyalinis, 15-20 μ . long.

Hab. in culmis emortuis *Andropogonis*, Newfield, New Jersey Amer. bor. (ELLIS).

5. **Belonium pallens** Sacc. Mich. II, p. 80, F. ital. f. 1286. — Asco- 2038
matibus plano-patellaribus, concaviusculis, sessilibus, $\frac{1}{4}$ mm. diam.,
glabris, disco pallide cinereis, extus brunneolis; excipuli contextu
parenchymatico, marginem versus prosenchymatico, cinereo-ru-
fesciente; ascis cylindraceutis, 80-55 \approx 10-12, apice rotundatis, bre-
vissime stipitatis, aparaphysatis(?), octosporis; sporidiis bacillari-
fusoideis curvulis, deorsum attenuatis, 40-45 \approx 3-3 $\frac{1}{2}$, 3-septatis,
hyalinis.

Hab. in culmis vaginisque *Brachypodii silvatici* prope Rouen Galliæ (LETENDRE). — Inter *Mollisiam gramineam* Karst. et *M. excelsiorem* Karst. fere medium; ob sporidia vero bacillaria et distincte septata inter *Belonia* aptius collocandum.

6. **Belonium filisporum** (Cooke) Phill. Disc. p. 162, *Peziza filispora* 2039
Cooke Grev. III, p. 66. — Cupulis sparsis v. subgregariis molliu-
sculis, hemisphæricis, dein applanatis, extus cornicoloribus, in sicco
brunneis, conniventibus; disco pallido v. sordide albo, leniter con-
cavo; ascis tereti-clavatis; sporidiis filiformibus, rectis curvulisve
3-septatis, 35 \approx 3; paraphysibus filiformibus, simplicibus.

Hab. in vaginis Graminum in Britannia. — Affine *B. excelsiori*.

7. **Belonium? albescens** (Cr.) Sacc. *Patellaria albescens* Cr. Finist. 2040
p. 46. — Cupulis sessilibus, disciformibus, concaviusculis, 2-4 mm.
lat., extus brunneis, disco griseo-albo; ascis minutis, octosporis;
sporidiis oblongo-cylindraceutis, hyalinis, 4-5-nucleatis; paraphysi-
bus simplicibus, apice incrassatis.

Hab. in culmis emortuis *Secalis*, Finistère Galliæ.

8. **Belonium pullum** Phillips et Keith in Grev. VI, p. 75, t. 97, f. 8-11, 2041
Disc. pag. 151. — Sparsum; cupulis sessilibus demum explanatis,
aquoso-cinereis, extus brunneis; ascis cylindraceuto-clavatis; spori-
diis fusiformibus, nucleatis, dein 3-septatis, 25-30 \approx 3-5; paraphy-
sibus linearibus, apice ovatis, dissilentibus.

Hab. ad culmos *Poæ* et *Typhæ*, Forres, Bristol Shrewsbury
Britanniæ. — Ascoma 1 mm. lat. excipuli cellulæ exteriores elon-
gatae setulas adnatas formantes.

9. **Belonium? eustegiæforme** (B. et C.) Sacc. *Peziza eustegiæformis* 2042
B. et C. North Am. Fung. n. 741, *Pez. Arundinariæ* Cooke Disc.
U. S. p. 297. — Applanatum, facile deciduum, piceum, e subiculo
maculæformi orbiculari oriundum, disco pallido.

Hab. in *Arundinaria macrospermæ* in Carolina infer. et Georgia.

10. **Belonium? paludosum** (Cr.) Sacc. *Patellaria paludosa* Cr. Finist. 2043
p. 46. — Cupulis brunneolis, sessilibus, disciformibus, 1 mm. lat.;
ascis late clavatis, minutis, octosporis; sporidiis fusoido-elongatis,
8-nucleatis; paraphysibus sursum bifurcatis et piriformi incrassatis.
Hab. in calamis *Junci effusi*, Finistère Galliæ. — Cellulæ
excipuli sphericæ.

11. **Belonium Arctii** (Phill.) Sacc. *Mollisia Arctii* Phill. Disc. p. 183. — 2044
Sparsum, sessile, initio subglobosum dein expansum, scabrum, ni-
gricanti-brunneum, margine pallido, serrulato, erecto vel subinvo-
luto, disco udo pallide aquoso-brunneo; ascis late clavatis; spori-
diis lineari-fusoidis, 2-septatis, 30-45 \approx 5; paraphysibus lineari-
bus, obtusis.

Hab. in caule putri *Arctii Lappæ* prope Bristol Britanniæ
(BUCKNALL). — Ascoma 0,5 mm. lat.

12. **Belonium fuscum** Phill. et Harkn. Calif. p. 3. — Cupulis sparsis, 2045
fusco-brunneis, longitudinaliter striatis; stipite brevi, obtuso; di-
sco concolore; ascis late clavatis, apice acutis, octosporis; spori-
diis oblongis vel oblongo-fusoidis, rectis curvulisve, 1-3-septa-
tis, 15-20 \approx 4-6; paraphysibus filiformibus, ramulosis obtusis.

Hab. in caulibus emortuis *Saniculæ Menziesii* in California.

13. **Belonium raphidosporum** (Rehm) Sacc. *Pyrenopeziza raphido-* 2046
spora Rehm Ascom. n. 298. — Sessile in ligni dealbati superficie,
semiglobosum, dimidiatum, primitus poro conspicuo pertusum, dein
concauum, urceolatum, 0,5 mm. lat., ore dilatato (ita ut discus
subfuscus conspiciatur), extus rugulosum et circa ostiolum subal-
bidum, fusco-nigrum, sparsum, elapsam foveolam nigrocinctam re-
linquens; hypothecio fuscidulo, gonidiophoro gonidiis viridibus, plus
minusve magnis ascoma, hymenio evanido, replentibus; ascis cla-
vatis, 8-sporis (an polysporis?) 50 \approx 9-12; sporidiis parallele po-
sitis, filiformibus, rectis vel subcurvatis, plus minusve acutatis, bi-
cellularibus, utraque cellula 2-guttulata, hyalinis, 21-24 \approx 1,5; pa-
raphysibus, superne conglutinatis.

Hab. ad truncos putridos *Pini Cembrae* in alpe tyrolensi
Kühtai.

II. *Trichobelonium*. Sacc. Ascomata byssiseda vel pilosula.

14. **Belonium retincolum** (Rab.) Sacc. *Tapesia* Karst. Rev. p. 137, 2047
Helotium retincola Rabenh. in Kalchbr. Szepes. p. 238, t. II, f. 1.

— Ascomatibus 2-3 mm. latis tomento effuso, nigro, subreticulato insidentibus, sparsis, sessilibus primitus planiusculis, dein scutellato-marginatis, margine subflexuoso, extus nigro-tomentosis; disco ceraceo, flavo-ochroleuco; carne alba; ascis clavatis; sporidiis cylindraceis, curvulis, (spurie?) bi-triseptatis.

Hab. in culmis subputridis in Hungaria et ad basin culmorum Phragmitis, Wasa Fennicæ. — Ascoma, sec. Karst., 0,5-1 mm. lat., in sicco valde fragile, initio hemisphæricum, totum atrum.

15. **Belonium Stockii** (Cooke et Phill.) Sacc. *Lachnella Stockii* C. et 2048
Ph. Disc. p. 261. — Gregarium v. congestum sessile demum planum extus rufo-brunneum; pilis brevibus septatis brunneis obsessum, disco concavo pallide rufo; ascis tereti-clavatis; sporidiis elongato-fusoideis, 3-septatis, 20-22 = 2-3.

Hab. in caulibus putridis herbarum Bungay Britannicæ (Stock). — Ascoma 0,5 mm. lat., substantia tenuis firmula.

III. *Scelobelonium*. Sacc. Ascomata stipitata.

16. **Belonium melanosporum** Rehm Ascom. Alp. n. 9 (*Belonidium*). 2049
— Cupulis sparsis solitariis interdum binis, breviter crasse stipitatis, stipite circ. 0,5 mm. long. flavescente vel nigricante, urceolato-turbinatis, margine albido involuto, nigrofuscis, siccis extus striatis, juvenilibus margine albido involuto, glabris, circ. 1 mm. alt., 0,5 mm. diam., contextu prosenchymatico, flavido; ascis clavatis, apice incrassatis, 4-8-sporis, 105 = 15; sporidiis oblongis, obtusis, 4-cellularibus, primitus hyalinis, dein subfuscis, muco lato circumdatis, mono- v. subdistichis 20 = 5; paraphysibus hyalinis, filiformibus apice sensim in clavam fuscam, 4-5 μ . cr. abeuntibus.

Hab. ad culmos erectos, siccos Luzulæ glabratae juxta glaciem æternam Taschach-Gletscher in valle Piz alpium tyrolensium, 2200 m. alt.

BELONIDIUM Mont. et Dur. Fl. Alg. t. XXVIII, f. 8 (1846), De Not. Prof. Disc. p. 380 (Etym. *belone* acus ob formam sporidiorum), *Arachnopeziza* Fuck. — Ascomata subsessilia vel breve stipitata, scutellata vel infundibuliformia, ceracea, læticoloria vel pallida (nec fusco-nigricantia) glabra vel puberula, subinde bysso inserta; asci elongati, typice paraphysati, octospori. Sporidia elongata vel teretiuscula, pluriseptata. — A sect. *Belonopsis* Mollisicæ (quam cfr.) differt præcipue sporidiis distinctius septatis, a *Belonio* ascomatibus seu excipulis numquam vere atris, nec setulosis.

1. *Eu-Belonidium*. Ascomata glabra, bysso nulla.

1. **Belonidium Moliniæ** De Not. Comm. critt. I, pag. 380. — Cupulis 2050
infundibuliformibus, concavis, pallescentibus; disco marginato, excipulo fibroso-ceraceo; ascis clavatis, grandiusculis; sporidiis terti-oblongatis, 4-ocularibus, hyalinis.

Hab. in culmis siccis Moliniæ cœruleæ, Valle Intrasca Italiae borealis.

2. **Belonidium Scolochloæ** (De Not.) Sacc. *Helotium Scolochloæ* De 2051
Not. Comm. Critt. I, p. 379. — Ascomate patellari convexo, lutescente sessili, excipulo crassiusculo; sporidiis fusoides vel fusideo-sublanceolatis, hyalinis, 4-ocularibus.

Hab. in culmis Scolochloæ in tectis prope S. Siro, Genova in Italia boreali.

3. **Belonidium tephromelas** (Pass.) Sacc. F. ital. fig. 1285, *Peziza te-* 2052
phromelas Pass. Erb. cr. ital. Ser. II, n. 397. — Cupulis gregariis subsuperficialibus, plano-scutellatis, breve marginatis, glabris, 1 mm. lat., cinereo-olivaceis, ceraceis; ascis clavatis, breve stipitatis, 80 ≈ 10-11, apice rotundatis, 8-sporis; sporidiis distichis fusoides, curvulis, utrinque obtuse attenuatis, 3-septatis, non constrictis, 20 ≈ 3,5, hyalinis.

Hab. in calamis Typhæ et Junci effusi pr. Parma Italiae.

4. **Belonidium sclerogenum** (B. et C.) Sacc. *Peziza sclerogena* B. et 2053
C. Cub. Fung. n. 695. — Sessile, subhemisphæricum, lutescens, margine inflexo, demum applanatum; ascis clavatis; sporidiis biserialibus, fusiformibus, curvulis, triseptatis, 30-34 μ . longis.

Hab. in petiolis Palmarum in insula Cuba.

5. **Belonidium pruiniferum** Rehm Ascom. n. 304. — Gregarium, sessile, 2054
siccum sphæroideum, vix urceolatum, rosellum, albido-pruinatum, scabrum, humidum dilatato-urceolatum vel subplanum, margine crasso, ruguloso, albido circumdatum, hyalino-flavidulum, plerumque 1-1,3 mm. diam., contextu prosenchymatico flavido, fibris marginalibus distantibus, obtusis, c. 3 μ . crassis; ascis clavatis, apice obtuse acuminatis, 8-sporis, 75 ≈ 9; sporidiis oblongis, obtusis, rectis vel subcurvatis, 1-4-cellularibus, 2-4-8 nucleis parvulis instructis, hyalinis distichis, 22-24 ≈ 3; paraphysibus filiformibus, superne sensim 3 μ . cr., hyalinis.

Hab. ad caules putridos Cirsii spinosissimi aliarumque in alpe tyrolensibus juxta glaciem æternam. — Apex ascorum jodo valde cœrulescit sporidiaque exacte 4-cellularia apparent.

6. **Belonidium introspectum** (Cooke) Sacc. *Peziza introspecta* Cooke 2055
Hedw. 1875, p. 84, Disc. U. S. I, p. 295. — Gregarium vel sparsum, minutum diaphanum, cupula sessili, molli, hemisphærica demum scutellari applanatave aquoso-pallida, $\frac{3}{10}$ - $\frac{4}{10}$ mm.; ascis clavatis, stipitatis; sporidiis arcte fusiformibus, rectis vel curvulis, hyalinis, 4-5 nucleatis, dein leniter 5-septatis, 40-45 \approx 8; paraphysibus linearibus,

Hab. ad lignum cariosum, New Jersey Amer. bor. (ELLIS).

7. **Belonidium immarginatum** Pat. et Gaill. in Bull. Soc. Myc. Fr. IV, 2056
p. 100 (*Beloniella*). — Cupula 260-400 μ . diam., sessili, glabra, expansa, immarginata, albido-lactea, opalina, fere ex toto ab hymenio efformata; ascis clavatis, octosporis, 80-90 \approx 10-12; sporidiis linearibus, fusiformibus, 4-septatis, hyalinis, 4-guttulatis, 40-43 \approx 4-5; paraphysibus ramosis, apice clavatis, intus granulosis.

Hab. ad ligna emortua Puerto-Zamuro Venezuela Amer. austr. (GAILLARD). — Jodi ops nulla.

8. **Belonidium glabro-virens** (Boud.) Sacc. *Helotium* Boud. in B. S. 2057
bot. Fr. 1881, p. 95, t. II, f. 6. — Ascomate perexiguo, sessili, glabro, smaragdino, hemisphærico, nitido translucido, margine saturatiore, 0,3-0,5 mm. diam., disco plano vel convexulo; ascis clavatis, octosporis, 80-94 \approx 10-14; sporidiis oblongis, curvulis, 3-septatis, 12-13 \approx 3-4; paraphysibus filiformibus, septatis, ramulosis.

Hab. in ligno putri Fraxini, Montmorency Galliæ. — Adest socia forma conidica stilbiformis virens.

9. **Belonidium album** (Cr.) Sacc. *Lecanidion album* Cr. Finist. p. 45. 2058
— Cupulis albis sessilibus disciformibus, $\frac{1}{5}$ mm. lat.; ascis late oblongis, octosporis; sporidiis subfusoides, 6-septatis, hyalinis.

Hab. in Helminthosporio quodam ad ramos Coryli, Finistère Galliæ.

10. **Belonidium beloneum** (Cr.) Sacc. *Helotium beloneum* Cr. Fin. 2059
p. 48, *Peziza belonea* Nyl. in litt. — Ascomate albo, sessili $\frac{1}{5}$ mm. diam., glabro, convexo; ascis clavatis octosporis; sporidiis subcylindricis elongatis, uniserialiter guttulatis.

Hab. ad terram, inter Polytricha, Moulin à Poudre Finistère Galliæ.

11. **Belonidium abscedens** (Cr.) Sacc. *Helotium abscedens* Cr. Fin. 2060
p. 48. — Ascomate albo, sessili, glabro, convexo, 200 μ . lat.; ascis crasse clavatis, octosporis; sporidiis navicularibus, primo granulosis, dein 5-septatis; paraphysibus filiformibus.

Hab. ad terram in declivitatibus, Finistère Galliæ.

II. *Arachnopeziza* Fuck. Ascomata glabra v. pilosula, bysso inserta.

12. **Belonidium Aurelia** (Pers.) De Not. Prof. Disc. p. 381, Pat. Tab. 2061
anal. f. 285, *Peziza aurelia* Pers. M. E. I, p. 270, *P. Wauchii*
Grev. t. 139, *Arachnopeziza aur.* Fuck. Symb. pag. 303, *Polynema*
Fuck. Symb. App. I, p. 337, f. 35, *Patellaria bicolor* Curr. Linn.
Trans. XXIV, p. 494, t. 51, f. 15-16. — Sessilis, sparsa, subven-
triosa, aureo-rubiginosa, pilis adpressis nunc aureis, nunc rubris
fimbriata, subiculo tenui niveo; ascis elongato-clavatis, substipita-
tis, 8-sporis, $90 \approx 10$; sporidiis oblique monostichis, fusiformibus,
plerumque rectis, 3-septatis, utrinque ciliatis, hyalinis, $16 \approx 4$; pa-
raphysibus copiosis, filiformibus, simplicibus.

Hab. ad folia, ramulos ipsaque pericarpia faginea aliasque quis-
quias humi jacentes putres in Germania, Gallia, Britannia, Italia,
Belgio, Amer. bor. — Cupulæ majusculæ, submembranaceæ, sub-
crispatæ, 2-3 mm. latæ. Color in fungo recente auroræ. Species
vere pulchella.

13. **Belonidium delicatulum** (Fuck.) Sacc. *Arachnop. delicatula* Fuck. 2062
Symb. p. 304. — Cupulis sparsis, in villo effuso, delicatissimo,
arachnoideo, laxo, candido insidentibus, primo globosis, demum
applanatis concavisve, extus pilis candidis, patentibus villosis, di-
sco concavo, rubro-fusco, usque ad 2 mm. lato, margine vix ele-
vato; ascis oblongis, substipitatis, 8-sporis, $80 \approx 8$; sporidiis farctis,
filiformibus, quandoque antice subhamatis, rectis curvatisve, con-
tinuis, hyalinis, $40 \approx 2$.

Hab. in cortice putri dejecto *Quercus* ad paginam interiorem
pr. Eberbach Rhenogoviæ. — *B. Aureliæ* affine.

14. **Belonidium auratum** (Fuck.) Sacc. Mich. I, p. 60, F. ital. fig. 1283, 2063
Arachnop. aurata Fuck. Symb. mycol. p. 304. — Cupulis $\frac{1}{2}$ mm.
latis, sparsis, villo delicatissimo, arachnoideo, candido, late effuso
insidentibus, subtus dense, strigose flavescenti villosis, subglabris,
primo globosis obconicisve, clausis, demum apertis, margine pro-
minente, brevissime aureo-ciliato, disco concavo, flavo; ascis oblon-
gis, in stipitem attenuatis, 8-sporis, $96 \approx 7$; sporidiis fasciculatis,
filiformibus, curvatis, multiguttulatis, antice obtusis, basi acumina-
tis, hyalinis, $72 \approx 2$.

Hab. in cortice interiore putrido, humido *Populi pyramida-*
lis in Rhenogovia et in lignis quercinis, Selva, Bavaria (Tre-
viso) Ital. bor. In specim. italicis asci sunt clavati, deorsum atte-

nuati, 110 \approx 10, paraphysibus filiformibus obvallati, octospori; sporidia bacillaria, curvula, 45-50 \approx 2 $\frac{1}{2}$, pluriguttulata, hyalina.

15. **Belonidium araneosum** (Berk.) Sacc. *Peziza areneosa* Berk. Fl. 2064

Tasm. p. 275, *P. arachnoidea* Cooke Austral. fung. p. 50. — Cupulis primum subglobosis demum ex hemisphærico expansis, sessilibus extus araneosis, floccis subtus super matricem repentibus oriundis, hymenio luteo-aurantiaco; sporidiis curvulis multinucleatis, 50-52 μ . long. linearibus.

Hab. in ligno emortuo in Tasmania (ARCHER). — Minuta, extus byssoidea. An aptius *Erinella*?

16. **Belonidium fulgens** (Hazsl.) Sacc. *Tapesia fulgens* Hazsl. Einig. 2065

Disc. p. 13. — A *Belonidio Aurelia* differt mycelio flavo-aureo, pilis superne brunneo-fulgentibus; sporidiis minoribus fusoidis, hyalinis, 3-septatis.

Hab. in ligno quercino prope Karlstadt Croatiae. — Ex auctore forte sporidia spurie septata.

17. **Belonidium? phlegmaceum** (Ellis) Sacc. *Tapesia phlegmacea* Ellis 2066

Torr. Cl. 1882, p. 19. — Gregarium sessile, orbiculare, planum, tenue, album, molliusculum, subiculo laxè arachnoideo, albo, repente insertum; ascis tereti-clavatis sursum abrupte acutatis, 60 \approx 12; sporidiis tereti-fusoidis, deorsum attenuatis, 30-33 \approx 2,5 (septatis?); paraphysibus supra vix incrassatis.

Hab. in truncis dejectis Magnoliæ, New Jersey Amer. bor.

18. **Belonidium basitrichum** Sacc. Fungi Ven. Ser. IV, n. 87, F. ital. 2067

fig. 113. — Cupulis gregariis, sessilibus, patellaribus, ceraceo-mollibus, ambitu circularibus repandisve, margine obtusiusculo vix prominulo totis, albis, subdiaphanis, dein sordide albidis, in siccò vix contractis, $\frac{1}{4}$ - $\frac{1}{2}$ mm. diam., disco concaviusculo vix granuloso, excipuli cellulis prosenchymaticis, stipatis, lutescentibus, saturatoribus ibique hyphis conidiophoris (*Helminthosporii*), sepi in star cinctis; hyphis filiformibus, 100 \approx 5, subsimplicibus, septatis, fuliginis, rigidulis, apice conidia fusoides, curvula, 35 \approx 8, fuliginea 6-8-septata gerentibus; ascis clavatis 100-120 \approx 14, breve attenuato-stipitatis; paraphysibus filiformibus clavulatis obvallatis, 8-sporis; sporidiis oblique recteve distichis, cylindræco-fusoidis, curvulis, 36-40 \approx 3 $\frac{3}{4}$ -4, initio 7-8-guttulatis, dein 6-8-septatis, hyalinis.

Hab. in ligno quercino udo putrescente, Selva (Treviso) Ital. bor. — *Bel. minutissimo* certe affine, differt vero cupulis sessilibus, sporidiis 6-8-septatis nec tantum 4-septatis.

19. **Belonidium melaneres** (B. et Br.) Sacc. *Peziza melaneres* B. et Br. Fung. of Ceyl. n. 950. — Cupulis subglobosis, albidis, subtiliter pulverulentis, e strato tenui byssoideo oriundis; hymenio concavo cinereo; ascis clavatis; sporidiis breviter fusiformibus uni-septatis 20 μ . long. 2068

Hab. in ramis in insula Ceylon. — An *Solenopezia*?

20. **Belonidium Ruborum** (C. et Ph.) Sacc. *Peziza Ruborum* Cooke Phil. Grevill. IX, p. 105. — Subgregarium ceraceo-flavum, subiculo tenui, evanido, concolori, nidulans; cupulis concavis, demum applanatis, extus tomentosus, fuscis $\frac{1}{2}$ -1 mm. lat.; tomento tenui, sparso; ascis clavatis; sporidiis sublanceolatis, demum triseptatis, hyalinis, 15 \approx 5. 2069

Hab. in sarmentis Rubi in Arduennis (LIBERT).

21. **Belonidium leucorrhodinum** (Mont.) Sacc. *Peziza leucorrhodina* Mont. Cuba p. 360, t. 13, f. 4, *Scutula leuc.* Speg. Fung. Guar. II, p. 56. — Sparsum vel aggregatum conglomeratumque; cupulis amœne roseis vel carneis in sicco concavis, margine crasso obtuso, humectis subgelatinosis, disco vix impresso, subiculo byssino niveo radiante orbiculari insidentibus; sporidiis cymbi-fusiformibus 3-4-septatis, ascis conformibus inclusis. 2070

Hab. in foliis Malvacearum Cubæ (RAMON DE LA SAGRA), ad folia viva arborum in Perisporiaceis parasitans, Guarapí Paraguay (BALANSA). — Sec. Speg. sporidia 12-14 \approx 4, primo 4-blasta, dein didyma ad septum non vel vix constricta, hyalina; asci 50-60 \approx 10-12. Quoad genus ambigua species.

22. **Belonidium Asteroma** (Fuck.) Sacc. Mycol. Ven. Spec. p. 164, t. XVI, f. 23-28, F. it t. 1284, *Arachnop. Asteroma* Fuck. Symb. mycol. p. 304. — Cupulis gregariis, sessilibus, basi fibrillis delicatis, repentibus, fuscis cinctis, $\frac{1}{2}$ lineam latis, extus furfuraceis, olivaceis, margine pallidiore, disco olivaceo, demum clauso; ascis oblongis, stipitatis, 8-sporis, 70 \approx 11; sporidiis farctis, vermicularibus, subcylindræis, utrinque obtusis, primo continuis, demum 4-6-guttulatis, simulate septatis, hyalinis, 36 \approx 2-3; paraphysibus asci longitudine, simplicibus. 2071

Hab. in foliis putridis adhuc stantibus Caricis paludosæ in Rhenogovia et Italia bor. — Planta italica a descriptione Fuckelii nonnihil recedit: cupulæ disco demum late hiante, applanato nec clauso; asci cylindræo-subclavati, breve stipitati, 60 \approx 9, 8-spori, paraphysibus filiformibus obsoletis obvallati; sporidia acicularia, 35 \approx 3, leniter arcuata, utrinque acutiuscula, hyalina, 4-

6-nucleata, subdisticha; cupulæ patelliformes, circulares, sinuosæ, diam. $\frac{1}{2}$ - $\frac{2}{3}$ mm., basi villo fusco parco cinctæ, cærulescenti-olivaceæ.

23. **Belonidium heteromorphum** (E. et E.) Sacc. *Peziza heteromorpha* 2072

E. et E. in Journ. Myc. II, p. 88. — Subiculo brunneo-nigro tomentosum, exteuso, plura cm. longo; cupulis sparsis, initio globosis ore minuto, rotundo apertis, margine albo, disco pallido, demum carneo, expanso, plano vel convexulo margineque undulato, 2-3 mm. diam.; ascis tereti-clavatis 70 \approx 6-7, copiose paraphysatis; sporidiis tereti-fusoideis, curvulis, hyalinis, 3-4-nucleatis et demum pseudo-septatis, 20 \approx 2,5-3.

Hab. in basi culmorum *Spartinæ polystachyæ*, Louisiana Amer. bor. (LANGLOIS). — Cupulæ juniores albo-puberulæ.

24. **Belonidium? Aliculariæ** (Oud.) Sacc. *Mollisia Aliculariæ* Oudem. 2073

Bijd. IX, p. 379. — Cupulis $\frac{1}{3}$ - $\frac{1}{4}$ mm. depresso-orbicularibus, sessilibus, basi in plantulæ nutrientis parenchymate absconditis, extus dilute, intus saturatius aurantiacis, ore nitidissime circulari præditis; ascis numerosissimis perfecte cylindræis versus apicem tantum paullulum incrassatis 70 \approx 5, achromis, membrana tenerrima; paraphysibus achromis, subtilissime filiformibus; sporidiis distichis, 23-30 \approx 2, achromis, bacilliformibus, 5-septatis.

Hab. in *Hepatica Alicularia scalaris*, Deurne Hollandiæ.

III. *Lasiobelonium* Sacc. Ascomata subtomentosa, bysso nulla.

25. **Belonidium Tami** (Lamy) De Not. Comm. Critt. I, 381, *Peziza* 2074

Tami Lamy in Desm. Descr. Esp. nouv. 1836, p. 10. — Sparsum sessile minutissimum, globoso-applanatum, tenerrimum, subtomentosum, primo albo-hyalinum, dein fulvum; ascis cylindricis; sporidiis ovoideis (?).

Hab. ad caules putrescentes *Tami communis*, Limoges Galliæ. — Sec. De Not. l. c.: ascomata depresso-urceolata, leviuscula, ceracea; excipulum fibrosum; sporidia teretiuscula 4-locularia, hyalina.

26. **Belonidium amœnum** Speg. Fung. Fueg. n. 343. — Cupulis super- 2075

facialibus, sparsis vel hinc inde 2-3-aggregatis, sessilibus, udis globosis, disco tumido-hemisphærico 250-400 μ . diam., albo-ceraceo donatis, siccis contracto-concavis, globosis, extus flavescens villosulis, pilis longiusculis cylindræis apice obtusis basi non incrassatis 60-100 \approx 1-2, levibus 4-6-septatis non constrictis rigidulis ex hyalino chlorinis; ascis clavulatis, antice abrupte breveque cunea-

tis apiceque truncatis, deorsum lenissime attenuatis 60-70 \approx 5-6, aparaphysatis, octosporis; sporidiis fasciculatis, bacillaribus, vix subclavulatis, superne obtuse rotundatis, inferne attenuato-acutatis 35-40 \approx 1,5, 3-5-septatis non constrictis, hyalinis.

Hab. ad culmos emortuos putrescentes Rostkoviæ grandifloræ in Staten island Fuegiæ.

27. **Belonidium æruginosum** Dur. et Lév. Expl. Sc. Alg. t. 28, f. 8 2076

(absque diagnosi). — Cupulis sessilibus gregariis, hypophyllis, ex urceolato scutellatis, albo-viridulis, tomentellis, ore coarctato, disco brunneolo; ascis tereti-clavatis, deorsum breve attenuatis, octosporis; sporidiis distichis, cylindraceo-fusoideis, triseptatis, denique constrictis, hyalinis; paraphysibus bacillaribus, asco longioribus.

Hab. in foliis emortuis dejectis Ilicis in Algeria.

IV. *Podobelonium* Sacc. Ascomata stipitata.

28. **Belonidium Campanula** (Nees) De Not. Prof. Disc. p. 380, Karst. 2077

M. F. I, p. 162, *Peziza Campanula* Nees Syst. pag. 71, f. 295, Fr. Syst. Myc. II, p. 123, *P. sulphurea* Batsch Cont. I, fig. 146 (ex unico specimine incompleto). — Tenella, cupula membranacea levi, campanulata, flava vel flavicans, stipite brevi filiformi; ascis elongatis; sporidiis teretiusculis utrinque obtusis, 4-6-ocularibus, hyalinis.

Hab. in culmis, stipulis putrescentibus in Germania, Fennia. — Gregaria, pellucida, subdifformis, ultra 2 mm. alta. Stipes cupula brevior, subflexuosus, abiens in cupulam late campanulatam margine subrepandam.

29. **Belonidium capense** (K. et C.) *Helotium capense* Kalch. et Cooke 2078

Grev. IX, p. 25. — Sparsum, aurantiacum; cupulis stipitatis, explanatis vel centro depressis, extus pallidioribus, 3 mm. diam.; stipite deorsum attenuato, pallidiore 2½ mm. long., in cupulam expanso, basi nigricante; ascis clavatis; sporidiis fusiformibus, curvulis, 5-septatis, 50 \approx 6.

Hab. ad ramos, P. Natal Africæ austr. (WOOD).

30. **Belonidium vexatum** De Not. Prof. Disc. p. 380, Karst. M. F. I, 2079

p. 163, *Belon. culmicolum* (Desm.?) Phill. Disc. p. 148, t. V, f. 29. — Stipitatum, pallescens vel rosello-albidum; cupula cyathoidea vel subcampanulata, in sicco ore coarctato plicatulo subclausa, margine lacero vel fimbriato, disco saturatiori, roseo vel testaceo circ. 0,7 mm. lat.; stipite in cupulam sensim abeunte, circ. 0,5 mm. alt.; ascis cylindraceo-clavatis, 100-150 \approx 10-15 sporidiis cylindra-

ceis, hyalinis, rectis vel leniter curvulis, 3-septatis, utroque apice leviter attenuatis, 28-40 \approx 3-4; paraphysibus filiformibus, apicem versus inæqualiter incrassatis, interdum furcellatis.

Hab. ad culmos Secales, Baldingeræ arundinaceæ, Airæ cæspitosæ, Calamagrostidum nec non Junci effusi in Fennia, Gallia, Germania, Italia. — Sec. Phill. huc spectat *Pez. culmicola* Desm. sed sporidiis sec. diagn. valde recedit. — Var. β . **litoreum** Karst. *Belonidium litoreum* Karst. Symb. pag. 213, *Peziza litorea* Fr. Syst. myc. II, p. 121? Partibus internis satis cum typo convenit, sed cupulæ solitariae vel cæspitosæ, breviter stipitulatæ virescenti- vel rosello-pallidæ aut pallidæ, siccæ pallescentes disco concolori vel subtestaceo-pallido, cupula concaviuscula vel convexa, sicca concava vel planiuscula, margine in sicco tenui, incurvo, sublacero. Ad culmos Phragmitis communis in par. Tammela Fenniæ.

31. **Belonidium minutissimum** (Batsch) Phillips Disc. p. 149, *Peziza* 2080
minutissima Batsch Elench. fig. 143, B. et Br. Ann. Nat. Hist. n. 171, tab. 15, fig. 21, *Peziza Helminthosporii* Blox. Herb. Kew. — Cupulis initio clavatis vel obovatis, dein cupulatis, albo-pallidis, glabris, stipite brevissimo, basi attenuato; ascis clavato-elongatis, octosporis; sporidiis oblongis vel oblongo-fusoideis, curvulis, constricto 4-septatis, 30 \approx 6, hyalinis; paraphysibus filiformibus.

Hab. in Helminthosporiis ad ramulos, Twycross et prope Bath Britannia.

Sect. 5. **Scolecosporæ** Sacc.

GORGONICEPS Karst. M. F. I, p. 15 (1871) [Etym. *gorgon* et *ceps* pro caput, ob ascoma sporidiis serpentiformibus farctum], *Vibrissæ* Sect. II, *Sessiles* Phill. gen. Vibr. p. 8, *Apostemidium* Karst. M. F. I, p. 15. — Ascomata sessilia vel brevissime stipitata ceracea vel ceraceo-mollia, turbinata vel disciformi-scutellata, glabra, mediocria vel minuta. Asci cylindraceuti, paraphysati, typice octospori. Sporidia filiformi-acicularia, sæpius septulata, subdiaphana, ascum plerumque æquantia. — Cfr. sect. *Belonopsis* generis *Mollisiæ* nec non gen. *Belonium* et *Belonidium*.

1. **Gorgoniceps aridula** Karst. M. F. I, p. 185. — Gregaria vel sub- 2081
sparsa, sessilis vel brevissime stipitata, cupula convexa, immarginata, cæσιο-hyalina, sicca irregulari, deorsum fuscescente, disco cæσιο-hyalino vel (siccitate) griseo-pallido, 0,3-0,8 mm. lat., sti-

pite brevissimo vel indistincto, fusco-atro; ascis clavatis, 82-130 = 11-14, obturaculo minutissimo jodo leviter cœrulescente; sporidiis conglobatis, bacillaribus, arcuatis v. flexuosis, septatis (vulgo septis 8-20) vel guttulatis, hyalinis, 50-88 = 2-2,5, paraphysibus filiformibus, 1,5-2 μ . cr., sursum 2-3 μ . cr., apice attenuato.

Hab. ad corticem crassiorem et lignum vetustum, Messuby et Mustiala Fenniæ.

2. **Gorgoniceps Guernisaci** (Cr.) Sacc. *Vibrissea Guernisaci* Crouan 2082
Finist. p. 46, Phill. Vibris. p. 8, t. II, f. 1-7, Gill. Disc. cum ic. Pat. Tab. an. Fung. fig. 369. — Minuta, lenticularis vel turbinata e carnosio subgelatinosa, hymenio pallide ochraceo vel griseo, convexo; ascis cylindraceis; sporidiis filiformibus, hyalinis, 270 μ . long., pluriguttulato-septulatis; paraphysibus filiformibus apice furcato-clavatis.

Hab. in ramis submersis Salicis in Gallia, Britannia. — Ascoma 1-3 mm. diam.

3. **Gorgoniceps Fiscella** (Karst.) Sacc. Consp. gen. disc. p. 7, *Apostemidium* Karst. Mycol. Fenn. I, p. 186. — Subgregaria, tota cæsia vel livido-pallida, granulis seriatis exiguis adnatis obsessa, disco convexiusculo sicco planiusculo, 0,5-1 mm. diam.; ascis cylindraceis, 200 = 5-6,5, apice jodo non tinctis; sporidiis conglobatis, filiformibus, 120-180 = 1; paraphysibus filiformibus, apice ovoideo.

Hab. ad ramulos alneos et salicinos locis humidis circa Mustiala Fenniæ. — A *Gorg. Guernisaci*, ad quam cl. Auctor in Rev. mon. p. 134, refert, videtur differre sporidiis multo brevioribus (120-180 nec 270).

4. **Gorgoniceps vibrisseoides** (Peck) Sacc. *Helotium vibrisseoides* 2084
Peck 32 Rep. 1879, p. 48 et Bull. N. Y. Stat. Mus. 1887, p. 28, t. II, f. 7-9, *Vibrissea turbinata* Phill. Gen. Vibr. p. 8, tab. II, f. 14-18 (1881), *Gorgoniceps turbinata* Sacc. Consp. Gen. Disc. p. 7. — Sparsa, turbinata, disco plano vel convexo, ochraceo, flavo, margine tenui cincto, extus cyaneo-grisea, levis; ascis cylindraceis, 8-sporis; sporidiis filiformibus 180 = 2; paraphysibus tenuibus apice ramosis clavulatis, brunneis.

Hab. in ramis Fraxini et lignis aqua dejectis, Shrewsbury Britannia et Sandlake et Catskill Mount. Amer. bor. — Ascoma $\frac{1}{2}$ -1 mm. lat. Species americana est paullo major, 2-4 mm., disco livido vel atro-viridulo.

5. **Gorgoniceps decolorans** (Saut.) Sacc. *Peziza decolorans* Saut. Pilz. 2085
Salzb. p. 9, Wint. Hedw. 1881, p. 131. — Alba, sessilis, concava,

carnoso-ceracea, vetusta nigrescens; ascis anguste cylindraceis, 280-290 \approx 6-7; sporidiis filiformibus, ascum æquantibus, 1-1,5 μ . crass. hyalinis; paraphysibus filiformibus, septatis, hyalinis, apice clavatis, 5 μ . crass.

Hab. in ligno putri prope Mittersill Salzburg. — 2 mm. lat.

6. **Gorgoniceps leptospora** (B. et Br.) Sacc. *Peziza leptospora* B. et Br. An. Nat. Hist. n. 1166, t. IV, f. 30, *Vibrissea* Phill. Gen. Vibr. p. 8, t. II, f. 19-23. — Hemisphærica dein expansa, sessilis; disco pallido vel stramineo, extus pilis adpressis sparsis nigris lurida; margine crenulato; ascis oblongis; sporidiis filiformibus 200-230 \approx 2, seriatim plurinucleatis, demum septulatis.

Hab. in lignis putrescentibus, Jedburg Britanniae. — Ascoma 1 mm. diam.

7. **Gorgoniceps obscura** Rehm Ascom. Ill. et Exs. n. 714. — Ascomatibus in subiculo ex hyphis fuscis, subramosis, septatis, longis, 6 μ . crassis, composito sessilibus, sparsis, primitus globosis subclausis, ore hyalino, dein urceolatis denique patellaribus, siccis margine crasso, demum involuto, humidis explanatis, 2 mm. diam., extus fuscis vel fusco-cinerellis, scabris, disco cinereo; contextu parenchymatico, fusco, versus marginem cellulis prosenchymatico-elongatis, fuscidulis, septatis, apice 6 μ . crassis et divergentibus; ascis clavatis apice obtuse acutatis, 75-96 \approx 9, 8-sporis; sporidiis filiformibus, rectis vel subcurvatis subacutis, hyalinis, 4-6 demum 8-cellularibus, 2-3-stichis, 30-36 \approx 1-2.

Hab. in truncis Callunæ vulgaris emortuis et inter muscos abditis pr. Königstein Saxoniae (KRIEGEL). — An potius *Belonium*?

8. **Gorgoniceps dinemasporioides** (E. et E.) Sacc. *Peziza* E. et E. Journ. myc. I, p. 42. — Nigra, setosa, minuta, puncto centrali affixa, infra celluloso-fibrosa; margine subfimbriato setisque longis 300-400 μ ., nigris patentibus ciliato; ascis clavulatis, 90-100 \approx 8-10 in basim sensim attenuatis; sporidiis filiformibus multinucleatis e flavido hyalinis 50-65 μ . longis.

Hab. in vaginis inferioribus culmi Andropogonis, Newfield N. J. Amer. bor.

9. **Gorgoniceps micrometra** (B. et Br.) Sacc. *Peziza* B. et Br. An. nat. Hist. n. 773. — Perexigua sessilis subturbinata brunnea, villo albo affixa ore subcontracto subtiliter striato; ascis clavatis; sporidiis filiformibus.

Hab. in calamis emortuis *Junci*, Twycross Britanniaë. — Ascoma sursum nudum, 100 μ . lat. An *Mollisia*?

ERINELLA Sacc., vix Quél. Ench. p. 301 (cujus species *Dasyscypham* spectant). [Etym. *erion* lana]. — Ascomata urceolata vel scutellata, stipitata vel sessilia, villosa vel pubescentia, ceracea, minuta. Asci teretes vel clavati, typice paraphysati, octospori. Sporidia filiformia vel acicularia, septulata vel guttulata, ascum subæquantia, subhyalina. — Est *Trichopeziza* vel *Dasyscypha* scolecospora.

I. *Eu-Erinella*. Ascomata stipitata.

1. **Erinella simillima** (B. et Br.) Sacc. *Peziza simillima* B. et Br. 2090
Fung. of Ceyl. n. 941. — Cupulis brevissime stipitatis, primum globosis, demum hemisphæricis, albo-tomentosis; hymenio concavo aurantiaco; ascis clavatis; sporidiis filiformibus 100-120 μ . long.
Hab. in corticibus et ramis in insula Ceylon (THWAITES) et Sarawak (BECCARI).
2. **Erinella calospora** Pat. et Gaill. in Bull. Soc. Phyc. Fr. IV, p. 101. 2091
Cupulis sparsis, 2-3 mm. diam., turbinatis, inferne in stipitem brevissimum angustatis, extus villosis albidisque, intus flavo-aurantiis; pilis externis cylindræis, elongatis, mollibus et flexuosis; ascis cylindræis, substipitatis, 120-150 \simeq 12-15, apice poro minutissimo (jodi ope cœrulescente) instructis; sporidiis longissimis, 90-120 \simeq 2-3, utrinque obtusis, 6-14-septatis, viridulis, lucem refringentibus; paraphysibus simplicibus ramosisve, regularibus, non incrassatis, septatis, hyalinis.
Hab. ad cortices arborum viventium inter Maipures et S. Fernando Amer. austr. (GAILLARD).
3. **Erinella orinocensis** Pat. et Gaill. in Bull. Soc. Myc. Fr. IV, p. 101. 2092
— Gregaria; cupula turbinata, extus alba, villosa, in stipitem brevissimum attenuata, margine pilis rugosis ciliato; disco subaurantiaco; ascis cylindræis, substipitatis, 80-90 \simeq 10, poro exoperculato (jodi ope cœrulescente) instructis; sporidiis rectis curvulisve linearibus, obtusis, 40-45 \simeq 3, hyalinis, 3-septatis; paraphysibus hyalinis, septatis, apice clavato-incrassatis.
Hab. ad caules putrescentes *Cannacearum*, Puerto Zamuro, Maipures aliisque locis Amer. austr. (GAILLARD). — Fungus circ. 1 mm. diam., ætate provecta brunneus.
4. **Erinella longispora** (Karst.) Sacc. *Lachnum longisporum* Karst. 2093
Hedw. 1889, p. 191. — Gregaria vel subsparsa, breviter stipitata vel

subsessilis, albida, villosula, cupula primum subsphæroidea, dein planiuscula, sicca subsphæroideo-contracta, 0,5 mm. lat., disco vitellino, stipite brevi crassiusculo vel fere nullo; ascis cylindraceo-clavatis, obtusis, circiter 60 \approx 6-7, octosporis; sporidiis distichis, filiformi-fusoideis, obsolete 3-septatis, chlorino-hyalinis, 18-40 \approx 2; paraphysibus 2 μ . cr., apice acutis.

Hab. ad corticem et ramos arborum frondosarum in Minos, Lafayette Brasiliæ. — Pili ascomatum asperi, apice obtusi, 3 mm. crassi.

5. **Erinella minutissima** (Cr.) Sacc. *Peziza minutissima* Cr. Fin. p. 52. 2094
— Cupulis altis, stipitatis, pilosis $\frac{1}{5}$ mm. lat., margine pilis brevibus apice rotundatis fasciculatis ciliato; disco flavido; ascis cylindricis 8-sporis; sporidiis filiformibus; paraphysibus fusoideis ascos multo superantibus; excipuli cellulæ majusculis angulosis.

Hab. in foliis putrescentibus quercinis, Finistère Galliæ.

6. **Erinella aturensis** Pat. et Gaill. in Bull. Soc. Myc. Fr. IV, p. 100. 2095
— Stipitata, 5-7 mm. alta, gregaria vel sparsa; cupula plana, 0,5-1 mm. diam., orbiculari, tenui, extus pruinoso et albida, margine pilis albis, brevibus, cylindraceis, rugosis, 30 \approx 3, ciliata; disco plano, flavo-aureo; stipite gracili, elongato, cylindraceo, albedo, glabro inferne incrassato et rufescente; ascis cylindraceis, apice acuminatis, exoperculatis, 60-70 \approx 1,5-2; sporidiis filiformibus, eguttulatis, 50-64 \approx 1,5; paraphysibus linearibus, apice incrassatis, hyalinis, ascos longitudine æquantibus.

Hab. ad folia putrescentia, Atures Amer. austr. (GAILLARD).

7. **Erinella Mapiriana** Pat. et Gaill. in Bull. Soc. Myc. Fr. IV, p. 100. 2096
— Stipitata, gregaria 2 mm. alta; cupula plana, orbiculari, margine pilis hyalinis rugosis 60-65 \approx 3, cylindraceis, apice obtusis ciliata, extus alba; disco tenuissimo diaphano, 0,5 mm. diam., vix flaveolo; stipite gracili, cylindraceo, albo, glabro; ascis cylindraceis, deorsum attenuatis, apice poro pertusis, 55-60 \approx 3-4; sporidiis filiformibus, gracilibus, 40 \approx 1; paraphysibus hyalinis simplicibus, linearibus, superne paullulum inflatis.

Hab. ad folia emortua, Mapipe Americæ australis (GAILLARD).

8. **Erinella erratilis** Qué. Champ. Norm. pag. 31, t. III, f. 15, Pat. 2097
Tab. anal. t. 588. — Ascomatibus ovoideis, 300-500 μ . diam., firmis, stipite brevi fultis, villosis, albo-roseis et in sicco granuliformibus; disco ceraceo, plano, incarnato-aurantiaco; sporidiis capillaribus, 40-50 μ . longis.

Hab. in calamis Junci exsiccatis in Normandia (A. LE BRE-

TON). — An potius *Dasyscypha?*: ex icone Pat. enim sporidia ascomato breviora sunt.

9. **Erinella juncicola** Fuck. Symb. mycol. p. 305, *Peziza virginea* 2098
Lasch in Rab. Fung. eur. p. 517, nec Batsch. — *Dasys. virgineæ* similis, sed multo minor; cupulis stipiteque cupulam vix æquante subfuscis, pilis brevioribus, inferioribus fuscis, marginis niveis; ascis oblongis, 8-sporis, $67 \approx 8$; sporidiis faretis, anguste filiformibus, $40 \approx 2$.

Hab. in calamis putridis Junci effusi, Æstrich et Driesen Germaniæ.

10. **Erinella hapala** (B. et Br.) Sacc. *Peziza hapala* B. et Br. Ann. 2099
N. H. n. 561. — Minuta, sparsa vel stipata; ascomatibus stipite obconico suffultis, extus furfuraceo-villosis, cervinis, disco plano, obscuriori; ascis clavatis; sporidiis elongatis, filiformibus, flexuosis, plerumque longitudinem asci æquantibus.

Hab. in Caricibus et Juncis emortuis in Britannia et Waitaki Novæ Zelandiæ.

II. *Erinopsis* Sacc. Ascomata sessilia.

11. **Erinella raphidophora** (B. et C.) Sacc. *Peziza raphidophora* 2100
B. et C. Cub. Fung. n. 683. — Primum globosa, breviter albifloccosa, plus minus furfuracea, demum expansa, margine rotundato inflexo; ascis elongatis; sporidiis linearibus utrinque acutis, brevioribus 25μ . long., sed sæpius longioribus, utrinque endochromate contracto.

Hab. in lignis putridis in Venezuela et Cuba. — Ascoma 2 mm. diam.

12. **Erinella raphidospora** (Ellis) Sacc. *Peziza* Ellis Torrey Bot. Club. 2101
1876, p. 107. — Gregaria sessilis, minuta, subconfluens, albo-tomentosa, disco plano vel leviter convexo; ascis lineari-clavatis, apice acutis vel obtusis; sporidiis filiformibus ascum æquantibus, seriatis multinucleatis.

Hab. in trunco vetusto Pini, Newfield N. J. Amer. bor.

13. **Erinella leucophæa** (B. et C.) Sacc. *Peziza leucophæa* B. et C. 2102
North Pac. Exp. n. 152. — Cupula concava, intus alba, extus floccis brunneis subfasciculatis aspera; sporidiis longis filiformibus.

Hab. in ramulis emortuis in Japonia.

14. **Erinella pseudofarinacea** (Cr.) Sacc. *Peziza pseudofarinacea* Cr. 2103
Fin. p. 52. — Cupulis albis, ovoideis dein turbinatis, 0,5 mm. lat., pilosis, pilis costulas verticales formantibus; margine laciniato;

disco stramineo; ascis clavatis; sporidiis filiformibus hyalinis; paraphysibus linearibus.

Hab. ad ramulos dejectos Pini maritimæ, Morlaix Finistère Galliæ (DE GUERNISAC).

15. **Erinella rhabdocarpa** (Ellis) Sacc. *Peziza rhabdocarpa* Ellis 2104
Torr. Cl. 1882, p. 19. — Sparsa sessilis, $\frac{1}{2}$ mm. diam., tenuis, margine pilis brevibus fasciculatis obtusis clavato-capitatis fimbriato; excipuli cellulis vesiculososis stipatis; ascis oblongo-cylindræis sessilibus, apice acutiusculis, $65-75 \approx 10$; sporidiis linearibus multinucleatis (an demum multiseptatis?) flavidis ascum subæquantibus, 2-3 μ . crass.

Hab. in ramis emortuis Comptoniæ, New Jersey America boreali.

16. **Erinella miniopsis** (Ell.) Sacc. *Peziza miniopsis* Ellis Bull. Torr. 2105
1881, p. 66. — Gregaria, sessilis, minuta, 500-750 μ . diam., pilis tomentososis, albis, crispis tecta; disco cinnabarino, cupuliformi; ascis clavato-cylindræis, $95 \approx 12$; sporidiis stipitatis, lineari-lanceolatis, 50-65 μ . longis, lutescentibus, nucleatis, demum multiseptatis; paraphysibus filiformibus sursum non incrassatis.

Hab. in cortice exteriori vivo Aceris rubri in Amer. bor. — Discus udus aurantiacus, siccus miniatus.

17. **Erinella brevipila** (Rip.) Sacc. *Peziza* Rip. Bull. Bot. Franc. 1876, 2106
p. 220 et Malbr. et Let. Champ. Norm. p. 61, f. 10, Mout. Ascom. Liege p. 139. — Cupulis sessilibus, subsparsis, minutis, scutellatis, pilis brevibus, crassiusculis, rugulosis, brunneo-atris marginatis; ascis cylindræis, $55-70 \approx 10-16$, octosporis; sporidiis bacillari-fusoideis, 30-40 ≈ 3 , pluri-guttulatis, dein 3-septatis, hyalinis.

Hab. in caulibus Centaureæ et Achilleæ in Gallia et Belgio.

18. **Erinella mutabilis** Quél. Champ. Normand. p. 31, nec B. et Br. 2107
— Sessilis, subcoriacea, tenuiter tomentosa, cervina dein fusca, 1 mm. diam., margine cilio lato albo, disco carneo dein albido; sporidiis acicularibus, 40 μ . longis, seriatim guttulatis, hyalinis.

Hab. in culmis siccis Brachypodii in Normandia (LE BRETON).

19. **Erinella albo-carnea** (Cr.) Sacc. *Peziza albo-carnea* Cr. Fin. 2108
p. 52. — Cupulis albis, subsessilibus, hemisphæricis, pilosis; disco incarnato pilis fasciculatis cincto; ascis subcylindræis 8-sporis; sporidiis tereti-filiformibus; paraphysibus fusoideis, excipuli cellulis prosenchymaticis anastomosantibus tenuissimis.

Hab. ad calamos Junci conglomerati in paludosis Finistère Galliæ.

Species *Pezizearum* mihi ignotæ.

1. **Peziza catulacea** Desm. Cat. pl. omiss. p. 15. 2109
Hab. in agro lillensi Galliæ.
2. **Peziza clavellata** Desm. Crypt. Voges. exs. n. 175. 2110
Hab. in agro lillensi Galliæ.
3. **Peziza Spirææ** Kirchn. in Lotos 1856, p. 246. 2111
Hab. in Bohemia meridionali.
4. **Peziza Armeriæ** Lasch in Klotzsch Herb. myc. n. 1126 et in Bot. 2112
Zeit. 1848, p. 292 (nomen).
Hab. in agro driesensi Germaniæ (LASCH).
5. **Peziza Verbenæ** Kirch. in Lotos 1856, p. 246. 2113
Hab. in Bohemia meridionali.
6. **Peziza epidermidis** Opiz Beitr. p. 25. 2114
Hab. in agro pragensi Bohemiæ.
7. **Peziza fungorum** Opiz in Lotos 1856, p. 246. 2115
Hab. in Bohemia meridionali.
8. **Peziza Juniperi** Kirchn. in Lotos 1856, p. 246. 2116
Hab. in Bohemia meridionali.
9. **Peziza Kirchneri** Opiz in Lotos 1857, p. 28. 2117
Hab. in Bohemia meridionali.
10. **Peziza Koerberi** Peyl in Lotos 1858, p. 31, t. 20. 2118
Hab. in Bohemia orientali.
11. **Peziza flava** Sw. Fl. Ind. occid. III, p. 1933. 2119
Hab. in Jamaica.
12. **Peziza phæoloma** Lév. in Demid. Voy. p. 97, t. 4, f. 7. 2120
Hab. in Tauria.
13. **Peziza raudanensis** Lecocq Rech. sur Raudan., Streinz Nom. 2121
pag. 433.
Hab. in agro parisiensi Galliæ.
14. **Peziza Artemisiæ** Kirchn. in Lotos 1856, p. 246. 2122
Hab. in Bohemia et Germania.
15. **Peziza limosa** Balb. Fl. lugd. II, p. 311. 2123
Hab. in agro Brixii Ital. bor.
16. **Peziza aterrima** Lasch in Klotzsch Herb. myc. n. 336. 2124
Hab. in Germania et Suecia.

Fam. 4. Ascoboleæ Boud.

Mém. Ascob. p. 20 (1869), Sacc. Consp. gen. Disc. p. 7.

Ascomata carnosae vel carnosogelatinosae, sessilia vel brevissime stipitata, plana vel convexa, glabra vel pilosa vel furfuracea. Asci 4-8-polyspori, apice operculatim dehiscentes, paraphysati, a disco mox exsistentes eumque echinatum v. papillatum reddentes. Sporidia globosa, ellipsoidea vel subfusoidea, continua, colorata vel hyalina. — Plerumque fimicolæ, rarius humi-carbonicolæ vel phytogenæ.

Clavis analytica generum.**Sect. 1. Phæosporæ** Sacc. Sporidia colorata.

Boudiera. Sporidia globosa, intra ascum libera.

514 *Ascobolus*. Sporidia ellipsoidea vel subfusoidea, intra ascum libera.

514 *Saccobolus*. Sporidia ellipsoidea v. subfusoidea, intra ascum sacculo communi inclusa.

Sect. 2. Hyalosporæ Sacc. Sporidia hyalina.

629 *Cubonia*. Sporidia globosa, octona.

528 *Ascophanus*. Sporidia ellipsoidea vel subfusoidea, octona; ascomata nuda.

536 *Lasiobolus*. Sporidia ellipsoidea vel subfusoidea, octona; ascomata pilosa.

539 *Ryparobius*. Sporidia ellipsoidea vel subfusoidea, numerosa; ascomata perfecta.

545 *Gymnodiscus*. Sporidia ellipsoideo-oblonga, numerosa; ascomata margine et excipulo carentia. (Ad *Gymnoascaceas* nutans).

Sect. 1. Phæosporæ Sacc.

BOUDIERA Cooke Grev. VI, p. 76 [1877], (Etym. ab E. BOUDIER, celeberrimo monographo Ascobolearum). — Ascomata immarginata, orbicularia discoidea, plana vel convexa, carnosae; hymenio papillato. Asci clavati v. clavato-cylindranei, erumpentes. Sporidia globosa, colorata. Paraphyses distinctæ. — Cfr. *Phæopezia*, sectio sphærosporiarum.

a *Boudiera globulosa* (Holl.) Speg. = 514
 1. **Boudiera areolata** C. et Ph. Grev. p. 76, t. 97, f. 12-15, Phill. Disc. p. 285, t. IX, f. 53, *Plicaria tracheja* Rehm Asc. n. 451, — Atro-brunnea; cupulis orbicularibus convexis; ascis 8-sporis, clavato-cylindraneis, 24 μ . cr.; sporidiis globosis, areolatis, 26-30 μ . diam., hyalinis dein brunneis; paraphysibus robustis, clavatis, septatis, supra purpureo-brunneis, sursum 8-10 μ . cr.

Hab. ad terram udam, N. Wales Britanniae et in Germania. —

Ascoma 2-2,5 mm. lat. Asci jodo cœrulescunt, paraphyses violascunt.

2. **Boudiera microscopica** (Crouan) Cooke Grev. VI, p. 76, *Ascobolus* 2126
microscopicus Cr. Finist. p. 57 et Ann. Sc. Nat. 1857, t. IV, E, fig. 20-23. — Sessilis, subhemisphærica, brunneola, glabra, disco plano; ascis clavatis, octosporis; sporidiis sphæricis, brunneis, echinatis; paraphysibus simplicibus, crassis, sursum latioribus, curvis, hyalinis.

Hab. in excrementis caninis, Finistère Galliae. — Contextus anastomotico-filamentosus.

3. **Boudiera marginata** Phill. et Harkn. Calif. pag. 4. — Gregaria, 2127
initio orbicularis, dein patellata, margine serrulato, sordide ochracea; ascis late clavatis, octosporis; sporidiis sphæricis, mox rufis, areolatis, 20 μ . lat.; paraphysibus linearibus, obtusulis.

Hab. in fimo cuniculorum in California. — Cellulæ excipuli crasse tunicatæ.

4. **Boudiera nivea** (Quel.) Sacc. *Ascobolus niveus* Quél. X Suppl. 2128
p. 14, t. IX, f. 18. — Ascomatibus hemisphæricis, dein lenticularibus, 500-800 μ . diam., glabris, hyalinis, diaphanis, margine membranaceo, subtilissimo, undulato; hymenio plano, albo, lilacino-punctulato; ascis cylindricis; sporidiis sphæroideis, 13-14 μ . diam., eleganter granulosis, lilacinis.

Hab. in fimo vulpium, Jura Galliae. — Cum *Phæopezia canina* comparanda.

5. **Boudiera hyperborea** (Karst.) Sacc. *Ascobolus hyperboreus* Karst. 2129
M. F. I, p. 80. — Gregaria, sessilis, nuda, planiuscula, pallescens, minuta; ascis subcylindræis, 16-18 μ . cr., 8-sporis; sporidiis monostichis, sphæroideis, papillose asperulis, dilutissime violascentifuscis, 10-14 μ . diam.

Hab. supra fimum Lemmi norvegici in umbrosis humidis prope oppidum Kola Lapponiæ rossicæ.

6. **Boudiera Brassicæ** (Crouan) Sacc. *Ascobolus Brassicæ* Crouan 2130
Fl. Finist. p. 57 et in Ann. Sc. Nat. 1857, p. 174, tab. IV, B, C, f. 9-14. — Alba, sessilis, hemisphærica, concava, 2-3 mm. lata, margine erecto, denticulato, disco pallide brunneo-violaceo; ascis tereti-clavatis operculatim dehiscentibus, octosporis; sporidiis sphæricis, distichis v. monostichis violaceo-brunneis; paraphysibus hyalinis, apice furcatis et gelatinoso-cohærentibus.

Hab. in trunculis putridis Brassicæ, Finistère Galliae. — Contextus excipuli hexagono-cellulosus. Sporidia ex icone, 16-18 μ . lat.

ASCOBOLUS Pers. in Gmel. Syst. p. 1461 ex p. [1791] (Etym. *ascos* ascus et *ballo* ejicio). — Ascomata carnosula, sessilia vel subsessilia scutellata v. plana v. convexula, glabra v. pilosella. Asci cylindraceo-clavati 4-8-spori, operculo apice dehiscens, varie paraphysati, exsistentes. Sporidia ellipsoidea vel breve fusioidea, eximie longitud. rimulosa vel reticulata vel levia, cyanea, violacea vel brunnea.

1. *Eu-Ascobolus*. Ascomata glabra.

a) Species fimicolæ.

1. **Ascobolus ærugineus** Fr. Obs. II, p. 310, Boud. Ascob. pag. 32, 2131
t. VII, fig. 72, *A. marginatus* Schum. Sael. 2, p. 437. — Sessilis gregarius, globosus v. subcylindraceus, planiusculus, immarginatus, glaber, viridis v. flavo-olivaceus; ascis anguste clavatis, 8-sporis; sporidiis ellipsoideis violaceis v. purpureo-violaceis, demum brunneis, anastomotico-rugosis, subinde levibus, 15-17 \approx 8; paraphysibus filiformibus, septatis, hyalinis, muco sulphureo-viridi obvolutis.

Hab. in fimo equino, vaccino et vulpino in Suecia, Dania, Britannia, Gallia, Belgio. — Ascoma $\frac{1}{2}$ -1 mm. lat., siccum nigricans. Species Crouani (Finist. p. 57) sporidiis globulosis videtur diversa. Sec. Boud. l. c. huc forte spectat *A. immarginatus* Becc.

2. **Ascobolus immarginatus** Beccari Erb. Critt. ital. n. 775. — Major 2132
2-10 mm. lat., gregarius, obconicus vel hemisphæricus, concavus, madore ambitu subrecurvus, sæpe irregularis, primum luteo-virescens, dein sporidiis emissis, disco fusco-violaceus, glaber, margine nudo, obtuso, levi; ascis oblongis, octosporis; paraphysibus filiformibus, articulatis, apice dilatatis; sporidiis violaceis, ellipsoideis, obtusis, obscure venulosis, 13-16 \approx 8-9.

Hab. in fimo in horto botanico, Pisa in Italia media. — Cfr. *Ascob. ærugineus*.

3. **Ascobolus viridulus** Phill. et Plowr. in Grevillea VIII, p. 103. — 2133
Sparsus, sessilis, hemisphæricus, concavus, dein expansus, submarginatus, crassus, pallide flavescenti-viridis, grosse granulatus; ascis clavatis, octosporis; sporidiis mono- vel distichis, ellipticis, violaceis, dein brunneis, 13 \approx 6, rugoso-striatis; paraphysibus validiusculis, distincte septatis, apice clavatis, muco pallide viridi obvolutis.

Hab. in stercore avis (Columbi?) ad Shrewsbury Britanniae. — Cupula 0,5-1 mm. diam. Habitus *Asc. furfuracei* juvenilis.

4. **Ascobolus globularis** Roll. Bull. Soc. mycol. IV, pag. 57, t. XV, 2134
fig. I. — Carnosus, luteo-virens, extus furfuraceus, piriformis, sed basi immersa globulum fingens, $\frac{1}{2}$ -1 mm.; disco plus minus plano aut convexo; ascis paucis valde prominentibus claviformibus, maximis, amplis, 280-300 \approx 70-80, breviter pedicellatis, 8-sporis; sporidiis sphæroideis, maximis, 33 \approx 28, sacco hyalino singulatim inclusis v. aliquando nudis, intense violaceis, brunnescentibus, levibus vel aliquando-verrucosis; paraphysibus hyalinis, gracilibus, ad apicem leviter v. vix incrassatis, plerumque simplicibus, junioribus granulosis, dein septatis ascisque gelatina sulphurea immersis.

Hab. ad stercus caprinum in horto botanico Parisiorum Galliæ.

5. **Ascobolus lapponicus** Karst. M. F. I, p. 80. — Gregarius, sessilis, 2135
glaber, gelatinosus, plano-concavus vel plano-convexus, submarginatus, flavido-pallens, disco virescente-pallido, 0,6 mm. lat.; sporidiis octonis, oblongato-ellipsoideis, violaceo-fuscis, 18-21 \approx 12-13,5.

Hab. supra fimum Lemmi norvegici prope oppidum Kola Lapponiæ rossicæ.

6. **Ascobolus crenulatus** Karst. M. F. I, p. 77. — Gregarius, sessilis, 2136
primum sphæroideus, dein applanatus, planiusculus, virescenti-luteus, furfuraceus, margine crenulato, circiter 1,5 mm. lat.; ascis clavatis jodo haud tinctis, 12 μ . cr., octosporis; sporidiis monostichis, ellipsoideis, striatulis, violaceo-fuscescentibus, 12-16 \approx 6-8; paraphysibus gracilescentibus.

Hab. supra fimum Tetraonum et vaccinum pr. Mustiala Fenniæ, in Britannia, Oneida et Helderberg Mts. Amer. bor. — Ab affinibus cupulis minoribus, margine crenulato, sporidiis minoribus etc. differt.

7. **Ascobolus stictoideus** Speg. Mich. I, p. 474. — Laxissime gregarius v. sparsus, minutus, vix $\frac{1}{3}$ - $\frac{1}{2}$ mm. diam., externe aquose albidus, disco dilute olivaceo ex ascis exsurgentibus nigro-punctato, totaliter in fimo immersus, non v. labiis tantum exsertis, crassiusculis atque laceris; ascis paucis 5-10, magnis, 150-160 \approx 40, clavato-saccatis, breviter et crasse stipitatis, superne crassiuscule tunicatis, octosporis; paraphysibus septulatis, apice curvulis obvallatis; sporidiis distichis vel irregulariter polystichis, ellipticis, 25 \approx 14, primo hyalinis, levibus, dein amœne violaceis minute, ac densissime verruculosis, postremo roseo-fuligineis.

Hab. in fimo canino putrescente, Conegliano Ital. bor. — Tunica ascorum jodi ope obsolete cærulescit.

8. **Ascobolus cubensis** B. et C. Cub. Fung. n. 707. — Parvus, crateriformis, viridi-flavus; ascis linearibus; sporidiis ellipticis pallide fuscis, longitudinaliter rugoso-plicatis, $10 \approx 5$. 2138

Hab. in fimo suino in insula Cuba.

9. **Ascobolus cervinus** B. et Br. Fung. of Ceyl. n. 1209. — Olivaceus, extus furfuraceus; margine discreto; ascis rectis, oblongis; sporidiis minoribus, 15μ . long. 2139

Hab. in fimo, Peradenya Ceylon. — Affinis *A. ærugineo* sed asci recti multo minores etc.

10. **Ascobolus Marchalii** Bomm. et Rouss. Fl. Myc. Brux. p. 131. — Ascomatibus carnosus, pallide flavis, distincte stipitatis vel in stipitem compactum subsulcatum, furfuraceum, 4-5 mm. alt. desinentibus; disco 4-8 mm. lat., margine integro parum inflexo et compacto, demum laciniato, ob sporidia exsilia brunneo-violascente; ascis claviformibus, $150-180 \mu$. longis; paraphysibus filiformibus, rectis vel curvulis, flavo-viridulis, subinde apice inflatis; sporidiis ellipticis, $15 \approx 9$, primo hyalinis, dein violascentibus, striatis. 2140

Hab. in fimo vaccino in Belgio. — Affinis *A. lignatili* et *A. Crouani*, a quibus differt stipite sæpe distincto v. striatulo, magnitudine et habitatione.

11. **Ascobolus marginatus** Pat. Tab. an. Fung. pag. 32, fig. 76, nec Schum. — Carnosulus, plerumque pedicellatus, rarius sessilis, 3-4 mm. lat., extus flavidus, glaber, margine dentibus furfuraceis subfimbriato, disco brunneo plano v. concaviusculo, ascis punctato; ascis cylindræis octosporis; sporidiis monostichis, ovoideis, $17-18 \approx 9-10$, violaceo-purpureis, rimulis ramulosis percursis; paraphysibus filiformibus. 2141

Hab. in fimo aquino, Poligny Galliæ. — *Ascob. lignatili* et *furfuraceo* subaffinis.

12. **Ascobolus Daldinianus** De Not. Comm. critt. I, p. 361. — Habitu *Ascophani granuliformis*, differt paraphysibus apice haud incrassatis; sporidiis violaceis cum nucleo subtiliter punctulato. 2142

Hab. in fimo vaccino, Locarno (DALDINI). — Flavo-ochraceus, glaber.

13. **Ascobolus furfuraceus** Pers. Obs. I, p. 33, t. IV, f. 3-6, Bern. Manip. IV, t. VI, f. 5, Boud. Ascob. p. 26, t. VI, f. 6-10, *Elvella fimetaria* Scop. Fung. Hung. in Ann. Hist. Nat. IV, p. 149, t. I, f. 6, *Peziza atra* Huds. Angl. II, p. 637, *Pez. stercoraria* Bull. Champ. p. 256, t. 376, Sowerb. fung. t. 18, 389, f. 3-6, *Pez. fu-* 2143

sca Bolt. fung. t. 109, f. 2. — Sessilis, subconcavus, fuscus virens, externe furfuraceus; ascis cylindraneo-clavatis, deorsum longe attenuato-stipitatis, apice rotundato-subtruncatis, 140-150 \approx 20-22; paraphysibus filiformibus, septulatis obvallatis, octosporis; sporidiis oblongo-ellipsoideis, 22-30 \approx 10-14, distichis vel oblique monostichis, primo violaceis, dein vinoso-fuligineis, longitudinaliter ramose striatulis, mucro obvolutis.

Hab. in fimo vaccino et equino, rarius felino, cervino et humano in Suecia, Gallia, Germania, Britannia, Belgio, Italia, Austria, Amer. bor. et austr., Africa et Oceania. — Ascoma 2-4 mm. lat. subglobosum dein disco concavo apertum. — Var. **nudus** Kickx Fland. I, p. 479: fulvo-virens, extus nudus. Ibidem in Belgio et Italia.

14. **Ascobolus glaber** Pers. Obs. Myc. I, p. 34, t. 4, f. 5, *b*, t. 7, *a*, *b*, *c*, Syn. p. 677, Nees. Syst. fig. 297, Fr. Syst. Myc. II, p. 164, Boud. Ascob. p. 33, t. VII, f. 13-15. — Sessilis, minutus, glaber, nitens, subconvexus, marginatus, spadiceus, globoso-oblongus, dein piriformis; ascis late tereti-clavatis, 8-sporis; sporidiis ellipsoideis violaceis, longitud. reticulato-rugosis, 25-30 \approx 12-14; paraphysibus filiformibus. 2144

Hab. in fimo vaccino, equino et cuniculorum in Suecia, Germania, Britannia, Gallia, Italia, Fennia. — Species conferta, superficialis, valde varia; quoad diversum maturitatis gradum forma tereti, conica, convexa, depressa etc. gaudet; $\frac{1}{2}$ -1 mm. lata. Etiam colore varius, primo rubens, dein spadiceus, demum niger, variat aurantius v. albus (*A. albidus* Cr. Finist. p. 57).

15. **Ascobolus rufo-pallidus** Karst. M. F. I, pag. 8. — Subgregarius, 2145
obconicus, sessilis, glaber, rufescens; disco plano-concavo, papillato, pallidiore, margine tenui fimbriato, 0,5 mm. lat.; sporidiis octonis, ellipsoideis, 16-26 \approx 12-13.

Hab. supra fimum Lemmi norvegici prope oppid. Kola Lapponiæ rossicæ. — Ipsi auctori dubia species; sporidia primo nigra, denuo examinata hyalina visa.

16. **Ascobolus minutus** Boud. Bul. Soc. Myc. IV, p. XLVIII, t. II, 2146
f. 1. — Gregarius aut sparsus, minutissimus, 0,5-0,7 mm. æquans, brunneus, extus levis dilutior, immarginatus, obconicus, aut hemisphæricus, dein lenticularis, extus glaber fulvus, disco plano aut convexo saturatiore, ascis parum superantibus nigro-papillato; paraphysibus septatis, hyalinis, gelatina lutea sæpius conspicua ascisque immersis, ad apicem subclavulatis, 5-7 μ . cr.; ascis minutis,

clavatis, hyalinis, octosporis, 140-170 \approx 13-14; sporidiis minutis, ellipticis, violaceis, densique fuscis, longitudinaliter striatis, striis vix anastomosantibus, 13-15 \approx 7-9.

Hab. in stercore vulpino, Montmorency Gallia.

17. **Ascobolus vinosus** Berk. Engl. Fl. V, p. 209, Boud. Ascob. p. 31, 2147
tab. VI, fig. 11, Pat. Tab. an. fig. 381, B. et Br. Ann. Nat. Hist.
n. 1083, tab. XVI, f. 25. — Sessilis, subglobosus, dein depressus,
glaber, vinoso-purpureus, margine laciniato; disco plano v. con-
vexo, livido-purpurascens; ascis late clavatis, octosporis; spori-
diis ellipsoideis, hyalinis, mox purpureis, demum brunneis, 23 \approx 13,
episporio anastomotico-rugoso; paraphysibus filiformibus, septatis,
vix coloratis, mucro livido obductis.

Hab. in fimo cuniculorum et vaccino in silvis in Bri-
tannia, Gallia et Germania.

18. **Ascobolus amœnus** Oud. Hedw. 1882, n. 11 et Bijd. IX, p. 381. — 2148
Sparsus, minutus, $\frac{4}{10}$ mm. diam., parum prominens, extus pallide
ochraceus, glaber, levis, floccorum tenerorum strato insidens, di-
sco ex ascis valde emergentibus nigro-punctato; ascis plurimis in
quovis ascomate, amplis clavatis, breve pedunculatis, 230 \approx 35, tu-
nica toto ambitu æquicrassa, 8-sporis; paraphysibus quam plu-
rimis, tenerrimis, septulatis, apice rectis obvallatis; sporidiis di-
stichis, primitus achromis, postea violaceis, denique fuscescentibus,
ellipticis, 36 \approx 15, statu colorato tantum densissime subtilissimeque
granulatis (verruculosis).

Hab. in fimo Cameli bactriani, Amsterdam Nederlandiæ
(VAN LEDDEN).

19. **Ascobolus australis** Berk. Linn. Journ. XVIII, p. 389. — Brun- 2149
neus; ascis clavatis; sporidiis ellipticis, purpureo-fuscis, levibus,
60-72 μ . longis; paraphysibus linearibus apice latioribus.

Hab. in fimo, Rockhampton Australiæ (THOZET).

20. **Ascobolus Baileyi** B. et Br. Fung. of Brisb. II, p. 69. — Cupulis 2150
primum ochraceis concavis, demum vinoso-brunneis explanatis,
extus leviter granulatis; ascis clavatis prominentibus; sporidiis
mono-distichis brunneis, ovatis, levibus, 15-18 μ . longis; paraphy-
sibus linearibus, apice clavulatis.

Hab. in fimo, Brisbane Australiæ (BAILEY).

21. **Ascobolus leiocarpus** B. et Br. Fung. of Ceyl. n. 971. — Cu- 2151
pulis extus rubiginosis furfuraceis; hymenio fusco; sporidiis elli-
pticis levibus v. tenuissime lineolatis.

Hab. in fimo Peradenya (THWAITES), in fimo bubalino Ceylon (BECCARI).

22. **Ascobolus major** B. et C. North Amer. Fungi n. 772. — De- 2152
planatus, margine eximio, prominente, umbrino; sporidiis ellipticis
levibus, 28-30 μ . long.

Hab. in fimo in Carolina inf. Amer. bor.

23. **Ascobolus Leveillei** Boud. Ascob. p. 35. t. VII, f. 16, nec Crouan. 2153
— Minutus, congestus, brunneus, extus opacus et minutissime fur-
furaceus, 1 mm. lat, subpiriformis, semimmersus; ascis longissi-
me exsertis, amplis, clavatis, 180 \approx 30, octosporis; sporidiis distichis
obtusè ellipsoideis, hyalinis, dein brunneis, 25-27 \approx 16, episporio
leviter reticulato; paraphysibus filiformibus, apice vix incrassatis.

Hab. in stercore equino prope Paris Galliæ et in Germania.
— Ascis gelatina sulphurea interposita longe exsiliantibus facile
distincta species. Asci jodo cœrulescunt, episporium violascit.

24. **Ascobolus sphæricus** Preuss Hoyersw. n. 156. — Immersus, mi- 2154
nutus, sphæricus, rugosus; ascis cylindricis hyalinis albis; spori-
diis octo, ovatis nigrescentibus; episporio glabro; guttulis oleosis
subbinis; paraphysibus clavatis.

Hab. in fimo canino prope Hoyerswerda.

b) Species humi-carbonicolæ.

25. **Ascobolus viridis** Curr. Linn. Trans. XXIV, p. 154, 1863 Phill. 2155
Disc. p. 289; t. IX, f. 54, nec Boud. — Ascomatibus sparsis ses-
silibus v. substipitatis, planiusculis, furfuraceis v. tomentellis ob-
scure viridi-luteis, 1,5-2 mm. lat.; ascis clavatis, jodo non tinctis,
18-20 μ . lat., octosporis; sporidiis ellipsoideis acuminatis, rugoso-
striatis, violaceo-fuscescentibus, 25-32 \approx 11,5-13; paraphysibus nu-
merosis, articulatis, 2 μ . crassis, muco virente obvolutis.

Hab. ad terram humoso-arenosam locis umbrosis in Britannia,
Fennia, Gallia, Italia, America boreali. — In speciminibus pata-
vinis: asci cylindræo-clavati, breve stipitati, apice rotundati, 180
 \approx 20, p. sporif. 100 longa; paraphysibus filiformibus, guttulatis ob-
vallati, octospori. Sporidia disticha, ovata, 25 \approx 16, rugoso-stria-
tula, initio 1-guttata, hyalina, tandem pure fuliginea (non viola-
cea). Ascomata olivaceo-virentia. — ***microspermus** Speg. F. Arg.
IV, n. 220: ascomatibus viridibus, breviter turbinatis, disco primo
hemisphærico, dein patellari-applanato, glaberrimo (2-5 mm. diam.);
ascis cylindræis vel cylindræo-clavatis, 140-150 \approx 10-20, apice
obtusè truncato-rotundatis, deorsum attenuato-stipitatis; paraphy-

sibus septulatis longioribus apice vix incrassato-nodulosis obval-latis; sporidiis ellipticis, utrinque obtuse rotundatis vel subtrun-cato-rotundatis, 17-18 \approx 8-9, monostichis vel irregulariter distichis, primo hyalinis, dein dilute roseo-fuligineis, longitudinaliter dense striatulis. Ad terram pinguem uliginosam in nemorosis prope la Recoleta Reip. Argentinæ.

26. **Ascobolus carbonarius** Karst. M. F. I, p. 76. — Cupulis gregariis 2156 sessilibus, concavis, demum pressione mutua difformibus, viridi-luteis mox brunneis furfuraceis, hypothecio pallido, 2-4 mm. lat.; ascis cylindraceo-clavatis, jodo non tinctis, 22 μ . cr., 8-sporis; sporidiis ellipsoideis, reticulatim insculptis, monostichis, violaceo-fuscis, 18-26 \approx 12-16; paraphysibus ramosis, 3 μ . cr.

Hab. ad terram in carbonariis circa Mustiala Fenniæ.

27. **Ascobolus pusillus** Boud. in Bull. Soc. Bot. Fr. 1877, pag. 310, 2157 t. IV, f. 7. — Perexiguus, carnosulus, hemisphæricus, dein plano-convexulus, immarginatus, glaber, flavo-purpurascens, extus pallidior; margine saturatiore; ascis amplis, sat brevibus, clavatis, operculatim dehiscentibus; sporidiis distichis, ovoideis, utrinque acutiusculis, 10-11 \approx 6-8, violaceis, tenuiter reticulatis; paraphysibus filiformibus, clavula oblonga dilute colorata terminatis.

Hab. in terra adusta et cuniculis fœdata, Montmorency Galliæ.

28. **Ascobolus psittacinus** Quél. Enchir. p. 293, *Peziza* Quél. Jura II, 2158 p. 295, t. V, fig. 9. — Ascomate cyathiformi, amplo, 1 cm. lat., concavo-plano, granulato stipiteque tereti, brevi, amœne viridibus dein sulphureis, disco olivaceo-fusco; ascis cylindraceo-clavatis; sporidiis monostichis, ellipsoideo-oblongis, amethysteis v. lilacineis, dein brunneis, rivulosis.

Hab. ad humum in ollis floralibus Jura Galliæ.

29. **Ascobolus foliicola** B. et Br. Fung. of Ceyl. n. 972. — Cupulis 2159 extus luteo-ferrugineis; hymenio demum undulato, spadiceo; sporidiis pallide lilacinis longitudinaliter rugosis.

Hab. in foliis putridis in insula Ceylon. — Episporium senio in globulos minutos diffinditur.

30. **Ascobolus atro-fuscus** Phill. et Plow. in Grevillea II, p. 186, 2160 t. 24, f. 1, *Ascobolus viridis* Boud. Ascob. p. 27, t. V, f. 4 nec Curr., *Ascobolus carbonicola* Boud. Bull. Soc. Bot. Fr. 1877, p. 310. — Sessilis, confertus v. sparsus, nigro-brunneus, concavus, dein planus, margine crenulato, extus furfuraceus; ascis clavatis, octosporis; sporidiis late ellipsoideis, obtusis, 22 \approx 13, hyalinis, dein

purpureis, demum brunneis, episporio granulato v. verrucoso; paraphysibus linearibus, subinde furcatis.

Hab. in areis carbonariis vel in carbone ipso in Britannia et Gallia. — Ascoma 2-6 mm. lat. Variat luteo-virens, ferrugineo-furfuraceus vel fulvus vel nigro-purpurascens. — Var. **pruinus** Boud. l. c. t. V, fig. 5: minutissime pruinus, opace fulvo-brunneus, carne luteo-virente, margine tantum dentato. Iisdem locis in Gallia.

31. **Ascobolus Archeri** Berk. Fl. Tasm. p. 276. — Cupula undulata, 2161 sessili vinoso-fusca; ascis clavatis; sporidiis amethysteis, eleganter granulatis, 12-13 μ . longis, dein usque 16-17 μ .

Hab. in carbone in Tasmania (ARCHER). — Ascoma 3 mm. lat.

32. **Ascobolus fimiputris** Quél. Enchir. p. 293, *Peziza fimiputris* 2162 Quél. Jura II, p. 397, t. V, f. 30. — Ascomate sessili, majusculo, patellari, farinoso, fuscello, 5 mm. lat., margine crenulato, furfuraceo-albo; disco spadiceo; sporidiis ellipsoideo-oblongis, obscure lilacinis vix rivulosis.

Hab. ad humum hortorum, Jura Galliæ.

c) Species phytogenæ.

33. **Ascobolus lignatilis** A. S. Lus. p. 347, t. 6, f. 6, Fr. Syst. Myc. II, 2163 p. 162, Boud. Ascob. p. 25, t. V, fig. 1. — Sordide luteus, extus albido-furfuraceus, stipite brevi crassiusculo in cupulam planam marginatam dilatato; ascis clavatis, mamillato-operculatis, 8-sporis; sporidiis anguste ellipsoideis, minoribus, longitudinaliter striatis parceque reticulatis, fuliginis.

Hab. ad ligna pinea fabrefacta subterranea (aqua cloacina aliquando male inquinata) Niskia in Lusatia. — Reliquis major, gregarius, furfure cum *Ascob. furfuraceo* congruens. Stipes 3-4 mm. fere longus et crassus, obconicus, sursum sensim dilatatus in cupulam planam v. concaviusculam, 8-10 mm. latam, ascis creberrimis nigro-punctatam. Color constans, e sordide luteo-subvirens (virore fere obsoleto).

34. **Ascobolus denudatus** Fr. Syst. Myc. II, pag. 164, Boud. Ascob. 2164 p. 26, t. V, f. 3. — Luteo-viridis, glaber, cupula turbinata substipitata, disco plano; ascis amplis, stipitatis, 8-sporis; sporidiis subdistichis, oblongo-ovatis, æquilateralibus, demum conglutinatis, 16-18 = 8, episporio subtilissime longitudinaliter striato et parce reticulato amœne violaceo, demum opaco-fusco; paraphysibus filiformibus, furcatis, apice clavatis.

Hab. ad asseres vetustos pineos in latere ad terram vergente in Suecia, Britannia, Germania. — Gregarius. Stipes brevis, sursum dilatatus in cupulam planam, marginatam, luteo-viridem, extus nudam et glabram, 2 mm. latam nec ultra. Variat stipite æquali.

35. **Ascobolus Crouani** Boud. Ascob. p. 26, tab. V, f. 2. — Sessilis, 2165
luteo-virens, globosus, dein turbinatus, plus minusve expansus, 2-5 mm. lat., fibrillis albis adfixus, extus conspicue fulvo-furfuraceus, vetustus brunnescens, margine furfuraceo-denticulato, disco concavo dein applanato lucido; ascis clavatis, basi attenuatis, octosporis; sporidiis ellipsoideis, subminutis, violaceis, denique brunneis, episporio longitudinaliter creberrime rimuloso; paraphysibus gracilibus septatis, apice piriformibus ascisque gelatina luteo-virente obvolutis.

Hab. inter folia putrida ad basim trunci *Syringæ vulgaris*, Montmorency Galliæ. — *Ascob. lignatili* dimidio minor.

36. **Ascobolus incolor** Quél. X Suppl. p. 11, t. IX, f. 17. — Asco- 2166
matibus turbinatis, 200-300 μ . diam., teneris, crassis, glabris, albescentibus v. opalinis, margine crenulato, furfuraceo, griseo-carneo; hymenio concavo, dein plano, velo fugaci tenui prædito, dein violaceo-punctulato; sporidiis ellipsoideo-oblongis, 25 μ . longis, venoso-reticulatis, violaceis.

Hab. in truncis *Brassicæ* putrescentibus Jura. — Habitu *Ombrophilam Clavum* in mentem revocat.

37. **Ascobolus Thwaitesii** B. et Br. Fung. of Ceyl. n. 970. — Car- 2167
neus, extus albo-furfuraceus; sporidiis ellipticis echinulatis, 25 \approx 12. *Hab.* in ligno putri, Central province, Ceylon. — Ab *A. lignatili* diversus.

38. **Ascobolus angulisporus** Boud. Bull. Soc. Bot. 1881, p. 92, t. II, 2168
f. 2. — Majusculus, tenuiter furfuraceus, subolivaceus hemisphæricus v. depressus, 5-7 mm. diam., extus granulis cupulâ saturatioribus conspersus; disco ascis punctato; ascis clavatis, octosporis, operculo subpapillato, 200-250 \approx 20; sporidiis ellipsoideis, violaceo-brunneis, 15-18 \approx 7-8, episporio depresse anguloso-verrucoso atque rimoso; paraphysibus filiformibus, septatis, clava 5-7 μ . crassa terminatis.

Hab. in scobe lignea putrescente, Montmorency Galliæ.

39. **Ascobolus cenangioides** Ces. Myc. Born. p. 11. — Cupulis gre- 2169
gariis, 1-1½ mm. latis, margine involuto, extus ferrugineis, disco brunneo, glabris; sporidiis fere opacis, nigrescentibus, levibus visis,

oblongis, e latere paullisper curvulis, obtusissimis, 9-10 \approx 3-4; paraphysibus numerosissimis filiformibus vix sursum incrassatis, obscure septatis.

Hab. parasiticus in *Xylaria cupressiformi*, Sarawak Bornei (BECCARI).

40. **Ascobolus Constantini** Roll. Bull. Soc. Mycol. IV, p. 56, t. XV, 2170 f. 1. — Stipitatus, carnosus; disco tenui, purpureo-brunneo, luteo-marginato, sæpe umbilicato, subtus ochraceo; stipite sat brevi, etiam ochraceo, sursum dilatato; ascis cylindricis, breviter pedicellatis aut ad basim attenuatis, 100 \approx 15, 8-sporis; sporidiis elliptico-fusiformibus, 15 \approx 8, episporio violaceo longitrorsum rimoso rimis tenuibus; paraphysibus numerosis, gracillimis, hyalinis, simplicibus ascisque gelatina sulphurea immersis.

Hab. ad corticem putrescentem Rubi prope Parisios Galliaë.

II. *Dasyobolus* Sacc. Ascomata pilosella.

41. **Ascobolus immersus** Pers. Obs. I, p. 35, t. 4, f. 7, Sacc. Mich. 2171 I, p. 234, Nees Syst. f. 297, Fr. Syst. Myc. II, pag. 164, Boud. Ascob. pag. 36, t. VIII, fig. 17, *Ascob. gigasporus* De Not. Disc. p. 360. — Gregarius v. sparsus, subimmersus aut emersus, teretipiriformis dein planiusculus v. convexus, sordide pallido-virens v. fuscescens, circiter 0,5-0,9 mm. lat., extus pilis minutissimis continuis, hyalinis simplicibus v. fasciculatis obsitus; ascis octosporis, rarius 2-4-6-sporis, cylindræo-ellipsoideis, basi breviter attenuatis, 180-250 \approx 60-95, apice truncatis, jodo dilute cœrulescentibus; sporidiis oblongo-ellipsoideis, longitrorsum remote rimulosis laxèque reticulatis, violaceo-fuscis, 60-80 \approx 30-48; paraphysibus æqualibus, inarticulatis, gracilibus.

Hab. supra stercus vaccinum et equinum in Suecia, Dania, Britannia, Germania, Belgio, Hungaria, Italia. — ***A. macrosporus** Cr. in Ann. Sc. nat. 4, VIII, p. 173, t. 4, B, Cav. Mat. Myc. Lomb. p. 8. A typo distinguitur ascis minoribus, apice rotundatis; sporidiis ellipsoideis, minoribus 40-50 μ . long. Ibidem. ridiisque maximis facillime dignoscitur.

42. **Ascobolus porphyrosporus** (Hedw.) Fr. Syst. Myc. II, pag. 163, 2172 Boud. Ascob. p. 36, Fuck. Symb. myc. App. II, p. 57, *Octospora porphyrospora* Hedw. Musc. frond. II, p. 25, t. 7, f. A. — Sessilis, subcylindricus, luride viridis, externe hirtulus; ascis clavato-saccatis, breviter stipitatis, 8-sporis, 240 \approx 20-30; sporidiis plerumque in asci superiori parte distiche conglomeratis, nec non

sæpe liberis, oblongo-ovatis, rectis, utrinque obtusis, monoplastis, episporio longitudinaliter distincte striato, pulcherrime violaceo, 22-24 \approx 10-12 (Fuck.).

Hab. in straminibus fimi veteris equini in Suecia, Gallia, Germania. — Gregarius, minor; junior nunc conoideus, nunc globosus; ille æqualiter in formam cylindricam, hic superne in cupulam rotundatam abit; sub lente extus hirtulus, deorsum vero glaber dilutior. Color sec. Fuck. initio albus dein diaphane aureus, demum brunneus.

43. **Ascobolus brunneus** Cooke in Hedwigia VI, 1867, p. 154. — 217
Sessilis, minutus, globosus, dein depressus, extus pilosus, pallide ochraceus; ascis late clavatis, brevibus, octosporis; sporidiis ellipsoideis, initio hyalinis et granulosis, demum brunneis, 25-35 \approx 15; paraphysibus filiformibus.

Hab. in fimo vaccino, Shere Surrey Britanniaë.

III. Species minus notæ.

44. **Ascobolus? microscopicus** (Wallr.) Sacc. *Peziza microscopica* 2174
Wallr. n. 2543. — Ascomatibus glabris, microscopicis, punctiformibus exilissimis, carnosulis, pallide flaventibus, dein discum planiusculum cerinum dilutius marginatum recludentibus, basi pilis arachnoideis suffultis.

Hab. ad fimum vaccinum in Thuringia in consortio. — *Lasiboli pilosi*, cujus forsán initia incondita.

45. **Ascobolus Tetricum** Carestia in Rabenh. F. E. n. 1236 (non vidi) 2175
et in Bot. Zeit. 1869, p. 431 (nomen).

Hab. in stercore Tetraonis Tetricis in Italia. — Verisimiliter una alterave ex speciebus in fimo Tetraonum nascentibus et hic descriptis.

SACCOBOLUS Boud. Ascob. pag. 38 [1869] (Etym. *saccos* saccus et *ballo* ejicio). — Ascomata carnosula, sessilia, glabra, rarissime pilosella, plano-convexa. Discus ascis mox nitide nigro-punctatus. Asci lati, breves, octospori, paraphysati. Sporidia ellipsoideo-oblonga, colorata, levia vel asperula, ad apicem asci sacculo communi inclusa.

I. *Eu-Saccobolus*. Ascomata glabra.

1. **Saccobolus Kerverni** (Cr.) Boud. Ascob. p. 39, t. VIII, f. 19, F. 2176
Ch. Hans. F. fimic. dan. t. VI, f. 22, *Ascob. Kerverni* Cr. Finist. p. 57 et Ann. Sc. nat. 1858, pag. 193, t. XIII, f. B. — Minutus,

flavo-aureus, sessilis, hemisphæricus v. subcylindricus, disco plano vel convexo; ascis ovato-cylindræcis, sursum obtuse rotundatis, deorsum brevissime crassiuscule stipitatis, 85-105 \approx 26-35, in basidiis cylindræcis, apice subincrassatis, 45-50 \approx 6-8, acrogenis; paraphysibus filiformibus, 5 cr., granulosis viridulis obvallatis; glomerulis sporidiorum sacco inclusis, cylindræceo-ellipsoideis, 45-50 \approx 20; sporidiis subnavicularibus, 18-24 \approx 10-12, utrinque rotundato-truncatulis, primo violaceis, dein amœne vinoso-fuligineis.

Hab. in fimo vaccino et equino in Gallia, Italia, Britannia, Hungaria, Germania, Amer. austr.

2. **Saccobolus violascens** Boud. Ascob. p. 40, t. VIII, fig. 19, Gillet 2177
Discom. cum. ic. Phill. Disc. p. 296, t. IX, f. 55. — Sparsus v. aggregatus, minutus, 1-2 mm. lat., rotundatus v. plus minusve flexuosus, glaber, nitidus subgelatinosus, cinereo-violaceus, disco convexo, vix pallidiore; ascis late clavatis, 66 \approx 15, basi attenuatis, operculo plano dehiscentibus, octosporis; sporidiis ellipsoideis, subacutis, subinde obliquis, hyalinis, demum cyaneo-violaceis vel atro-violaceis, levibus, 15-17 \approx 7-9, sacco communi hyalino inclusis; paraphysibus septatis, clava violacea terminatis.

Hab. in fimo vaccino et Cuniculorum in Gallia, Britannia, Germania et Hungaria.

3. **Saccobolus depauperatus** (Berk. et Br.) Rehm Ascom. n. 90, *Asco-* 2178
bolus depauperatus B. et Br. Ann. Nat. Hist. n. 1084, tab. XIV, f. 6, *Asc. Kerverni* Karst. M. F. I, p. 78, nec Cr. — Minutus, planus, pallidus, dein vinosus; ascis brevibus, ovato-clavatis, basi abrupte breviter attenuato-stipitatis, octosporis, 40 \approx 18; sporidiis obtuse fusoides, luride violaceis, levibus, 10-12 \approx 5-6,5, sacco communi hyalino inclusis; paraphysibus filiformibus, septatis, tenuiter apice incrassatis.

Hab. in stercore ovino, equino et cervino in Britannia et Transylvania. — Ascoma 250 μ . lat., flavidum, mox vinosum.

4. **Saccobolus versicolor** Karst. Rev. mon. p. 123, *Asc. versicolor* 2179
Karst. M. F. I, p. 79. — Gregarius, sessilis, nudus, immarginatus, convexellus, primum incarnato-pallidus, dein rufo-carneus, demum fuligineus, 0,4-0,9 mm. lat.; ascis oblongatis, basi breviter attenuatis, 70-86 \approx 20-22, jodo cœrulescentibus, 8-sporis; sporidiis fusoides-oblongato-ellipsoideis, levibus, violaceo-fuscescentibus, 17-20 \approx 7-9 in sacculum oblongum apice ascorum collectis.

Hab. supra sterces vaccinum in Fennia australi. — An, teste Rehm, satis distinctus a *S. violascente*?

5. **Saccobolus obscurus** Cooke in Grev. IV, p. 112. — Subgregarius, 2180
subinde dense congestus, fuliginosus vel atro-brunneus, disco convexo, pallidiore; ascis clavatis, octosporis; sporidiis ellipsoideis, violaceis, dein brunneis, rugosis, 12-14 \approx 7, sacculo communi hyalino inclusis; paraphysibus filiformibus simplicibus.

Hab. in tela putrescente uda, Forden Montgomeryshire Britanniae (COOKE). — Ascoma 200-900 μ . diam.

6. **Saccobolus dilutellus** (Fuck.) Sacc. *Ascobolus dilutellus* Fuck. in 2181
Hedw. 1866, p. 4, f. 7, a, b, c. — Ascomatibus gregariis sessilibus, 0,5 mm. lat., planis, diaphanis, dilutissime aquoso-violaceis, disco paullulo obscuriore, subtilissime punctatis; ascis stipitatis, oblongo-ovatis, curvatis, 8-sporis; sporidiis in asco amplo semper dense conglomeratis, glomerulis suborbicularibus, 24 μ . diam., ovatis, dilute violaceis, dein fuscis, 14 \approx 8; paraphysibus simplicibus, plerumque clavatis, 1-3-septatis.

Hab. in fimo putri canino, Æstrich Rhenogoviæ.

7. **Saccobolus globulifer** Boud. Ascob. p. 42, t. IX, f. 21. — Hemi- 2182
sphaericus, glaber, vix nitidus, albus, dein pallide cinereo-purpurascens, disco subplano; ascis crassis, brevibus, apice truncatis, basi attenuatis, operculo plano dehiscentibus, octosporis; sporidiis oblongo-ovatis, utrinque subacutis, pressione trigonis, maturis in globulum rotundatum aggregatis, roseis in cinereo-violaceum vergentibus, episporio verrucis minutis, præsertim ad margines prædito; paraphysibus bacillaribus, septulatis, hyalinis.

Hab. in fimo Cuniculorum, Ecouen pr. Paris Galliae.

8. **Saccobolus neglectus** Boud. Ascob. p. 41, t. IX, f. 20. — Pere- 2183
xiguus, globosus, glaber, subnitidus, albus vel dein cinereus vel cinereo-purpureus, basi pallidior; disco fulvo, subinde vero ascis exsertis nigricante; ascis minutis, latis, basi attenuatis, operculo plano dehiscentibus, octosporis; sporidiis ellipsoideis, subacuminatis, levibus, roseolis dein cinereo-violaceis nigrisque, 15-19 \approx 6-8, sacculo communi hyalino inclusis; paraphysibus simplicibus vel furcatis, apice vix incrassatis, hyalinis, septatis, muco parum conspicuo obductis.

Hab. in fimo Cuniculorum, equino, asinino, vaccino et ovino in Gallia et Britannia. — Variat albidus et cinereus disco subpurpureo.

9. **Saccobolus Hansenianus** Speg. Mich. I, p. 234. — Ascomatibus 2184
primo conoideis, durissimis, flavo-viridulis, vertice atro-vinoso, dein applanatis undique flavo-viridulis sed disco ob ascos exsiliens brun-

neo-punctato; ascis amplis saccatis, elliptico-fusoideis, deorsum brevissime stipitatis, apice truncatis, 180-210 \approx 67-75, basidiis cylindraceis, vix clavulatis, 40-45 \approx 10-12, suffultis, paraphysibus filiformibus viridulis obvallatis; glomerulis sporidiorum elliptico-ovatis, 85-90 \approx 30, sacco crassissimo inclusis; sporidiis ovato-ellipsoideis, inæquilateralibus, utrinque rotundato-truncatis, 35-40 \approx 25, primo opace violaceis, dein intense fuligineis.

Hab. in fimo vaccino et equino in umbrosis herbidis, Conigliano Ital. bor.

10. **Saccobolus Boudieri** Oud. Hedw. 1882, p. 166 et Bijd. IX, p. 23. 2185
 — Ascomatibus minimis, glabris, levibus; ascis clavatis, 100 \approx 25; sporidiis singulis violaceis, in glomerulum ovalem vel oblongo-ovalem, 42 \approx 18, conglutinatis, pressione trigonis, episporio verrucis minutissimis exasperato, 16 \approx 7.

Hab. in fimo Amsterdam Nederlandiæ (VAN LEDDEN). — Color ascomatis non indicatus.

II. *Eriobolus* Sacc. Ascomata albo-pilosa.

11. **Saccobolus cæsariatus** Renny in Phill. Disc. p. 297. — Minutus 2186
 hemisphæricus, albus, pilis hyalinis, septatis, tenuibus, flexuosis ob-
 situs; disco convexo, ascis exsertis papillato; ascis late clavatis;
 sporidiis ellipsoideis, levibus, purpureis, sacco communi hyalino
 inclusis; paraphysibus filiformibus, obtusiusculis, simplicibus vel
 ramosis.

Hab. in fimo? in Britannia. — *Lachnellam* quamdam candi-
 dam imitatur.

Sect. 2. **Hyalosporæ** Sacc.

CUBONIA Sacc. nov. gen. (Etym. a cl. prof. J. CUBONI, Instituti phy-
 to-pathologici romani direttore), *Lasioboli* et *Ascophani* spec.
 Auct. — Ascomata sessilia hemisphærico-obconica, glabra vel pi-
 losa, disco plano, ascis papillato. Asci clavati vel subpiriformes,
 octospori, paraphysati. Sporidia perfecte sphærica, asperula, hyalina.

1. **Cubonia brachyasca** (March.) Sacc. *Lasiobolus brachyascus* March. 2187
 Fung. copr. Belg. p. 41. — Sparsa, primo obconica deinde ap-
 planata, sessilis, alba, extus dense longèque pilosa, pilis inferne
 incrassatis, 200-280 \approx 6-8, continuis vel basi vix septatis, hyalinis
 vestita, 120-200 μ . diam., margine obsolete; disco plano; ascis
 crystallinis valde prominulis eximie papillato; paraphysibus gra-

cilibus, hyalinis, simplicibus vel 2-4-divisis, valde arcuatis, inferne articulatis, in fragmenta bacillaria abeuntibus et ascos vix æquantibus, apice late rotundatis, inferne breviter stipitatis, 40-45 \approx 19,5-21,5, jodo non cœrulescentibus; sporidiis subdistichis, perfecte globosis, hyalinis, 8,8-9,2 μ . diam. minute asperulatis.

Hab. in fimo canino, socio *Ascobolo æruginoso*, Werbomont (Liège) Belgii.

2. **Cubonia Boudieri** (Renn.) Sacc. *Ascoph. Boudieri* Renny et Phill. 2188
Disc. p. 304. — Minuta, sessilis, hemisphærica, glabra, alba; disco plano, papillato; ascis late cylindræo-clavatis, octosporis; sporidiis globosis, asperis, hyalinis; paraphysibus filiformibus obtusis.

Hab. in fimo cuniculorum, Hereford Britanniae (RENNY).

ASCOPHANUS Boud. *Ascob.* p. 51 (1869) [Etym. *ascos* ascus et *phaino* appareo], *Ascoboli* et *Pezizæ* spec. Auct. — Ascomata carnosula, sessilia, scutellata, plana v. convexula, glabra v. rugosa (non setosa). Asci lati, 4-8-spori, operculo apice dehiscentes, e disco exsistentes, varie paraphysati. Sporidia ellipsoidea, subhyalina, continua, levia vel vix granulata.

I. Species fimicolæ.

1. **Ascophanus argenteus** (Curr.) Boud. *Ascob.* pag. 55, t. XI, f. 32, 2189
Ascobolus Curr. in B. et Br. Ann. N. H. n. 1088, t. XVII, f. 32.
— Gregarius, minutissimus, oculo inermi vix visibilis, subpiriformis, argenteo-albus; ascis oblongo-ovoideis, basi acutatis, octosporis; sporidiis ellipsoideis, hyalinis, 12 \approx 7-8; paraphysibus apice clavatis.

Hab. in fimo vaccino, Elthan Britanniae.

2. **Ascophanus lacteus** Cooke et Phill. *Grev.* V, p. 119, *Disc.* p. 306. 2190
— Sparsus, initio obconicus dein expansus, concaviusculus, demum convexus, lacteus, glaber; ascis clavatis, octosporis; sporidiis subdistichis, ellipsoideis, hyalinis, levibus, 10 \approx 5; paraphysibus filiformibus.

Hab. in fimo vaccino, Shrewsbury Britanniae. — Ascoma 1-1/5 mm. lat.

3. **Ascophanus microsporus** (B. et Br.) Phill. *Disc.* p. 307, *Ascobolus* B. et Br. Ann. N. H. n. 1087, t. XVI, f. 28, *Asc. Coemansii* Boud. *Ascob.* p. 54. t. X, f. 30. — Exiguus, sessilis, sordide albus vel flavido-brunneus, depressus; ascis late clavatis sæpe stipite tenui obliquo auctis, 8-sporis; sporidiis ellipsoideis, hyalinis, levi-

bus, 7-8 \approx 3,5; paraphysibus filiformibus apice eximie capitatis, endochromate flavo-viridi.

Hab. in fimo vaccino et ovino in Gallia et Britannia. — Ascoma $\frac{1}{2}$ -1 mm. lat. Habitus fere *Ascoph. granuliformis* sed fructificatio diversa. Sec. B. et Br. sporidia tandem violacea fiunt, quod Boudier haud observavit.

4. **Ascophanus incanus** (Phill.) Sacc. *Ascobolus* Phill. Grev. V, p. 117, 2192 tab. 88, f. 10. — Sparsus, turbinatus, dein planus, disco depresso incano-griseus, margine membranaceo dein evanescente; ascis late clavatis, 8-sporis; sporidiis ovoideis, hyalinis, 29 \approx 14; paraphysibus linearibus.

Hab. in fimo vaccino, Blue Canon Sierra Nevada Californiæ. — Sporidia interdum utrinque papillata; operculum ascorum evidens.

5. **Ascophanus Aurora** (Cr.) Boud. Ascob. p. 58, tab. XI, f. 36, *Peziza Aurora* Cr. Fin. p. 53. — Sparsus, minutus, aurantio-ruber nitidulus, applanatus, disco distincte papillato; ascis clavatis, octosporis; sporidiis ellipsoideis, hyalinis, levibus, 10 \approx 6,5; paraphysibus filiformibus, simplicibus vel divisis, curvis, aurantio-granulosis.

Hab. in fimo vaccino in Gallia, Britannia et in Agro tridentino. — In exemplaribus tridentinis asci sunt oblongo-cylindraceuti 80 \approx 16; sporidia disticha oblongo-ellipsoidea, 1-guttata, hyalina, 14-15 \approx 7-8; paraphyses filiformes sursum furcatae.

6. **Ascophanus nitidus** (Fuck.) Sacc. (nec Speg.), *Ascobolus* Fuck. 2194 Hedw. 1866, p. 4, f. 4 a, b, c. — Ascomatibus gregariis, seminis papaveris magnitudine, lentiformibus, omnino levibus, nitidis, pulcherrime miniatis siccitate excavatis, *Nectricæ Pezizæ* similibus, colore immutato diaphanis; ascis oblongis, brevissime oblique stipitatis, octosporis; sporidiis ovatis, hyalinis; paraphysibus simplicibus, filiformibus, apice curvatis, multiguttulatis, miniatis.

Hab. ad fimum equinum in silva Æstrich Rhenogoviæ.

7. **Ascophanus cinnabarinus** Speg. Mich. II, p. 258. — Primo cylindraceuto-conicus melleo-fulvus, dein cupuliformis, vividissime cinnabarinus, disco saturiore $\frac{1}{4}$ - $\frac{1}{5}$ mm. diam.; ascis cylindraceutis longissime pedicellatis, octosporis 150 \approx 8-9; paraphysibus apice crasse clavatis 10 μ . cr., atque intense rubro-fuligineis, jodi ope opace coerulescentibus; sporidiis monostichis, hyalinis, ellipticis, eguttulatis, 10-12 \approx 5.

Hab. in fimo vaccino in alpinis Cadore Ital. bor., ubi, etsi

minutus ob vivacitatem coloris, facillime detegitur, socio *Ascoph. Holmskioldii* E. C. Hans.

8. **Ascophanus amethysteus** Quél. Esp. nouv. Champ. Fr. 1878, p. 291. 2196

— Ascomatibus globuloso-lentiformibus, teneris, glabrescentibus, sub lente granulosis, translucidis, hyalino-roseis; sporidiis ellipsoideis, 12 μ . longis, hyalino-roseis.

Hab. in fimo in silvis Juræ.

9. **Ascophanus vicinus** Boud. Ascob. p. 56, t. XI, f. 33. — Sparsus, 2197

raro aggregatus, $\frac{1}{2}$ -1 mm. lat. ochraceo-carneus, convexulus v. applanatus; disco minute papillato; ascis oblongis, amplis, basi attenuatis, octosporis; sporidiis ellipsoideis utrinque rotundatis, hyalinis, 30-32 \approx 20-22; paraphysibus apice clavatis, septatis, hyalinis.

Hab. in fimo vaccino in Gallia, Belgio et America boreali.

10. **Ascophanus Holmskjoldii** Hans. F. fim. dan. p. 12, t. VI, f. 1-8. 2198

— Ascomatibus cinereo-rubentibus, furfurellis, sessilibus, hemisphæricis vel subcylindræis, disco convexo papillato, $\frac{1}{2}$ -1 mm. lat.; ascis elongato-fusoideis, p. spor. 180-200 \approx 30-45, stipite 100 μ . long., paraphysibus filiformibus jodo cœrulescentibus obvallatis, octosporis; sporidiis distichis oblongo-ellipsoideis 30-36 \approx 13-16, minute asperulis, utrinque appendiculâ rotundatâ auctis stratoque mucoso obvolutis, flavido-guttulatis, hyalinis.

Hab. in fimo vaccino et damarum in Dania, Belgio, Italia.

— Sec. Hans. loc. cit. ex appendiculis setulæ fasciculatæ oriuntur, quæ vero in sporidiis junioribus tantum observandæ sunt.

11. **Ascophanus subgranuliformis** Rehm in Voss Mater. Krains V, 2199

p. 224, fig. 7 a, b. — Gregarius pallide luteus, levis, $\frac{1}{2}$ -1 mm. lat., ascis cylindræis, breve stipitatis; sporidiis monostichis, oblongo-ellipsoideis, 30-33 \approx 12-14 (ex icone), hyalinis, levibus; paraphysibus filiformibus, apice capitatis, non curvatis.

Hab. in fimo vaccino exsiccato in fagetis Carniolæ, 1500 m. alt. — Ab *Asc. granuliformi* Boud. differt ascis cylindræis, paraphysibus non curvatis.

12. **Ascophanus granuliformis** (Cr.) Boud. Ascob. p. 55, t. X, f. 31, 2200

Pat. Tab. f. 173, *Ascobolus* Cr. Fin. p. 56, *Peziza* Karst. M. F. I, p. 50. — Sparsus sphæricus, flavido-ochraceus, pellucidus, centro opacus, levis, disco planiusculo, papillato, extus glaber; ascis brevibus et latis, 90-115 \approx 12-18, octosporis; sporidiis ovoideis, obtusis, uniguttatis, levibus, 12-15 \approx 7-10; paraphysibus filiformibus apice subincrassatis.

Hab. in fimo vaccino, equino, rarius cuniculorum in Gallia, Britannia, Germania, Belgio, Italia, Fennia, Amer. merid. — Ascoma $\frac{1}{2}$ -1 mm. diam.

13. **Ascophanus ochraceus** (Cr.) Boud. Ascob. p. 57, tab. V, fig. 34, ²²⁰¹
Ascobolus Cr. Fin. p. 57, *Ascoph.* *nitidus* Speg. Mich. I, p. 235, nec Fuck. — Glaber, ochraceus, minutus, $\frac{1}{2}$ -1 mm. lat., disco convexo, ascis minute punctato; ascis amplis, octosporis, cylindraceo-subfusoides, apice subattenuatis; sporidiis ovato-oblongis, levibus, hyalinis vel luteolis, 16-17 \approx 8-9; paraphysibus simplicibus raro e basi bi- trifidis sursum curvatis et subincrassatis.

Hab. in fimo vaccino, equino, ovino et leporino in Gallia, Britannia, Italia et Belgio. — Variat ascomate pallido et fere albo.

14. **Ascophanus minutellus** Karst. Rev. Monogr. p. 121, *Peziza mi-* ²²⁰²
nutella Karst, M. Fenn. I, p. 51. — Sparsus, sessilis, immarginatus, planus, testaceo-pallidus aut albidus, 0,2-0,3; ascis fusoidelongatis, 80-100 \approx 16, octosporis; sporidiis mono- vel distichis, ellipsoideis, eguttulatis, 15-18 \approx 8-9; paraphysibus filiformibus, simplicibus, inarticulatis, 1,5-2 μ . cr., apice clava subovoidea, obliqua, 4-5 μ . crassa.

Hab. supra fimum ovinum vetustum in Mustiala Fenniae.

15. **Ascophanus vilis** Karst. et Starb. Rev. Myc. 1887, p. 150 et Symb. ²²⁰³
 XXIII, p. 3. — Sessilis, immarginatus, planiusculus, testaceo-pallescentis, siccus fuscescens, 0,2 mm. lat.; ascis cylindraceis 120 \approx 10-12, 8-sporis; sporidiis monostichis, ellipsoideis, eguttulatis, 15-18 \approx 8-9; paraphysibus filiformibus, conglutinatis, apice incurvatis, vix incrassatis.

Hab. in fimo equino ad Mustiala Fenniae (K. STARBAECK). — Ab *Asc. minutello* sporidiis monostichis et paraphysibus haud clavatis distinctus.

16. **Ascophanus cinereus** (Cr.) Boud. Ascob. pag. 59, t. XI, f. 37, ²²⁰⁴
Ascobolus Cr. Finist. p. 56, *Peziza* Karst. M. F. I, p. 59. — Gregarius, sessilis, crassiusculus, carnosus, disco plano vel convexiusculo, ab initio pallidus, dein cinereus vel fuliginosus, demum saepe nigricans, fere marginatus, interdum obliquus et irregularis, 1 mm. lat.; ascis cylindraceo-clavatis, basi tenuata stipitiformi, 120-180 \approx 16-25, jodo cœrulescentibus, 8-sporis; sporidiis monostichis, cylindraceis vel ellipsoideis, eguttulatis, 14-23, plerumque 18-20 \approx 8-11; paraphysibus filiformibus, simplicibus.

Hab. supra fimum equinum in Gallia, Italia, Germania, Bri-

tannia, Belgio, Fennia. — Sec. Rehm sporidia vetusta brunnescunt et utrinque papillam hyalinam præbent.

17. **Ascophanus cinerellus** (Karst.) Speg. F. Arg. II, n. 97, *Pezizula cinerella* Karst. M. F. p. 51. — Sparsus vel subgregarius, sessilis, convexellus, margine flexuoso-repando (saltem in statu sicco), cinereo-pallidus circ. 0,3-04 mm. lat.; ascis cylindræo-clavatis, 38-42 \approx 6-7, jodo non tinctis, 8-sporis; sporidiis mono- vel distichis, ellipsoideis vel sphæroideo-ellipsoideis, eguttulatis, 5-7 \approx 3-4; paraphysibus non visis.

Hab. supra sterco vaccinum et equinum in Fennia, Belgio et Amer. australi. — Species facillime cognita, *Mollisiam fallentem* Karst. in memoriam revocans.

18. **Ascophanus antarcticus** Speg. Fung. Patag. p. 58. — Sparsus hemisphærico-cupulatus, minutus 300-350 μ . diam., ater, levissimus glaberrimus, disco concaviusculo non vel vix pallidior, carnosulo-subcarbonaceus, contextu excipuli dense minutissimeque merenchymatico, olivaceo; ascis cylindræis, subtorulosis, apice obtuse rotundatis, postice in stipitem crassum ac breviusculum productis, 65-70 \approx 7-8, octosporis, aparaphysatis, muco fuscescente tenacissimo immersis; sporidiis recte vel oblique distichis, ellipticis, 10-11 \approx 5-6,5, utrinque obtusis, hyalinis non vel grosse 1-guttatis.

Hab. in stercore vetusto Rheæ Darwinii in altiplanitie, Meseta vocata, secus Rio S. Cruz Patagoniæ. — Jodi vis nulla.

19. **Ascophanus punctiformis** (Karst.) Sacc. *Ascobolus* Karst. F. Fenn. exs. n. 655, *Pezizella polyspora* * *punctiformis* Karst. M. F. I, p. 82. — *Rypar. polysporo* extus similis sed ascis octosporis, oblongato-clavatis, 35-50 \approx 10-14; sporidiis ellipsoideis 8-10 \approx 4-5, hyalinis.

Hab. in fimo equino prope Abo et Mustiala Fenniæ.

20. **Ascophanus fallax** (Auersw.) Sacc. *Ascobolus fallax* Auersw. Hedw. 1868, p. 52, *Pezizula crustacea* v. *fallax* (Auersw.) Karst. M. F. I, p. 81. — Microscopicus, depresso-hemisphæricus, (ut videtur) immarginatus, lividus vel e luteo fuscescens, glaber; ascis semiprojectis ut punctulis albis inspersus; ascis parvis, 30 \approx 8-10, clavatis 8-sporis; sporidiis ovalibus et omnino cum præcedentium congruentibus.

Hab. in stercore canino, Rosenthal Cassel Germaniæ et in Fennia. — Affinis *Ryp. crustaceo* sed octosporus.

21. **Ascophanus subfuscus** Boud. Ascob. p. 52, t. 10, f. 28. — Con- fertus, rarius sparsus, minutissimus, hemisphæricus, extus glaber,

brunneus, basi pallidior, siccus atro-brunneus, margine inæqualiter inflexo, disco plano, pallido vel pallide fulvo; ascis brevibus, late clavatis, octosporis; sporidiis oblongo-ellipsoideis vel subfusoides, hyalinis, $10 \approx 5$; paraphysibus late clavatis, apice brunneis.

Hab. in fimo canino, felino, vaccino et humano in Gallia, Britannia, Belgio, Germania. — Ascoma 100-200 μ . lat.

22. **Ascophanus Cesatii** (Carest.) Sacc. *Ascobolus* Car. in Rab. F. E. 2210

ed. II, n. 976, *Pezizula Cesatii* (Carest.) Karst. M. F. I, p. 83. — Cupulis madore molliusculis, patellulatis, disco pallide carneo, extus fuscis; ascis clavulatis, curvulis, numerosis, 8-sporis, $32 \approx 8$; sporidiis hyalinis, ovalibus vel subrotundatis, 8 μ . long.; paraphysibus simplicibus, capillaribus, rigidulis.

Hab. supra fimum Tetraonis Tetricis in Italia boreali, Fennia, in stercore anserino in Beeren Eiland (sporid. ellipsoidea, $8-10 \approx 5-6$).

23. **Ascophanus tetraonalis** Peck Bull. N. Y. Mus. 1887, II, p. 22. — 2211

Sessilis, 2-4 mm. lat., extus cinereus, margine subinde undulato-flexuoso, disco nigricans vel nigro-brunneus; ascis cylindraceutis, apice truncatis; sporidiis monostichis ellipsoideis, levibus, hyalinis, $15-18 \approx 7$.

Hab. in excrementis Tetraonis, Catskill Mount. Amer. bor. — *Ascoph. gallinaceo* subaffine.

24. **Ascophanus minutissimus** Boud. Ascob. pag. 53, t. 10, f. 29. — 2212

Omnium minutissimus, 100-200 μ . lat., sparsus, hemisphæricus v. subplanus, brunneo-fulvus, margine nigro, siccus totus nigricans; ascis tereti-clavatis, minoribus basi attenuatis, octosporis; sporidiis ovoideo-fusoideis, hyalinis, $7-9 \approx 4$; paraphysibus simplicibus, apice piriformi, luteo-virente.

Hab. in fimo equino et ovino, Montmorency Gallia, in Britannia et Belgio.

25. **Ascophanus conformis** (Karst.) Sacc. *Pezizula conformis* Karst. 2213

M. F. I, p. 83. — Confertus, fuscidulus, glaber, disco pallidiori planiusculo, 0,1-0,2 mm. lat.; ascis clavatis, $40-70 \approx 10-12$, parte sporif. 26-28 μ . long., octosporis; sporidiis distichis, ellipsoideis, eguttulatis, incoloribus, $7-8 \approx 4$, paraphysibus nondum visis.

Hab. ad fimum vaccinum in sphagnosis deustis, Pellinsuo prope Mustiala Fennia. — Teste Karst., est subspecies *Rypar. polyspori*, sed asci octospori.

26. **Ascophanus humosoides** Peck Bull. N. Y. St. Mus. n. 2, p. 22. 2214

— Minutus, vix 1 mm. lat., sessilis, sparsus vel gregarius, ex au-

rantio vinosus, disco plano vel convexulo, breve marginato; ascis brevibus cylindrico clavatis; sporidiis ellipsoideis, levibus, 20-25 \approx 12; paraphysibus filiformibus, sursum crassiusculis.

Hab. in excremento cuniculi cujusdam silvatici, Catskill Mount Was. Amer. bor. — Ascoma filamentis hyalinis paucis matrici affixum.

27. **Ascophanus Oudemansii** March. Fung. coproph. p. 39. — Sparsus 2215 vel gregarius, basi filamentis albis, subtilissimis, evanescentibus, adfixus, primo globoso-piriformis, demum planiusculus, sessilis, glaber, purpurascens, 2,5-4 mm. diam., margine lato denticulato-fimbriato tandem eximie reflexo; disco plano, dein leniter concavo, subundulato valde crystallino-papillato; paraphysibus ascos subæquantibus gracilibus, septatis, hyalinis, simplicibus vel ramosis, apice paullo incrassatis; ascis cylindraceutis, rectis, superne vix attenuatis, breviter stipitatis, 180-215 \approx 17-21, jodo non cœrulescentibus, 8-sporis; sporidiis monostichis, 26-28 \approx 14-16, ellipsoideis, incoloribus, levibus, plerumque nucleo conspicuo.

Hab. supra fimum Leporum et Cuniculorum, socio *Ascophano sexdecimsporo*, Aywaille Belgii. — Affinis *A. difformi*, sed ascis cylindraceutis jodo non tinctis, sporidiis majoribus mox distinctus.

II. *Polygenæ*, in tela, lana, corio, rarius in fimo et humo nascentes.

28. **Ascophanus carneus** (Pers.) Boud. Ascob. pag. 60, t. XII, f. 38, 2216 *Ascobolus* Pers. Syn. p. 666, nec Myc. Eur., Fries S. M. II, p. 165. — Sparsus vel rarius subaggregatus, minutus, sessilis, 1-1,5 mm. lat., roseus vel carneus, glaber, initio globosus dein applanatus, disco convexo, immarginato, applanato; ascis late clavatis deorsum attenuatis, sæpius rosellis, octosporis, 100-120 \approx 20-24; sporidiis ellipsoideis, levibus vel minutissime granulosis, hyalinis, initio muco obvolutis, 16-18 \approx 9-10; paraphysibus obtusis, clavatis, septatis.

Hab. in fimo vaccino, in tela et lana putrescentibus, in Suecia, Germania, Britannia, Gallia, Hungaria, Belgio, Italia, Fennia, Amer. bor. — Var. **Cuniculi** Boud. Asc. loc. cit. fig. 39, Pat. Tab. An. fig. 380: cupulis aurantiis vel aurantio-carneis, 1 mm. lat.; paraphysibus hyalinis. In stercore Cuniculorum in Britannia et Gallia.

29. **Ascophanus saccharinus** (Berk. et Curt.) Boud. Ascob. p. 61, t. 12, 2217 f. 40. — Sparsus vel confertus, disco hemisphærico, dein expanso

et subplano saccharino-nitido, rubro-lateritius v. salmonicolor, siccus margine pallidior; ascis amplis, octosporis; sporidiis ellipsoideis, hyalinis, 17-20 μ . long.

Hab. ad fimum, corium vetustum et telam putrem in Gallia, Britannia. — Ascoma basi hyphis albidis affixum. Potius var. *A. carnei*. Ceterum *A. carneus*, *saccharinus*, *difformis*, *testaceus* nimis inter se affines.

30. **Ascophanus difformis** (Nyl.) Boud. Ascob. pag. 62, Karst. Rev. 2218
 Monogr. p. 121, *Pez. difformis* Karst. Fenn. I, p. 61, *Ascobolus difformis* Nyl. Obs. p. 85. — Gregarius vel confertus, sæpe confluens, sessilis, primum convexus, demum planiusculus, carneus vel dilute subaurantiacus, basi filamentis intricatis, albis adfixus 0,5-0,6 mm. lat.; ascis oblongato-clavatis, 20 μ . cr., jodo cœrulescentibus, 8-sporis; sporidiis distichis, ellipsoideis, eguttulatis, 18-22 \approx 10-14; paraphysibus simplicibus, mollibus, articulatis, sursum vix vel levissime incrassatis, 4-6 μ . cr.

Hab. in corio et panno lineo in Fennia, in fibris ligneis putridis Pircuniæ in Argentina. — (Asci 150-160 \approx 25-35; sporidia 20 \approx 10). Teste Phill., non differt ab *Ascophano testaceo*. Sec. Rhem est var. *A. carnei*.

31. **Ascophanus testaceus** (Moug.) Phill. Disc. p. 310, t. IX, f. 58, 2219
Ascob. testaceus Moug. Wallr. Fl. crypt. IV, pag. 513, B. et Br. Ann. N. H. n. 1082, t. 14, f. 5, Fuck. Symb. App. II, p. 58, f. 23, *Peziza test.* Moug. in Fr. Elench II, p. 12, *Helotium* Berk. Outl. p. 372. — Cupulis testaceo-rufescentibus, carnosis, gregariis sparsisve, sessilibus, primo perfecte globosis, clausis, demum ore lacerato magis magisque dilatatis, postremo hemisphæricis, tympaniformibus, 2-3 mm. latis, orbicularibus seu irregularibus, extus glabris seu junioribus paucitrichis, margine distincto, acuto, erecto, subtiliter lacerato, vix pallidiore, disco plano concolore, subtiliter punctulato; ascis oblongo-cylindræis, breviter stipitatis, 8-sporis, 170 \approx 18; sporidiis oblique monostichis, oblongo-ovatis, uniguttulatis, continuis, rectis, hyalinis, 24 \approx 12 (Fuck.), 18-20 \approx 9-11 (Phill.); paraphysibus simplicibus, anguste clavatis, clavulis fuscis.

Hab. in tela putrida et in stercore murino et Cuniculi in Rhenogovia, Gallia, Britannia. — *Patellaria testacea* Fr., ex ipso auct. (Summa p. 366) est *Lachnea scutellata*.

32. **Ascophanus miniatus** (Preuss) Sacc. Ascob. *miniatus* Preuss Ho- 2220
 yersw. n. 155. — Sessilis, glaber, carnosus, subconvexus, immar-

ginatus, dilute miniatus; ascis clavatis; sporidiis ovatis, albis; paraphysibus simplicibus, supra capitato-clavatis, miniatis.

Hab. in cortice Juglandis in hortis Hoyerswerda.

33. **Ascophanus consociatus** (B. et Br.) Phill. Disc. p. 312, *Ascobolus* B. et Br. Ann. Nat. Hist. n. 1491, t. II, f. 7. — Gregarius subhemisphæricus, extus rugoso-granulatus, pallide flavus vel albidus; ascis late clavatis, brevibus, octosporis; sporidiis distichis, late fusoideis, intus granulosus, $10 \approx 6$; paraphysibus filiformibus. 2221

Hab. ad Chætosphæriam cupuliferam vetustam Landridge Brit. — Ascoma 100-150 μ . lat.; sporidia luteola.

34. **Ascophanus pallens** Boud. in Bull. Soc. B. et M. tr. 1888, pag. XLVIII, t. II, f. 2. — Minutus, 1-3 mm. latus, albidus aut albidocinereus, hemisphæricus aut lenticularis, submarginatus, extus levis, disco plano aut convexo, ascis prominentibus longe papillato; paraphysibus hyalinis, sæpius continuis ad apicem incrassatis, ad basim divisis et septatis, apice 6-8 μ . cr.; ascis maximis, amplis, clavatis, octosporis 290-350 \approx 35-45, operculo lato leniter umbonato; sporidiis maximis, oblongo-fusiformibus, hyalinis, intus nullo modo granulosus, 40-45 \approx 15-20. 2222

Hab. ad terram argillosam cum *Confervis* in umbrosis silvarum Ecoen Galliæ.

35. **Ascophanus Guernisacii** Cr. Finist. p. 56, tab. ultima, fig. 2. — Brunneus, basi albicans, hemisphæricus, levis, 2-3 mm. lat., margine membranaceo, lobato; ascis subcylindræis, amplis, octosporis; sporidiis cymbiformibus, hyalinis, inæqualiter granulosus; paraphysibus simplicibus, filiformibus contextu crasso, reticulato, colorato. 2223

Hab. ad terram schistosam et in muris antiquis, Finistère Galliæ.

LASIOBOLUS Sacc. Consp. gen. Disc. p. 8 (1884), Karst. Rev. p. 122, Boud. Class. Disc. p. 20 (Etym. *lasios* pilosus et *bolus* pro Ascobolo), *Ascophani* spec. Auct. — Ascomata carnosula, sessilia, plana vel convexa, distincte setosa vel pilosa. Asci oblongi vel clavati, 4-8-spori, paraphysati e disco erumpentes. Sporidia ellipsoidea vel oblonga, continua, hyalina, typice levia.

1. **Lasiobolus equinus** (Müll.) Karst. Rev. pag. 122, *Peziza equina* Müll. in Flor. dan. t. 779, f. 3, *Pez. papillata* Pers. Syn. Fung. p. 650, Nees Syst. f. 276, *P. diversicolor* Fr. Syst. myc. II, p. 88, *P. cervina* Pers. Myc. cur. I, p. 254, *Ascobolus papillatus* Wallr. 2224

Flor. Crypt. Germ. II, pag. 513, *Lasiob. papillatus* Sacc. Consp. Gen. Disc. p. 8, *Ascophan.* Boud. Ascob. p. 62, t. XII, f. 41. — Cupulis gregariis, obconice prominulis, ab initio pallido-luteis, dein plus minusve aurantiacis v. fulvescentibus, pilis erectis, albido-incoloribus strigosis, 0,3-05, mm. lat.; ascis oblongato-clavatis, 22-33 mm. crass., jodo non tinctis; sporidii octonis, ellipsoideis, 18-24 = 11-14; paraphysibus 2-3,5 μ . crass.

Hab. in fimo equino, vaccino, suino, Cuniculorum, murino in Suecia, Fennia, Lapponia, Belgio, Germania, Gallia, Amer. bor. — Pili cupulæ subulati, inarticulati, 220-260 = (basi) 14-22. — ***L. ciliatus** (Berk.) Sacc. *Ascobolus* Berk. Engl. Fl. V, p. 374, Ann. N. H. n. 1083, t. 14, f. 7, an Fr., *Ascophanus* Boud. Ascob. p. 63, Phill. Disc. p. 312: sessilis, subhemisphæricus, levis, aurantiacus ad basim setulis continuis, albis cinctus; disco plano, margine tumido, albo, glabro; ascis late clavatis; sporidiis ellipsoideis, levibus, hyalinis, 20-22 = 10; paraphysibus filiformibus, aurantio-granulosis. In fimo vaccino et equino in Britannia, Germania, Amer. bor. et Africa australi. Quid spectet *A. ciliatus* Fr. S. M. II, pag. 164 (margine albo ciliato), ignotum. — ***L. pilosus** (Fr.) Sacc. Consp. gen. Disc. p. 8, *Ascobolus* Fr. S. M. II, p. 164, Pat. Tab. an. f. 487, *Ascophanus* Boud. Ascob. pag. 64, t. XII, f. 42-44: gregarius, sessilis, obconice prominulus, granuliformis, inferne pilis albidis, sparsis strigosus, primum vulgo pallidus, dein fulvo-testaceus vel plus minusve aurantiacus, minutissimus; ascis oblongatis, basi stipitato-constrictis, 100-120 = 22-34, jodo non tinctis, 8-sporis; sporidiis ellipsoideis, 19-23 = 10-14; paraphysibus gracilescentibus. In fimo caprino, capreolino, ovino, vaccino, equino, canino, in Suecia, Germania, Britannia, Gallia, Hungaria, Italia, Amer. bor. et merid. Quoad formas varias cfr. Boud. loc. cit.

2. **Lasiobolus raripilus** (Phill.) Sacc. *Ascobolus raripilus* Phill. in 2225
Grevillea VII, p. 23. — Gregarius vel confertus, minutus, sessilis, glaber, primo globosus, dein hemisphæricus, disco convexo, pallido, vitellino-flavo, extus pilis paucis pallidis, septatis, rectis parce obsito; ascis late clavatis, octosporis; sporidiis ovatis, 25 = 14, levibus, hyalinis; paraphysibus linearibus, simplicibus, apice clavatis.

Hab. in fimo vaccino in California (HARKNESS).

3. **Lasiobolus ruber** (Quél.) Sacc. *Ascophanus ruber* Quél. 12 Suppl. 2226
p. 13, t. VII, f. 13 et in Grevillea 1879, p. p. — Ascomate globuloso, dein hemisphærico, 1 mm. diam., rufulo, setulis subtilibus,

albis nitentibus hirto, hymenio plano, papillato, rufo-aurantiaco; sporidiis ellipsoideis, 20 μ . longis, hyalinis.

Hab. in fimo vaccino in pascuis alpinis Juræ. — *L. ciliato* similis sed margine integro et sporidiis hyalinis differt.

4. **Lasiobolus diversisporus** (Fuck.) Sacc. *Ascob. diversisporus* Fuck. 2227
S. M. p. 289, *Humaria* Speg. in Mich. I, p. 236. — Cupulis gregariis, usque ad 1 mm. latis, $\frac{1}{2}$ mm. altis, primo globosis, demum vertice applanatis, submarginatis, diaphanis, flavo-rubris, extus sparse pilosis, pilis rectis, hyalinis, continuis, cupulæ diametrum subæquantibus; ascis stipitatis, oblongis, 4-8-sporis, longitudine valde varia, plerumque 212 \approx 21; sporidiis inordinatis, ovatis vel ovato-oblongis, magnitudine in eodem asco item valde varia, 20-24 \approx 12-16 hyalinis; paraphysibus filiformibus, ramosis (?).

Hab. in fimo vaccino in Rhenogovia et Ital. bor. — In forma italica (ex Conegliano) sunt ascomata viridulo-testacea, campanuliformia, sessilia, undique setis hyalinis ornata; setulis unicellularibus, e basi bulbillosa acutissimis, crasse tunicatis; asci saccato-cylindræci deorsum in stipitem filiformem brevem abrupte attenuati, apice obtuse rotundati, 150-180 \approx 30-38, aparaphysati (?); sporidia inordinate monosticha, oblongo-ellipsoidea, utrinque obtusa, 22-26 \approx 12-15, eguttulata, hyalina.

5. **Lasiobolus albicans** (Fuck.) Sacc. *Ascobolus albicans* Fuck. in 2228
Hedwigia 1866, p. 3, f. 2, a, b, c. — Ascomatibus carnosis, rubescentibus, late obconicis, usque ad 4 mm. lat., 2 mm. alt., planis concavisve, disco argute marginato paullo pallidiore, siccitate albo-pruinoso, extus margineque pilis brevissimis obsitis; ascis longissime stipitatis, oblongis, octosporis; sporidiis ovatis, hyalinis; paraphysibus apice bi-tripartitis hyalinis.

Hab. ad terram inter muscos, in fimi equini vicinia, in pinetis Budenheim Rhenogoviæ.

6. **Lasiobolus avicularius** Karst. Rev. p. 122, *Peziza* Karst. M. F. I, 2229
pag. 74. — Gregarius, obconicus, fere immarginatus, pilis erectis hyalino-albidis strigosus, hyalino-albidus, punctiformis, disco planiusculo; sporidiis fusoido-oblongatis, eguttulatis, 10-11 \approx 4.

Hab. supra fimum ovium e. g. Tetraonum, prope oppid. Abo Fenniæ.

7. **Lasiobolus hirtellus** Karst. Rev. p. 122, *Peziza* Karst. M. F. I, 2230
p. 74. — Gregarius sessilis, planiusculus, pallidus, pilis erectis, albido-incoloribus strigosus, 0,5 mm. lat.; ascis 50-100 \approx 12, jodo

non tinctis; sporidiis ellipsoideis, 10-12 \approx 6-7; paraphysibus gracilescentibus, 2-3 μ . cr.

Hab. in fimo Tetraonum prope Mustiala Fennia.

RYPAROBIOUS Boud. Ascob. p. 47 (Etym. *ryparos* sordidus et *bios* vita) *Thecotheus* Boud. Ascob. p. 45, *Ascozonus* Renny. — Ascomata carnosula, sessilia, scutellata v. disciformia, minuta v. minutissima glabra v. ciliatula. Asci crassiusculi sed breves, rarius amplissimi, 16-myriospori, operculo apice dehiscentes, e disco exsistentes, varie paraphysati. Sporidia ellipsoidea, oblonga v. subfusoida, continua, hyalina, quandoque in glomum fere conglobata.

I. *Eu-Ryparobius*. Asci minuti v. mediocres.

1. **Ryparobius crustaceus** (Fuck.) Rehm Asc. p. 52, *Ascobolus* 2231
crustaceus Fuck. in Hedw. 1866, p. 4, *Asc. Cookei* Crouan Flor. Finist. p. 56, suppl. f. 3, (1867) *Asc. polysporus* Auersw. in Hedw. 1868, p. 51, *Pezizula crustacea* Karst. M. F. I, p. 81, *Ryparobius Cookei* Boud. Ascob. p. 48, t. IX, fig. 24, Phill. Disc. p. 299, t. IX, f. 57. — Aggregatus, sæpissime confluens, sessilis, depressosphæroideus, glaber, fuscus, disco pallidiore, 0,1 mm. lat.; ascis paucis, obovoideo-oblongatis, basi paullo curvatis, 60-100 \approx 20-28, jodo non tinctis; sporidiis 48-64 incoloribus, conglobatis, ovoideis aut oblongato-ovoideis, 7-10 \approx 4,5-5,5; paraphysibus parcis, gracilescentibus, apice subclavato.

Hab. in fimo canino, suino, equino, vaccino putrescente in Germania, Fennia, Gallia, Italia, Belgio, Britannia, Fuegia. — ***myriadeus** Karst. M. F. I, p. 81, ? *Ascob. caninus* Auersw. in Hedw. l. c.: typo simillimus sed ascis 24-34-sporis, clavatis, 44 \approx 11 recedens. Cum typo in Fennia et Germania.

2. **Ryparobius caninus** (Auersw.) Sacc. *Ascobolus* Auersw. Hedw. 2232
1868, p. 51. — Microscopicus, depresso-globosus, fuscus v. brunneus, glaber, acute marginatus, disco pallidiore; ascis clavatis, polysporis 44 \approx 11; sporidiis ovalibus, hyalinis, monoblastis, levibus 7-8 \approx 4, 24-32 in quovis asco.

Hab. in stercore canino, Rosenthal Cassel. — Cfr. præcedentem.

3. **Ryparobius polysporus** (Karst.) Sacc. Mich. II, p. 571, *Pezizula* 2233
Karst. M. F. I, p. 82. — Sparsus v. gregarius, sessilis, glaber, fuscidulus, 0,1 mm. lat.; ascis paucis ellipsoideis 118-130 \approx 50, jodo

non tinctis; sporidiis ellipsoideis, conglobatis, 150-200, hyalinis, 6 = 3; paraphysibus gracilibus.

Hab. in fimo equino pr. Abo et Mustiala Fennix, in fimo vaccino Newfield N. J. Amer. bor. (forma ascis 70-80 = 18-20; sporidiis 5 = 3,5-4) et in Argentina Amer. merid.

4. **Ryparobius brunneus** Boud. Ascob. p. 47, t. IX, fig. 23. — Confer- 223
tissimus, minutissimus, perexiguus, glaber, fulvo-brunneus, disco concolore, subconvexo; ascis oblongis, latis, basi acutatis; sporidiis 32, oblongo-ovoideis, minutis, hyalinis, utrinque subacutis; paraphysibus parvis, septatis, apice vix incrassatis.

Hab. in stercore humano, vaccino et asinino, Montmorency Gallix.

5. **Ryparobius felinus** Boud. Asc. p. 49, tab. X, fig. 45. — Confer- 223
tus aut aggregatus, minutissimus, fulvo-cinnamomeus, disco convexo, saturatiore, margine vix conspicuo; ascis amplis, oblongis, basi attenuatis; sporidiis 64, oblongo-elongatis, hyalinis; paraphysibus parvis, septatis, hyalinis, apice incrassatis.

Hab. in stercore felino circa Montmorency Gallix — Affinis *Ryp. brunneo*.

6. **Ryparobius myriosporus** (Cr.) Boud. Ascob. p. 50, tab. X, fig. 27, 2236
Nectria myriospora Crouan Fin. p. 37, tab. ult., fig. 15, *Chilonectria* Sacc. Syll. II, p. 454. — Minutissimus, congestus, rarius sparsus, $\frac{1}{10}$ - $\frac{1}{5}$ mm. lat. rufescens, rotundatus, glaber versus marginem ruber, disco plano, ascis exsertis papillato; ascis amplissimis, ovoideis, basi vix attenuatis, operculo amplissimo dehiscentibus; sporidiis numerosissimis, 200-250, ovoideis, minutis, hyalinis, apice subacutis, initio ascum replentibus, demum in asci apice conglobatis.

Hab. in stercore canino, Montmorency, in stercore equino Finistère Gallix.

7. **Ryparobius saccoboloides** Speg. Mich. I, p. 474. — Dense grega- 2237
rius, minutissimus, 80-100 μ . diam., difficillime nudo oculo perspicendus, sordide roseo-fuscescens, disco obscuriore virescente, primo globosus, hemisphæricus, subsuperficialis; contextu excipuli minutissime ac densissime parenchymatico, dilute roseo-fuscidulo; ascis ovoideis v. elliptico-clavatis, superne obtusis, inferne in pedicellum crassum ac nodulosum desinentibus, 40-50 = 20-25, 60-120-sporis, a paraphysatis (?); sporidiis in glomerulo 35-40 = 15-20 elliptico, tenaciter muco connexis, etiam extra ascos, ellipticis v. ovoi-

deis, utrinque obtusiusculis, continuis, hyalinis, luce refracta dilute chlorinis, crassiuscule tunicatis, 5-6 \approx 2 $\frac{1}{2}$ -3.

Hab. in fimo canino vetusto putrescente, Conegliano Ital. bor. — Iodi ope asci et sporidia rubro-fuliginea evadunt, stipites autem et bases ascorum ita colorantur ut opaci fiant.

3. **Ryparobius pachyascus** Rehm Asc. fasc. XIX, pag. 5, n. 914. — 2238

— Gregarius, raro sparsus e globoso depressus, 60-100 μ . diam., subimmersus, tenuis, diaphanus, flavidus, rarius brunneo-flavus; ascis ovoideis, basi acutatis, 4-8, rarius 1-16 in quoque ascomate, polyporis, 77-90 \approx 38-40; paraphysibus parvis ramosis, curvulis cito evanidis; sporidiis ovoideis, 6 \approx 3, hyalinis.

Hab. in fimo equino et Cuniculorum in Austria (ZUKAL). — Apex ascorum senio operculatim secedens; sporidia initio strato mucoso sphærico simul obvoluta.

9. **Ryparobius albidus** Boud. Bull. Soc. Mycol. IV, pag. XLIX, t. II, 2239

f. 3. — Minutissimus sed pro genere major, albidus, sparsus aut gregarius, 0,2-0,4 mm. diam., primo hemisphæricus, dein lenticularis, immarginatus extus et supra pallidus vix cinerescens, disco plano dein convexo, ascis papillato; paraphysibus cylindricis, subspissis, bene septatis, ad apicem vix 4 μ . cr.; ascis late clavatis, hyalinis, 32-40-50 \approx 5-6; sporidiis maturis ad apicem ascorum in massam ovatam conglobatis, hyalinis, levibus, oblongo-fusiformibus, intus non granulosis, 10-15 \approx 5-6.

Hab. ad stercus vaccinum in pratis, loco dicto «Foret de Carnelle» pr. Montmorency Galliæ.

10. **Ryparobius dubius** Boud. Ascob. tab. X, fig. 26. — Sparsus, per- 2240

exiguus, sæpe immersus, globulosus, pallide griseus vel fulvus, disco convexo, pellucido, immarginato; ascis oblongis vel oblongo-ovatis, hyalinis, basi obtusis vel subattenuatis; sporidiis 100-128, ellipsoideis, hyalinis, subacutis; paraphysibus nullis vel obsoletis.

Hab. in fimo equino, ovino et Cuniculorum in Gallia, Britannia et Belgio. — Sec. Rehm asc. n. 105, asci 40-45 \approx 24, circiter in quoque ascomate seni; sporidia ellipsoidea, 6 \approx 4. An idem ac *Rypar. myriosporus* Boud.?

11. **Ryparobius sexdecimsporus** (Cr.) Sacc. *Ascobolus* Cr. Ann. Sc. 2241

Nat. 1858, p. 195, tab. XIII, fig. 21-26, *Ascoph.* Boud. Ascobol. p. 57, tab. XI, fig. 35. — Sparsus, minutus, sessilis hemisphæricus, convexus vel planus, glaber, albus dein griseus, demum flavido-albus; ascis oblongis, latis, basi acutatis; sporidiis 16, elli-

psoides, hyalinis, levibus, 11-12 \approx 6-7; paraphysibus simplicibus v. furcatis; apice vix incrassato, recto vel curvulo.

Hab. in fimo equino, vaccino in Gallia, Britannia, Belgio, Germania. — Ascoma 1-2 mm. diam.

12. **Ryparobius hyalinellus** (Karst.) Sacc. *Pezizula hyalinella* Karst. 2242

M. F. I, pag. 83. — Gregarius, valde convexus, fere sphaeroideus, hyalinus, immarginatus, glaber, latit. vix 0,1 mm.; ascis oblongato-clavatis, 55-100 \approx 18-28; sporidiis 72, sphaeroideo-ellipsoideis, hyalinis, 5 \approx 3; paraphysibus filiformibus, apice ovoideis, 6 μ . cr.

Hab. supra fimum Tetraonum in silva Haarankorpi prope Mustiala Fenniae. — ***promiscuus** Karst. M. F. I, p. 83: *hyalinello* similis, ascis vero 50-62 \approx 16-18 sporidiisque 32, chlorino-hyalinis, 6 \approx 4 diversa. Cum specie.

II. *Thecotheus* Boud. Asci magni, valde exsistentes.

13. **Ryparobius Pelletieri** (Cr.) Sacc. Mich. I, p. 605, *Ascobolus Pel-* 2243
letieri Cr. Finist. p. 56, Ann. Sc. Nat. 1857, p. 173, tab. IV A,

fig. 1-4, Pat. Tab. An. fig. 172, *Thecotheus* Boud. Ascob. p. 46, t. IX, fig. 22, *A. Solms-Laubachii* Rabh. Bot. Zeit. 1862, p. 198, *Pezizula Pelletieri* Speg. Mich. I, 238. — Ascomatibus primo subsparsis globosis, dein patellaribus, candidissimis vel dilute cinereo-roseis, $\frac{3}{4}$ -1 $\frac{1}{4}$ mm. diam., extus pruinosis; ascis cylindraneo-clavatis, deorsum attenuatis, breve stipitatis, apice obtuse rotundatis, 200-300 \approx 50-55, 30-32-sporis; sporidiis tetrahexastichis elliptico-fusiformibus 27-30-35 \approx 14-18, utrinque acutiuscule rotundatis, crassiuscule tunicatis, hyalinis.

Hab. in fimo equino in umbrosis in Gallia, Italia, Germania, Britannia et Belgio.

14. **Ryparobius Winteri** March. Fung. coproph. p. 39, t. IV, f. 1-7. — 2244

Sparsus, rarius subgregarius, globoso-cylindricus, albus v. albocyanellus, glaber, 400-500 \approx 200-300, margine obsolete dentato, tandem inflexo; disco concolore plano, ascis parce papillato; paraphysibus numerosis, hyalinis, linearibus, 1-2 μ . crass., septatis, ramosis, inferne non raro crassioribus, articulatis, ad apicem curvatis, ascos superantibus; ascis oblongato-cylindraceutis, subsessilibus, rectis vel deorsum curvatis, operculo convexo dehiscentibus, sporidia circ. 256 (?) includentibus, jodo haud cœrulescentibus, 160-210 \approx 45-55; sporidiis ellipsoideis, utrinque rotundatis, 10-11 \approx 5-6 hyalinis, nucleo magno et conspicuo.

Hab. in fimo damarum, Tervueren Belgii. — Cupulis cylin-

draceis albis, sporidiis ratione majusculis, grosse nucleatis mox dignoscitur.

III. *Ascozonus* Renny. Asci (saltem in plerisque) operculo magno conico, tubinde et longitr. fisso, transverse dehiscentes. Ascomata ciliata v. pilosula.

5. **Ryparobius subhirtus** (Renny) Phillips. Disc. p. 302, *Ascozonus* 2245
Renny Journ. Bot. 1874, p. 357, tab. CLV, fig. 4-7. — Minutus sessilis, hemisphæricus, albus, subdiaphanus pilis brevibus inæqualibus sæpe fasciculatis, conspersus, margine ciliato, disco plano, papillato; ascis latissimis, oblongis basi acutatis; sporidiis circ. 128, ellipsoideis, hyalinis, levibus, initio in massam ovoideam collectis; paraphysibus non visis.

Hab. in stercore *Cuniculorum*, Hereford Britanniae (RENNY).

6. **Ryparobius Crouani** (Renny) Phill. Disc. pag. 300, *Ascozonus* 2246
Crouani Renny in Journ. Bot. 1874, p. 356, tab. 154, fig. 6-10 nec *Ascob. Crouani* Cooke = *Humaria*. — Perexiguus, initio albus, dein albidus, fragilis, sessilis, hemisphæricus, glaber, excipulo strato unico cellularum formato, margine setulis brevibus subacuminatis, rugulosis uniseriatis ciliato; ascis late clavatis; sporidiis 32, oblongo-fusoideis, utrinque obtusis, hyalinis, levibus; paraphysibus non visis.

Hab. in stercore *Cuniculorum*, Hereford Britanniae (RENNY).

— Ascoma 200 μ . diam.

7. **Ryparobius Woolhopensis** (Renny) B. et Br. Ann. Nat. Hist. 2247
n. 1395, tab. IX, fig. 12, *Ascozonus* Renny Journ. Bot. 1874, p. 356, tab. CLIII. — Minutus, sparsus, initio albus dein sordidus, crassiuscule stipitatus, tuberculatus, margine setuloso-fimbriatus dein nudus, excipulo basi vesiculoso; ascis late clavatis; sporidiis 64, late fusoideis, hyalinis, levibus, 17-18 \approx 5; paraphysibus filiformibus obtusis, simplicibus.

Hab. in stercore avium hyphis *Mucoris* commixtus, Hereford Britanniae (RENNY). — Ascoma 400 μ . lat.

8. **Ryparobius argenteus** B. et Br. Ann. Nat. Hist. n. 1394, t. IX, 2248
f. 11, Grev. t. 22, f. 4, *Ascozonus cunicularius* Renny Journ. Bot. 1874, p. 355, tab. CLV, fig. 1-3. — Perexiguus, initio globosus, dein applanatus, argenteo-albus, pilis teneris ciliatus; ascis latis, brevibus 100 μ . longis operculatim dehiscentibus; sporidiis 64, fusoideis hyalinis, levibus, 17 \approx 7,6; paraphysibus filiformibus, furcatis, apice leniter incrassatis.

Hab. in fimo *Cuniculorum*, hyphis *Mucoris* plerumque af-

fixus, Hereford Britanniae (RENNY), in Belgio (MARCHAL). — Ascoma 100 μ . lat. — An huc pertineat *Comesia cunicularia* (Boud.) valde verisimile.

19. **Ryparobius Leveilleanus** (Renny) Phill. Disc. p. 301, *Ascozonus* 2249
Renny Journ. Bot. 1874, p. 356, tab. CLIV, fig. 1-5. — Minutissimus, breve stipitatus, argenteo-albus, stipite cellulis prominulis, rotundis formato, margine setulis brevibus inæqualibus, uniseriatis ciliato, disco papillato; ascis latissimis, basi acutatis, operculo umbonato; sporidiis 64-96, oblongo-fusoideis, utrinque obtusis, hyalinis, levibus, paraphysibus non visis.

Hab. in fimo Cuniculorum, Hereford Britanniae (RENNY). — Ascomata 200-300 μ . lat. Excipulum cellulis minutis, applanatis formatum.

20. **Ryparobius parvisporus** (Renny) Phill. Disc. pag. 303, *Ascozonus* 2250
Renny Journ. Bot. 1874, pag. 356, tab. CLVI, fig. 1-5. — Perexiguus, fragilis, carnosulus, albus, nitidulus, dein sordidus, subvinosus, margine setulis subulatis, asperulis, 1-2-seriatis, inæqualiter fimbriato; disco plano, dein ascis prominentibus punctato; ascis late clavatis; sporidiis 16-24, ellipsoideis, hyalinis, levibus; paraphysibus filiformibus, obtusis, septatis.

Hab. in stercore Cuniculorum, Hereford Britanniae.

21. **Ryparobius niveus** (Fuck.) Sacc. *Ascobolus niveus* Fuck. in Hedw. 2251
1866, 1, 4, f. 3 a, b, c et Symb. myc. pag. 289. — Ascomatibus sparsis, punctiformibus, usque ad 1 mm. lat., planis vix excavatis, hyalino-diaphanis, niveis, extus margineque pilis concoloribus subtilissime puberulis; ascis stipitatis, oblongo-ovatis, curvatis, 64-sporis, demum operculatim dehiscentibus; sporidiis farctis, ellipticis, hyalinis, continuis; paraphysibus nullis.

Hab. ad fimum caninum putridum in M. Rabenkopf Rhenviæ.

22. **Ryparobius Asteriscus** Karst. Discom. nov. in Notis. ur Sällsk. 2252
pro Faun. et Flor. Fenn. Förh. XIII, p. 446, Rev. monogr. atque Synops. Ascomycet. fenn. pag. 122. — Subgregarius, sessilis, subsphæroideus, disco planiusculo, vitreo-pellucido, margine pilosellus, minutissimus 0,1-0,2; ascis subsessilibus, obovoideo-oblongatis 94-96 \approx 24-33; sporidiis 48-60, conglobatis, utrinque attenuatis seu acutatis, simplicibus, eguttulatis, hyalinis, 10-16 \approx 4; paraphysibus paucis, gracilibus, cito pereuntibus, apice incrassatis.

Hab. in stercore vulpino vetusto prope Mustiala Fenniae.

IV. *Moutonia* Sacc. Ascomata monoasca.

23. **Ryparobius monoascus** Mout. Ascom. Liège p. 141. — Sparsus, 2253
plerumque immersus, hemisphæricus, 150-200 μ . diam. contextu
membranaceo, polygonio, subhyalino, asco in quoque ascomate unico,
ovoideo, 200 \approx 150-170, sessili, e disco emergente, multisporo; spo-
ridiis (ultra 500) ovatis, hyalinis, 5-6 $\frac{1}{2}$ \approx 4-4 $\frac{1}{2}$.

Hab. in fimo Capreolorum, Angleur, Beaufays Belgii ¹⁾.

GYMNODISCUS Zuk. Ein. Ascom. pag. 8, tab. I, f. 1 (1887) [Etyim.
gymnos nudus et *discus*]. — Ascomata carnosio-ceracea, initio con-
cava dein convexula, margine et excipulo nullo, hypothecio glo-
boso-discoideo parenchymatico. Asci clavati, leniter exsistentes, po-
lyspori. Sporidia elliptico-oblonga, continua, hyalina, initio muc-
o hyalino obvoluta. Paraphyses bacillares, subinde furcatæ. — Est
Ryparobius excipulo carens, ad *Gymnoascaceas* nutans.

1. **Gymnodiscus neglectus** Zuk. Ein. Ascom. p. 8, t. I, f. I a, c. — 2254
Solitarius, albidus, 200-250 μ . lat. et alt., glaber; ascis clavatis,
breve stipitatis, apice rotundatis, 86 \approx 21, operculo secesso, trun-
catis, polysporis; sporidiis ex ellipsoideo breve fusoides, polysti-
chis, 10-11 \approx 3, initio strato mucoso hyalino subgloboso obvolutis;
paraphysibus interdum furcatis.

Hab. in fimo, Wien Austriæ (ZUKAL).

Fam. 5. Dermateæ Fr. Summa p. 345.

Ascomata urceolata, cupulata vel demum applanata, sessilia, ra-
rius stipitata, suberosa, coriacea vel cornea, extus sæpius furfuracea,
typice brunnea vel atra, sæpissime cæspitoso-erumpentia. Asci 4-8-
spori vel myriospori, typice paraphysati. Sporidia continua vel septa-
ta, hyalina, rarius colorata. — Familia ægre limitanda, in proximas
Pezizeas, *Patellarieas* etc. sensim abiens: genera quoque difficilia
ex eo quod plures species habitu simillimæ, fructificatione generice
diversa (nempe octospora vel myriospora, hyalospora vel didymospo-
ra) utuntur; dubium ergo an de polymorphismo agatur. Dolet exi-
mum opus Rehmianum de Discomyc. germanicis serius pervenisse,
ut eo ubique uti potuissem; species vero ejusdem omnes ad diem
editas, quantum potui, recepi.

1) Teste cl. Heimerl (Niederöst Ascob. p. 30, opella egregia sub prelo accepta),
R. monoascus Mout. ad gen. *Thelebolum* est referendus et totum hoc genus *Asco-*
boleis adscribendum, præeuntibus quoque observationibus cl. H. Zukalii (Denkschr. K.
Akad. Wien 1885). Cfr. Heim. l. c. ubi *Theleb. stercoreus* Tode, *Th. nanus* Heim. et
Th. Zukalii Heim. describuntur una cum plur. aliis novis Ascoboleis.

Clavis analytica generum.

Sect. 1. Hyalosporæ. Sporidia ovoidea, oblonga v. fusoidea, hyalina.

* Stipitatae, majores.

Midotis. Ascomata auriformia, subverticalia, coriacea.

Urnula. Ascomata urceolato-turbinata, coriacea.

** Subsessiles, minores.

Dermatea. Ascomata subsuberosa, mox patellari-aperta. Asci octospori.

Cenangium. Ascomata coriaceo-subcornea, urceolato-scutellata. Asci octospori.

Tympanis. Ascomata *Cenangii*. Asci myriospori vel myriospori simul et octospori.

Ameghiniella. Ascomata membranaceo-coriacea, stromate tuberculato, initio hypodermico inserta. Asci 8-spori.

Ephelina. Ascomata ceraceo-subcoriacea, stromate crustaceo effuso inserta. Asci 8-spori.

Laquearia. Ascomata coriaceo-subcornea, dimidiata, infra deficientia. Asci 8-spori.

Sect. 2. Phæosporæ. Sporidia ovoidea vel oblonga, fusca.

Hymenobolus. Ascomata coriacea initio tecta et clausa, dein erumpentia et ore lacero cupulari-aperta. (Ad *Phacidieas* prope accedit).

[*Phæangium.* Sporidia fusca, cetera *Cenangii*. Vide Sect. III. *Cenangii*].

Sect. 3. Didymosporæ. Sporidia ovoidea, oblonga v. fusoidea, 1-septata, hyalina v. fusca.

Cenangella. Ascomata coriacea vel subcornea ex urceolato patellaria. Sporidia hyalina.

[*Phæangella.* Sporidia fusca, cetera *Cenangellæ*. Vide Sect. II. *Cenangellæ*].

> [*Tryblidium.* Ascomata hysteroidea. Sporidia fusca. Cfr. Syll. II, p. 740].

Sect. 4. Phragmosporæ. Sporidia oblonga v. fusoidea, 2-pluriseptata, hyalina v. colorata.

p. 594 *Scleroderris.* Ascomata coriacea vel subcornea, glabra, ex urceolato patellaria. Sporidia hyalina.

[*Phæoderris.* Sporidia fusca, cetera *Scleroderridis*. Vide Sect. II. *Scleroderridis*].

> *Crumenula.* Ascomata ceraceo-membranacea, pilosula, urceolata. Sporidia hyalina.

> [*Tryblidiella.* Ascomata hysteroidea. Sporidia fusca. Cfr. Syll. II, p. 757].

Sect. 5. Scolecosporæ. Sporidia filiformia, continua v. septata.

pg. 601 x *Godronia.* Ascomata subcoriacea, urceolato-calyciformia.

- Pocillum*. Ascomata clavato-turbinata, fibrosa, disco truncato. *pg. 605*
Crinula. Ascomata clavata, stipite corneo, hymenio submucoso, initio convexo conidiophoro, demum disciformi ascophoro. *pg. 606*

Sect. 1. Hyalosporæ Sacc.

MIDOTIS Fries. Syst. Orb. Veg. p. 363 (1825), Elench. II, pag. 29 (Etym. *Mida* et *ous*, *otos* auris), *Wynnea* Berk. et Curt. F. Mex. p. 424. — Ascomata elongata, auriformia, coriacea, sursum divisa, basi in stipitem plus minus distinctum connata. Hymenium inferum ab excipulo subinde discretum. Asci teretes, octospori, paraphysati. Sporidia ovoideo-oblonga, continua, hyalina.

1. **Midotis gigantea** (B. et C.) Sacc. *Wynnea gigantea* Berk. et Curt. 2255
 Fung. of Mexic. n. 5, t. XII, Cooke Myc. f. 93. — Stipite communi subcylindrico, crasso, rugoso, suberoso, intus albo, sursum ramoso, in cupulas auriformes multiplices quandoque proliferas diviso; cupulis extus glabris, marginibus inflexis, cum hymenio rufis; ascis subcylindricis, octosporis; sporidiis magnis, subcymbiformibus, 25 = 14, utrinque obtusis.

Hab. in lignis putridis? in Mexico. — Stipes communis 7-8 cm. long., 18 mm. cr., cupulæ 6-7 cm. lat.

2. **Midotis macrotis** (Berk.) Sacc. *Peziza* Berk. Dec. fung. n. 356, 2256
Wynnea Berk. Journ. Linn. 1886, p. 424, Cooke Myc. f. 94. — Cupulis elongatis, obliquis, auriformibus, basi connato-ramosis, coriaceo-subcartilagineis, hepatico-rufis, extus glabris, hymenio purpurascente; ascis cylindricis, filiformi-paraphysatis, octosporis; sporidiis ellipsoideis, hyalinis, 25 = 12.

Hab. in ligno putri in India et Mexico. — Ascoma 12-13 cm. alt.

3. **Midotis heteromera** Mont. Syll. Crypt. n. 642, *Peziza* Mont. Cent. 2257
 II, n. 18, t. 6, f. 3. — Fasciculata, basi ramosa aut prolifera, coriacea, fragilis, stipitata; stipite brevi ramoso rubiginoso strigoso, in cupulam dilatato inæqualem, uno latere versam, subauriformem, disco umbrino ascophoro; ascis filiformi-clavatis, octosporis; sporidiis oblongis cymbiformibus, uniseriatis, 10 = 3,5.

Hab. ad ligna in silvis sinnedariensibus Guianæ (LEPRIEUR), S. Domingo et Cuba (BERK.).

4. **Midotis verruculosa** B. et C. Cub. Fung. n. 705. — Cupula obliqua 2258
 extus lateritia verrucosa; hymenio livido-fusco; sporidiis 10 = 5.

Hab. in ligno putri in insula Cuba. — A *M. heteromera* dif-

fert superficie verruculosa nec tantum furfuracea sporidiisque crassioribus.

5. **Midotis regularis** Cooke et Phil. Grev. IX, pag. 109. — Erumpens; stipite brevi, ramoso; ramulis brevissimis; cupulis concavis, fuscis, punctatis; margine inflexo; hymenio obscuriore levi; ascis cylindraceutis; sporidiis ellipticis 10-13 \approx 4-5; paraphysibus linearibus. 2259

Hab. in ligno putri, Rio Janeiro Brasilicæ.

6. **Midotis plicata** Phill. et Harkn. Calif. p. 4. — Ascomatibus obliquis, externe granulosis, brunneo-nigrescentibus, hymenio concolori, subplicato; ascis cylindraceutis, octosporis; sporidiis ovato-ellipticis, leniter curvatis, binucleatis, 7 \approx 5-7; paraphysibus non visis. 2260

Hab. in ligno Umbellulariæ californicæ in California. — Affinis *M. regulari*, a qua differt sporidiis minoribus, curvatis, binucleatis atque disco longitudinaliter plicato.

7. **Midotis Lingua** Fr. Elench. II, p. 29. — Solitaria, suberecta, obovato-oblonga, utrinque plana, margine leviter deflexo, 5 cm. usque alta, stipite brevissimo laterali instructa; stipite 2-4 mm. longo, glabro sublaccato-nitente fragili, margine ascomatis rufo-badio ab hymenio distincto, sed in pileum abeunte, pagina sterili, levi, glabra, azona, badio-fusca, subfuliginosa, subinde laccato-nitente; contextu floccoso, albo, primo molli, sicco cartilagineo; hymenio molli, absque papillarum vestigio, nigricante, siccitate rimoso-foveolato, sub lente subpruinoso (unde sporidia haud elastice explodi videntur). 2261

Hab. ad bases truncorum in Vallisia (SCHLEICHER). — Fingas *Otideam leporinam* resupinatam, sic ejus habebis ideam.

8. **Midotis Patella** Fries. Nov. Symb. Mant. p. 231. — Cupularis, sessilis, postice oblique adnata, supra glaberrima cervina, hymenio concavo brunneo; ascis exacte linearibus, octosporis; sporidiis ellipsoideis, ut plurimum biocellatis. 2262

Hab. ad truncos prostratos in Mexico (LIEBMANN). — Cupula coriacea *Auriculariæ* instar, 25 mm. lat. Hymenium in adultis a cupula facillime secedens. An hujus generis?

URNULA Fr. Summa p. 364 (1849) [Etym. *urna*] ¹⁾. — Ascomata sti-

1) Teste cl. Cooke in litt. huc ducenda **Urnula rhytidia** (Berk.) seu *Peziza rhytidia* Berk. (supra n. 331) ob excipulum extus fibrosum brunneum, medie fibrosum virens, interius compactius, denique pallidius, ascophorum.

pitata, urceolata subclausa, dein ore rotundo vel laciniato dehiscentia, coriacea, fusca vel furfuracea vel pubescentia. Asci cylindracei, octospori, paraphysati; sporidia ellipsoideo-oblonga, continua, hyalina.

1. **Urnula Craterium** (Schw.) Fr. Novæ Symb. p. 122, *Peziza* Schw. 2263
 Carol. p. 91, t. I, f. 7-11, Fr. Syst. Myc. II, p. 74, *Cenangium*
 Fr. Elench. II, p. 21. — Maxima, longe stipitata, subcæspitosa, nigro-badia, subclausa, intus cava, subiculo tomentoso; ascis longissime cylindræis, 8-sporis, 400-500 \approx 14-25; sporidiis monostichis oblongis hyalinis, 23-33 \approx 10-13; paraphysibus ramosissimis, septatis.

Hab. ad ramos dejectos in Carolina, Ohio et in America arctica (DRUMMOND) et in Hungaria. — Vegetatione superficiali ab *Cenangiiis* differt, sed velo pulveraceo convenit. Passim laciniatim dehiscit. Cfr. Hedw. 1883, p. 182, ex quo patet *P. adustam* Schulz. et *P. lugubrem* Kalchbr. huc referendas esse.

2. **Urnula Hartii** Berk. Fung. Arct. Exped. p. 16. — Cupula cyathiformi, extus cum stipite spadiceo velutina; margine inflexo; hymenio pallidiore; sporidiis ellipticis binucleatis, monostichis, 15 \approx 7. 2234

Hab. inter muscos Upernavik in regione arctica (H. C. HART et FEILDEN). — Ascoma 6 mm. lat., stipes 4 mm. alt. Affinis *U. Craterio* sed minor. Habitus *Geopyxidis Ciborii*.

3. **Urnula minor** Fr. Nov. Symb. p. 122. — Coriacea, subfasciculata, primo turbinato-clavata, extus albo-pruinosa, stipite brevi nigro, dein dehiscens, ore obliquo lacero dentato, disco urceolato pallido. 2265

Hab. ad terram in Guinea (AFZELIUS). — Ab *U. Craterio* differt statura multiplo minori, cupula turbinata, extus e pruina albidâ et, quantum e paucis speciminibus videre licet, defectu insignis mycelii byssacei. Stipes admodum tenuis, 2 mm. paullo ultra longior et sensim (nec abrupte ut in *U. Craterio*) in clavam dilatatus, nudus, niger, subinde pauci basi juncti; cupula membranaceo-coriacea, primo omnino clausa, dein ore indefinito lacera hiascens, ore obliquo dentato-lacero, extus e pruina pallida. Asci et sporidia nulla adsunt, sed floccorum s. paraphysium densa congeries exacte similis *U. Craterii*.

4. **Urnula Microcrater** (Hazsl.) Sacc. *Craterium Microcrater* Hazsl. 2266
 Eing. Disc. p. 17 et Magyar. Szab. Disc. t. 9, f. 31. — Ascomate clavato-piriformi, stipitato, apice truncato, excavato, initio clauso,

demum margine erecto fisso aperto, atro-brunneo, extus furfuraceo; stipite brevi, cylindræo, basi atro-radiculoso; ascis cylindricis, substipitatis, filiformi-paraphysatis, octosporis; sporidiis oblongo-ellipsoideis, monostichis, hyalinis, levibus.

Hab. in ramis terra infossis, mycelio atro-brunneo insidens, in Hungaria et Slavonia. — Totus fungus 10-12 cm. alt., 5-6 cm. lat.

5. **Urnula terrestris** (Niessl) Sacc. *Podophacidium terrestre* Niessl 2267
 Beitr. p. 163, t. VII, f. 56. — Gregaria; ascomate substipitato, turbinato vel sycioideo, 2-3 mm. diam., 1-2 mm. alt., coriaceo-membranaceo, badio, primum clauso demum laciniato, disco undulato, sulphureo; ascis clavatis, inferne attenuatis stipitatis, apice late rotundatis, 8-sporis, 124-136 \approx 8-9; sporidiis monostichis, oblongis, inæquilateralibus, simplicibus, continuis vel interdum nucleo 1-2 diviso, hyalinis, 11-13 \approx 4-5; paraphysibus ascorum longitudine, apice bifurcatis.

Hab. ad terram nudam in silvis prope Gratz Stiriaë. — A typo *Urnulæ* vix stipite breviorè distingui videtur.

DERMATEA Fr. Summa Veg. p. 362 (1849), [Etym. *derma* corium]. — Ascomata erumpenti-superficialia, urceolato-scutellata, mox aperta, subtuberosa, sæpius e basi communi cæspitosa. Ascii paraphysati, octospori. Sporidia ellipsoidea vel oblonga, continua, hyalina. — Hinc *Peziculæ* illinc *Cenangio* affinis, a prima substantia magis suberosa, ab altera substantia vix coriacea, colore plerumque lætiore, disco magis aperto, sporidiis sæpius majoribus differret; sed revera species plures hucusque ambiguæ, genera haud acute limitata demonstrant.

1. **Dermateæ Cerasi** (Pers.) Fr. Summ. Veg. Scand. p. 362, Tul. Carp. 2268
 III, p. 156, t. XIX, f. 13-16, Karst. M. F. I, p. 223, *Peziza* Pers. Disp. p. 35, *Cenangium* Fr. Syst. Myc. II, p. 180, Sacc. F. it. fig. 1309. — Stromate cortici immerso, carnosissimo, continuo, e parenchymate luteo-virente et fusco-virgato composito, crasso; cupulis per epidermidem erumpentibus, solitarie vel sæpius gregatim stromati insidentibus, primitus planiusculis margineque elevato sinuoso-repando, demum plus minus convexis et margine reflexo vel evanescente, furfure citrino-virente conspersis disco e cæsi-virente fusco vel tandem nigrescente, suberosis, 2-4 mm. lat.; ascis cylindræo-clavatis, 85-90 \approx 10, 8-sporis apice jodo non tinctis; sporidiis plerumque distichis, oblongatis vel aciculari-ob-

longatis, curvulis vel subrectis, eguttulatis, chlorinis, 14-20 \approx 4-5,5; paraphysibus filiformibus, conglutinatis, apice clavato, fuscidulo v. subfusco.

Hab. in ramis exsiccatis *Cerasorum* in Suecia, Fennia, Gallia, Germania, Italia, Belgio, Austria, Hungaria, Britannia, Amer. bor. — Status secundarii: *Micropera Drupacearum* Lév. var. *Cerasi* et *Dothichiza dubia* (Pers.).

2. **Dermatea pulcherrima** Fuck. Symb. App. II, p. 56. — Cupulis cæspitosis, subcoriaceis, 2-8 mm. latis, subsessilibus, primo concavis, demum magis explanatis, margine involuto, extus pulveraceis, pulcherrime læte flavo-viridibus, disco flavo-fusco; ascis stipitatis, cylindraceis, 8-sporis, 94 \approx 8; sporidiis oblique monostichis, fusi-formibus, curvatis, continuis, biguttulatis, hyalinis, 14 \approx 3; paraphysibus simplicibus, filiformibus. 2269

Hab. in ramis *Cerasi avium* pr. Hattenheim Rhenogoviæ. — A *D. Cerasi* ascomatibus maximis distinguenda.

3. **Dermatea Padi** Fr. Summa Veg. p. 362, Tul. Carp. III, p. 160, Karst. M. F. I, pag. 224, *Peziza Cerasi* β . *Padi* A. et S. Lus. p. 345. *Cenang. fallax* Fr. — Cæspitosa vel subsolitaria, erumpens, epidermide cincta, globosa clausa, mox subpatellaris, disco plano olivaceo-nigricante, extus rufo-olivaceo-furfuracea; sporidiis ellipsoideo-oblongis, utrinque 1-guttatis, hyalinis. 2270

Hab. in ramis emortuis *Pruni Padi* in Suecia, Fennia, Germania, Gallia. — Status secundarii: *Micropera fallax* (Wahl.) [Cfr. Karst. loc. cit.], *Dothichiza Padi* S. et R. et *Sphæronæma brunneo-viride* Fuck.

4. **Dermatea Ariæ** (Pers.) Tul. Cap. III, p. 160, *Peziza* Pers. M. E. I, p. 325, *Tympanis* Fr. Syst. Myc. II, pag. 175 et Elench. II, p. 18, *T. inconstans* Fr. Summa p. 400, *Cenangium inconstans* Fuck. Symb. pag. 268, *Dermatea* Tul. — Ascomatibus sessilibus, sparsis, duris, nigris, primum subrotundis clausis, dein vertice dilatatis orbiculato-deplanatis, ambitu marginante subelevato cinctis majusculis subgregariis; ascis cylindraceo-clavatis, apice incrassatis, 8-sporis, 70-90 \approx 8-9; sporidiis oblongis curvulis, 2-guttulatis, hyalinis, 10-14 \approx 3-4; paraphysibus sursum furcatis, septatis, clavulatis, 6 μ . cr. 2271

Hab. ad cortices *Sorbi Ariæ*, *S. Aucupariæ* et *Mespili* in Suecia, Germania, Gallia, Helvetia. — Status pycnidicus est *Micropera Sorbi* (Fr.) Sacc. seu *Sphæria conica* A. et S.

5. **Dermatea Cydoniæ** Schw. Syn. Am. bor. n. 1973. — Sparsa, sim- 2272

plex, sessilis, applanato-adpressa, difformis aut subrotundo-undulata, extus furfure albido crasso pulverulento tecta, marginibus tumidis, arcte inflexis; disco fusco-badio aut subcinnamomeo 4-6 mm. lat.

Hab. rara in emortuis ramis Cydoniæ, Bethlehem Amer. bor.

6. **Dermatea Corni** Phil. et Hark. Grev. XIII, p. 22. — Cæspitosa v. 2273
sparsa, minuta, primo tecta, demum erumpens, turbinata, furfuracea, vitellina, margine distincto, disco plano vel subdepresso, obscuriore; ascis late clavatis; sporidiis oblongo-ellipticis, 25-30 \approx 8; paraphysibus filiformibus, superne clavato-incrassatis, furcatis.

Hab. in ramis Corni in California (HARKNESS).

7. **Dermatea Pseudoplatani** Phill. in Grev. XVII, p. 45. — Cæspitosa, 2274
erumpens, sessilis v. substipitata; disco initio convexo dein subdepresso, albo demum pallide flavo-brunneo; ascis late clavatis 8-sporis; sporidiis oblongis vel oblongo-ellipsoideis, triguttatis demum (spurie?) triseptatis 15-17 \approx 5-7; paraphysibus apice clavatis.

Hab. in cortice Aceris Pseudoplatani, Spark Hill Britannicæ (W. H. GROVE). — Ascoma $\frac{1}{2}$ -1 mm. lat. *Derm. lividæ* proxima videtur. Colore albo mox distincta species. «Potius *Dermatella*».

8. **Dermatea olivacea** Ellis Bull. Torr. Cl. 1877, p. 133. — Ascomati- 2275
bus cæspitosis, erumpentibus, in stipitem brevem desinentibus, olivaceo-furfuraceis, disco plano, margine obtuso; ascis latis obtusis, breviter stipitatis, 125-135 \approx 20-25; sporidiis oblongis, distinctis, obtusis, 35 \approx 12-15, primo protoplasmate griseo dein saturatiore faretis; paraphysibus linearibus, crispulis, simplicibus vel parce ramosis, apicibus vix incrassatis.

Hab. in ramis Ilicis glabræ emortuis, South Jersey Americæ borealis.

9. **Dermatea Xanthoxyli** Peck 31 Rep. St. Mus. p. 47. — Ascomati- 2276
bus dense cæspitosis, minutis, mutua pressione sæpe inæqualibus, brunneo-lilacinis extus margineque albis et villosopruinosus, disco plano vel concaviusculo; ascis brevibus clavatis; sporidiis stipatis continuis subcylindricis, leniter curvis, obtusis, hyalinis.

Hab. in ramis emortuis Xanthoxyli americani, West Troy Amer. bor. — Cæspituli vix 2 mm. lat. sæpe ex cupulis 10-12 compositi.

10. **Dermatea acicola** Briard et Sacc. Fung. Alg. et Gall. n. 15 in 2277
Rev. Mycol. 1885. — Ascomatibus erumpentibus, gregariis obconicis, tenacellis, minutis, $\frac{1}{4}$ mm. diam., totis nigris, glabris disco sub-

plano, breve marginato; ascis clavatis, breve stipitatis, subtorulosis, 120-144 \approx 22-24, octosporis; paraphysibus filiformibus, ramulosis, sursum leniter incrassatis obvallatis; sporidiis ellipsoideo-oblongis, continuis granulosis 1-3 guttulatisque, dein eguttulatis, 20-26 \approx 12-14, hyalinis.

Hab. in pag. sup. foliorum Juniperi communis pr. Troyes Galliæ (BRIARD). — Etsi pro genere minuta species, tamen ab hujus typo non abhorret.

11. **Dermatea juniperina** Ellis Amer. Nat. 1883, p. 193. — Erumpens, 2278
sessilis, orbicularis, fuliginoso-nigra, disco udo vix pallidiori, margine obsolete circiter $\frac{1}{4}$ mm. crass. sicca deorsum contracta et fere stipitata; ascis clavato-cylindræis, 100-114 \approx 15-18; paraphysibus filiformibus superne vix incrassatis; sporidiis subdistichis, ellipsoideis, subhyalinis, crasse uninucleatis, 18-20 \approx 7-12.

Hab. in foliis emortuis Juniperi communis, Decorah Jowa Amer. bor. (G. W. HOLWAY).

12. **Dermatea Pini** Phill. et Hark. Grev. XIII, p. 22. — Cæspitosa 2279
vel sparsa, subsessilis, globosa, demum patelliformis, ceraceo-coriacea, furfuracea, ochraceo-incarnata, margine indistincto, disco concolori, applanato; ascis clavatis, octosporis; sporidiis oblongo-ellipticis, 3-4 nucleatis, 17-20 \approx 6-8; paraphysibus linearibus, superne incrassatis, furcatis.

Hab. in cortice Pini in California (HARKNESS).

13. **Dermatea phyllophila** Peck 31 Rep. Stat. Mus. p. 47. — Asco- 2280
matibus minutis suborbicularibus, margine flexuoso, siccis, subfibrosis brunneis, extus pilosellis, erumpentibus, epidermide rupta cinctis et partim tectis, udis expansis et discum planum, pallidum vel sordide album revelantibus; ascis oblongo-clavatis, obtusis sessilibus; sporidiis late ellipsoideis, subhyalinis 7-8 \approx 5-6 plerumque uninucleatis; paraphysibus apice incrassatis ascos leniter superantibus.

Hab. in foliis emortuis sed adhuc stantibus Abietis balsameæ Summit Amer. bor. — Discus udus pruinosus.

14. **Dermatea cinnamomea** Cooke et Peck Disc. U. S. II, p. 24 et II, 2281
p. 28, Rep. Stat. Mus. p. 67 nec DC. (*Pezicula*). — Cupulis subcæspitosis erumpentibus, subsessilibus, epidermide rupta cinctis, subcoriaceis, extus pulverulentis cinnamomeis, margine involuto, disco subplano sicco leniter anguloso brunneo; ascis elongato-clavatis, sporidiis anguste ellipsoideis, continuis 12-13 μ . longis.

Hab. in ramis emortuis Populi, Sandlake Amer. bor.

15. **Dermatea australis** (Speg.) Sacc. *Cenangium australe* Speg. F. 2282
 Fueg. n. 345. — Stromatibus cortice innatis, sparsis v. laxe gregariis, primo peridermio tectis, dein, eo fisso, transverse erumpentibus, ellipticis 3-5 mm. long., 1-3 mm. lat. vel pulvinatulis 1 mm. crass., superne applanatis truncato-marginatis, fusco-purpureis, sæpius pulvere subviolascente inspersis; cupulis stromate immersis, primo clausis (an medio minute papillulatis?), dein applanato-expansis 0,5-1 mm. diam., sæpe subconfluentibus, non v. parce obtuseque marginatis, non v. vix esxertis, e violascenti purpurascensibus; ascis cylindræis, antice truncato-rotundatis, postice breviter crasseque attenuato-pedicellatis, 90-180 \approx 14-18 octosporis; paraphysibus filiformibus longioribus dense obvallatis; iodi ope tunica ascorum apice dilute violaceo-cærulescente; sporidiis transverse v. oblique v. recte monostichis, ellipticis sæpius utrinque obtusatis 16-24 \approx 7-14, crasse tunicatis, granuloso-farctis v. grosse 2-guttulatis, primo hyalinis dein chlorinulis v. dilute olivascentibus.
- Hab.* vulgata ad ramos dejectos putrescentes Fagi betuloidis in silvis in Staten island et Fuegia. — Species fabrica naturaque melius Bulgarieis adscribenda, vegetatione tamen cenangioidea donata. An novum genus?
16. **Dermatea lobata** Ellis Bull. Torr. Cl. 1876, p. 108. — Superfi- 2283
 cialis sparsa, globosa, primo clausa, dein expansa, aperta et disco convexo, margine lacerato-lobato, extus rufo-brunnea atque rugosa, squamulis innatis vestita; ascis cylindræis; paraphysibus superne guttulato-incrassatis; sporidiis monostichis, breviter oblongis vel ovoideis, subhyalinis, 12-15 \approx 10.
- Hab.* in ramis Quercus albæ dejectis sed nondum putridis Newfield, New Jersey Amer. bor.
17. **Dermatea tabacina** Cooke Disc. U. S. II, p. 24, Rehm Ascom. 2284
 n. 359. — Ascomatibus cæspitosis, erumpentibus, stipitatis, primo subglobosis, dein cupulatis, subinde coriaceis, margine inflexo, lateraliter compressis castaneo-brunneis, vix furfuraceis; disco pallido, in sicco hysteriiformi; ascis clavatis, 10 \approx 18; sporidiis elongatis, obtusis, subellipsoideis, distichis rectis vel curvulis, 1-cellularibus, hyalinis, 7,5 \approx 6; paraphysibus crassiusculis, articulatis, 5 μ . crassis, sursum brunneis clavulatis.
- Hab.* in Quercus albæ ramis vivis Unit. Stat. Amer. bor. — Sec. Cooke sporidia 10-11 \approx 7, fusiformia, intus granulosa.
18. **Dermatea purpurascens** E. et E. Jour. Myc. 88, p. 100. — Erum- 2285
 pens, sessilis v. substipitata $\frac{1}{2}$ - $\frac{3}{4}$ mm. alta, sparsa vel ascomati-

bus 2-4 aggregatis, disco convexo vel plano, subimmarginato, $\frac{3}{4}$ -1 mm. diam., e sordide albo rufo-purpurascete extus obscurior, inferne in basim stipitiformem contracta; ascis clavato-cylindraceutis, 115-120 \approx 18-22; paraphysibus crassis superne vix incrassatis; sporidiis distichis oblongis, leniter curvulis, 25-30 \approx 8-11, utrinque obtusis, crasse 4-nucleatis subhyalinis.

Hab. in ramulis emortuis Castaneæ, West Chester Amer. bor. — Affinis *D. olivaceæ*, a qua differt in primis colore disci.

19. **Dermatea pruinosa** E. et E. Jour. Myc. 88, p. 100. — Gregaria, 2286 sessilis vel subsessilis, 2-2,5 mm. crass. sordide brunnea, extus albo-pruinosa, disco livido-albo; ascis cylindraceutis, 55 \approx 5; paraphysibus filiformibus simplicibus vel ramosis; sporidiis subdistichis allantoideis, hyalinis, 8-10 \approx 2-2 $\frac{1}{2}$.

Hab. in cortice emortuo, Colorado Amer. bor. (D. A. COCKE-RELL). — Affine *D. fusco-sanguineæ*, a qua differt colore, magnitudine atque forma sporidiorum.

20. **Dermatea inclusa** Peck. 30 Rep. Stat. Mus. pag. 62. — Minuta, 2287 sparsa, erumpens, sessilis, epidermide rupta, arcte cincta, marginata, margine farinoso v. furfuraceo; disco-plano v. concavo subochraceo; ascis latis oblongo-cylindraceutis; sporidiis distichis vel inordinatis, oblongo-ellipsoideis sæpe curvulis hyalinis, 28-35 μ . long.

Hab. in truncis emortuis Salicis Maryland Amer. bor. — Sporidia 1-nucleata v. granulosa. Fungus udus intus rhabarbarinus.

21. **Dermatea rufa** Cooke Grev. VIII, pag. 72. — Sparsa, erumpens, 2288 fusco-rufa, carnosocoriacea; cupulis in stipitem productis, disco excavato, rufo, 0,12-0,3 mm. diam., extus farinaceo, aureo-fusco; carne concolori; ascis clavatis; sporidiis fusiformibus, rectis vel curvulis, 35-40 \approx 5-6, quadrinucleatis, hyalinis; paraphysibus filiformibus.

Hab. in corticibus, Natali Africæ austr. — Madefacta colorem aureo-brunneum exsudat.

22. **Dermatea carnea** C. et Ellis Grev. V, p. 32, t. 75, f. 9. — Cæspitosa, 2289 minuta, ochraceo-carnea, erumpens, substipitata, turbinata demum excavata, extus furfuracea, pallidior; ascis clavatis, octosporis; sporidiis ellipsoideis, sæpe (genuine?) 3-septatis, hyalinis, 20-22 \approx 8; paraphysibus filiformi-clavulatis.

Hab. in ramis corticatis Aceris rubri, Viburni, Carpinii americanæ, New Jersey et West Albany Amer. bor. — Ascoma 0,2-0,5 mm. lat. «An rectius *Dermatella*?»

CENANGIUM Fr. Syst. Myc. II, pag. 177 ex p. (1822) [Etym. *cenos* cavus et *angeion* vas), *Dermatea*, *Phibalis*, *Encœlia* Auct. ex p. — Ascomata erumpenti-superficialia, sæpius e stromate communi cæspitosa, globulosa, clausa, dein aperta urceolata vel scutellata, coriacea v. subcornea extus typice furfuracea, plerumque fusca v. atra. Asci paraphysati 4-8-spori. Sporidia oblonga v. fusoidea, continua, hyalina. Sæpe adsunt pycnidia et spermogonia. — Cum gen. *Dermatea* confluit, hinc species etiam sub hoc genere quærendæ.

I. *Eu-Cenangium*. Ascomata minora, duriora.

1. **Cenangium Prunastri** (Pers.) Fr. Syst. Myc. II, pag. 180, *Peziza* 2290
 Pers. Tent. pag. 35, *Dermatea* Fr. Summa p. 362, Rehm Disc. p. 261, *Tympanis* Wallr. Crypt. p. 427. — Subcæspitosum, subcorneum, nudum, nigricans, cupulis primo subulæformibus, dein apertis concavis substipitatis; ascis clavatis, 8-sporis, 60-80 \approx 12; sporidiis oblongis vel elongato-ovatis, obtusis, 1-cellularibus, 1-2 nucleis magnis præditis (an demum 2-cellularibus?), hyalinis, distichis, 12-14 \approx 4-4,5; paraphysibus filiformibus, superne furcatis.

Hab. in ramis siccis Pruni domesticæ, spinosæ, Americanæ, Armeniacæ in Suecia, Germania, Gallia, Hungaria, Britannia, Belgio, Italia, Amer. bor. — Status pycnidicus est *Sphaeronecema spurium* (Fr.) Sacc. Etiam transversim erumpens, subcæspitosum et primitus *sphaericeforme*, adultum profunde excavatum, vix 2 mm. latum; hymenium virens.

2. **Cenangium polygonium** Fuck. Symb. App. II, p. 55, p. p. *Dermatea* 2291
polygonia Rehm Disc. p. 263. — Cupulis ut in *Tymp. polygonia* (quam cfr.); ascis tereti-clavatis 110-120 \approx 20, 8-sporis; sporidiis oblongo-ellipsoideis obtusis, rectis, continuis, hyalinis, 15-20 \approx 6-8, distichis; paraphysibus furcatis, apice elliptico-clavatis, brunneis, 5 μ . cr.

Hab. in ramis siccis Piri Mali pr. Æstrich Rhenogoviæ. — An forma octospora *Tymp. polygoniæ*?

3. **Cenangium Syringæ** (Rehm) Sacc. *Dermatea Syringæ* Rehm Ascom. 2292
 Lojk. n. 58 (1873). — Plerumque gregarium, ex rimis epidermidis erumpens, primitus globosum, dein irregulariter expansum, rugoso-marginatum, fuscum, 0,5-1,5 mm. diam.; ascis clavatis, 8-sporis, 50-60 \approx 5; sporidiis ellipticis vel oblongato-ovoideis, 1-cellularibus, sæpe 2-nucleatis hyalinis, distichis, 8-9 \approx 2-2,5; paraphysibus superne clava fusca 4-5 μ . cr. instructis.

Hab. ad ramum siccum *Syringæ vulgaris* prope Plavisevicza com. Szörény in Hungaria (LOJKA).

4. **Cenangium pulveraceum** (A. et S.) Fr. Syst. Myc. II, p. 181, *Peziza* Alb. et Schw. Lus. pag. 342, t. VIII, f. 2, *Phibalis* Wallr. Crypt. n. 2408. — Ascomatibus gregariis nigricantibus, extus scobe furfuracea cinerea obtectis, primum subglobosis, dein in basin stipitiformem productis turbinatis, vertice semipatulis, 1 mm. lat.; disco flavido, plano; ascis clavatis 8-sporis; sporidiis elongatis, hyalinis, continuis, 5-8 = 2; paraphysibus filiformibus (Phill.).

Hab. ad corticem *Betulæ*, *Pruni*, *Ilicis*, *Fagi* in Germania, Belgio, Britannia, Ceylon Amer. bor. — Cfr. Rehm Disc. p. 229. Sec. Fuck. ascomata adsunt spermogonica sporulis allantoideis 4 = 1 referta.

5. **Cenangium vagabundum** (P. et B.) Sacc. *Tympanis vagabunda* Pass. et Belt. Fung. Sic. n. 17. — Cupulis sparsis, solitariis, erumpentibus, sessilibus vel turbinato-substipitatis, corneis, primo clausis, dein apertis, margine involuto, rubiginoso, fuscis, nitidis striatulis; ascis cylindrico-clavatis, basi longe attenuatis, jodo immutatis, 112-125 = 10-12, sed sæpe multo brevioribus, 8-sporis (?); sporidiis oblongo-ellipticis, biguttulatis, hyalinis, 12 = 5 in ascorum lumine plerumque imperfecte perspicuis ibique guttulis eorum sporidia globosa numerosa simulantibus; paraphysibus filiformibus stipatis ascos æquantibus, apice subcoalitis, sed non fucatis.

Hab. in ramulis aridis dejectis *Rosæ*, *Rubi*, *Pistaciæ* *Terebinthi* prope Monostalla Siciliæ.

6. **Cenangium bicolor** (Ell.) Sacc. *Tympanis bicolor* Ellis Amer. Nat. 1883, pag. 193. — Cæspitosum v. simplex, sessile, margine angusto, subundulato, extus pallide rufum, disco atro plano, $\frac{3}{4}$ -1 mm. diam.; ascis subcylindraceis, 75 = 8-9; paraphysibus obtusis, sursum indistincte incrassatis; sporidiis uniseriatis, oblongo-ellipsoideis, sæpe uno apice acutis, 2-4-nucleatis, lutescentibus, 13-15 = 3,5-4.

Hab. in ramulis emortuis (*Aceris*?), Decorah, Jowa Amer. bor. — Affine *Tymp. acerince*.

7. **Cenangium clandestinum** Rehm Disc. p. 223. — Erumpens, seriatim cæspitosum, globosum dein scutellatum extus atro-brunneum, margine pallidiore, siccum nigrum et convolutum, 0,5-1 mm. lat., ceraceo-coriaceum; disco plano griseo; ascis clavatis 45-50 = 6-8, octosporis; sporidiis ellipsoideis obtusis rectis curvulisve continuis hyalinis, distichis 9-11 = 3; paraphysibus filiformi-clavulatis.

- Hab.* in ramulis siccis *Aceris campestris* in Franconia Bavaricæ.
8. **Cenangium Magnoliæ** B. et C. North Am. Fung. n. 766. — Cæspitosum, apertum marginatum, nigrum; ascis amplis; sporidiis magnis allantoideis, 25-30 = 12-15. 2297
- Hab.* in ramis *Magnoliæ glaucæ*, *Perseæ* et *Lauri*, Alabama, Darien, Gainesville Amer. bor.
9. **Cenangium? Sambuci** (Cr.) Sacc. *Tympanis Sambuci* Cr. Finist. pag. 43. — Ascomatibus 1 mm. diam., lutescentibus, translucidis, sessilibus subcylindraceis; ascis dehiscentibus, octosporis; sporidiis subfusiformibus, parum curvatis. 2298
- Hab.* in ramulis emortuis *Sambuci*, Finistere Gallicæ.
10. **Cenangium Sophoræ** Pass. Erb. critt. ital. II serie, n. 1173. — Cupulis cæspitosis, minutis erumpentibus, atris; ascis oblongo-clavatis, 8-sporis; sporidiis distichis, elliptico-oblongis, rectis vel curvis, minutis, hyalinis; paraphysibus non visis. 2299
- Hab.* in ramis siccis *Sophoræ pendulæ* in Horto botanico Parmæ Ital. bor.
11. **Cenangium Sarothamni** Fuck. Symb. p. 270. — Cupulis gregariis cæspitosisve, substipitatis, primo clausis, umbilicatis, demum apertis, applanatis, extus fuscis, subpulveraceis, demum atris, 2 mm. latis, disco nigro-fusco, margine elevato, atro cinctis; ascis oblongis, stipitatis, antice obtusis, seorsum attenuatis, 8-sporis, 18 = 8-9; sporidiis subdistichis oblongo-ovatis, hyalinis, continuis, 8-10 = 3-4. 2300
- Hab.* in ramulis siccis *Sarothamni scoparii* pr. Eberbach Rhenogoviæ et in Arduennis (FUCKEL, LIBERT).
12. **Cenangium Andromedæ** (Schw.) Fr. Syst. Myc. II, p. 282, *Peziza* Schw. Carol. n. 1261. — Solitarium, minutum, nudum, nitens, nigerrimum, cupula subglobosa, stipite longiusculo; sporidiis fusoides vel sigmoideis, tenuibus, pluriguttulatis (Berk.). 2301
- Hab.* in cortice *Andromedæ arboreæ* Carolinae. — Sparsum, interdum etiam fasciculatum, magnitudine capitis acicularum minimarum. Substantia fere cornea. Cupula sphaeriformis, margine valde involuto, disco urceolato. *Tympanidi* affine.
13. **Cenangium Vaccinii** (Fuck.) Sacc. *Dothiora* Fuck. Symb. App. III, pag. 29. — Patellis erumpentibus, demum valde prominentibus, gregariis, ramulos plerumque totos occupantibus, fusco-nigris, 1 mm. diam., rotundatis sed plerumque ellipticis irregularibusque, margine elevato, tumido, vertice concavis, primo carbonaceis concoloribus, demum irregulariter fissis et disco sordido exposito; ascis 2302

clavatis, 8-sporis, $74 \approx 12$; sporidiis faretis, oblongo-ovatis, utrimque obtusis, parum curvatis, continuis, hyalinis, $12 \approx 6$ mm. crass.

Hab. in caulibus ramisque siccis Vaccinii uliginosi, S. Moritz Ober-Engadin Helvetiæ. Habitus hinc *Sporomegatis degenerantis*, illinc *Dothioræ ellipticæ*, sporidiis vero diversissimum.

14. **Cenangium cæspitosum** (Fuck.) Rehm Disc. p. 223 *Dermatea* 2303
Fuck. Symb. p. 277. — Cupulis erumpentibus, dense cæspitosis, difformibus, usque ad 2 mm. latis, extus margineque cinereo-pulverulentis, asperis, disco atro, excavato; ascis linearibus, 8-sporis, $60 \approx 8$; sporidiis cylindræis, rectis, continuis, hyalinis, $10 \approx 2$.

Hab. ad ramos corticatos Coryli Avellanæ. — Habitus *Cen. populnei* sed minus.

15. **Cenangium Coryli** Corda Ic. V, p. 78, t. IX, f. 63. — Aggregatum, superficiale, minutum; cupulis globulosis, dein applanatis, substipitatis discoque nigricantibus; ascis clavatis; paraphysibus tenuissimis obvallatis; sporidiis senis (semper?) oblongo-ellipsoideis, hyalinis, 9-10 μ . longis.

Hab. in ramis emortuis Coryli in Bohemia. — Sec. Kickx Crypt. Fl. I, pag. 473 stat. pycnidicus est *Catinula turgida* (Fr.). An forma oligospora *Tympanidis corylinæ*?

16. **Cenangium sticticum** (B. et C.) Sacc. *Tympanis stictica* B. et C. 2305
North Am. Fung. n. 763. — Punctiforme; cupulis concavis, margine elevato; ascis clavatis; sporidiis fusiformibus, curvatis, quadrinucleatis.

Hab. in ramis Salicis babylonicæ et forte Pini et Quercus in Amer. bor.

17. **Cenangium glabrum** (Wallr.) Rehm Disc. p. 225, *Phibalis glabra* 2306
Wallr. Crypt. n. 2412. — Ascomatibus hypophlæodeis, subsolitariis, mox epidermidem scissam superantibus sessilibus, membranaceis tenacellis, extus glabris dilute-fuscescentibus, dein discum albo-pallescentem marginibus inflexis cinctum recludentibus; ascis clavatis, apice rotundatis, $45-50 \approx 6-8$, 8-sporis; sporidiis oblongo-clavatis, obtusis, rectiusculis, eguttulatis, hyalinis, $6-9 \approx 2$, distichis; paraphysibus filiformi-clavulatis, apice brunneolis, 5-6 μ . cr.

Hab. ad ramulos quercinos juniores languidos in Thuringia et Franconia.

18. **Cenangium turgidum** Fr. Syst. Myc. II, p. 236, *Peziza quernea* 2307
Schw. Carol. n. 1265. — Aggregatum, obovatum, subrugosum, nigro-fuscescens, ore connivente stellatim inflexo, subiculo corticali tumido; sporidiis distichis, fusoides, rectis, 4-guttulatis, hyalinis.

Hab. ingenti copia ad ramos et ramulos querneos eorumque excrescentias occupat in Carolina Amer. bor. — Ascomata furfuracea, primo clausa dein aperta, 4-6 mm. lat. *C. fuliginoso* utique affine, sed tubercula, cui insident cupulæ, multo minora magis prominent, subhemisphærica, intus tota lignosa (nec fungosa) et corticis colore; cupulæ minores minus prominent. *Dichæna* facile dicendum. Fr. l. c.

19. **Cenangium salignum** Fuck. Symb. p. 268, nec Auct. — Cupulis ut 2308
in *Tympan. saligna* (quam cfr.); ascis anguste clavatis, 8-sporis, 36 \approx 4; sporidiis cylindræis, curvatis, continuis, 6 \approx 1,5.

Hab. in ramis siccis Salicis caprææ prope Æstrich Rhénogoviæ et in Belgio (LAMBOTTE).

20. **Cenangium spermatisporum** (Nyl.) Sacc. *Tympanis* Nyl. Obs. 2309
p. 70, Karst. M. T. I, p. 227. — Erumpens, solitarium v. cæspitosum, nigricans, mox apertum, concavum vel planiusculum, margine subinæquali, nudum, 0,6-0,9 mm. lat.; ascis elongato-clavatis, 11 μ . cr., octosporis; sporidiis breve ellipsoideis, continuis, 6-7 \approx 4; paraphysibus filiformibus, apice incrassatis, fuscis, conglutinatis.

Hab. in cortice Populi tremulæ emortuo in Fennia. — Adsunt spermogonia cæspitosa, nigra, minuta, sporulis allontoideis 3-4 \approx 0,5. An status octosporus *Tymp. populinæ*?

21. **Cenangium subnitidum** Cooke et Phill. in Grev. III, p. 186. — 2310
Cupulis gregariis erumpentibus turbinatis, demum patellatis, brunneo-nigricantibus, disco marginato-depresso dein plano vel convexo, extus nudi sopacis vel nitidulis; ascis clavato-cylindræis, 8-sporis; sporidiis anguste ellipsoideis, curvis, biguttatis, pallide succineis, 15 \approx 5.

Hab. in ramis emortuis deiectis Alni, Trefriw North Wales Forres Britannia. — Adsunt pycnidia conica vel subsphærica sæpe solitaria; stylosporibus anguste fusoides, curvis, hyalinis, 10-15 \approx 1.

22. **Cenangium rubiginellum** Sacc. *C. rubiginosum* Cooke in Rav. 2311
Fungi Amer. n. 635, nec Fr. — Sparsum v. gregarium, rubiginosum; cupulis erumpentibus, coriaceis, breviter stipitatis, glabris, disco pallidiore; ascis cylindræis; sporidiis ellipticis vel utrinque leniter acuminatis, hyalinis, nucleatis, 16 \approx 8.

Hab. in ramis Ostryæ virginicæ in Carolina Amer. bor. (RAVENEL).

23. **Cenangium Abietis** (Pers.) Rehm Disc. pag. 227, *Peziza Abietis* 2312

Pers. Syn. p. 671, *P. cervina* Pers. Syn. p. 647 (non *Cyphella digitalis*), *Cen. ferruginosum* Fries Syst. Myc. II, p. 187, *Trybl. pineum* Pers. Myc. Eur. p. 332. — Gregarium, coriaceo-membranaceum, sessile, rugosum, subpruinatum, cervino-nigrescens, ore compresso inflexo, humido patulo, disco lutescente; ascis clavatis, supra rotundatis, crasse stipitatis, 60-80 \approx 10-12, 8-sporis; sporidiis ellipsoideis vel ovato-ellipsoideis, 11-13 \approx 5-7, distichis, continuis, 1-2-guttatis; paraphysibus filiformi-clavatis, virescenti-flavidis.

Hab. ad ramos exsiccatos Pini silvestris, P. Strobi, Abietis balsamiferæ, A. pectinatæ etc. in Suecia, Germania, Belgio, Gallia, Italia, Britannia, Amer. bor. in Quercu Carolina (SCHWEIN.). Status secundarii noti. — Species memorabilis, versiformis. Prima ætate simillima *Sphæricæ* cuidam cæspitosæ peritheciis subrotundis reniformibusque, pulvere ferruginoso tectis; dein magis explicata, 2-4 mm. lata, subnuda, stipite brevissimo et affinium more in cortice latente, sicca compressa connivente-clausa, sed sæpe etiam angulata; humida aperta subrotunda, in lacinas plures divisa, disco olivaceo-lutescente. Color exterior opacus, varius. — β . **strobilinum** A. et S. p. 362: sparsum e badio nigricans. In strobilis Abietis in Gallia et Germania.

24. **Cenangium laricinum** (Pass.) Sacc. *Tympanis laricina* Pass. Erb. 2313
critt. ital. II. ser. n. 1284, vix *Cenangium laricinum* Fuck. — Cupulis erumpentibus, cæspitosis nec raro solitariis, primo clausis, dein apertis, disco concavo vel plano marginato, dissectis intus albis; ascis elongato-clavatis attenuato-stipitatis, ad apicem rotundatis, longitudine et crassitie variis sed ut plurimum 65 \approx 10 octosporis, jodo immutatis; sporidiis mono- vel distichis elliptico-navicularibus integris ad polos nucleatis, hyalinis, 10 \approx 5; paraphysibus obscuris.

Hab. in ramis siccis dejectis Laricis europææ in silvis Tressero Ital. bor. (ANZI). — Spermata (vel stylosporæ?) subfusiformia vehementer arcuata, hyalina, medio spurie septata, 15 \approx 2,5.

25. **Cenangium acicolum** (Fuck.) Rehm Disc. p. 228. — Gregarium, 2314
erumpens, turbinatum, brevissime crasse stipitatum extus flavo-brunneum, glabrum siccum furfuraceum et convolutum 1-3 mm. lat., ceraceo-coriaceum, disco planiusculo concolore pallidius marginato; ascis clavatis 75-90 \approx 10-12, 8-sporis; sporidiis ellipsoideis rectis continuis hyalinis, 12-14 \approx 3,5-4,5 distichis; paraphysibus filiformibus, sursum clavulatis flavo-brunneolis.

Hab. in acubus putridis Pini silvestris in Germania.

26. **Cenangium farinaceum** (Pers.) Rehm Disc. p. 226, *Peziza* Pers. 2315

Syn. p. 672, *Pez. pinicola* β . *cæspitosa* Fr. Syst. Myc. II, p. 113, *Pseudophacidium decorticans* Rehm in Myc. March. n. 854. — Cæspitosum, innato-erumpens, seriatum, ceraceo-coriaceum, globosum clausum dein subapplanatum, apertum, subsinuosum, brunneo-nigricans, griseo-pulvereum, disco nigro, 1-1,5 mm. lat.; ascis clavatis, apice rotundatis, 75-90 \approx 10-12, 8-sporis; sporidiis subclavatis rectis curvulisve, continuis, 2-guttatis, 15-17 \approx 5-6, distichis; paraphysibus filiformibus 2 μ . cr., subcyaneis.

Hab. in ramis siccis Pini silvestris in Germania.

27. **Cenangium leptospermum** B. et C. North Amer. Fungi n. 768. — 2316

Fasciculatum, minutum, nitidum, subglobosum, disco punctiformi; sporidiis elongato-fusiformibus, arcuatis, pluri-nucleatis, nucleis globosis.

Hab. in ramis Abietis Douglasii, Alabama Americæ borealis (PETERS).

28. **Cenangium helotioides** Mout. et Sacc. (sp. nova). — Ascomatibus 2317

sparsis obconicis breve stipitatis, totis olivaceo-nigris, $\frac{1}{3}$ mm. lat.; disco concavo, margine diu inflexo subtecto; ascis clavatis, 8-sporis, 120-130 \approx 20; sporidiis distichis ellipsoideo-cymbiformibus, continuis, hyalinis, granulosis, 18-22 \approx 8-8,5; paraphysibus filiformibus ascos paullo superantibus superne atro-olivaceis.

Hab. in pagina sup. foliorum adhuc pendulorum Juniperi communis pr. Liege Belgii.

29. **Cenangium acuum** C. et Peck in Grev. VII, p. 40. — Ita, teste 2318

Cooke, reformanda *Mollisia Pinastri* (C. et P.) Sacc., supra descripta p. 327.

30. **Cenangium Sabalidis** (Ell. et Mart.) Sacc. *Dermatea* Ell. et Mart. 2319

Amer. Nat. 1884, p. 1147. — Ascomatibus tenuibus, gregariis vel sparsis, brunneis, 250-450 μ . diam.; ascis sessilibus, 35 \approx 5; sporidiis bi-tristichis, oblongis vel clavato-oblongis, lutescentibus, 2-nucleatis, 4-6 \approx 1-1,2.

Hab. in petiolis emortuis Sabal serrulatæ, Cove springs Americæ borealis.

31. **Cenangium pelidnum** (K. et C.) Sacc. *Dermatea pelidna* K. et 2320

C. Grev. IX, pag. 25. — Cæspitosum, subcoriaceum; cupulis (pressione mutua) irregularibus, læte badiis, furfuraceis 3 mm. diam., disco atro-brunneo vel fuligineo; ascis minimis, cylindraceutis, 30 μ . longis; sporidiis linearibus 4 μ . longis.

Hab. in ramis decorticatis, Foschberg Afr. austr. (MAC-OWAN).

— Affine *C. furfuraceo* et *C. populneo*.

32. **Cenangium pezizoides** Peck 31 Rep. Stat. Mus. p. 48. — Cupulis 2321
sparsis, minutis erumpentibus, sessilibus v. basi angusta affixis,
levibus nigris; ascis oblongo-clavatis; sporidiis stipatis, oblongo-
ellipsoideis 20-25 μ . long. sæpe grosse 1-nucleatis, subinde curvulis.

Hab. in petiolis foliorum *Cassandræ calyculatæ*, socio
Cen. Cassandræ, Center Amer. bor. — A *C. Cassandræ* mox di-
stinctum.

33. **Cenangium Cassandræ** Peck 31 Rep. Stat. Mus. p. 48. — Cupulis 2322
oblongis v. hysteriiformibus, erumpentibus, epidermide rupta, arcte
cinctis; ascis oblongo clavatis; sporidiis linearibus curvis mucro
obvolutis, leniter coloratis 28-30 μ . long.

Hab. in petiolis foliorum *Cassandræ calyculatæ*, Center
Amer. bor.

34. **Cenangium lichenoideum** B. et Br. Fung. of Brisb. p. 404, t. 45, 2323
f. 9. — Cæspitosum, cinereum; cupulis turbinatis, stipitatis, ver-
rucis cinereis irregularibus vestitis, perfectis, margine crasso, in-
curvo, cinereo, striato, junioribus absque ordine squamosis; hymenio
levi rufo-brunneo; ascis octosporis; sporidiis ellipsoideis, 32-36
 μ . long.

Hab. ad truncos Brisbane Australiæ. — Ascomata 1,2-2,2 mm.
lata.

35. **Cenangium brasiliense** Mont. Cent. VII. n. 95. — Gregarium, 2324
erumpens; excipulo coriaceo initio cum stipite obpiriformi clauso
pallido, hirto, dein cupulari-aperto immo toto explanato, disco cin-
namomeo nudo; ascis longe clavatis inter paraphyses capillares ni-
dulantibus, octosporis; sporidiis fusiformibus.

Hab. in cortice arborum provinciæ Goyaz in Brasilia (WEDDEL).

36. **Cenangium fulvo-tingens** B. et C. North Am. Fungi n. 764. — 2325
Fasciculatum, fulvo-tingens; cupulis tenuibus extus venosis subti-
liter pulverulentis, congestis, compressis; sporidiis oblongis curvulis,
suballantoideis, 6-7 μ . long.

Hab. in ligno sicco, quod colore fulvo maculatur, in Pennsyl-
vania Amer. bor. (MICHENER).

37. **Cenangium Aparines** (Wallr.) Fuck. Symb. pag. 271, *Tympanis* 2326
Aparines Wallr. Flor. Crypt. n. 2342. — Ascomatibus sparsis,
primum hypophlœodeis, dein epidermidem scissam infarcentibus,
sessilibus, subrotundis, extus fuligine tenui adpersis asperulis ni-
gricantibus diu clausis, subglobosis, denique in discum dilute cine-

reum carnosulum limbo inflexo cinctum reclusis; ascis clavatis, 8-sporis; sporidiis fusoides 4-5-guttulatis, hyalinis, continuis.

Hab. ad caules siccos Galii Aparines in agro Badensi (KNEIFF), Thuringiaci (WALLR.) et Rhenogovia (FUCK.).

38. **Cenangium Pustula** Rehm Disc. pag. 225. — Gregarium, innato-²³²⁷
erumpens, globosum dein scutellatum extus brunneolum, siccum
griseo-albo-furfuraceum, striatum et convolutum 1-3 mm. lat.
membranaceo-ceraceum; disco planiusculo griseo-brunneo; ascis
clavatis supra rotundatis, 36-45 \approx 6-8, octosporis; sporidiis di-
stichis elliptico-oblongis obtusis rectis curvulisve, continuis, hya-
linis, 6-8 \approx 2,5-3; paraphysibus filiformibus 3 μ . cras. ascos supe-
rantibus.

Hab. in foliis siccis Eryngii campestris et Convallariæ majalis in Thuringia. — An diversum a sequente?

39. **Cenangium Umbellatarum** Ces. in Rabenh. H. Viv. II ed. u. [312] ²³²⁸
et in Bot. Zeit. 1857, p. 93. — Primitus stictidiforme, immersum,
pulverulentum, mox reclusum, limbo dentato v. lacero; disco pri-
mum luteo v. fuscello, demum fusco v. badio; ascis e tubuloso cla-
vatis tenuibus, dense stipatis, 44 μ . longis; paraphysibus parcis
rigidulis filiformibus æquilongis intermixtis; sporidiis minutis, 6-8
 μ ., ovatis, obtusis, (spurie?) 1-septatis.

Hab. in caulibus Oreoselini et Eryngii prope Vercelli Ital. bor.

40. **Cenangium Colensoi** Berk. Fl. New Zeal. pag. 201. — Sparsum, ²³²⁹
primitus oblongum, demum orbiculari-expansum, fuscum, hymenio
pallido subcarneo; ascis oblongis; sporidiis minutis, elliptico-sub-
cymbiformibus 6-7 μ . hyalinis.

Hab. in foliis putridis Phormii (ut videtur) in Nova Zelandia (COLENZO).

41. **Cenangium microspermum** Sacc. et Ell. Mich. II, p. 571. — Asco-²³³⁰
matibus cæspitose-erumpentibus, calyculatis, sessilibus, subcoriaceis,
vix $\frac{1}{5}$ mm. diam., fusco-cinereis, extus setuloso-olivascentibus;
excipulo parenchymatico olivaceo; ascis teretiusculis breve stipi-
tatis, 40 \approx 4-5; paraphysibus filiformibus obvallatis, octosporis;
sporidiis distichis cylindræo-clavulatis, 5 \approx 1,5, hyalinis, rectis
v. leniter curvis.

Hab. in Valsaria didymospora parasiticum ad Ilicis opacæ ramulos, Jona N. J. (ELLIS). — A *Cenangio pulveraceo* (A. S.) certe diversum.

II. *Encælia* Fr. Ascomata typice majora, tenui-coriacea, demum varie contorta.

42. **Cenangium furfuraceum** (Roth) De Not. Prof. Disc. p. 30, *Peziza* ²³³¹
Roth Cat. II, p. 257, t. IX, f. 3, *Phibalis* Wallr. Crypt. n. 2413,
Encælia Karst. M. F. I, p. 218, *Pez. Coryli* DC. Fr. VI, p. 21.
— Ascomatibus sessilibus cæspitosis, carnosio-coriaceis, majusculis,
sæpius difformibus, extus furfure ferrugineo-pallido obtectis, dein
discum cinnamomeo-nigrum margine involuto cinctum recludentibus;
ascis clavulatis 81-100 \approx 6-8, paraphysatis, octosporis; sporidiis cy-
lindræis curvis, 2-guttulatis (quasi Allantosporarum) 10-12 \approx 3-4,
hyalinis.

Hab. ad ramos coryleos et alneos in Germania, Helvetia,
Gallia, Belgio, Fennia, Britannia, Rossia. — Ascoma 5-15 mm. lat.

43. **Cenangium Fuckelii** Sacc. Miscell. myc. I, p. 8, *Dermat. furfu-* ²³³²
racea Fuck. Symb. p. 278 et Sacc. F. Ven. IV, p. 29, nec Auct.
— A *C. furfuraceo* genuino differt ascomatibus multo minoribus,
vix 1-1½ mm. diam.; ascis cylindræis; sporidiis ellipsoideo-ob-
longis, rectis, 10-11 \approx 6-8; structura tamen ascomatis et indumenti
simillima.

Hab. in ramis Coryli Avellanæ in Rhenogovia (FUCKEL) et
in Pruno in Ital. bor. — Icon in Fung. ital. n. 1312 pessime
fucata, nam non ochracea sed stramineo-furfuracea prætereaque
ascomata nimis aperta.

44. **Cenangium populneum** (Pers.) Rehm Disc. p. 220, *C. populinum* ²³³³
Tul. Carp. III, p. 171, Sacc. F. it. t. 1310 (f. *Populorum*), *Peziza*
fascicularis Alb. et Schw. Consp. Fung. n. 315, t. 12, f. 2,
Fr. Syst. Myc. II, p. 75, *Peziza populnea* Pers. Syn. Fung. p. 671,
Dermatea fascicularis Fr. Summ. Veg. Scand. p. 362, *Encælia*
Karst. M. F. I, p. 217, *Peziza crispa* Sow. Engl. Fungi t. 425.
— Cupulis cæspitose aggregatis, raro solitariis, cortici interiori ad-
natis, sed epidermide secedente superficialibus, sessilibus, coriaceo-
membranaceis, difformibus, subfarinaceis, fusco-nigrescentibus, ru-
gosis, disco concavo, obscure spadiceo, dein pallidiore, 5-15 mm.
lat.; ascis cylindræo-clavatis, 70-92 \approx 8-9; sporidiis distichis, ob-
longatis vel elongatis, ut plurimum curvulis, eguttulatis, 11-16 \approx
3-4; paraphysibus sursum incrassatis.

Hab. ad truncos et ramos putres Populi tremulæ, rarius
Sorbi, Salicis, Fraxini, Corni in Suecia, Lapponia, Fennia,

Gallia, Germania, Hungaria, Belgio, Italia, Sibiria, Britannia, America boreali.

45. **Cenangium Ellisii** Sacc., *Cenang. purpureum* Ellis Bull. Torr. 2334
Cl. 1876, pag. 108, nec Fr. — Cæspitosum erumpens, irregulare, saturate atro-purpureum, sordide albescente furfuraceum; ascis clavato-cylindræis; paraphysibus sursum leniter incrassatis; sporidiis phaseoliformibus, hyalinis, obtusis, $20 \approx 8$.

Hab. in Viburno emortuo, Newfield, New Jersey Amer. bor. — *C. furfuraceo* simile sed minus. Verisimiliter var. *C. populnei*.

46. **Cenangium tiliaceum** (Fr.) Karst. Rev. p. 145, *Peziza* Fr. Syst. 2335
Myc. II, p. 76, *Dermatea* Fr. Summa pag. 362, *Encælia tiliacea* (Fr.) Karst. M. F. I, p. 218, Bresad. Trid. p. 93, t. 105. — Subcæspitosum, sessile, ceraceum, cinnamomeum, subtus rugosum nudum; ascis tereti-clavatis, longe stipitatis, $110-130 \approx 7-8$, octosporis; sporidiis distichis cylindræis, obtusis, leniter curvis, pluri-guttulatis, hyalinis, $12-18 \approx 3-4$; paraphysibus filiformibus apice clavulatis, aureo-granulosis.

Hab. in ramis exsiccatis Tilæ, rarius Mali in Suecia, Fennia, Gallia, Germania, Italia. — Erumpens, cæspitosum, sed et solitarium, 6-12 mm. lat. plane sessile, extus corticatum quasi, ceterum nudum glabrum dilutius, disco opaco fusco-cinnamomeo, in solitariis plano, margine integerrimo, sed cupulæ in cæspitosis, obmutuam pressionem concavæ, undulato-repandæ.

47. **Cenangium Ulmi** Tul. Carp. III, p. 170, t. XIX, f. 18-22, *Dermatea* Fuck. Symb. App. II, p. 56. — Gregarium, ceraceo-coriaceum initio globulosum clausum, magnitudine seminis sinapeos, rubiginosum, innato-erumpens, e basi communi cupulis 2-4 orientibus, denique scutellatum, tortuosum, inæqualiter marginatum, disco flavo v. brunneo, 2-4 mm. lat.; ascis cylindræis, 8-sporis, apice rotundatis, $6,5 \mu$. cr.; sporidiis cylindræis, curvulis, continuis, $10-15 \approx 2,5-3$, sæpe 2-guttulatis; paraphysibus filiformibus, clavulatis.

Hab. in ramis corticatis siccis Ulmi in Gallia et Rhenogovia. — Sec. Fuck. asci $108 \approx 10-11$, sporidia $14-16 \approx 4$. Spermogonia adsunt, teste Tul.

48. **Cenangium Carpini** Rehm Disc. p. 221. — Atro-brunneum, coriaceum extus striatulum, siccum flavido-brunneum, erumpens, primo globosum in cæspitulos subrotundos ex 8-12 cupulis constantes dispositum, epidermide laciniata cinctum, dein inæquale patellatum; disco plano brunneo, 2-4 mm. lat.; ascis tereti-clavatis, apice rotundatis, $75-80 \approx 8-9$, octosporis; sporidiis elongatis obtusis cur-

vulis continuis, hyalinis, 12-15 \approx 3-3,5, distichis; paraphysibus filiformibus apice clavulatis 4 μ . crass. brunneolis.

Hab. in ramis siccis Carpini Betuli in Carniolia (Voss). — A *Cen. populneo* differt cupulis multo minoribus, a *Cen. Ulmi* colore flavido-brunneo.

49. **Cenangium impudicellum** Karst. Rev. p. 146, *Encœlia impudicella* Karst. M. F. I, p. 219. — Solitarium vel cæspitosum, erumpens, e sphæroideo-hemisphæricum, tandem explanatum, difforme, leniter furfuraceum, demum subnudum, primitus griseum, dein subcinnamomeo-fuscum, marginem versus dilutius, siccum fuligineo-fuscum vel nigricans, breviter stipitatum vel sessile, coriaceum, disco e lutescente pallido, siccitate subcinnamomeo, levi vel ruguloso, margine integerrimo, 3-5 mm. lat.; ascis cylindræco-subclavatis, 40-50 \approx 5, apice jodo non cœrulescentibus; sporidiis distichis vel oblique monostichis, elongatis, utroque apice paullulum attenuatis, simplicibus, curvulis, 6-9 \approx 1,5-2; paraphysibus haud bene discretis.

Hab. ad corticem ramorum Abietis excelsæ dejectorum exsiccatorum in Mustiala et prope oppidum Wasa Fenniae. — Est forsân *Peziza tristis* Saut. in Flora, 1841, p. 309, teste Karst.

50. **Cenangium inculcatum** (Karst.) Sacc. *Encœlia inculcata* Karst. 2339 M. F. p. 220. — Solitarium, sparsum vel subgregarium, immersum, dein plus minus emergens, subsphæroideum vel dein depresso-sphæroideum, primitus clausum, dein vertice in lacinias irregulares complures acutas tenerrimas dehiscens, ore constricto, atrum, disco pallido, demum nudum, circiter 0,7 mm. lat., coriaceo-membranaceum; ascis et paraphysibus cohærentibus; sporidiis elongatis vel subfusoideo-elongatis, simplicibus vel spurie tenuiter uniseptatis, rectis vel quadantenus incurvatis, incoloribus, 9-12 \approx 2,5-3,5; hymenio jodo intense cœrulescente.

Hab. in cortice Abietis excelsæ, Mustiala Fenniae. — Nuper ab Auctore (Rev. p. 146) ad *Odontotrema* relatam.

51. **Cenangium russum** (B. et Br.) Sacc. *Peziza russa* B. et Br. Fung. 2340 of Ceyl. n. 940. — Cupulis subcoriaceis rugulosis granulatis, vivide rubro-brunneis, margine appendiculis moniliformibus ornato; ascis 50 μ . longis; sporidiis allantoideis 7-8 μ . longis.

Hab. ad cortices, Central province, Ceylon.

52. **Cenangium cumulatum** (Quél.) Sacc. *Encœlia cumulata* Quél. X, 2341 Suppl. p. 14, tab. IX, fig. 14. — Ascomatibus turbinatis, compressis, dein varie contortis, 400 μ . diam., subtiliter tomentosus, pallide lute-

scentibus, ochraceis; hymenio plano vel irregulari, pulverulento, concolori; sporidiis fusoideis, 3-4 μ . long. curvatis.

Hab. seriatim in rimis corticis *Aceris Pseudoplatani*, Jura.

53. **Cenangium striatulum** Mout. et Sacc. (sp. nov.) — Ascomatibus 2342
dense, late gregariis, obconico-cupulatis, tabacino-fuscis, disco concavo, 2-2,5 mm. lat., longitud. striatulis; ascis cylindraceo-oblongis, 160 \approx 16; sporidiis ovato-oblongis, 26-30 \approx 9-10.

Hab. in ramis exsiccatis *Betulae albæ*, pr. Liege Belgii. — Ascomata initio cortice relaxato velata.

54. **Cenangium Bloxami** (Phill.) Sacc. *Encœlia* Phill. Disc. pag. 338. 2343
— Gregarium, sæpe cæspitosum, breve stipitatum, cyathiforme, coriaceum, brunneo-nigricans, minute verrucosum; disco luride brunneo, margine subundulato, carne atro-purpureo-brunnea; ascis clavatis, octosporis; sporidiis ellipsoideis, 3-4 \approx 2; paraphysibus filiformibus concretis.

Hab. in ligno putri in Britannia (*BLOXAM*). — Ascoma 2-8 mm. lat. — Ex hymenio sæpe exsiliunt stylosporæ fusoideæ, uniseptatæ, basidiis filiformibus suffultæ.

55. **Cenangium Reichenbachii** (Rabenh.) Rehm Disc. p. 229, *Peziza* 2344
Reichenbachii Rabenh. D. cr. Fl. p. 367, n. 2831. — Cæspitosum, erumpens, 5-8 mm. alta, 5-15 mm. lat., primo rotundatum, clausum, demum scutellatum e coriaceo carnosomolle, extus farinosum, albido-griseum, disco plano, æquali v. tortuoso, atro-brunneo, margine tenui plerumque gibboso; ascis cylindraceo-clavatis, octosporis, flavescentibus; paraphysibus numerosis, filiformibus; sporidiis ovoideis, nubilosis.

Hab. in ramis emortuis muscõsis ad «Schandau» in Helvetia, Saxonia. — An, teste Rehm, stirps bulgariacea?

56. **Cenangium ustale** (B. et C.) Sacc. *Peziza ustalis* B. et C. North 2345
Am. Fungi n. 718. — Congestum, irregulare, extus rufum, subtiliter tomentosum; hymenio spadiceo; stipite cylindrico brevi.

Hab. ad ramos dejectos, Alabama Amer. bor. (PETERS).

57. **Cenangium Ravenelii** (B. et C.) Sacc. *Peziza Ravenelii* B. et C. 2346
North Am. Fung. n. 717. — Parvum, sessile, concavum, flexuosum, extus albidum, subtiliter tomentosum, intus rufescens; stipite brevissimo.

Hab. in *Patellaria nigro-cinnabarina* in Carolina sup. Amer. bor. — Ascoma 2 mm. lat.

58. **Cenangium purpureum** (Hedw.) Sacc. *Octospora purpurea* Hedw. 2347
Musc. fr. II, p. 63, t. 22, *Peziza caiycina* Nees Syst. f. 286,

Peziza purpurea Fr. S. M. II, pag. 77. — Subcoriaceum, infundibuliforme, extus pruinose, obsolete purpureum; disco sanguineo; stipite brevi; ascis (ex icone Hedw.!) tereti-clavatis; sporidiis ellipsoideo-oblongis, hyalinis.

Hab. supra basin residuam truncorum *Quercus* putrilaginosam Lipsiæ, Upsaliæ, Ostrogothiæ, Sueciæ. — Stipes vix attingens, leviter striatus, infima basi nigricans, sursum in patellam apertam ampliatus. Extus fuscens, tenerrime albedo-papillosum, unde senescens, præcipue versus marginem, pruinose; substantia albida, solidiuscula.

59. **Cenangium nitidum** (Saut.) Sacc. *Peziza nitida* Saut. Pilz. Salz. 2348 p. 8. — Carnosum, stipite brevi crasso; ascomate extus roseo, subgloboso, disco coccineo, margine tenui inflexo.

Hab. ad ramos emortuos, prope Mittersill Salzburg. — Ascoma 4-10 mm. diam. et pariter longum. *C. purpureo* affine.

60. **Cenangium tegulare** (Weinm.) Sacc. *Peziza* Weinm. Syllog. p. 112. 2349 — Sessile, carnosum-coriaceum, brunneum, demum explanatum, margine repando, extus pruinose.

Hab. in virgultis putrescentibus locis umbrosis silvaticis Petropoli Rossicæ (WEINMANN). — Species luculenter distincta; ex habitu et loco inter *Encælias* recensenda; solitaria aut subcæspitosa, tenax, sicca saltem subcoriacea; junior subglobosa, mox campanulata, demum explanata, 1,3-2 cm. et ultra lata, dilute brunnea aut olivascens, sicca obscure brunnea. Margo patens, repandus, non quidem lacero-fissus, sed sub lente crenulatus.

61. **Cenangium triste** (Saut.) Sacc. *Peziza tristis* Saut. Pilz. Salz. 2350 p. 8. — Sessile, solitarium, coriaceum, nigrum, margine involuto integro.

Hab. in truncis *Pini* putrescentibus prope Mittersill. — Affine *C. purpureo*. Ascoma 2-10 mm. lat.

62. **Cenangium rubiginosum** (Fr.) Sacc. *Pez. rubiginosa* Fr. Elench. 2351 II, p. 7. — Subcarnosum, persistens, turbinato-sessile, extus purpureo-pruinose, margine tumido integro, disco urceolato nigro.

Hab. ad ligna putrida, Petropoli Rossicæ (WEINMANN). — Disci colore præcipue a *C. purpureo* recedit. Elevato-sessile, basi haud applanatum, 2-5 mm. altum et latum, regulare, margine subinflexo integro. Sub disco nigro conspicitur stratum ascorum amplorum albicans.

63. **Cenangium fissum** (Wallr.) Rehm Disc. p. 222, *Peziza fissa* Fr. 2352 Syst. II, 75, *P. fascicularis* β . *corylina* Wahlenb. Suec. II, 993,

P. lacera Pers. Myc. I, 227, *Phibalis fissa* Wallr. Crypt. n. 4683. — Ascomatibus hypophlæodeis, mox epidermidem lacero-scissam infarcientibus subeuntibusque, subcæspitosis, sessilibus, membranaceis fragilibus, primum clausis, extus scobe farinosa dilute cinnamomea s. cervina adpersis, dein hiantibus discumque album recludentibus.

Hab. ad ramos coryleos in Suecia et Germania. — An diversum a *C. Coryli* Corda?

64. **Cenangium helvolum** Jungh. Crypt. Java p. 30 (*Peziza, Encœlia*). 235

— Ochraceo-gilvum, cupulatum, stipitatum, extus granuloso-farinaceum, margine granuloso-crenato, 4 mm. latum, cupulatum, intus leve fusco-gilvum, extus strato farinaceo crassiusculo obductum, pallide gilvum, basi in stipitem brevem concolorem attenuatum.

Hab. in culmis Bambusæ arundinaceæ gregatim juxta articulos, in silvis Montis Merapi Javæ. — In statu siccato cupula (marginibus conniventibus) clausa, rima longitudinali aperta.

III. *Phœangium* Sacc. Sporidia fusca.

65. **Cenangium phæosporum** Cooke Grev. XII, pag. 44, Phill. Disc. 235

p. 346. — Cupulis sparsis erumpentibus, rufo-brunneis, breve stipitatis, extus delicate furfuraceis, in stipitem obscuriorem attenuatis, margine subincurvato, disco subconcolore; ascis elongato-clavatis, octosporis; sporidiis monostichis pallide brunneis, late ellipsoideis, levibus, $12 \approx 8$; paraphysibus crassis, apice clavatis brunneis.

Hab. in cortice Aceris, Exeter Britannicæ (E. PARFITT). — Ascoma 1 mm. lat.

66. **Cenangium tetrasporum** (Ellis) Sacc. *Dermatea tetraspora* Ellis 2355

Bull. Torr. Cl. 1876, p. 108. — Erumpens, simplex vel subcæspitosum, sessile, marginatum, 2,5 mm. lat., disco plano vel vix concavo, obscure brunneo, rugoso, margine tenui et pallido; ascis brevibus, clavato-cylindraceutis, latis, tetrasporis; sporidiis ovato-oblongis, nonnullis sphæroideis, brunneis, $20-25 \approx 15-20$, crasse uniuucleatis, intus primo granulosis.

Hab. in ramulis nondum cæsis *Quercus coccineæ*, Newfield, New Jersey Amer. bor.

67. **Cenangium punctoideum** (Cooke) Sacc. *Tympanis punctoidea* 2356

Cooke Disc. U. S. II, p. 30. — Minutum, erumpens, punctiforme atrum, coriaceum, sæpe seriatum; ascomatibus solitariis vel 2-3 acervatis, compressis, irregularibus, breviter stipitatis; disco con-

cavo, in sicco lateraliter compresso; ascis subcylindræis; sporidiis ellipsoideis, brunneis.

Hab. in corticibus, United States Amer. bcr.

38. **Cenangium lignicolum** Preuss Hoyersw. n. 341. — Gregarium, 2357
nudum, subcorneum, nigrum; cupulis primo subglobosis, conniventibus, dein planis; stipite crasso, brevissimo, dein atro; ascis cylindricis, octosporis, paraphysibus mixtis; sporidiis ovatis, nigris.

Hab. ad truncos arborum frondosarum, Hoyersverda.

IV. Species *Eu-Cenangii*, fructificatione ignota, dubiæ.

39. **Cenangium apertum** Schw. Syn. Am. n. 2001. — Sparsum sim- 2358
plex, cupulis 2-4 mm. lat., primum clausis, pulvinato-rotundis extus nigro-ferruginosis, pulverulentis, demum late apertis, marginibus irregulariter inflexis, sæpe ruptis; disco pallido.

Hab. in ramulis emortuis *Hydrangeæ*, Bethlehem et Salem Amer. bor. (SCHWEINITZ et MICHENER). — Affine est *C. ferruginoso*.

70. **Cenangium fatiscens** Schw. Syn. Am. n. 2005. — Minutum (ma- 2359
jus tamen in *Syringa*) fasciculatum, prorumpens, sessile; cupulis globosis primum clausis, interdum difformibus, pulvere copioso tectis, demum omnino fatiscentibus.

Hab. in cortice *Syringæ* et evolutius in *Moro alba*, Bethlehem Amer. bor. — Pulvere deterso apparent cupulæ applanatæ atro-nitentes, demum irregulariter apertæ.

71. **Cenangium acutum** (Schum.) Fr. S. M. II, p. 188, *Hyster. acutum* 2360
Schum. Saell. p. 151. — Simplex, elliptico-oblongum, naviculare, leve, nigro-fuscum, disco umbrino-fusco.

Hab. in cortice *Sambuci nigræ* in Saellandia. — Sparsum, vix prominens, ut videtur nudum.

72. **Cenangium Cephalanthi** (Schw.) Fr. S. M. II, p. 188, *Peziza* 2361
Schw. Carol. n. 1256. — Simplex, sessile, compressum, subpulverulentum, nigro-fuscum, margine lacero involuto.

Hab. plerumque transversim erumpens in cortice *Cephalanthi occidentalis* emortuo in Carolina, Alabama, Greenbush America borealis. — Optima dicitur species, *Colpom. quercino* minor et obscurior; disco in humidis subrotundo, cinerescente. Non ita prominet.

73. **Cenangium laminare** Fries V. A. H. I. c. p. 560, Kunz. Myc. 2362
Heft. 2, p. 58. — Cæspitosum, plicato-lobatum, lobis planiusculis nigricantibus albido-pruinosis, apice cavis subclausis.

Hab. ad ramos dejectos putrescentes *Robiniæ?* in Suecia et

Germania. — Substantia fere membranacea *C. Abietis*, cum quo etiam superficie convenit pulverulenta et forma compressa. Specimina plura basi concresecunt, inde subramosum v. in plicas quasi divisum, quæ hactenus clausæ modo repertæ sed apice cavæ et circum circa hymenio vestitæ.

74. **Cenangium striatum** (Bert.) Fr. S. M. II, p. 188, *Pez. striata* 2363
Bertier apud Spreng. in Vet. Ac. Handl. 1820, p. 50. — Simplex, sessile, compressum, naviculare, atrum, extus transversim sulcato-striatum.

Hab. in cortice Guilandinæ Bonducellæ, Guadalupa. — *Hysterio* simile et quoad substantiam reliquis firmitus, sed omnibus Cenangi characteribus gaudet. Cupula 4 mm. longa, subnuda, extus striis confertis parallelis exarata; quando plura specimina aggregata passim angulata; margine involuto. Discus concavus, nigrescens.

75. **Cenangium Viburni** (Schw.) Fr. S. M. II, p. 185, *Pez. Viburni* 2364
Schwein. Carol. n. 1264. — Subcæspitosum, stipitatum, rugosum, opacum, atrum, margine crasso rimoso-dehiscente.

Hab. ad cortices Viburni, Jadhin, Carolinae. — An *Blitrydium*? *C. Pinastris* simile, tamen certe distinctum; stipes 2 mm. usque longus, subinde ramosus, crassus; cupula non patellato-collapsa, initio cinereo-pulverulenta, dein omnino nuda, in lacinias 4-5 subæquales dehiscens, disco intusque etiam atra.

76. **Cenangium viticolum** (Schw.) Fuck. Symb. p. 210, *Peziza* Schw. 2365
Carol. n. 1263, *Tympanis* Fr. Syst. Myc. II, p. 176. — Minutum, sessile, hemisphæricum, rugulosum, opacum, fuscescenti-nigrum, disco marginato; ascis maturis nondum visis (Fuck.).

Hab. ad ramos exsiccatos Vitis in Carolina (Schw.), Gallia (Fr.), Germania (Fuck.). — Species distinctissima, habitu fere *Pleosporæ herbarum*, substantia molliori (tremelloso-coriacea); sparsa, solitaria, innata, disco primo impresso punctiformi obtuse marginato, dein dilatato subelapso.

77. **Cenangium bicolor** (Wallr.) Sacc. *Phibalis bicolor* Wallr. Crypt. 2366
n. 2400. — Ascomatibus hypophlæodeis, mox epidermidem scissam penetrantibus, e strato pseudostromatico carnosio convexulo cæspitose erumpentibus, extus tegmine furfuraceo stipato albo-cinereo vestitis, primum subrotundis basi subæqualibus clausis sphaeriformibus, dein in basin productis subturbinatis vertice in osculum circinatum, demum in discum planum fusco-atrum margine tenui cinctum reclusis, scutellaribus.

Hab. ad Rhamni Frangulæ ramulos siccos in Thuringia.

— Ascomata 2-6 in cæspite stratoque coccineo epidermidis juncta.

78. **Cenangium Staphyleæ** Schw. Syn. Am. bor. n. 1989. — Sparsum ²³⁶⁷
vel gregarium, primum epidermide tectum minutum, sphaeriæforme, demum prorumpens, nigrum, apice aperto irregulari; disco indistincte pulverulento.

Hab. passim in junioribus ramis Staphyleæ, Bethlehem Americæ borealis.

79. **Cenangium palmatum** Schw. Syn. Am. bor. n. 1986. — Cæspit- ²³⁶⁸
tosum; cæspitibus pugilliformibus declinatis, cupulis nigris subcylindricis, quasi ex tuberculo cæspitosim orientibus variis sibi ipsis impositis, apice primum in pseudostiolum abeuntibus, demum apertiusculis, et quasi poro hemisphærico concavo minuto excavatis, intus pulveraceis, 2-4 mm. altitudine.

Hab. tractu longitudinali prorumpens ex cortice Rhododendri maximi, Bethlehem Amer. bor.

80. **Cenangium arcticum** (Ehrenb.) Fr. S. M. II, p. 186, *Trybl. ar-* ²³⁶⁹
cticum Ehrenb. Fung. Cham. n. XXXIII, t. 20, f. 17. — Solitarium, minimum, nigrum, suborbiculare, cupula in lacinias tres obtusas dehiscente, demum trigonum, disco albido.

Hab. in caulibus Andromedæ tetragonæ, non solum ad sinum S. Laurentii, sed et in Lapponia etc. — Primo clausum, oblongum, glabrum, dein suborbiculare et subhemisphæricum, subpedicellatum, granulosum. Maturum tribus laciniis obtusis dehiscento formam trigonam acquirit; discus griseo-albidus.

81. **Cenangium Rhois** Schw. Syn. Am. bor. n. 1982. — Cæspitosum, ²³⁷⁰
albido-pulverulentum, sphaeriæforme, demum apertum; cæspitulis minutis, fere semper circumdatis pulvere ex cortice orto.

Hab. non infrequens in Rhois glabræ ramis, Salem et Bethlehem. — Affine *C. Aucupariæ* et cum hoc confusum.

82. **Cenangium clavatum** (Schw.) Fr. S. M. II, p. 179, *Pez. Cera-* ²³⁷¹
sorum Schwein. Carol. n. 1176. — Cæspitosum, subnudum, fusco-nigricans; cupula subclavata connivente, disco nigrescente.

Hab. in ramis emortuis Pruni serotinæ in Carolina, rarissime. — Cæspites e paucis individuis componuntur, sed cupulæ sessiles, reliquorum majores et magis evolutæ. Caro flava, in siccis vero fusca.

83. **Cenangium Cratægi** Schw. Syn. Amer. n. 1898. — Sparsum, ses- ²³⁷²
sile, repando-effusum, subtremelloso-corneum, atrum aut atro-fu-

scum, primo globosum, demum apertum, nigro-pulveraceum, pulvere compacto; disco semper impresso.

Hab. passim in ramulis *Cratægi*, Bethlehem Amer. bor.

84. **Cenangium Spirææ** (Schw.) Berk. North Am. Fungi p. 143, *Dermateæ Spirææ* Schw. Syn. Amer. bor. n. 1975. — Subsimplex, aut 2-3 in cæspitulum aggregatis, cupulis siccis conniventibus madidis apertissimis, extus brunneo-fuscis, furfuraceo-strigosis; disco badio minore, numquam 4 mm. diam. excedente.

Hab. in ramis *Spirææ* *opulifoliæ* rarior, Bethlehem et in Carolina super. Amer. bor.

85. **Cenangium Rosæ** Schw. Syn. Am. n. 2002. — Cæspitosum, prorumpens; cupulis dense aggregatis, corneis, nigro-nitentibus, margine tuberculoso, disco plano aperto, cupulis difformibus.

Hab. prorumpens rarius ex cortice *Rosæ corymbosæ*, Bethlehem Amer. bor.

86. **Cenangium enteroxanthum** Schw. Syn. Am. n. 2014. — Longitudinaliter seriatum aut irregulariter prorumpens, sessile, hysteriiforme, subrotundum aut ovatum, plerumque clausum aut rima longitudinaliter apertum, extus olivaceo-nigrum rugosum, intus colore luteo-virente, pulverulentum, præsertim sub disco subaperto.

Hab. parvulum sed distinctissimum in ligno *Pomorum*, Bethlehem Amer. bor. — Crusta quadam ligno commixto nigra, ex qua prorumpit.

87. **Cenangium pirinum** Schw. Syn. Am. n. 2013. — Cupulis gregaris aut sparsis, atro-fuscis, nitentibus, plerumque transversim aut varie sitis, semper basim versum in stipitem contractis, more *Lophii* siccitate conniventibus, sed etiam late hiascentibus, hysteriiformibus, marginibus inflexis, discum planum atro-pulverulentum exhibentibus, interdum scutellam *Lichenis* referens, rotundato-apertum.

Hab. longe lateque obtegens frustula corticis *Piri coronariæ*, Nazareth Amer. bor.

88. **Cenangium Juglandis** B. et C. North Am. Fungi n. 769. — Cæspitosum, globosum, pruinatum, apice nigrum, serius omnino nudatum.

Hab. in ramis *Juglandis* in montibus Virginiae Amer. bor. — Asci nondum observati.

89. **Cenangium sphæriæmorphum** Schw. Syn. Am. bor. n. 1991. — Gregarium, rarius confluens, epidermide innatum aut prorumpens, interdum quasi fasciculatum, plerumque autem forma obovata tur-

binata, fusco-nigrum, rugosum, punctatum, non stipitatum, disco rarius subaperto, intus ferrugineum, 1 mm. diam.

Hab. in ramis emollitis *Quercus albæ*, Bethlehem Amer. bor. — Ramum agmine vasto longe lateque diffuso occupat.

90. **Cenangium confusum** Schw. Syn. Am. bor. n. 1990. — Sparsum 2379 vel confluens, ramos aut juniores truncos pedatiter obtegens sub epidermide crusta quadam effusa fusco-nigra insidens, cupulis prorumpentibus, irregularibus, difformibus, sphaeriæmorphis, conspurcatis extrorsum sporidiis quasi profluentibus, ceterum sæpe globosis demum apice aperto, ore aut pezizoideo aut sphaeroideo aut irregulari.

Hab. frequens in cortice ramorum *Quercus albæ* in terra jacente, Salem et Bethlehem Amer. bor.

91. **Cenangium fibrisedum** Schw. Syn. Am. n. 2000. — Minutissi- 2380 mum, fasciculatum et sparsum, etiam passim confluens, siccum nigerrimum, cupulis varie formatis, sed semper conniventibus, extus papillis nigris tam dense obsitum (fere *Exosporium Tiliæ* referens), madefactum disco pallido-rufo, atro-pulverulento.

Hab. in lignis denudatis siccis, fibris insidens, primum subte-ctum, Bethlehem præsertim in *Castaneis* sepium.

92. **Cenangium Castaneæ** Schw. Syn. Am. n. 2004. — Simplex, pro- 2381 rumpens, epidermide cinctum et pulvere quodam spurio ex cortice insidens, sessile subrepando-undulatum, marginibus tumidulis, centro discoideo irregulariter depresso, rugoso, subpulverulento, demum ruptum et intus grumosum, fuscum, extus nigro-fuscum, 2 mm. diam. non excedens.

Hab. ramulis junioribus *Castaneæ* rarius insidens, Bethlehem.

93. **Cenangium Betulæ** Fr. S. M. II, p. 187. — Cæspitoso-connatum, 2382 sessile, coriaceo-membranaceum, nudum, atrum, disco concavo subcompresso, atro-sanguineo.

Hab. erumpens e cortice *Betulæ albæ* in Kamtschatka. (WORMSK.) — Cupulæ majusculæ, subrotundæ, siccæ compresso-conniventes, humidæ apertæ subrotundæ. *Cenangio Abietis* paullo firmius.

94. **Cenangium compressum** Schw. Syn. Am. bor. n. 1987. — Trans- 2383 versim erumpens, cæspitosum, valde elevatum et ramum quasi aculeans, cupulis semper inflato-compressis, apice valde varie formatis, nigris, furfure cinereo adpersis, apice demum apertiusculis, 4 mm. sæpe altis, furfure externo detergibili (tum fungus nigro-pulverulentus evadit).

576 Discomyceteæ, Dermateæ, Hyalosporæ, Cenangium.

Hab. ex ramis *Betulæ carpinifoliæ* (lentæ) propullans, Bethlehem et in New England Amer. bor.

95. **Cenangium molliusculum** Schw. Syn. Am. n. 2003. — Pezizoi- 2384
deum, aggregatum ac sparsum, sæpe invicem adpressum et inde angulatum, statu madido molliusculum 2-6 mm. lat., nigro-olivaceum marginatum, sicco statu corneo-ceraceum, sessile, basi tamen contracta, cupulam marginatam subrepandam lobatam referens, extus olivaceum, disco convexo rugoso, punctato, nigro; intus substantia eleganter flavo-ferruginea.

Hab. eximia species in *Betula carpinifolia*, Mauch Chunk Amer. bor.

96. **Cenangium populinum** Schw. Syn. Am. n. 2003. — Sparsum, 2385
2-4 mm. latum, elevatum cum epidermide, a qua cinctum, primum clausum, nigrum, demum apertum, margine effuso, disco cinereo pulverulento.

Hab. sparsim erumpens ex *Populi italicæ* cortice, Bethlehem Amer. bor. — Clausum fuscescit; faciliter elabitur.

97. **Cenangium Schweinitzii** Sacc. *Dermea populea* Schw. Syn. Am. 2386
bor. n. 1972, nec *Cen. popul.* (Pers.). — Sessile, cæspitosum, coriaceo-membranaceum, minus, ovatum aut oblongum, fere semper clausum, extus cinereo-furfuraceum, intus nigrum; singulis cupulis, sphaeriæformibus clausis, rarissime apertis, 1 mm. alt.

Hab. raro in *Populo italica*, Bethlehem Amer. bor.

98. **Cenangium fallax** B. et R. (nec Fr.). — Subglobosum, sparsum, 2387
dense viridi-pulveraceum.

Hab. in ramis *Taxodii distichi*, Santee Canal Carol. inf. Amer. bor. (RAVENEL). — Pulcrum sed fructificatio ignota.

99. **Cenangium chlorellum** Fr. Elench. II, pag. 21. — Cæspitosum, 2388
minutum, sessile, cupulare, æruginoso-pulverulentum, ore collabente.

Hab. ad cortices *Abietis excelsæ* in subalpinis Europæ mediæ (MOUG.). — Facillime dignoscitur pulchella hæc et distinctissima species cupulis, ut *Calicii chlorelli*, æruginoso-pulverulentis, quo color interior nigrescens oblitteratur; individua 5-8 e cortice cæspitosim erumpunt, sed basi non in corpus solidum connata, ut in *Scler. Ribis* etc. Discus nigrescere videtur; equidem rite explicatum observari non potuit.

100. **Cenangium æruginosum** Schw. Syn. Am. n. 1999. — Crustæ 2389
atro-æruginosæ lignum obtegenti et tingenti insidens, cæspitosim aut in lineas flexuosas aggregatum; cupulis minutis applanatis, mar-

gine undulato-plicato tuberculoso; disco applanato pulverulento unicolore atro-æruginoso; vix 1 mm. alt.

Hab. in ligno udo decorticato aut sub cortice, Bethlehem Americæ borealis.

101. **Cenangium nigro-fuscum** Schw. Syn. Am. n. 2006. — Sparsum 2390 aut subcæspitosum, gregarium, globosum aut turbinatum, liberum quasi in epidermide, ad 4 mm. latum, undique tuberculosum et quasi fusco-barbatum pube brevi rigida; disco vix aperto, sed dehiscens in rimis varie tortis.

Hab. ingenti copia ad dejectos ramos ignotos, Bethlehem Amer. bor. — An hujus generis fungus distinctissimus?

102. **Cenangium tumorum** Schw. Syn. Am. n. 1997. — Prorumpens, 2391 primum tectum, demum epidermide stellatim fisso cinctum, sparsum nec cæspitosum, rotundatum, convexum, nigrum, extus squamulosum, primum omnino clausum, demum rimis aut irregulariter rupto ore apertum.

Hab. in excrescentiis ramorum passim, Bethlehem Amer. bor.

103. **Cenangium episphærium** Schw. Syn. Amer. bor. n. 1988. — Dif- 2392 forme, subcylindrico-ventricosum extus tuberculosum, inæquabile, apice truncato-impreso aut irregulariter aperto, nigro-fuscum, intus subgrumosum.

Hab. in lignis igni destinatis in Amer. bor. — Aliquo modo analogum *Hydno* aut *Radulo aterrimo*. Vulgare in *Diatrype stigmatæ* et *Eulypta limæformi*, præsertim non evolutis. Epidermidem valde elevat et ad dejectionem præparat.

Species inquirendæ.

104. **Cenangium pulvis** Reb. Neom. p. 388 (Pez.). — Gregarium, mi- 2393 nutissimum, substipitatum, cupulis subglobosis inapertis, olivaceis, dein nigris.

Hab. in ramis putrescentibus in Neomarkia.

105. **Cenangium hypodermium** DC. Fl. fr. 6, p. 19 (Pez.). — Cupulis 2394 sessilibus, subpulverulenti, adultis cylindricis, brevibus truncatis crassis.

Hab. sub epidermide Cerasi in Gallia. — An a *Cen. Cerasi* diversum?

106. **Cenangium? Thymi** Fuck. Symb. p. 271. — Ascomatibus 2395 stylosporeis; sporulis allantoideis, $4 \approx 1,5$.

Hab. in ramulis vivis Thymi Serpylli pr. Æstrich Rhénogoviæ.

107. **Cenangium alniellum** Rehm in Hazsl. Einig. Disc. p. 10, t. III, 23 6
fig. 4. — Cupulis solitariis vel cæspitosis, e piriformi patellatis, $\frac{1}{2}$ -
1 cm. lat. intus albis, farinosis, disco atro-brunneo; ascis clavatis,
deorsum longe attenuatis; sporidiis cylindræis, hyalinis, continuis,
utrinque rotundatis, rarius clavatis, 15-18 \approx 3.

Hab. in ramis Alni incanæ prope Iglo Hungariæ.

108. **Cenangium alnicolum** Hazsl. Einig. Discom. p. 9, Magyar. Szab. 2397
Disc. t. VI, f. 14. — Cupulis minutis patellatis, atro-brunneis, so-
litariis vel cæspitosis, disco plano dein convexo, levi, nigro fere
immarginato; ascis cylindræis, aliis spermatiphoris, aliis spori-
dia fusioidea, obtusa, brunnea, 14-16 μ . long. foveolis.

Hab. in ramis Alni prope Hrabko et Eperies Hungariæ. —
An e sect. *Phæangii*?

109. **Cenangium ilicinum** Dur. et Lév. Expl. Sc. Alg. tab. 29, fig. 4 2398
(absque diagnosi). — Ascomatibus cæspitosis, erumpentibus, cupu-
latis, exiguis, extus atro-cinereis, pruinosis, disco concaviusculo
atro, nitido; ascis clavatis brevissime stipitatis, octosporis; spori-
diis fusioideis, distichis, hyalinis; paraphysibus filiformi-clavulatis,
pluries divisis.

Hab. in ramis corticatis Quercus Ilicis, in Algeria.

TYMPANIS Tode Meckl. I, p. 23, (1790), emend. Sacc. Gen. Disc. p. 8
[Etym. *tympanon*]. — Ascomata erumpenti-superficialia, sæpius
cæspitosa, mox scutellari-aperta, nuda vel furfuracea, coriaceo-
cornea, firma, fusca vel atra. Asci paraphysati, vel myriospori, vel
myriospori simul et octospori. Sporidia (numerosa) spermatioidea
oblonga perexigua, vel (octona) majora, oblonga, continua, raris-
sime (spurie?) 1-septata, hyalina.

1. **Tympanis conspersa** Fr. Syst. II, p. 175, Tul. Carp. III, p. 153, 2399
Ann. N. S. 1853, t. XVI, f. 15-16, *Peziza Piri* Pers. Syn. p. 671,
P. Aucupariæ et *sphæroides* Pers. Myc. I, p. 327, *P. conglom-*
merata Wahlenb., *P. sphæriciformis*, Rebent. *P. sphæroides*
Roth Nees Syst. f. 281. — Ascomatibus subrotundo-cæspitosis, sti-
patis, mox epidermidem transversim scissam infarcentibus, erectis,
atris nudis pulvereque albo adpersis, biformibus, aliis (spermogo-
nicis) cylindricis obtusis corniculatis, aliis e basi cylindrica obova-
tis in verticem umbilicato-depressum disciformem dilatatis, tenuis-
sime rugulosis, dein discum nigricantem recludentibus; ascis tere-
ti-clavatis, apice rotundatis, 115-180 \approx 18-20, myriosporis; spori-

diis spermatioideis, ovatis, flavidulis, $1-2 \approx 0,5$; paraphysibus furcatis, septatis, apice clavulatis, 5μ . cr. brunneolis.

Hab. ad ramulos languidos Sorbi Aucupariæ, Cratægi, Piri, Pruni, Alni, Populi, Betulæ aliarumque arborum in Germania, Gallia, Suecia, Italia, Belgio, Britannia, Amer. bor. — Etiam in hac specie forma octospora indicatur. — Var. **rugulosa** Fuck. Symb. p. 272: cupulis rugulosis, opacis, fuscis. In ramulis Sambuci pr. Bonn Germaniæ.

2. **Tympanis Aucupariæ** (Pers.) Wallr. Crypt. n. 2348, *Cenangium* 2400
Aucupariæ Fr. Syst. II, p. 181, *Peziza Aucupariæ* Spr., *Dothidea cæspitosa* Fr. *Sphæria Aucupariæ* Pers. Syn. p. 51, *Sph. cæspitosa* Tod. Meckl. I, p. 41, t. 14, f. 113. — Ascomatibus cæspitosis, nigris, albido-pulverulentis, e basi implexa elongata subcylindrica in verticem angustum primum clausum dein apertum desinentibus; ascis clavatis, myriosporis; sporidiis perexiguis; paraphysibus filiformi-clavulatis apice brunneolis, conglutinatis.

Hab. ad ramos Sorbi Aucupariæ in Germania, Suecia, Britannia, in Piro americana in Amer. bor. — Teste Rehm vix vel non diversa a *T. conspersa*.

3. **Tympanis polygonia** (Fuck.) Sacc. *Cen. polygonium* Fuck. Symb. 2401
 App. II, p. 55. — Cupulis erumpentibus, raro sparsis, plerumque dense cæspitosis, basi in stipitem communem crassum connatis, coriaceis, cæspitulis 2-3 mm. lat., e 3-8 cupulis compositis, singulis 1 mm. lat., extus atris, 3-6-gonis, angulis obtusis, valde prominentibus, vertice conniventibus, inde marginem dentatum referentibus, siccis arcte clausis, disco minuto, carnosio, vix concavo, humectato pallide-olivaceo, sicco atro; ascis clavatis, multisporis, $108 \approx 20$; sporidiis ovato-cylindræis, subcurvatis, $3 \approx 1$, pallidissime flavescens; paraphysibus copiosis, simplicibus, anguste clavatis, 2-3-septatis.

Hab. in ramis adhuc stantibus Piri Mali prope Æstrich Rhénogoviæ. — Cfr. *Cenangium polygonium*.

4. **Tympanis Prunastri** (Fuck.) Rehm Disc. p. 266. — Gregaria in- 2402
 nato-erumpens, cæspitulosa, demum brevissime crasse stipitata, urceolata dein patellaris, atro-nitida, cornea 0,4-1,2 mm. lat.; disco plano marginato; ascis tereti-clavatis, apice rotundatis, $130-150 \approx 12-15$, 8-sporis simul et myriosporis; sporidiis octonis ovoideis, (spurie?) 1-septatis, hyalinis $8-10 \approx 3-3,5$ monostichis appendicula filiformi auctis; sporidiis spermatioideis oblongis $2-3 \approx 1-1,5$ flavidulis; paraphysibus filiformi-clavulatis, apice 5μ . cr. brunneis.

Hab. in ramis siccis Pruni spinosæ in Germania media.

5. **Tympanis gyrosa** B. et C. North Am. Fungi n. 761. — Fascicu- 2403
lata; cupulis arcute compressis, gyrosis; ascis nondum visis.

Hab. in ramis dejectis Piri Mali, Virginia, New England Amer. bor.

6. **Tympanis Rosæ** Karst. Symb. Myc. Fenn. XXIII, p. 6. — Cupu- 2404
lis sessilibus vel subsessilibus, solitariis vel cæspitulosis, nudis, nigris, planiusculis, margine subacuto, subdenticulato-inæquali, nitentibus, 0,4 mm. lat.; ascis cylindraceo-subclavatis, myriosporis, 75 \approx 9-10; sporidiis oblongis vel ellipsoideis, 2 \approx 0,5-1; paraphysibus gracilibus apice conglutinatis.

Hab. in ramis Rosæ volvatæ in horto Mustiala Fenniæ.

7. **Tympanis plicato-crenata** (Schw.) Fr. Syst. Myc. II, pag. 175, 2405
Pez. plicato-crenata Schwein. Carol. n. 1257. — Substipitata, opaca, atra, margine obtuso profunde crenato plicatoque, disco-concaviusculo.

Hab. in cortice Pruni in Carolina superiore. — Sparsim e cortice erumpunt greges minores, in siccis iterumque humectatis aterrimi, sed in vivis «discus cinerescens». Stipes in cortice omnino delitescit, quare sessilem potius dicerem. Optime dignoscitur margine eleganter crenato et plicato-sulcato discoque compacto, sed fatiscente nec polito. Cfr. *Phacidium plicatum* Fr. Elench. II, pag. 132, ex quo videtur hæc diagnosis ad *Cen. Andromedæ* spectare.

8. **Tympanis Ligustri** Tul. Carp. III, p. 154, Sacc. Fung. it. f. 1304, 2406
Cenangium Ligustri (Tul.) Fuck. Symb. pag. 268. — Erumpenti-superficiale, elongatum, nitidulum, atrum, cæspitulosum, patellare, disco concavo-plano marginato, 0,5-08 mm. lat.; ascis tereti-clavatis, apice rotundatis, 95-115 \approx 12-15, myriosporis; sporidiis globuloso-ellipsoideis, 2,5 \approx 2, chlorinis; paraphysibus furcatis, septatis, apice clavulatis, 6 μ . cr. brunneolis.

Hab. in ramis Ligustri vulgaris in Germania, Gallia, Britannia. — Var. **japonica** Sacc. Mich. I, p. 58: ascis 100-110 \approx 18; sporidiis botuliformibus 4 \approx 1, hyalinis. In ramis Ligustri japonici in Ital. bor.

9. **Tympanis Syringæ** Fuck. F. rhen. n. 2144, Rehm Disc. pag. 270, 2407
Cen. Syringæ Fuck. Symb. p. 270. — Cupulis sparsis, atris, 1-2 mm. diam., primo clausis, demum apertis, margine 4-7-lacerato, disco atro; ascis elongatis, stipitatis, operculatis, 112 \approx 16; sporidiis spermatiiformibus minutissimis, cylindraceis, curvatis, oscil-

lantibus 2-3 \approx 1,5; paraphysibus simplicibus, linearibus, ascis longitudine, apice 5 μ . cr. brunneis.

Hab. in ramis siccis *Syringæ vulgaris*, prope Hattenheim Rhenogoviæ.

10. **Tympanis Fraxini** (Schw.) Fr. Syst. Myc. II, p. 174, *Pez. Fra-* 2408
xini Schwein. Carol. n. 1262. — Subsessilis, turbinato-truncata, nitida, atra, disco plano rugoso marginato 1 mm. lat.; ascis terti-clavatis, apice rotundatis, 90-100 \approx 10-12, myriosporis; sporidiis oblongis, rectis, chlorinis, 3 \approx 1-5; paraphysibus furcatis, septatis apice clavulatis, brunneolis, 5 μ . cr.

Hab. ad ramos exsiccatos fraxineos in Suecia, Germania, Britannia, Amer bor. — Specimina pauca fasciculatim erumpunt, e basi sursum ampliata, nitida; margine prominente obtuso flexuoso; disco opaco, solidiusculo, atro, punctato-rugoso. Cfr. Rehm Discom. pag. 266.

11. **Tympanis turbinata** Schw. Syn. Am. bor. n. 1969. — Substipi- 2409
tata, primum erumpens ex epidermide capitulo globoso, sparsim sita et quasi tuberculis echinata, fusco-nigra, demum turbinato-obconica, marginibus tumidulis, fere clausis, disco poriformi, tandem apertiusculo, extus striata 2 mm. alt.; ascis obtusis; sporidiis numerosis (Berk.)

Hab. in ramulis exoletis *Diervillæ trifidæ* et *Viburni prunifolii*, Bethlehem et Center Amer. bor.

12. **Tympanis fasciculata** Schw. Syn. Amer. bor. n. 1967, Rehm 2410
Ascom. n. 423. — Subsessilis, minor, fasciculatim erumpens, epidermide cincta; cupulis fusco-nigris, varie tortis difformibus, marginibus inflexis subplicatis, disco excavato, junior clausa, subsphæriæformis; ascis clavatis, 100 \approx 5, myriosporis; sporidiis elongatis, obtusis, hyalinis 4 \approx 2; paraphysibus filiformibus epithecium virens formantibus.

Hab. in epidermide ramorum *Viburni dentati* in Pennsylvania et New Jersey Amer. bor.

13. **Tympanis antarctica** Fung. Fueg. n. 346. — Dense cæspitosa, 2411
per rimas lineares transversas peridermii erumpens, 10-50 cupulis in quoque cæspitulo, minuta 250-350 μ . diam., primo sphæroideo-clausa dein irregulariter aperta extus atra subcarbonacea glabra, intus vix pallescens; ascis cylindræo-clavatis, apice obtuse lateque rotundatis, deorsum brevissime crasseque noduloso-stipitatis, 75-80 \approx 10-14, myriosporis, paraphysibus filiformibus longioribus dense obvallatis; jodi ope nulla; sporidiis inordinatis, conglobatis,

mucosissimis, minutis, cylindratis, rectis vel allantoideis, 2-2,5 \approx 0,7-1, utrinque plus minusve rotundatis, hyalinis.

Hab. ad ramos emortuos Fagi betuloidis in silvis prope Agaia Fuegiæ.

14. **Tympanis mutata** (Fuck.) Rehm Disc. pag. 270, *Cen. mutatum* 2412

Fuck. Symb. p. 270. — Cupulis erumpentibus, in acervulos oblongos valde dense congestis, rarius sparsis, primo punctiformibus, globosis, mox explanatis, convexis deflexisque, 2 mm. latis, disco sicco aterrimo, humefacto pallide fusco sordidove, emarginato; ascis a corpusculis ut in *Tymp. pitya* etc. repletis.

Hab. in ramis siccis Betulæ albæ in silva Æstrich Rhénogoviæ.

15. **Tympanis populina** (Fuck.) Sacc. Gen. Disc. pag. 8, *Cen. populi-* 2413

num Fuck. Symb. p. 268, Sacc. F. ital. f. 1305. — Cupulis superficialibus, sparsis cæspitosisve, aterrimis, 1-2 mm. latis, sessilibus, disco concavo, demum plano, concolore, repando-marginato; ascis oblongis, tunica crassa, 72-100 \approx 12-15; sporidiis minutissimis, cylindratis, curvatis, 3-4 \approx 1, hyalinis.

Hab. ad corticem ramorum Populi tremulæ, fastigiatæ, laurifoliæ etc. in Germania, Belgio, Sibiria, Italia. — Status spermogonici sunt *Phoma Crepini* Speg. et *Dothichiza populina* Sacc.

16. **Tympanis saligna** Tod. F. Meckl. I, p. 24, t. IV, f. 37, non *Cen-* 2414

angium Fuck. Symb. p. 268, ?*Peziza Todeana* Spr. Syst. IV, p. 515. — Ascomatibus gregariis subcæspitosis, atris, nitidulis, primum globularibus dein elongatis, verticem obtusum truncatum clausum demum in discum concavum apertum informantibus, 0,5-1,5 mm. lat.; ascis tereti-fusoideis, 90-110 \approx 15-18, myriosporis; sporidiis elongatis rectis, chlorinis, 3 \approx 1,5; paraphysibus furcatis, supra clavatis, 5 μ . cr. brunneolis.

Hab. ad ramos salicinos siccos rarius in Germania, Suecia, Lapponia, Belgio.

17. **Tympanis alnea** (Pers.) Fr. Syst. Myc. II, p. 174, *Peziza alnea* 2415

Pers. Syn. p. 673, Myc. Eur. p. 325, *Tymp. conspersa* f. *alnea* Karst. M. F. I, p. 227, *T. conspersa* f. *nitida* Fuck. Symb. p. 272.

— Substipitata, opaca, umbrino-nigrescens, cornea; cupulis subflexuosis obsolete marginatis, in cæspitulos 3-4 mm. lat., 3-20 congestis, disco circulari sæpe inæqualiter marginato, 0,3-0,5 mm. lat.; ascis tereti-clavatis, 150-160 \approx 15-20; sporidiis spermatioideis innumeris, allantoideis 3 \approx 1,5; paraphysibus filiformi-clavulatis, apice 6 μ . cr. brunneolis.

Hab. ad ramos Alni incanæ et viridis in Suecia, Germania, Britannia. — Parva, exsiccata disco excavata vel potius margine magis prominente distincta, non vero clausa.

18. **Tympanis hysteroideis** Rehm Disc. p. 268. — Gregaria, sæpe 2416
solitaria, innato-erumpens, parum emergens, scutellata, nitido-atra, 0,8-1,5 mm. lat., cornea, dura, stellata vel hysteroideo-contorta, disco oblongo, plano; ascis tereti-clavatis, myriosporis; sporidiis spermatioideis oblongis, curvulis, flaveolis, $3 \approx 1,5$; paraphysibus furcatis, septatis, apice 5 μ . cr. clavatis, brunneolis.

Hab. in ramis siccis Alni viridis, Cetzsthal Tyrolis.

19. **Tympanis corylina** (Sacc.) Rehm Disc. p. 270, *Chilangium* Sacc. 2417
F. ital. f. 1303. — Gregaria, erumpens, atro-nitens, 1-1,2, scutellata, disco planiusculo; ascis fusoideis, myriosporis; sporidiis oblongis, obtusis, curvulis, continuis, hyalinis, 6-8 \approx 1.

Hab. in ramis corticatis Coryli Avellanæ in Arduennis (LIBERT).

20. **Tympanis laricina** (Fuck.) Sacc. *Cen. laricinum* Fuck. Symb. 2418
p. 270, *Tymp. pinastri* Rehm Disc. p. 272, nec Tul. — Cupulis sparsis cæspitosisve, erumpentibus ex urceolato patellaribus 0,5-1 mm. lat., totis atro-nitidulis; ascis tereti-clavatis, 90-130 \approx 9-12, myriosporis; sporidiis spermatioideis elongatis, rectis, chlorinis, 2-2,5 \approx 1; paraphysibus furcatis, apice clavulatis, 5 μ . cr. brunneolis.

Hab. in ramulis siccis Laricis europææ et Abietum in Germania, Italia, Britannia, Hungaria, Galicia. — Fungus pycnidicus est *Cenangium bullatum* Alb. et Schw. Consp. p. 344 seu *C. Pinastri* b. *monstrosum* Fr. Syst. Myc. II, p. 184: cupulis rotundatis, clausis, demum perforatis, nigris, rugulosis; stylosporibus longis, filiformibus, tenuissimis, curvatis, in massa gelatinosa lutea profluentibus.

21. **Tympanis Abietis** Cr. Finist. p. 43. — Ascomate 1-2 mm. diam., 2419
brunneo-nigrescente, sessili vel turbinato, parum concavo; ascis cylindræis; sporidiis sphaeroideis numerosissimis; paraphysibus filiformibus, superne furcatis et parum incrassatis.

Hab. in cortice emortuo Abietis, Finistère Galliæ.

22. **Tympanis pitya** (Fr.) Sacc., nec Karst. *Cenangium* Fr. Syst. Myc. 2420
II, p. 184, Fuck. Symb. p. 269, *Tryblidium* Fr. Summa p. 369. — Minutum, denudatum, nitidulum, cæspitulosum, sessile, leve opacum, demum denticulato-dehiscens, disco nigro; ascis cylindraceo-clavatis, 100 \approx 18; paraphysibus bacillaribus obvallatis; sporidiis spermatioideis, curvulis 3 \approx 1/2, inæqualibus, hyalinis fartis.

Hab. in ramulis corticatis emortuis Pini silvestris, Abietum in Germania, Suecia, Italia. — Quoad pycnidium cfr. Fuck. loc. cit. — ***T. juniperina** Sacc. Mich. I, pag. 419: ascis 80-90 = 10-11, ceterum typo similibus, æqualiter paraphysatis et myriosporis; ascomatibus similibus vel paullo majoribus, opace nigris. In cortice trunci Juniperi communis in silva Cansiglio Italiae borealis.

23. **Tympanis seriata** Schw. Syn. Amer. bor. n. 1968. — Stipitata, 2421
concretescens longis seriebus primum *Sphaerium* piriformem nigram majusculam rugosam in oram prolongatam referens, tum *Pezizam* ore contracto, stipite crasso cylindrico, marginibus tumidulis atrovirentibus æmulans; disco velato, velo pulverulento albescente-viridi, ipso atrovirente; ultimo statu valde dilatata disco tuberculato, margine viridi-pulverulento, lobato, undulato.

Hab. in ligno decorticato, longis seriebus, Bethlehem Amer. bor. — Ascomata 2 mm. vix superantia.

24. **Tympanis cinerescens** Schw. Syn. Amer. bor. n. 1966. — Ses- 2422
silis, majuscula, gregaria, prorumpens ex epidermide elevata, cupulas cingente; cupulis rotundis aut difformibus lobatisque et subconfluentibus; disco marginato, impresso aut umbonato et etiam tuberculoso, velo cinereo, primum clauso, demum evanido; tunc omnino nigra, pulvere seminali tecta.

Hab. in putridissimo ramo ignoto horti Easton Amer. bor.

AMEGHINIELLA Speg. F. Fueg. n. 347 (1888) [Etym. a cl. F. AMEGHINO palæontologo austro-amer.]. — Ascomata primo parvula, tuberculum minutum cortice tectum efficientia, mox erumpentia ac explanato-expansa basi connata, sæpe confluentia, majora, tenuiuscula, membranacea-tenacella, flexilia, plicato-undulata, fusca v. atra. Asci pusilli octospori, paraphysati; sporidia minuta cylindræa v. allantoidea, hyalina. — Genus singulare epithecii naturâ ac fabricâ inter *Rhizinam* ac *Bulgarieas* medium, vegetatione tamen ac fructificationis notis ad *Dermateas* accedens.

1. **Ameghiniella australis** Speg. l. c. — Stromate parvulo, tuberculato- 2423
effuso, parvulo 3-5 mm. diam., primo peridermio tecto, dein transverse erumpente, atro; cupulis sessilibus primo parvulis, crassiusculis, rigidulis, mox explanato-expansis, majusculis 1-3 mm. diam., crassiuscule membranaceis 300-450 μ . crass., coriacellis, flexilibus, dense undulato-plicatis, margine acutis, repandis v. sublobulatis, atro-olivaceis, extus siccis, olivaceo-pruinulosis, udis viscosulis.

contextu interno rufescenti-ferrugineo; ascis pusillis, antice rotundato-subtruncatis, postice breviter crasseque pedicellatis 40-50 \approx 3-4,5, paraphysibus densis, fuscidulis, mucoso-diffluentibus obvallatis, octosporis; sporidiis cylindræis v. allantoideis, utrinque obtusatis, 4,5-6 \approx 0,7-1 hyalinis (luce refracta chlorinis).

Hab. ad ramos emortuos Fagi betuloidis in Staten island et Fuegia tota. — Species summopere polymorpha, in juventute nunc *Cenangii* nunc *Tryblidii* cujusdam habitum simulans, per ætatem tamen mox dignoscenda: asci centrifuge evolvuntur (jam prima juventute) margine tandem semper sterili. Iodi ops nulla.

EPHELINA Sacc. (Etym. *ephelis* ustio a sole), *Ephelis* Phill. Disc. p. 358, nec Fr., nec Sacc., *Excipula* Fuck. et Berk. p. p. — Ascomata tuberculiformia, demum patellata, ceracea v. subcoriacea, sessilia, minuta, atra crusta effusa subinde cornea nigricante insidentia. Asci elongati, paraphysati, octospori. Sporidia oblonga continua, hyalina. — An *Pyrenop. Gentianæ* (n. 1496) huc pertineat, dubium.

1. **Ephelina Rhinanthi** (Phill.) Sacc. *Ephelis* Phill. Disc. p. 358, t. XI, 2424 f. 69, *Rhytisma radicalis* Cooke in Grev. VIII, p. 9 (immat.) — Cupulis tuberculatis, congestis vel gregariis, crusta cornea effusa atra insidentibus, denique expansis, patellatis, subceraceis, nigris; ascis tereti-clavatis, 8-sporis; sporidiis oblongis v. clavatis, 3-guttatis, 10 \approx 5; paraphysibus filiformi-clavulatis.

Hab. in caule imo et radice *Rhinanthi Cristæ-galli*, Aberdeen, Forres, Whitchurch Britannia. — Ascomata $\frac{1}{2}$ mm. lat. extus rugulosa, intus pallide grisea. Adest st. stylosporeus; sporulis fusoides 2-pluriseptatis, 70 \approx 5.

2. **Ephelina stromatica** (Fuck.) Sacc. *Excipula* Fuck. Symb. p. 400. 2425 — Ascomatibus in stromate spurio, tenuissimo, atro insidentibus, subconfluentibus, orbicularibus, planis, umbilicatis, astomis, nigris; ascis ovato-oblongis, curvatis, 8-sporis, 28 \approx 12; sporidiis ovato-clavatis, simplicibus, 10 \approx 4 hyalinis.

Hab. in caulibus siccis *Silenes nutantis*, Oestrich Rheno-goviæ et in Jura (MORTHIER).

3. **Ephelina Viburni** (Fuck.) Sacc. *Excipula* Fuck. Symb. Myc. p. 400. 2426 — Ascomatibus sparsis, punctiformibus, in macula grisea, indeterminata, hemisphæricis, mox cupulæformibus, astomis, atris; ascis et sporidiis maturis nondum visis.

Hab. in foliis siccis Viburni Lantanæ, Vollrads Rhenogoviæ et in Jura (MORTHER).

4. **Ephelina gregaria** (Berk.) Sacc. *Excipula* Berk. Flor. New Zeal. 2427 vol. II, p. 202, Hook. Handb. New Zeal. Flor. p. 631. — Ascomatibus minutis, maculis brunneolis insidentibus, extus nigris, intus pallidis; ascis latis, clavatis; sporidiis obovato-oblongis, 10 μ . longis, plasmate demum obscuro bipartito.

Hab. ad paginam superiorem foliorum Gnaphalii in Nova Zelandia septentr. (COLENZO).

5. **Ephelina Galii** (Lasch.) Sacc. *Excipula* Lasch. in Kl. H. M. n. 678, 2428 Fuck. Symb. p. 401 et App., Sacc. Syll. III, p. 669. — Erumpens elliptica v. oblonga, rugulosa, atra, disco pallido.

Hab. in caule Galii Molluginis et G. silvatici in Rhenogovia et Borussia. — Asci nondum maturi observati. *Phacidio vernali* affinis dicitur.

LAQUEARIA Fries S. v. Sc. p. 366 (1849) [Etym. *laqueare*]. — Ascumata subcoriaceo-subcornea, dimidiata, infra deficientia, decidua, pertusa discum tegentia. Discus ceraceus persistens. Asci octospori, clavati. Sporidia ellipsoidea, continua, hyalina. — Genus, quoad locum, dubium. Cl. Rehm rectius forte in familiola propria (*Ostropææ*) cum *Robergea* et *Ostropa* enumerat.

1. **Laquearia sphæralis** Fr. Summa pag. 366, *Stictis* Fr. Syst. Myc. II, 2429 pag. 194. — Erumpens, hemisphærica, fusco-atra, urceolata, ore contracto integro, disco plano nigro; ascis oblongis, sessilibus, 8-sporis; sporidiis distichis minutis, oblongo-ellipticis, hyalinis, continuis (Fuck.)

Hab. ad ramos exsiccatos decorticatos Fraxini in Suecia, Germania, Britannia, ut videtur, rarissime. — Habitus *Trematosphæricæ pertusæ*, sed quoad magnitudinem, colorem et oris formationem cum *Godronia Urceolo* potissimum comparanda. Gregaria erumpenti-superficialis, limbo crasso persistente in urceoli formam contracto, ore regulari inflexo punctiformi-pertuso. Hymenium humectatum tumet, basin innatam modo tegit, unde patet limbum cupulæ v. perithecii forma gaudentem esse accessorium. Transversim dissecta intus livido-nigra, demum elabens foveolam nigram in ligno relinquit.

2. **Laquearia Nylanderii** Cr. Finist. p. 46. — Ascomatibus sparsis, 2430 1 mm. diam., nigris, sessilibus, glabris, lecanidiformibus; ascis

clavatis, dehiscentibus, octosporis; sporidiis cylindræis, guttulatis; paraphysibus filiformibus, superne ramosis.

Hab. in cortice vivo Fagi, Finistère Galliæ.

Sect. 2. Phæosporæ Sacc.

HYMENOBOLUS Mont. Ann. Sc. Nat. 3. IV, p. 359 (1845), Syll. Crypt. p. 191 [Etym. *hymenium* et *ballo* ejicio]. — Ascoma erumpens, coriaceum, fusco-atrum, primum clausum, dein ore lacero subconivente ruptum. Hymenium concolor, ceraceum, atro-pulverulentum, tandem prorsus elabens. Asci tubulosi, octospori, denique elastice dissilientes. Sporidia continua, oblonga, fuliginea. Paraphyses filiformes. — Genus hinc *Phacidieis*, illinc *Ascoboleis* affine, quoad locum adhuc dubium.

1. **Hymenobolus Agaves** Dur. et Mont. Cent. V, n. 90, et Fl. Alg. 2431 ined., Atlas, t. 28, f. 2. — Characteribus iisdem ac generis; ascis cylindricis, p. s. 100-120 \approx 8-9 apice, tunica integra, obtusiusculis, breve sensim stipitatis, paraphysibus bacillaribus hyalinis obvallatis octosporis; sporidiis oblique monostichis, oblongo-ellipsoideis, 15-17 \approx 8, fuligineis, guttulâ crassâ pallidiore fœtis.

Hab. sub epidermide foliorum *Agaves americanæ* emortuorum in collibus Babel-Oued et Alger Africæ sept. (DURIEU et TRABUT). — Innato-erumpens. Cupulæ sparsæ aut seriatæ, sub epidermide rimosa foliorum enatæ, e cortice tandem erumpentes, primitus clausæ, sessiles, extus intusque fuscae, subtus planiusculæ adnatæ, demum apertæ 2-4 mm. latæ, semimillimetrum in medio crassæ, coriaceæ, siccae fragiles, acute marginatæ, ore inflexo, laciniis epidermidis stellatim ruptæ patentibus aut strictis cinctæ.

Sect. 3. Didymosporæ Sacc.

CENANGELLA Sacc. Consp. gen. Disc. p. 9 (1884), Rehm Disc. 229 (Etym. demin. a *Cenangio*). — Ascomata erumpenti-superficialia, subinde basi crassa substipitata, ex urceolato patellata, coriacea, rarius subcornea, brunnea vel atra, sicca varie contorta. Asci elongati v. clavati, 4-8-16-spori, paraphysati. Sporidia oblonga v. fussoidea, 1-septata, subhyalina, rarius colorata. — *Niptera Rhododendri* (Ces.) De Not. (supra n. 1997), [= *Peziza* Ces. Bot. Zeit. 1854. p. 186, = *Velutaria* Rehm Ascom. n. 253], præeunte ipso Rehm Disc. p. 230, potius *Cenangellæ* speciem sistit.

I. *Eu-Cenangella*. Sporidia subhyalina.

1. **Cenangella Pinastri** (Tul.) Sacc. *Tymp. Pinastri* Tul. Sel. Fung. 2432
Carp. III, p. 151, t. 19, f. 10-12. — Cupulis cæspitosis, raro solitariis substipitatis, nigris, primitus clausis et sphæroideis demum apertis concavis, margine obtuso vel evanescente, disco tandem dilutiore, nudis, circiter 0,5 mm. lat.; ascis elongato-clavatis, obtusissimis, sessilibus, 100 \approx 11, 8-16-sporis; sporidiis ovoideis, uniseptatis, hyalinis, 8-9 \approx 3,5; paraphysibus filiformibus, simplicibus, apice clavatis fuscescentibus et conglutinatis.
Hab. in corticibus Abietis excelsæ et pectinatæ recens demortuæ in Fennia, Gallia, Germania, Italia, Belgio, Amer. bor. — Hypothecium (lamina tenui) fuscescens. Spermogonia vulgo cæspitosa, modo segregata, nunc ascomatibus mixta, primitus subsphæroidea, mucronulata, demum ovoidea, nigra, cavitate simplici confossa; sporulæ elongatæ, simplices, rectæ, 3,5 μ . long.; sterigmata filiformia, ramis strictissimis multibrachiata, 35 μ . long.
2. **Cenangella pitya** (Karst.) Sacc. *Tympanis hypopodia* Nyl. Obs. 2433
p. 72 (teste Karst.), *Tympanis pitya* Karst. M. F. I, p. 228. — Ascomatibus erumpentibus, solitariis vel in cæspitulos sociatis (2-4 insimul), demum stipitatis, nigris nudis, primitus clausis et sphæroideis, deinde apertis et concavis, tandem sæpe convexis, margine demum acutiusculo, subdenticulato-inæquali, circiter 0,6 mm. lat.; stipite crasso, sensim in cupulam abeunte, 0-1-0,5 mm. alt. circiter 0,3 mm. crass.; ascis elongato-clavatis, obtusissimis, sessilibus, 8-16-sporis, 90 \approx 8-10; sporidiis ovoideo-oblongatis, uniseptatis, incoloribus, 8-10 \approx 2-3; paraphysibus filiformibus, gracilibus, adspersis, apice clavatis fuscescentibus et conglutinatis.
Hab. ad corticem levem Pini silvestris in Fennia et in Lapponia. — Spermogonia erumpentia, gregaria, solitaria, rarius subcæspitosa, subsphæroidea, cavitate simplici confossa, nigra, minuta; sporidia elongata, recta vel subrecta, incoloria, simplicia 2 \approx 0,5.
3. **Cenangella Piceæ** (Pers.) Sacc. *Peziza* Pers. M. E. I, p. 269, *Mol-* 2434
lisia Quéll. Ench. p. 318, *Peziza abieticola* Nyl. *Pez. fenn.* p. 52, *Dermatea Piceæ* Rehm Disc. pag. 257, *Cenangium farinaceum* Fuck. Symb. p. 269. — Cupulis sparsis, erumpentibus, sessilibus, 1-2 mm. latis, primo clausis subglobosis, demum apertis, concavis, disco pallide fusco, extus fuscis, albo-farinaceis subglabrisve, margine incurvo; ascis clavatis, stipitatis, 8-sporis, 90-112 \approx 10-15;

sporidiis in asci superiori parte inordinatis, lanceolatis, plasmate medio diviso, 2-cellularibus, hyalinis, 16-18 \approx 5-6.

Hab. in pag. inf. foliorum *Abietis pectinatæ* in Rhénogovia, Tyroli, Helvetia, Fennia.

4. **Cenangella dolosa** Sacc. Consp. gen. Disc. p. 9, *Cenangium dolosum* Sacc. et Sp. Mich. I, p. 58. — Cupulis sparsis corticulis, innato-erumpentibus, initio et siccis clausis, udis urceolato-apertis fibrosis, coriaceis, duris, aterrimis $\frac{1}{2}$ - $\frac{3}{4}$ mm. diam.; ascis clavatis breve crassiuscule stipitatis, 80-100 \approx 10-13; paraphysibus filiformibus obvallatis, octosporis; sporidiis subdistichis, biconico-fusoideis 22-25 \approx 6-7, medio constricto 1-septatis, rectis curvulisve, 4-guttulatis, hyalinis.

Hab. in ramulis corticatis *Coryli Avellanæ*, Conegliano Ital. bor. (SPEGAZZINI).

5. **Cenangella stegioides** (Speg.) Sacc., *Dermatea stegioides* Speg. Mich. I, p. 471. — Ascomatibus primo subcutaneis, clausis, dein epidermide operculatim circumscissa sed permanente subvelatis, disciformibus, extus cinnamomeis, granuloso-tomentellis, disco cinereo v. subroseo, concavo, prominulo, $\frac{1}{2}$ -1 mm. diam.; ascis cylindraceis; paraphysibus filiformibus obvallatis, 35-40 \approx 2-3, octosporis; sporidiis distichis, cylindræis v. clavulatis, non v. tenuissime 1-septatis, ad septum non constrictis, hyalinis, 5-6 \approx 1-1 $\frac{1}{2}$.

Hab. ad ramulos emortuos *Quercus sessilifloræ* Colfosco, Treviso Ital. bor.

6. **Cenangella Ravenelii** (Berk.) Sacc. *Tympanis Ravenelii* Berk. North Am. Fungi n. 760. — Sparsa vel fasciculata; cupulis breviter pedicellatis marginatis, disco cinereo; sporidiis biconicis commissa medioque constrictis, 34-36 μ . long.; paraphysibus clava obovata (conidio?) terminatis.

Hab. in ramis *Carpini* et *Ilicis* in Carolina inf. et Alabama Amer. bor. — Prope septum sporidiorum subinde adest nucleus peculiaris.

7. **Cenangella Carpini** (Hazsl.) Sacc. *Cenangium Carpini* Hazsl. Einig. Disc. p. 10 et Magyar. Szab. Disc. t. VI, f. 15. — Erumpens, obconica, subcæspitosa, dein dehiscendo discoidea, atro-brunnea, glabra; ascis fusoides, tenuibus, octosporis; sporidiis anguste fusoides, hyalinis, uniseptatis, latitudine 6-8-plo longioribus; paraphysibus tenuibus, filiformibus, apice brunneis.

Hab. in cortice *Carpini* prope Eperies Hungariæ.

8. **Cenangella vernicosa** (Fuck.) Sacc. *Cenangium vernicosum* Fuck. 2439

Symb. p. 268, *Dermatea* Rehm Disc. p. 262. — Cupulis gregariis, innato-erumpentibus, dein sessilibus, concavis, marginatis, atherimis, nitidis, 1-2 mm. diam., disco nigro, opaco; ascis clavatis, apice rotundatis incrassatis, 70-80 \simeq 10-12, 4-8-sporis; sporidiis fusoides, rectiusculis, dein 2-ocularibus, 12-15 \simeq 4-5, hyalinis; paraphysibus furcatis, septatis, apice clavulatis, brunneo-flavis 4 μ . crass.

Hab. in ramis corticatis Pruni Padi prope Biebrich Rheno-goviæ et in Arduennis. — Fungus pycnidicus est *Sphæronæma polymorphum* Auersw.: cylindræum, obtusum, $\frac{1}{2}$ mm. altum, atherimum, nitidum, gregarium; stylosporibus cylindræis, rectis, minutis, hyalinis.

9. **Cenangella Ericæ** (Niessl) Rehm. Disc. p. 232, *Cenangium Ericæ* 2440
Niessl Beitr. p. 61, t. VII, f. 4-6. — Solitaria, nunc sessilis basi contracta, nunc substipitata, corrugata rugulosave, ore compresso-connivente, in statu humido aperta, nigra, 0,5-1 mm. lat., membranaceo-coriacea, disco griseo-albescente; ascis clavatis in stipitem brevem attenuatis, apice rotundatis, 8-sporis, 70-90 \simeq 8-10; sporidiis distichis, oblongo-lanceolatis, utrinque attenuato-rotundatis, medio 1-septatis constrictisque, hyalinis, guttulatis, 15-18 \simeq 3-4; paraphysibus ascorum longitudine, apice incrassatis interdum ramosis, hyalinis.

Hab. in ramulis foliisque siccis Callunæ vulgaris pr. Liezen et Voitsberg Stiria et in montibus dell'Oropa Pedemontii. — Status pycnidicus, teste Niessl, est *Pestalozzia Callunæ* Ces.

10. **Cenangella Rehmiana** Sacc. *Dermatea Rhododendri* Rehm Disc. 2441
p. 248 *Helotium* Rehm Ascom. n. 109. — Ascomatibus per epidermidem fissam erumpentibus, plerumque gregariis, sessilibus v. brevissime stipitatis, primitus planis, orbicularibus, distincte marginatis, siccis subcorrugatis, extus fuscis, scabris, disco flavido vel viridi, contextu parenchymatico, fusco, margine pseudoprosenchymatico, 0,5-2 mm. diam.; ascis clavatis, in stipitem elongatis, 8-sporis, 80-90 \simeq 10; sporidiis ellipticis vel elongato-ovatis, 1-cellularibus, plerumque 1-2 nucleolis præditis, denique bicellularibus, hyalinis, distichis, 15-18 \simeq 4,5-5; paraphysibus filiformibus, haud clavatis, hyalinis, 2,5 μ .

Hab. ad ramulos siccos Rhododendri ferruginei in alpinis editis Tyrolensibus. — Nomen mutavi, quia generi præsentis adscribenda quoque homonyma *Cenangella Rhododendri* (Ces.) Rehm.

11. **Cenangella Fraxini** Sacc. Consp. gen. Disc. pag. 9, Fung. ital. 2442

f. 1437, (*Tympanis*) et forte *C. Carpini* Tul. Ann. Sc. nat. 1853 p. 140, (asci 8-spori, sporidia bilocularia!). — Erumpens, gregaria vel subcæspitosa, ex urceolato patellata, fuligineo-atra, marginata, 0,5-0,7 mm. lat., subcoriacea; ascis tereti-clavatis, breve stipitatis, filiformi-paraphysatis, 108-115 \approx 18-21, octosporis; sporidiis subdistichis, fusoideis, tenuiter 1-septatis, hyalinis, 26-29 \approx 10-12.

Hab. in cortice emortuo Fraxini Orni, Rouen Galliæ (LE-TENDRE). — Sporidia subinde extra ascos (abnormiter?) 3-septata fuscilla.

12. **Cenangella urceolata** (Ellis) Sacc. *Cenangium urceolatum* Ellis 2443

in Grev. VI, p. 9. — Erumpens, prominens, olivaceo-atra; cupulis urceolatis, ad basin attenuatis, extus pilis brevibus flaccidis adspersis, ore contracto, disco pallide-fuligineo; ascis clavato-cylindraceis; sporidiis arcte fusiformibus, hyalinis, uniseptatis, 15 \approx 4.

Hab. ad ramos Clethræ alnifoliæ, New Jersey Amer. bor. — Ascomata 0,3-0,5 mm. lat. *Sphæronæma clethrinolum* Ell. videtur spermogonium.

13. **Cenangella æquinoctialis** (Mont.) Sacc. *Cenangium æquinoctiale* 2444

Mont. Guy., n. 262, in appendice et n. 452. — Gregaria, erumpens; excipulo coriaceo initio globoso clauso, helvolo-furfuraceo, tandem subcupulari-explanato; disco livido-fusco, pulvere copioso sulphureo velato; ascis cylindricis 8-sporis, 250 μ . long.; sporidiis ovoideis, inæqualiter bilocularibus, monostichis, 30 \approx 15, limbo lato cinctis.

Hab. ad cortices in Guyana (LEPRIEUR). — Ascomata gregaria vel cæspitosa-confluentia, primo sphaerica clausa, semen Cannabis magnitudine æquantia, dein hemisphaerica aut pressione mutua irregularia, 1 ad 1½ mm.; discus planus, marginem crassum interdum flexuosum æquans.

14. **Cenangella flavo-cinerea** (Phill.) Sacc. *Dermatea* Phill. in Grev. 2445

VII, p. 23. — Cupulis gregariis, sessilibus, initio hemisphaericis dein expansis; disco flavido vel cyaneo-griseo, margine pilis brunneis brevibus fimbriato, extus avellaneo-brunnea; ascis clavatis 8-sporis; sporidiis fusoideis rectis curvulisve, 1-septatis vel 3-nucleatis, 10-20 \approx 4-6; paraphysibus numerosis tenuissimis.

Hab. in fragmentis ligneis in California.

15. **Cenangella radulicola** (Fuck.) Rehm Disc. p. 231, *Cenangium* 2446

Fuck. F. R. n. 2073, *Dermatea* Fuck. Symb. p. 278. — Cupulis sparsis, primo cylindræis, clausis, demum apertis, 1-3 mm. latis, 1-1,5 mm. alt., calyciformibus, in stipitem crassum seorsum attenua-

tis, margine involuto, fuscis, striato-rugulosis, disco atro-olivaceo; ascis stipitatis, elongatis, 8-sporis, 128-150 \approx 16-18; sporidiis lanceolato-oblongis, rectis curvatisve, continuis, 2-4-guttulatis, dein 1-septatis, hyalinis, 18-26 \approx 6-8; paraphysibus simplicibus linearibus.

Hab. in ramulis Betulæ, *Radulo aterrimo* tectis, in Rhénogovia.

16. **Cenangella parasitica** (Fuck.) Rehm Disc. p. 232, *C. parasiticum* 2447

Fuck. Symb. App. I, p. 43. — Cupulis demum in pycnidii cæspitulis ortis, orbicularibus seu irregularibus, subsessilibus, 1-2 mm. latis altisque, primo turbinatis, subclausis, demum perforatis, aperitis, tandem explanatis, extus margineque valde elevato, involuto, densissime, brevissime velutinis, pallide sordido-fuscis argillaceisve vel quandoque margine parum pallidiori, disco griseo, carnosio; ascis linearibus, 8-sporis; sporidiis monostichis, ovatis, utrinque obtusis, didymis, medio constrictis, pallide flavis, 6-8 \approx 3-4.

Hab. parasitica in Sphæronæmate cæspitoso ad *Acer platanoides* in Rhénogovia. — Sec. Fuck. *Sphæronæmatis* species est pycnidium.

II. *Phœangella* Sacc. Sporidia colorata.

17. **Cenangella Aceris** (Hazsl.) Sacc. *Cenangium Aceris* Hazsl. Einig. 2448

Disc. p. 9, Magyar. Szab. Disc. t. XII, f. 13. — Gregaria, minuta, discoidea, erumpenti-superficialis, disco crasso, pallide brunneo, superficie atro-brunneo; ascis clavatis, 90-98 μ . long. breve stipitatis, octosporis; sporidiis elongatis vel ovato-oblongis, uniseptatis, brunneolis, 14-20 \approx 4; paraphysibus filiformibus.

Hab. in ramus *Aceris tatarici* in Hungaria (HAZSL) et Slavonia (SCHULZER).

18. **Cenangella Morthieri** (Fuck.) Sacc. *Cenangium Morthieri* Fuck. 2449

Symb. p. 272, t. IV, f. 47. — Cupulis cæspitosis seriatisque, primo tenuibus, valde excavatis, extus albo-farinaceis, demum disco crasso, plano, atro, distincte marginato; ascis oblongis, breviter stipitatis, 4-sporis, 80 \approx 10; sporidiis monostichis oblongis, utrinque parum attenuatis, subcurvatis, continuis uniseptatisve, 2-guttulatis, fuscis, 16 \approx 4.

Hab. in ramis corticatis *Rhamni alpinæ* in Jura Helvetiæ (MORTHER). — Status pycnidicus est *Micula Mougeotii* Duby.

19. **Cenangella Ulicis** (Cooke) Sacc. *Dermatea* Cooke in Grev. III, 2450

p. 186. — Cæspitosa vel sparsa substipitata; cupulis initio turbinatis dein expansis, extus rufo-brunneis furfuraceis, 1-2 mm. lat.,

disco concavo obscuriore; ascis clavato-cylindræis; sporidiis ellipsoideis 1-septatis, brunneis $12 \approx 5$; paraphysibus subclavatis apice brunneolis.

Hab. in ramis Ulicis europæi, Shere Britannicæ. — Ascoma extus coffeicolor.

20. **Cenangella deformata** (Peck) Sacc. *Cenangium* Peck 28 Rep. 2451 Stat. Mus. p. 68. — Minuta, sparsa, vel congesta, initio inæqualis v. subspherica, dein apice aperta discoidea, margine irregulari v. rupto, nigra; sporidiis stipatis ellipsoideis endochromate bipartito demum coloratis et 1-septatis, $26-32 \mu$. long.

Hab. in corticibus emortuis Juniperi virginianæ, Greenbush Amer. bor. — Species initio spheriæformis, sæpius seriata.

21. **Cenangella Cesatii** Sacc. *Patellaria?* *Tympanis?* Ces. Born. p. 2452 11. — Tota aterrime, erumpens per greges lineares e ligno, primitus turbinata clausa, serius patellaris, margine incrassato interdum crenulato; fructificatione ascospora compacta, sed ceterum incerta; sporidiis dipodiæformibus.

Hab. in corticibus Etich River in ditione Sarawak.

22. **Cenangella quercina** (Hazsl.) Sacc. *Cenangium quercinum* Hazsl. 2453 Ein. Discom. p. 7, Magyar. szab. Disc. t. VI, f. 10. — Sparsa, subcutaneo-erumpens, ex urceolato patellata, minuta; ascis linearifusoideis, paraphysatis; sporidiis fusoides, uniseptatis, leniter constrictis, flavo-brunneis.

Hab. in ramis quercinis prope Eperies Hungariæ. — Habitus *Peziculæ quercinæ*.

23. **Cenangella Potentillæ** (Hazsl.) Sacc. *Cenangium Potentillæ* Hazsl. 2454 Einig. Discom. p. 8, Magyar. szab. Disc. t. V, f. 11. — Erumpens, nigra, opaca, disco convexo pulvereo, margine prominulo, contextu griseo-flavo; ascis tereti-fusoideis, paraphysatis; sporidiis oblongo-fusoideis, uniseptatis, opace atro-brunneis.

Hab. in ramis Potentillæ fruticosæ, Eperies Hungariæ. — Paraphyses crassæ pluriseptatæ.

24. **Cenangella aggregata** (Hazsl.) Sacc. *Cenangium* Hazsl. Ein. Disc. 2455 p. 9, nec Lasch. — Sparsa, urceolata, dein circulariter vel rimose dehiscens, demum discoidea; ascis clavatis, breve stipitatis, octosporis; sporidiis oblongis v. ovoideis, bilocularibus, brunneis; paraphysibus filiformi-clavulatis, coloratis.

Hab. in caulibus emortuis putrescentibus *Odontites* prope Bartfeld Hungariæ.

Sect. 4. Phragmosporæ Sacc.

SCLERODERRIS Fr. Syst. Myc. II, p. 178 (1822), ut subgen., De Not. Disc. p. 29 (Etym. *scleros* durus et *derris* pellis), *Cenangii*, *Tympanidis* etc. spec. Auct. — Ascomata erumpenti-superficialia, sæpius cæspitosa, ex urceolato patellata, sæpe margine lacero-fimbriata, pruinosa vel levia, coriacea vel cornea, brunnea vel atra raro læte colorata. Asci paraphysati, typice octospori. Sporidia elongata vel cylindræa, demum 3-pluriseptata, hyalina, rarius colorata. — Est mihi *Cenangium* phragmosporum.

I. *Eu-Scleroderris*. Sporidia subhyalina.

1. **Scleroderris ribesia** (Pers.) Karst. M. F. I, p. 215, *Peziza* Pers. 2456
Teut. p. 35, *Cenangium Ribis* Fr. Syst. Myc. II, pag. 179, Tul. Ann. Sc. Nat. 1853, t. 16, f. 9-11, Carp. III, pag. 164, t. XIX, f. 1-9. — Stromate ligno innato, primitus hypophlæodeo, sphæroideo, solido, intus pallido vel luteolo-virente, extus fulvo, e lateribus imis conidia ellipsoidea vel ovoidea, recta, simplicia, hyalina, 3,5-5 \approx 3 fundente, dein per epidermidem erumpente gignenteque ascomata et spermogonia; ascomatibus cæspitosis, 1-4 mm. lat., 1,5 mm. alt., breviter stipitatis primitus sphæroideis vertice depressis vel umbilicatis, clausis fuscis vel fulvescenti-fuscis, dein obverse turbinatis, ore connivente fimbriato dehiscentibus, rugulosis, subnudis, fusco-nigrescentibus, disco cinereo-albido; ascis cylindræis, obtusis, deorsum longe attenuatis, 100-120 \approx 7-8, octosporis; sporidiis conglobatis aciculari-elongatis vel aciculari-filiformibus, hinc obtusis, illinc acutis, 4-8-guttulatis dein tenuiter 4-septatis, chlorino-hyalinis, 30-36 \approx 3,5-4,5; paraphysibus filiformibus, simplicibus, apice vix clavato nonnihil corrugatis.

Hab. in ramis emortuis Ribis rubri, tristis et nigri in Suecia, Fennia, Britannia, Gallia, Germania, Belgio, Sibiria. — Stat. pycnidicus est *Fuckelia Ribis* Bon.; st. macrostylosporifer teste Fuck., est *Mastomyces Friesii* Mont.

2. **Scleroderris repanda** (Fr.) Rehm Disc. p. 209 (ut var.), *Cen. repandum* Fr. Elench. II, p. 22. — Gregaria, turbinata, fusco-pruinosa, demum nuda, levi, cervino-nigrescens, ore repando laciniatoque inflexo, disco fusco; ascis sporidiisque ut in *Scl. ribesia*. 2457

Hab. in ramis exsiccatis Ribis petræi in Vogesis (MOUGEOT). — Affinis *C. Ribis*, a qua differt cupulis tenuioribus, magis expli-

catis, ore repando laciniatoque in velum haud continuato; cupula demum nuda, trita subnitente discoque fuscescente.

3. **Scleroderris seriata** (Fr.) Rehm Disc. pag. 211, *Cenangium* Fr. 2458 S. M. II, p. 185, *Trybl. seriatum* Fries exs. n. 161, *Pez. truncatula* Rehent. Neom. p. 388 non Pers., *Dermatea ser.* Tul. Carp. III, pag. 160. — Gregaria, globoso-depressa, substipitata rugosa, nuda, atra, in lacinias obtusas dehiscens, disco fuligineo-atro; ascis ovato-elongatis, apice obtusis, longissime stipitatis $110 \approx 12$, 8-sporis; sporidiis anguste fusoides, acutis rectis curvulisve, $55-80 \approx 2-3$, pseudo-multiseptatis, hyalinis.

Hab. in cortice *Betulae* albæ in Suecia, Germania, Britannia, Belgio, Gallia. — Adsunt spermogonia et pycnidia. Cfr. Phill. Disc. p. 348. Per rimas corticis transversales erumpit, series 7-35 mm. longas lineares plus minus confertas sistens. Stipes brevis, inter corticem nidulat. Cupulae opacæ; clausæ centro depressæ, obtuse marginatæ, demum apertæ, in lacinias 4-6 fragiles hiantes.

4. **Scleroderris fuliginosa** (Pers.) Karst. M. F. I, p. 216, *Cenangium* 2459 Fr. Elench. II, p. 23, *Cen. difforme* Fr. in Moug. et Nestl. Stirp. vog. n. 889, *Sphæria fuliginosa* Pers. Syn. p. 52, *Tymp. fuliginosa* β . Wallr. Crypt. p. 430. — Cupulis in plagas latas effusas stipatis, difformibus, fuliginosis, disco pallido, subiculo late ambiente-effuso innatis; ascis tereti-clavatis, apice rotundatis $100-130 \approx 9-10$, 8-sporis; sporidiis cylindraceutis utrinque acutis, $60-65 \approx 2,5-3,5$, rectis, 8-ocularibus, hyalinis subparallelis; paraphysibus filiformibus, hyalinis.

Hab. ad ramos emortuos *Salicis capreae* in Suecia, Norvegia, Germania, Gallia. — Optime dignoscitur stromate sub epidermide cortici interiori innato, late ambiente effuso, humido nigrescente, sicco superne lutescente aut olivaceo; cupulae simplices vel caespitosæ, per epidermidem erumpentes, liberatæ, difformes, in perfectissimis tenues, coriaceo-membranaceæ, sublaciniatæ, pruinosa, ferruginosa, disco sublutescentes, in imperfectis minores, nigrescentes etc.

5. **Scleroderris concinna** (B. et C.) Sacc. *Cenangium concinnum* B. 2460 et C. North Am. Fungi n. 767. — Cupulis sessilibus subtiliter pulverulentis marginatis; disco plano nigro; sporidiis biserialibus, oblongis, triseptatis, $15-16 \mu$. longis.

Hab. in cortice *Quercus falcatae*, Lauri Benzoin et Sassafras in Carolina et Alabama Amer. bor.

6. **Scleroderris bacillifera** (Karst.) Sacc. *Tympanis* Karst. M. F. I, 2461

p. 229. — Cupulis erumpentibus, sessilibus vel subsessilibus, solitariis vel sæpius in cæspitulos sociatis (2-5 insimul), nudis, nigris, primitus clausis et sphæroideis, deinde apertis et concavis, tandem planiusculis, margine obtuso, disco nitido, 0,5-06 mm. lat.; ascis clavatis, obtusis, subpedicellatis, 65-88 \approx 10-11, octosporis; sporidiis conglobatis, bacillaribus, vulgo apicibus attenuatis, flexuosis, simplicibus vel spurie tenuiter 5-7-septatis, 20-52 \approx 3-4,5; paraphysibus filiformibus, gracilibus, apice incrassatis fuscescentibus et conglutinatis.

Hab. supra corticem crassiorem truncorum Abietis excel-sæ stantium, in Fennia saltem meridionali passim. — Spermogonia verrucariiformia, nigra, minuta; sporulæ oblongatæ, simplices, incolores, 4 \approx 1,5.

7. **Scleroderris pitya** (B. et C.) Sacc. *Cenangium pityum* B. et C. 246
North Am. Fungi n. 765 nec Fr. — Erumpens, brunnea, margine obtuso inflexo subtiliter pulverulento; sporidiis lineari-oblongis, curvatis, 4-septatis, 20 μ . longis.

Hab. in cortice Abietum, New England Amer. bor. (SPRAGUE).

8. **Scleroderris Sequoiæ** (Plow.) Sacc. *Cenangium* Plow. in Grev. 246
VII, p. 23. — Cupulis gregariis turbinatis, nigris, margine connivente, disco nigricante intus cinereo; ascis late clavatis, octosporis; sporidiis ovoideis vel ovato-oblongis, simplicibus dein triseptatis, enucleatis, 25-30 \approx 7-15; paraphysibus furcatis tenuibus.

Hab. in trunco Sequoiæ giganteæ in California.

9. **Scleroderris sepiaria** (Karst.) Sacc. *Tympanis sepiaria* Karst. 246
Fragm. mycol. IX, p. 2. — Ascomatibus erumpenti-superficialibus sessilibus, interdum solitariis, subinde in cæspitulos sociatis (2-5 insimul), primitus clausis et subsphæroideis, deinde apertis, concavis, subinde ellipsoideis, obtusis marginatis, nudis subtiliter punctulatis, nigris, 0,3-0,4 mm. lat.; ascis clavatis, obtusis, subpedicellatis, 70-80 \approx 8-9,5 mm., octosporis; sporidiis oblique mono- vel subdistichis, ovoideo-oblongatis, simplicibus raro 1, rarissime 3-5 septatis, 12-18 \approx 3,5-4,5; paraphysibus filiformibus, 1,5 mm. crass., interdum ramosis.

Hab. ad lignum pineum prope Mustiala Fennicæ.

10. **Scleroderris amphibola** (Mass.) Gill. Disc. p. 198, *Tympanis am-* 246
phibola (Mass.) Karst. Mycol. Fenn. I, p. 230, *Pragmopora am-*
phibola Mass., *Cenangium sphaeroides* Niessl herb. — Ascomatibus erumpenti-superficialibus, nigris, rugulosis, demum convexulis, immarginatis; ascis cylindræo-clavatis, brevissime stipitatis,

apice tunica integra, rotundatis, 70-75 \approx 8-10, paraphysibus asco longioribus sursum paullum incrassatis guttulatis obvallatis, 8-sporis; sporidiis distichis vel oblique monostichis, fusoides utrinque acutiusculis, 18-20 \approx 3 $\frac{1}{2}$ -4 $\frac{1}{2}$, 3-septatis leniter curvulis, hyalinis.

Hab. ad corticem Pini silvestris in Fennia, Gallia, Britannia, Italia. — Sporidia subinde 5-septata. Spermogonia nota.

11. **Scleroderris amphiboloides** (Nyl.) Sacc. *Tympanis* Nyl. Obs. 2466 p. 71, Karst. M. F. I, p. 230. — Sessilis, gregaria, subsolitaria, e sphæroideo demum patellata, concava dein plana, obtusè marginata, nuda, nigra, rugulosa, intus obscura, 0,4-0,5 mm. lat.; ascis elongato-clavatis, obtusissimis, sessilibus, 85-90 \approx 11-15, 8-16-sporis; sporidiis fusoides-elongatis, spurie (?) 5-7-septatis, hyalinis, 15-25 \approx 2,5-4,5; paraphysibus filiformibus, gracilibus, apice incrassatulis dilute lutescentibus.

Hab. in ligno abietino vetusto in Fennia meridionali.

12. **Scleroderris hypopodiza** (Nyl.) Sacc. *Tympanis* Nyl. Obs. p. 71, 2467 Karst. M. F. I, p. 231, Rehm Asc. Lojk. n. 61. — Cupulis cæspitosis, rarius solitariis basi substipitato-constrictis, primitus clausis, deinde apertis, concavis, tandem convexulis et immarginatis, nudis, nigris, subrugulosis, inæqualibus, intus concoloribus, 0,5-0,8 mm. lat.; ascis elongato-clavatis, obtusissimis, 80 \approx 15, 8-24-sporis; sporidiis fusoides-elongatis, spurie tenuiter pluri- (vulgo 7-) septatis, incoloribus 18-23 \approx 3,5-4; paraphysibus gracilibus, sursum leviter incrassatis.

Hab. ad lignum pineum (et quercinum?) vetustum in Fennia et Hungaria. — Spermogonia vulgo cæspitosa, segregata vel cupulis immixta, obovoidea vel vertice conoideo-attenuata, nigra; sporulæ elongatæ 3-4 \approx 0,5. Sec. Rehm asci 100 \approx 10-15, 8-spori; sporidia 18-24 \approx 3, disticha. Rehm Asc. n. 358 sistit formam myriosporam, an hujus speciei?

13. **Scleroderris aggregata** (Lasch) Rehm Disc. pag. 212, *Sphæria* 2468 Lasch Bot. Zeit. 1857, p. 428, *Cenangium* Fuck. Symb. p. 271. — Cæspitose-seriata, coriaceo-cornea erumpens, atro-nitida urceolata, demum quadrifido-dehiscens 0,5-1 mm. lat.; disco pallido, concavo; ascis clavatis, 75-80 \approx 7-9, octosporis; sporidiis elongato-fusoides, obtusiusculis, curvulis, 3-septatis, 4-guttatis, 30-33 \approx 3-4, distichis, hyalinis; paraphysibus filiformibus 2 μ . cr. hyalinis.

Hab. in caulibus siccis Euphrasiæ officinalis in Germania media. — Teste Fuck., adsunt stylosporæ teretes, curvæ, pluriguttatæ, 1-septatæ, 18 \approx 4, hyalinæ.

14. **Scleroderris nigro-rufa** (Berk.) Sacc. *Excipula nigro-rufa* Berk. 2469
Fl. New Zeal., vol. II, p. 202, t. 106, fig. 11, Hook. Handb. New
Zeal. Flor. p. 630. — Subglobosa, extus nigra, intus rubra; ostio-
lo inflexo; ascis latis, clavatis, obtusis; sporidiis hyalinis, obova-
to-oblongis, obtusis, obliquis, 4-septatis.

Hab. ad paginam inferiorem foliorum *Pittospori crassi-*
folii, in Nova Zelandia septentr. (COLENZO).

15. **Scleroderris pallidula** (Cooke) Sacc. *Dermatea pallidula* Cooke 2470
Grev. XVI, pag. 70. — Erumpens; cupulis convexis, subcæspitosis
(2-4), testaceo-carneis, demum pallescentibus 1-2 mm. lat., deor-
sum in stipite brevi communi attenuatis; margine obsolete; ascis
clavatis, octosporis; sporidiis ellipsoideo-lanceolatis, utrinque ob-
tusis, triseptatis, hyalinis, $25 \approx 9$; paraphysibus sursum incrassa-
tis, brunneis.

Hab. ad ramos *Rhois venenatæ* New Jersey Amer. bor. (J.
B. ELLIS).

16. **Scleroderris Eucalypti** (C. et H.) Sacc. *Dermatea Eucalypti* 2471
Cooke et Hark. Grevillea pag. 130. — Parva, erumpens, carnea;
cupulis sessilibus, solitariis, extus obscurioribus $\frac{1}{3}$ mm.; ascis
clavatis; sporidiis subfusoides utrinque obtusis, 20-30 \approx 10-12, qua-
drinucleatis, dein pseudo-triseptatis, hyalinis; paraphysibus fla-
vidis.

Hab. in cortice *Eucalypti* in California.

17. **Scleroderris vermicularis** (Ces.) Sacc. *Tympanis vermicularis* 2472
Ces. Myc. Born. p. 11. — Cæspitibus nigrescentibus, usque 6 mm.
diam. (*Myriangium* sat bene revocantibus); cupulis subcarnosis
stromate discoideo tenui applanato nunc circinnatim, nunc grega-
tim emergentibus, obverse piriformibus, nonnunquam compressiu-
sculis 1,5 mm. alt. e purpurascenti brunneis, sub lente minute gra-
nulosis vel pulverulentis, ostiolo punctiformi impresso; nucleo pal-
lidiori; ascis longe pedicellatis, e cylindraceo clavatis, 64-70 μ .
longis, tetrasporis; sporidiis vermicularibus, sæpius uno alteroque
fine reduncis, pluriseptatis, hyalinis, 24 μ . long.

Hab. ad lignum decorticatum Sarawak Bornei (BECCARI).

18. **Scleroderris fumosa** (C. et Ph.) Sacc. *Dermatea fumosa* C. et 2473
Ph. Grev. VIII, pag. 64. — Sparsa, sessilis; cupulis demum expan-
sis 2-4 mm., extus pallidis, granulosis, margine elevato, flexuoso;
hymenio murinaceo; ascis clavatis, longe stipitatis; sporidiis lan-
ceolatis, rectis vel curvulis, endochromate quinque-divisis, 25-35
 \approx 4-6.

Hab. ad ligna putrescentia, Dunedin Novæ Zelandiæ.

19. **Scleroderris aterrima** (Hazsl.) Sacc. *Encoelia aterrima* Hazsl. 2474

Einig. Disc. p. 10, Magyar szab. Disc. t. VIII, f. 17. — Sessilibus, opace nigra, margine nitudulo, subcupulata, 1 cm. lat.; ascis clavatis, stipitatis, parte superiore octosporis; sporidiis distichis, fusoides, hyalinis, triseptatis.

Hab. in radice putri Pinuum prope Bade Czemete Hungariæ.

20. **Scleroderris Syringæ** (Wint.) Sacc. *Cenangium Syringæ* Wint. 2475

Hedw. 1874, p. 57 c. ic. nec Rehm. — Ascomatibus ut in *Tympanide Syringæ* (quam cfr.); ascis octosporis; sporidiis fusoides utrinque rotundatis, $31 \approx 5$, 8-10-guttulato-septatis, chlorino-hyalinis.

Hab. in ramis Syringæ vulgaris in Germania. — An forma octospora *Tymp. Syringæ*? Teste Minks in hac specie adsunt sporidia bilocularia. An species vere diversæ licet habitu simillimo?

II. *Phæoderris* Sacc. Sporidia colorata.

21. **Scleroderris betulina** (Peck) Sacc. *Cenangium betulinum* Peck 2476

35 Rep. p. 143. — Ascomatibus cæspitosis vel subseriatis, rima brevi corticali erumpentibus, primo sphæriæformibus, dein apertis atris, disco plano, tenuiter marginato sæpe mutua pressione irregulari, $170-350 \mu$. diam.; ascis oblongis vel subclavatis, $40 \approx 10$; sporidiis stipatis, oblongis, obtusis, pallide coloratis, triseptatis, $10-12 \approx 4$.

Hab. in cortice emortuo Betulæ populifoliæ, Center Americæ borealis.

22. **Scleroderris pulveracea** (Hazsl.) Sacc. *Pezicula? pulveracea* 2477

Hazsl. Einig. Disc. p. 11, Magyar. szab. Disc. t. II, f. 19. — Gregaria, stromati nigricanti inserta, obconica, atra, intus albida, minuta, disco circulari, subconvexo; ascis clavatis, 4-8-sporis; sporidiis oblongo-cylindræis, $14 \approx 2,5$, triseptatis, episporio crassiusculo brunneo; paraphysibus filiformibus.

Hab. in cortice Betulæ in Hungaria.

23. **Scleroderris acerina** (Peck) Sacc. *Tympanis* Peck 31 Rep. Stat. 2478

Mus. p. 48. — Cupulis subcæspitosis, obconicis, erumpentibus, nigris, margine distincto sæpe flexuoso, disco concavo; ascis oblongo-cylindræis; sporidiis oblongis, $13-20 \mu$. long. intus granulosis denique 4-nucleatis vel 3-septatis coloratis.

Hab. in cortice acerino, Adirondack et Catskill Mount. Amer.