

hyalinis, 18-20 \approx 9, monostichis; paraphysibus filiformibus sursum clavulatis; conidiis sphæricis.

Hab. ad baccas *Vaccinii Myrtilli Sclerotio* infectas in Germania. — Status conidicus in ramulis oritur.

18. **Sclerotinia Vaccinii** Woron. Memoir. Acad. S. Petersb. 1888. — 814

Affinis *Scl. baccarum*: ascomatibus cupulatis brunneis; stipite sæpe prælongo; ascis cylindræis, apice canaliculatis jodoque cœrulescentibus, 8-sporis; paraphysibus septulatis, clavulatis; sporidiis octonis ovoideis, 14-17 \approx 7-9, quatuor paullulo minoribus; conidiis 3-4 \approx 2-2,5, limoniformibus, hyalinis.

Hab. in baccis, *Sclerotio* correptis, *Vaccinii Vitis-idææ* in Fennia. — Status conidicus, *Moniliam* sistens, in ramulis foliisque oritur.

19. **Sclerotinia Oxycocci** Woron. Memoir. Acad. S. Petersb. 1888. — 815

A *Scl. Vaccinii* differt ascomatibus gracilioribus; sporidiis octonis, quatuor conspicue minoribus, 12-14 \approx 6-7; conidiis 2,5-2,8 \approx 2,2.

Hab. in baccis, *Sclerotio* correptis, *Vaccinii Oxycocci* in Fennia. — Status conidicus in ramulis foliisque oritur.

20. **Sclerotinia megalospora** Woron. Memoir. Acad. S. Petersb. 1888. 816

— A *Sclerot. Vaccinii* differt conidiis rotundioribus, 2,4-3 μ . diam.; sporidiis multo majoribus octonis, 20-25 \approx 14-16, omnibus æqualibus, fertilibus.

Hab. in foliis *Vaccinii uliginosi* in Fennia. — Status conidicus in foliis ramulisque oritur.

21. **Sclerotinia gracilipes** (Cooke) Sacc. *Peziza* (Hymenoscypha) *gra-* 817

cilipes Cooke Hedw. 1875, p. 82, Disc. U. S. I, p. 294. — Stipitata, cupulata, submembranacea, delicatula, fuscescens, discoidea, demum convexa 2-3 mm., e *Sclerotio* compresso, rugoso, atro enata; stipite tenuissimo 2-3 cm. long.; sporidiis oblongis 8 \approx 4.

Hab. ad petala decidua New Jersey Amer. bor. (ELLIS). — Affinis *Sclerot. ciborioidi* (*S. Trifoliorum*):

22. **Sclerotinia incondita** Ellis Bull. Torr. Cl. 1881, p. 74 (*Peziza*) 818

Ell. N. Am. F. n. 391. — Solitaria, stipitata, pallide castanea, disco plano vel convexo, 3-6 mm. diam., absque margine distincto; stipite centrali, erecto, brunneolo, circ. 12-13 mm. alto, firmo; ascis cylindræo-clavatis, sessilibus circ. 75 μ . longis, tetrasporis; sporidiis ellipticis v. ovato-ellipticis 10-12,5 \approx 6-7,5 hyalinis.

Hab. inter muscos in paludibus Americæ borealis. — Stipes e *Sclerotio* angusto, cupuliformi, atro exurgens. *Sclerotium* habitu ei *Sclerotiniæ gracilipedis* Cooke simile.

23. **Sclerotinia Tuba** Batsch Elench. p. 122 (*Pez.*) nec *Peziza Tuba* 819
Bolt. Fr. Syst. Myc. II, p. 58, Pers. Myc. Eur. p. 235, *P. perennis* Pers. Syn. p. 644, Michel. t. 86, fig. 10. — Cæspitosa, fulva, cupula infundibuliformi, levi, radice tuberosa nigra perenni.

Hab. in silvis Castaneæ Italiæ, etiam in America boreali (SCHWEINITZ). — Stipite subflexuoso, levi, sursum in cupulam orbicularem 7-8 cm. altam, 3 cm. latam dilatato. Radix perennis est ac tribus plerumque tuberculis constat, quorum medium Pezizas profert, alterum effœtum anni præcedentis, tertium omnium minimum anno sequente fructificat. Hoc ex capite cum bulbis Orchidearum congruit. Michelius in horto coluit.

CIBORIA Fuckel Symb. Mycol. p. 311 [1869] (Etym. *ciborium* ob formam), *Rutstrœmia* Karst. ex parte. — Ascoma longe firmeque sæpe longissime stipitatum, media magnitudine, majusculum, ceraceum, extus glabrum, furfuraceum, apertum, patellæforme, marginatum; disco sæpe discolori. Asci elongati, 8-spori. Sporidia oblongo-ovata, cylindræca lanceolatave, continua, hyalina, rarius appendiculata. Paraphyses variæ. — Plerumque vernaes.

1. **Ciboria pseudotuberosa** Rehm Ascom. n. 106 (1870), Pat. Tab. 378, 820
Sclerotinia Batschiana Zopf (1880) in Zopf et Syd. myc. march. 50 c. icon. *Peziza glandicola* Doass. in Revue myc. n. 10, p. 49, Cfr. Grevillea IV, pl. 65, f. 288. — Gregaria, 2 cm. long., stipitata, stipite tenui, subflexuoso, sicco plerumque longitudinaliter striato, olivaceo, sicca infundibuliformis, subcomplicata, olivaceo-fusca, humida explanata, subpatellæformis, disco livido-fusco, 5-7 mm. diam.; ascis clavatis, 8-sporis, $120 \approx 6-7$; sporidiis obtuse-oblongis vel ovatis, glabris, hyalinis, $8-9 \approx 4-4,5$, continuis, monostichis in superiore asci parte; paraphysibus filiformibus, superne sensim (3 μ .) incrassatis, hyalinis.

Hab. ad cotyledones putridas Quercuum in silvis prope Windsheim Franconiæ bav., in Gallia et Britannia.

2. **Ciboria Juglandis** Preuss Hoyersw. n. 154 (*Peziza*). — Levis, fir- 821
mula, hypocrateriformis, disco ochraceo-fusco, margine integerrimo, dilutiore, extus albido; stipite longo filiformi, deorsum attenuato, nigrescente cum radiculis; ascis cylindricis; sporidiis ovatis albis; paraphysibus simplicibus.

Hab. in nucleis (cotyledonibus) rancidis Juglandium, terra tectis, Hoyerswerda.

3. **Ciboria amentacea** (Balb.) Fuck. Symb. p. 311, *Peziza amenta-* 822

cea Balb. in Act. Taur. II, t. 2, *Pez. julacea* Pers. M. E. I, p. 311, *Rutstroemia ament.* Karst. M. F. I, p. 106. — Cupulis longe stipitatis, circ. 2-3 cm. altis, primo concavis, demum explanatis, extus fuis, disco pallidior, 5 mm. latis; stipite firmo; ascis elongatis, stipitatis, 8-sporis, $150 \approx 6$; sporidiis monostichis, ovatis, continuis, hyalinis, $6 \approx 3$.

Hab. ad amenta masculina Alni glutinosæ et Salicum in Italia, Germania, Fennia, Britannia. — Sec. Phillips sporidia $12 \approx 5,5$, hinc species a *C. Caucæ* ægre distinguitur.

4. **Ciboria Caucæ** (Rebent.) Fuck. Symb. p. 311, *P. amentalis* Schum. 823
Saell. p. 418, *P. Caucæ* Rebent. Neom. p. 386, t. 4, f. 17, Fr. S. M. II, p. 126, Krombh. t. V, f. 37-39, Pat. t. 483. — Pallide fuscescens, cupula vasculiformi, margine erecto, stipite brevi crassiusculo subflexuoso; ascis elongatis, 8-sporis, 130μ . long.; sporidiis oblique monostichis, ovatis, inæquilateralibus, $9 \approx 4$, hyalinis (Fuck.), $10 \approx 6$ (Phill.).

Hab. in amentis dejectis Populi albæ et Tremulæ in Dania, Germania, Britannia, Gallia. — Stipes subinde filiformis, tenuis, typice 5-10 mm. long. Cupula ceracea, 5 mm. lata, exacte vasculiformis, intus fusco-umbrina, extus pallidior, basi subplicata.

5. **Ciboria echinophila** (Bull.) Sacc. F. Ven. Ser. IV, n. 88, F. ital. 824
fig. 1297, *P. echinophila* Bull. Champ. p. 235, t. 500, f. 1, Pers. Myc. Eur. p. 278, Pat. Tab. 84. — Cupula plano-infundibuliformi, dilute cinnamomea; stipite longo dilutiore, primo subtomentoso; ascis cylindræis, $120-140 \approx 12-15$, breve crassiuscule stipitatis, apice abrupte attenuato-truncatis, paraphysibus filiformibus obvallatis, 8-sporis; sporidiis monostichis cylindræis, $18-20 \approx 5$, vehementer curvatis, utrinque obtusis sed initio minute apiculatis, pluriguttulatis dein 1-nucleato-farctis, hyalinis.

Hab. ad involucra putrescentia Castaneæ in Gallia, Helvetia, Britannia, Germania, Italia, Belgio. — Ad *Phialeam* accedit. Stipes longitudine varius, 12-18 mm. circiter. Cupula 2-4 mm. lata, firma.

6. **Ciboria Urnula** Weinm. Hym. Gaster. p. 459. — Solitaria, firmula; 825
ascomate oblongiusculo, obscure fusco, ore contracto, subrevoluto, extus stipiteque elongato pruinoso-villosiusculis.

Hab. semper in fructibus putrescentibus Vaccinii Vitis-Idææ inter cæspites humidos Sphagnorum in Rossia. — Ascoma 3-4 mm. altum, 2-3 mm. latum. Margo primo erectus, dein subrevolutus, integer l. in statu vetusto lacinulatus. Stipes $2\frac{1}{2}-3\frac{1}{2}$

cm. longus, tenuis, æqualis, ut plurimum inter sphagna humida latens. An *Sclerotinia*?

7. **Ciboria rufo-fusca** (Weber.) Sacc. *Pez. rufo-fusca* Web. pag. 7, 826
t. III, fig. 4. — Solitaria vel gregaria, rubescenti-brunnea; ascomatibus ceraceis, cupulato-patellatis, prima ætate sessilibus, dein stipitatis ad 8 mm. latis; stipite tereti, exili, ascoma subæquante; ascis minutis, linearibus, octosporis; sporidiis ellipticis, subinde ovoideis, contentu granuloso foetis, $7,5 \approx 3,7$; paraphysibus filiformibus, superne leniter ampliatis.

Hab. in acubus et squamis Abietis pectinatæ et Abietis excelsæ pr. Landeck Germaniæ.

8. **Ciboria strobilina** (A. S.) Sacc. *P. strobilina* A. et S. Consp. p. 313 827
(ut var. *Scl. tuberosæ*) *Phialea strobilina* Quéf. 10 Suppl. t. IX, f. 8, Gill. Disc. c. ic. (non *Pez. strobilina* Fr.). — Cyathiformis dein expansa undulata, e lacteo bisa v. fuscescens; stipite gracili longo, 1-3 cm. flexuoso, basi attenuato nigricante; sporidiis oblongis, hyalinis, $10-12 \approx 5-6$.

Hab. squamas strobilorum Abietum in Lusatia, Gallia. — Ascoma 1-2 cm. lat.

9. **Ciboria subularis** Bull. champ. pag. 236, t. 500, f. 2 (*Peziza*), *P.* 828
subulipes Pers. Myc. Eur. p. 282, *Pez. Carpinii* Batsch f. 150 (?), *Phialea subularis* Gill. Disc. c. ic. — Lateritia, fragilis, cupula hypocrateriformi, integerrima, stipite longissimo tenui, flexuoso; ascis tereti-clavatis; sporidiis oblongis, 2-guttatis, hyalinis, $17-20 \approx 4-5$; paraphysibus filiformi-clavulatis.

Hab. supra semina semiputrida Helianthi annui et Bidentis tripartitæ in Gallia et Belgio, in fructibus Angelicæ in Anglia. — Ascoma 3-4 mm. lat.; stipes 12-14 mm. long.; specimina anglica extus albida. Similis *Ciboriæ Friesii*, loco et substantia fragili distinguenda.

10. **Ciboria firma** (Pers.) Fuck. Symb. myc. p. 312, Sacc. F. it. p. 1295, 829
P. ochroleuca Bolt. fung. t. 105, f. 1, Sowerb. t. 115, *P. firma* Pers. syn. p. 658, Fr. S. M. II, 117, Pat. Tab. 78, Gonn. et Rab. t. VI, f. 3, *Phialea* Gill. Disc. c. ic., *Rutströmia* Karst. M. T. I, p. 108. — Cupula infundibuliformi, dein dilatata repanda dilute fusca; stipite longo deorsum attenuato nigrescente; ascis elongatis, stipitatis, 8-sporis, $16 \approx 12$; sporidiis elongato-distichis, oblongo-cylindræis, valde curvatis, utrinque rotundato-obtusis, hyalinis, 2-4-guttulatis, $14-16 \approx 4-5$.

Hab. ad ramos dejectos putrescentes in Suecia, Britannia, Bel-

gio, Fennia, Italia, Germania, in America boreali et Tasmania. — Stipes tenax, filiformis, glaber 12-20 mm. circ. longus: Cupula 7-12 mm. et ultra lata, integerrima, subrepanda. Colore variat rarius tota ochroleuca, sæpius extus dilutior, subochroleuca, disco umbrino, olivaceo etc. *P. alutacea* et *stipitum* Schum. Saell. p. 431, colore et statura minore aliquantulum recedunt. — ***C. macrospora** Sacc. F. ital. fig. 1296: ascis majoribus nempe 150 \times 15-16, clavatis, apice obtusatis, paraphysibus filiformibus sursum incrassatis obvallatis, octosporis; sporidiis majoribus, nempe 25-28 \times 7, oblongo-fusoideis, sæpe curvulis, 2-guttatis, hyalinis. In foliis galbulisque putrescentibus Juniperi communis, Conegliano, Ital. bor. (SPEGAZZINI).

11. **Ciboria bolaris** (Batsch) Fuck. Symb. p. 311, *P. bolaris* Batsch. 830
Cont. I, p. 221, f. 155 (f. 144, etiam prope accedit) Fr. S. M. II, p. 112. — Infundibuliformis, cupula hemisphærica, fibrilloso-venosa, subochracea, disco badio, stipite brevi nigrescente; ascis stipitatis, cylindræis, 8-sporis, 208 \times 16; sporidiis primo distichis, demum submonostichis, oblongo-ovatis, hyalinis, distincte scrobiculatis, 20 \times 8, nucleo granuloso, non guttulato (Fuck.).

Hab. ad ramos siccos deciduos *Coryli*, *Carpini*, *Ilicis*, *Humuli*, *Salicis*, in Suecia, Britannia, Germania, Italia. — *Sec. Phill.* sporidia 14-16 \times 4-6, 2-guttata. Ceracea, firma, 4-5 mm. alta et lata, extus e fibrillis rugoso-venosa, dilutior; margine subserato, in siccis inflexo, junior reliquorum more passim subvillosa, mox vero glabrescens. Variat ceterum colore plus minus obscuro et stipitis longitudine. — β . **C. explanata** Holmsk. l. c. p. 35, t. 17, *Pers. Eur.* p. 273: subfusca, disco subrotundo planiusculo, margine denticulato. Junior sessilis, cupulæformis, extus pilis tenuissimis obsita, adulta glabra, subtenuis, 8-10 mm. lata; stipite æquali. Forsan diversa; sed loco omnino convenit cum vulgari.

12. **Ciboria clavipes** Hazsl. *Einig. Disc.* p. 13, tab. III, f. 8. — Cla- 831
viformis, basi incrassata rotundataque, libere inserta, lutea; stipite brunneo-lutescente, diametro ascomatis hemisphærici fere triplo longiori; disco profunde concavo; ascis angustis, clavatis, in stipitem longiusculum, tenuem desinentibus, octosporis; sporidiis primo partem superiorem dein inferiorem asci occupantibus, cylindræis vel clavatis, 16-20 μ . longis, utrinque rotundatis, 3-4-nucleatis.

Hab. in caulibus *Artemisiæ vulgaris*, prope Eperies Hungariæ.

13. **Ciboria fallax** Bomm. et Rouss. Fl. mycol. pag. 135. — Cupula 832
4-5 mm. diam., parum concava dein subplana, extus fibrillis adpressis vestita; disco armeniaco, fracto (ut in Stereis quibusdam) rufescente; stipite 4-5 mm. longo, leniter fibrilloso apiceque ampliato; sporidiis $24 \approx 6$, oblongis, uno polo obtusis, altero subacutis, pluriguttulatis, utrinque appendicula hyalina, ægre visibili, cum sporidio angulum rectum formante instructis.

Hab. ad caules herbaceos et sarmenta Rubi locis udis in Belgio.

14. **Ciboria carniolica** Rehm in Voss Mat. Krains V, p. 226, f. 1, *a-d* 833
et Ascom. n. 903. — Turbinata, stipitata, firma, solitaria vel 2-3 gregaria, disco subplano, fusciscente, pruinoso, margine tenui dilutiore cincto, orbiculari, interdum irregulariter eroso, 1-1.5 mm. diam., stipite flavescente, sicco rugoso, 3 mm. alt., $\frac{1}{4}$ - $\frac{1}{2}$ mm. diam.; ascis subcylindræis, 8-sporis, $50 \approx 5$; sporidiis 2-stichis oblongis, obtusis, rectis, hyalinis, 1-cellularibus, $5-7 \approx 2$; paraphysibus ascos superantibus, filiformibus, apice sensim clavulatis, hyalinis.

Hab. ad radices (*Quercus*?) demersas in silvis prope Laibach Carniolæ. — A *Lachnella pygmaea* satis differre videtur.

15. **Ciboria calopus** (Fr.) *Peziza calopus* Fr. Observ. 2, p. 307, Syst. 834
myc. II, p. 131, *Helotium c.* Fr. S. v. Sc. p. 355, Fuck. Symb. mycol. App. II, p. 62, fig. 36. — Cupulis sparsis, ceraceis, plerumque longe stipitatis sed sæpe sessilibus subturbinatisque, orbicularibus, in stipitem attenuatis, 3-5 mm. latis, primo concavis, demum explanatis, margine obsolete, extus cupulis stipitibusque glabris, amœne roseis, siccis plicatis, disco flavescente-ochraceo, sicco fusco; ascis cylindræis oblique stipitatis, 8-sporis, $144 \approx 16$; sporidiis in asci superiori parte distichis, late fusiforme-ovatis, continuis, biguttulatis, hyalinis, $16-20 \approx 8$; paraphysibus simplicibus, apice vix crassioribus.

Hab. ad stipites, culmos, folia, radices putres in Suecia, Germania et Gallia. — Fungus conidiophorus *Dacriomycetem* exhibens, primo sub foliorum vivorum epidermide nidulans, demum turgidus liberque, versiformis, plerumque elongatus, carnosus, amœne roseus, hyphis niveis cinctus; intus hyphis ramosis contextus; hyphis apice conidiophoris; conidia ovata, paullo breviora quam ascosporæ. Fuck. l. c.

16. **Ciboria ciliatospora** Fuck. Symb. p. 311, t. IV, f. 36, Sacc. et 835
Berl. Misc. Mycol. II, p. 29, t. VIII, f. 8. — Glabra, longissime stipitata, ad 2-3 cm. alta, pallide fusca; cupulis turbinatis in stipitem attenuatis, demum parum ventricosis, ad 4 mm. latis, extus

longitudinaliter striatis, disco concavo, parum obscuriore, margine vix distincto, involuto; ascis elongato-subclavatis, longe stipitatis, 8-sporis, $132 \approx 12$; sporidiis distichis, elongatis, basi oblique obtusis, antice acuminatis, cum ciliis sporidii diametrum æquantibus, hyalinis, 3-4-guttulatis, $24 \approx 6$.

Hab. in caulibus Tanaceti et aliar. plant. in Rhenogovia et Italia bor. — Ascomata (in forma ital.) cum stipite 1 cm. alta, 2-3 mm. lata. Asci paraphysati, deorsum longe attenuati, 100-110 \approx 7-9; sporidia disticha v. oblique 1-sticha, clavato-fusoidea, 22-24 \approx 5-6, deorsum acutiora, utrinque cauda acuta 4 \approx 0,5 aucta. — Var. **minor** S. et B. l. c.: ascomatibus dimidio minoribus; ascis 120 \approx 8-9; sporidiis similibus, sed 20-24 \approx 6-7. In caulibus, Fiumicello agri Patavini.

17. **Ciboria vinosa** Berl. et Sacc. Fung. Ven. Novi p. 14, t. XIII, 836
f. 10. — Ascomatibus majusculis, firmis, lentis, disco latente vinoso, 2-4 mm. lato, extus ruguloso, glauco-roseo; stipite subtili, 7 mm. alto, fusco; ascis clavatis, longe stipitatis, basi noduloso-incrassatulis, apice rotundatis, paraphysibus filiformibus, ramosis cinctis, 65 \approx 7-8; octosporis; sporidiis irregulariter distichis, ovoideo-elongatis, utrinque obtusiusculis, muticis, 7-8 \approx 2,5-3, hyalinis.

Hab. ad stipitem Angiopteridis tasmanianæ in Horto Botanico patavino.

18. **Ciboria chlorophana** (Rouss. et De Not.) Sacc. *Peziza chloro-* 837
phana Rouss. in De Not. Rettif. Discom. pag. 385. — Ascómate coriaceo, breviter stipitato, demum applanato subpeltato, excipulo fibroso; ascis amplis 8-sporis; sporidiis fusoideo-ellipsoideis, utrinque subacutatis, continuis, 1-nucleatis.

Hab. ad ramos Thujæ Melun Galliæ. — «An *Chlorosplenium*».

19. **Ciboria luteo-virescens** Rob. et Desm. XIX, Not. n. 85, *Peziza* 838
pallido-virescens Phill. Grev. VII, p. 24. — Patellata dein convexa, firma, luteo- vel pallide virescens, margine integro, stipite tenui deorsum attenuato, flexuoso, plus minus elongato terraque immerso; ascis cylindraceo-clavatis octosporis; sporidiis ellipsoideis, 15 \approx 5; paraphysibus filiformibus, obtusis granulosis.

Hab. in petiolis Aceris terra infossis in Gallia et Britannia. Ascoma 3-12 mm. lat.; stipes sæpe 2 cm. long., ascoma extus sericeo-tomentellum nec vere glabrum.

20. **Ciboria tabacina** Ell. et Holw. in Arthur Bull. Minn. III, p. 35. — 839
Stipite gracili, plerumque filiformi, leniter sursum ampliato, 0,5-

2,5 cm. longo, e flavescenti-tabacino brunneo, ut ascomatis parte exteriori; ascomate cupulato-patelliformi, 1,5-2,5 mm. diam. subtus subruguloso, margine integro, æquali, vix leniter incurvo; disco concavo, ardosiaco; ascis cylindræis 100-115 \times 9-11; paraphysibus validis flavescensibus, sensim sed leniter superne dilatatis; sporidiis uniseriatis, ellipticis, 9-12 \times 4-5, plerumque grosse uninucleatis, e flavescensibus hyalinis.

Hab. in petiolis putrescentibus ad «Vermilion lake» Amer. bor. — A *C. Sydowiana* Rehm distincta imprimis sporidiis angustioribus.

21. **Ciboria Sydowiana** Rehm in Hedwigia 1885, p. 226. — Asco- 840
matibus sparsis, primitus subglobosis, dein in patellam subcyathoidem, subtus longitudinaliter subrugulosam, pallide fuscam, margine subscabro cinctam dilatatis, 3 mm. long., stipitatis, 3-4 mm. diam. sicca margine involuto, fuscidule parenchymatico-contextis; ascis cylindræis, apice incrassatis, 8-sporis, 110 \times 8; sporidiis 1-stichis, ovatis vel elliptico-clavatis, plerumque subcurvatis, 1-cellularibus nucleis magnis 1-2 (rarissime 3) præditis, hyalinis, 10-12 \times 5-7; paraphysibus hyalinis, filiformibus, haud vel elliptico-clavatis, 3 μ . crass.

Hab. ad pedunculos foliorum putridorum *Quercus pedunculatæ*, Thiergarten prope Berlin (SYDOW). — Teste Phill. Disc. p. 143 ab hac non differt *Phialea renispora* (Ellis).

22. **Ciboria renispora** (Ellis) Sacc. *Helotium renisporum* Ellis in 841
Cooke Disc. U. S. I, p. 299. — Ascomate stipitato, 1-2 mm. lato, convexo, dein plano (sicco concavo) pallide cinnamomeo vel brunneo-flavido; stipite æquali, gracili, deorsum atrato, 3-6 mm. longo; ascis subcylindricis; sporidiis reniformibus, 20 μ . longis.

Hab. in foliis dejectis putridis, New Jersey Amer. bor. — Species britannica in foliis quercinis (Phill. Disc. p. 143) sporidiis 10 \times 5, ascomate fimbriato videtur diversa.

23. **Ciboria nyssogena** (Ellis) Sacc. *Helotium nyssogenum* Ellis Torr. 842
Cl. 1881, p. 73. — Ascomate stipitato, brunneo, concavo, 5-6 mm. vel minus lato, margine pallido, obtuso; stipite 2,5-5 cm. longo, plerumque flexuoso, 1 mm. crasso; ascis cylindricis, 47 \times 3-4; paraphysibus linearibus, obtusiusculis, æqualibus; sporidiis monostichis, ellipsoideis, hyalinis, 10-12 \times 5.

Hab. in nucibus vetustis *Nyssæ multifloræ* limo infossis et in foliis putridis in uliginosis, New Jersey Amer. bor.

24. **Ciboria Friesii** Pers. M. E. I, p. 277 (*Peziza*), *Peziza ciborioi* 843

des Fr. Obs. II, p. 307, non Auctorum. — Cupula infundibuliformi, levi obscure rufescente, stipite longissimo capillari, spadiceo.

Hab. ad culmos in uliginosis in Suecia, in foliis *Quercus* in Britannia (?) et ad ramos in Amer. bor. (?). — Gregaria, tenera, sed tenax. Stipes 2-3 cm. fere, subflexuosus; cupula 1 mm. lata, demum subcrenulata.

25. **Ciboria tenella** Karst. Fragm. mycol. XXII, p. 124 (ut subsp. *C.* 844 *Friesii*). — Stipitata, pallescens vel lutescens, siccitate in rufum leniter vergens, plano-infundibuliformis, stipite flexuoso, usque ad 3 cm. longo; ascis subcylindræis 60-66 \approx 6; sporidiis monostichis, eguttulatis, oblongatis, rectis, 6-8 \approx 2-3.

Hab. in calamis putrescentibus *Caricum* ad Mustiala Fenniæ.

26. **Ciboria tremellosa** Fuck. Symb. mycol. p. 312. — Sparsa fasci- 845 culatave, longe stipitata, ad 2-3 cm. alta, diaphana; stipite crasso, distincte ruguloso, fusco, diaphano; cupulis 4 mm. latis, applanatis, demum revolutis, margine non elevato sed paullo obscuriore, disco atro-fusco, levi; ascis sessilibus, oblongis, 8-sporis, 100 \approx 8; sporidiis distichis, oblongo-lanceolatis, inæquilateralibus, minute guttulatis, hyalinis, 16 \approx 4; paraphysibus elongato-clavatis, fuscis, apice obscurioribus.

Hab. in ligno udo putri *Quercus*, rarius pr. Eberbach Rhe-nogoviæ.

27. **Ciboria macilenta** Karst. M. F. I, p. 108 (*Rutstroemia*). — Sparsa, 846 stipitata, pallida; cupula convexa, subtus concava, sat tenui, 1,5 mm. lat., stipite filiformi, æquali, circiter 2 mm. alt.; ascis cylindræis 110-130 \approx 7-8, obturaculo minutissimo jodo levissime cærulescente; sporidiis monostichis, ellipsoideis vel oblongato-ellipsoideis simplicibus, vulgo eguttulatis, rectis, 11-14 \approx 5-6; paraphysibus circiter 2 μ . cr. apicem versus leniter incrassatis.

Hab. ad terram vasorum floralium, Mustiala Fenniæ. — Ascomatis forma prædistincta. Serius a cl. Auctore ad *Helotium* relata.

28. **Ciboria gracilipes** Karst. Symb. Myc. Fenn. III, p. 56 (*Rutstræ-* 847 *mia* Rev. monogr. p. 126 (*Helot.*)). — Sparsa, stipitata, glabra; cupula concava, sicca convexa, alutacea vel rufescente, 3 mm. lat.; stipite deorsum attenuato, subflexuoso, pallidiore, gracillimo, maxima parte terræ immerso, 1 cm. alt.; ascis cylindræis, apice jodo dilute cærulescentibus, 120 \approx 11-12 (parte sporif.); sporidiis monostichis, ellipsoideis vel sphæroideo-ellipsoideis, guttulis duabus, apicalibus, exiguis præditis, hyalinis, 14-20 \approx 9-11; paraphysibus filiformibus, gracilibus.

Hab. in terra humosa prope Mustiala Fenniæ. — Cum *C. macilenta* comparanda, sed sporidiis majoribus, colore alutaceo etc. mox distincta.

PITYA Fuckel Symb. mycol. p. 317 [1869] (Etym. *pitys* pinus, hinc non *Pithya*). — Ascoma media magnitudine, ceraceum, primo teres, demum explanatum, in stipitem crassum brevem attenuatum, basi albicante fibrillosa, ceterum subglabrum, margine acuto vix distincto, disco colorato. Asci longissimi, cylindranei, 8-spori. Sporidia monosticha, perfecte globosa, simplicia, subhyalina; paraphyses filiformes, clavatæ. — Autumnales, substantia fere *Helotii*, sed fructificatio *Barlææ*.

1. **Pitya vulgaris** Fuck. Symb. p. 317, *Pez. pitya* Pers. ic. et descr. 818 2, p. 43, t. 11, f. 2, Nees Syst. f. 287, Fr. S. M. II, p. 155, *Pez. Leineri* Raben. et Gonn. t. V, f. 6, Weberb. t. III, f. 2. — Cupula planiuscula extus stipiteque brevi villosis, pallidis, disco aurantio-rubro; ascis longissimis, elongatis, $232 \approx 12$, in superiore parte 8-sporis; sporidiis monostichis, globosis, nucleo hyalino, episporio lutescente, crasso, 12 μ . diam.

Hab. in caudicibus, ramis acubusque languidis emortuisve *Abietis pectinatæ* nec alibi, in Germania, Gallia, Helvetia, in cortice *Sequojæ sempervirentis* in Amer. bor. — Discus in adultis concaviusculus, rugosus. Gregaria, majuscula, firma, ceraceo-crasiuscula, 5-12 mm. lata et ultra, margine obtuso non prominente, subtus pallidior, demum fere glabra. Variat stipite brevior, disco demum dilute flavo subumbilicato etc.

2. **Pitya Cupressi** (Batsch) Fuck. Symb. p. 317, *P. Cupressi* Batsch 849 Elench. p. 119, *P. cupressina* Fr. Syst. Myc. II, p. 135, De Seyn. Veg. inf. III, t. III, *Fungoides aureum et omnium minimum turbinatum et vix cavum* Mich. gen. p. 207, t. 86, f. 20. — Cupulis carnosio-ceraceis integerrimis flavo-rufescentibus, primo claviformibus, dein hemisphæricis; stipite brevi crasso; ascis longissimis, cylindraneis, 8-sporis, $68 \approx 8$ (parte sporifer.); sporidiis in asci superiori parte monostichis, perfecte globosis, 8-10 μ . diam., nucleo hyalino, episporio levi dilutissime rubello; paraphysibus tereti-clavulatis.

Hab. ad folia *Cupressi* et *Juniperi Sabinæ* et *virginianæ* in Italia, Germania, Belgio, Britannia, Fennia, Suecia; in foliis *Sequojæ sempervirentis* in Amer. bor. — Gregaria, pusilla,

turbinata, aurea, substantia crassiuscula. Stipes primo villo ejusdem indolis ac in *P. vulgari* obductus.

3. **Pitya thujina** Peck 26 Rep. p. 82 (*Helot.*). — Ascomatibus glabris, subsessilibus, concavis v. subplanis, aurantiacis, extus paullo pallidioribus; sporidiis globosis, 7-8 μ . diam. 850

Hab. in ramulis dejectis Thujæ occidentalis, Lowville Am. bor. — *Pityæ cupressinæ* peraffinis.

4. **Pitya fascicularis** (B. et Br.) Sacc. *Helot. fasciculare* B. et Br. 851
Fung. of Ceyl. n. 958. — Fascicularis, obconico-stipitata, pallida; hymenio convexo; ascis linearibus; sporidiis subglobosis 7-8 μ . diam.

Hab. ad cortices, Peradenya Ceylon.

HELOTIUM Fr. Summa Veg. p. 354 ex p. (1849) [Etym. *helos* clavus]. — Ascoma ceraceum, crassiusculum, disco subplano initio punctiformi dein dilatato, semper aperto, breve crasse stipitatum v. subsessile, glabrum v. pruinatum, plerumque læticolor. Asci fusoidi v. cylindranei, 8-spori, rarius oligospori, filiformi-paraphysati. Sporidia ovoidea, oblonga, fusoidia, teretiuscula, continua, subinde spurie partita, hyalina. — Genus vastum, per formas intermedias ad plura transiens, hinc ægre limitandum et sec. varios auctores varie sumptum. A typo Karstenii [Rev. monogr.] seposui *Phialeam*, *Cyathiculam*, *Pezizellam* et *Pseudohelotium*, sed plurimæ species ambiguæ, quæ sub variis generibus sunt inquirendæ.

Subhelotium (1-168) extus glabrum

A. Stipitata v. substipitata. (1-118)

I. Disco albo, pallido. (1-33)

1. **Helotium fagineum** (Pers.) Fr. Summa p. 356, *Pez. faginea* Pers. 852
M. E. I, p. 296, Fr. Syst. Myc. II, pag. 136, *Elv. fungif.* Scop. ann. IV, p. 150, t. 2, f. 8. — Minutum; cupula planiuscula, albida; stipite brevi crasso; ascis ovato-oblongis, subsessilibus, 8-sporis, 60-70 \approx 8; sporidiis subdistichis, ovato-oblongis, utrinque parum attenuatis rotundatisque, hyalinis, continuis, 10-12 \approx 4-5.

Hab. ad pericarpia sicca faginea, locis umbrosis dejecta, copiose in Suecia, Britannia, Germania, Belgio, Gallia. — Gregarium 1-2 mm. latum, glabrum, pallescens.

2. **Helotium Neesii** (Saut.) Sacc. *Pez. Neesii* Saut. Salz. pag. 9. — 853
Pusillum, ceraceo-aquosum, niveum, ascomate turbinato; stipite brevissimo æquali.

Hab. in pagina inf. filiorum putrescentibus prope Mittersill Salzburg. — Affine dicitur *H. phascoidi*.

3. **Helotium naviculisporum** Ellis in Cooke Disc. U. S. I, p. 299, et 854
Bull. Torr. 1874, p. 46. — Albidum, dein ochraceum, stipitatum,
disco plano-convexo, circ. 1 mm., paullo obscuriore; ascis latis;
sporidiis navicularibus, 25 μ . longis, spurie septatis, granulosis.

Hab. in foliis aqua diu immersis, New Jersey Amer. bor. —
Stipes 1 mm. long.

4. **Helotium conformatum** Karst. M. F. I, p. 124. — Sparsum v. gre- 855
garium, stipitatum, pallidum; cupula plana, latit. circiter 2 mm.;
stipite solido, pallido, deorsum interdum fuscescente, breviusculo;
ascis cylindraceo-clavatis, 80-125 \times 6-9, obturaculo jodo obsolete
cœrulescente; sporidiis monostichis, oblongatis vel subellipsoideis
eguttulatis, 6-12 \times 3,5-6; paraphysibus 1,3 μ . cr. sursum leviter
incrassatulis.

Hab. ad folia Alni putrescentia in par. Tammela, Fennia et
Somerset East Africæ aust. (MAC OWAN). — Extus *H. epiphyll*
sat simile, internis vero partibus magis cum *H. uliginoso* convenit.

5. **Helotium palustre** Peck 32 Rep. p. 48. — Stipitatum, planum v. 856
leviter convexum, pallidum vel albidum; stipite 6-12 mm. long.,
basi leniter incrassato; ascis subclavatis; sporidiis oblongis, 10-12
 μ . longis.

Hab. ad folia dejecta in uliginosis, Sandlake Amer. bor. —
Ascoma siccando atro-rufo-brunneum seu castaneum; stipes pro-
portione ascomatis elongatus.

6. **Helotium chioneum** Fr. Summa pag. 356, Fuck. Symb. App. II, 857
pag. 63, *P. chionea* Fr. Syst. Myc. II, pag. 132. — Ascomati-
bus exiguis ceraceo-eburneis, hyalinis albidis, primum obovatis, e
basi stipite brevissimo suffulta in cupulam tenuem concaviusculam
tenuiter inflexoque marginatam concolorem dilatatis; ascis elon-
gato-clavatis, 8-sporis, 60 \times 6; sporidiis in asci superiori parte
conglobatis, cylindraceis, continuis, hyalinis, 8 \times 2; paraphysibus
filiformibus, multiguttulatis.

Hab. ad folia pinea et conos humi jacentes passim in Sue-
cia, Germania. — Affine *H. herbarum* sed distincte stipitatum,
ascoma regulare, concavum, tenuius.

7. **Helotium abacinum** (Fr.) Karst. M. F. I, p. 132, *P. abacina* Fr. 858
Syst. Myc. II, pag. 139, *Ombrophila abacina* Fr. Summa Veg.
pag. 357. — Tremelloso-molle, minutum, aquose luteolum, cupula
plano-convexa; stipite brevi crasso; ascis cylindraceo-clavatis, 50-
60 \times 4-5, filiformi-paraphysatis; sporidiis fusoideo-elongatis, 6-8
 \times 1,5-2.

Hab. ad folia dejecta Pinuum in Suecia, Fennia et Gallia. — Gregarium, 2-3 mm. habitu fere *Sclerotii complanati*. Stipes firmus, scabriusculus, sursum levissime attenuatus, basi sæpe obscurior; capitulum pileiforme, pallidius, 2-3 mm. latum, passim irregulare et subtus excavatum. Ascoma, sec. Karst., album, 1 mm. lat. Species Queletii sporidiis 20 μ . long., 4-guttatis aliena.

8. **Helotium tenerrimum** Fr. Summa p. 355, *P. tenerrima* Fr. Syst. 859 Myc. II, p. 128. — Minimum, punctiforme, albidum, cupula membranacea turbinata irregulari, stipite brevi.

Hab. ad folia madida Pini silvestris in Suecia. — Nudo oculo puncta minima refert; cupula irregulari. Stipes tenuis, cupulæ diametro vix brevior, cum cupula glaberrimus.

9. **Helotium Huebnerianum** (Rabenh.) Sacc. *Peziza Huebneriana* Ra- 860 benh. D. C. Fl. p. 343, n. 2631, *Helotium rufescens* Ficinus Fl. Dresd. II, XXI. — Sparsum v. cæspitosum, albo-lacteum, siccum brunneo-rufum, ad 7-8 mm. altum, convexum deorsum applanatum, stipite dilute flavo, superne attenuato.

Hab. in foliis Glyceriæ fluitantis in agro dresdensi Germaniæ (HUEBNER).

10. **Helotium phormium** Cooke Grev. VIII, p. 63. — Erumpens, pal- 861 lidum, stipitatum; cupulis clavatis, dein plano-concavis, 0-5 mm. lat. difformibus; stipite amplo, deorsum attenuato; ascis clavatis; sporidiis subclavatis, utrinque rotundatis, nucleatis, curvulis 30-35 \approx 5.

Hab. in Phormio tenace, Maungaroa Novæ Zelandiæ.

11. **Helotium album** Schum. Saell. 2, p. 412, Fr. Syst. Myc. II, p. 157. 862 — Album, minutum, tenue, capitulo plano-convexo, stipite brevi crassiusculo; ascis elongato-clavatis, stipitatis, 8-sporis, 60 μ . long.; sporidiis ovato-clavatis, 6 \approx 4 hyalinis, (FUCKEL).

Hab. in foliis subputridis graminum in Saellandia (SCHUM.), in foliis putridis Airæ cæspitosæ pr. Æstrich Rhenogoviæ. — A *P. culmigena* certe distinguitur forma et substantia firmiore alba. Gregarium, 2 mm. altum. Stipes deorsum angustatus; capitulum primo planum, dein umbonatum, demum subhemisphæricum (ex icone obtuse conicum) margine acuto subrepando.

12. **Helotium cruentatum** Karst. M. F. I, p. 139. — Sparsum, sti- 863 pitatum, album v. albidum; cupula planiuscula, disco albo vel albedo, trito luteo, dein sanguineo v. subaurantiaco, sicco expallente, 0,6 mm. lat.; stipite brevi æquali; ascis cylindraceo-clavatis, 50

≈ 5; sporidiis fusoido-elongatis, rectis v. subrectis, guttulatissi 8-16 ≈ 1-2.

Hab. in culmis Dactylidis glomeratæ emortuis in Mustiala Fennia.

13. **Helotium perpusillum** Desm. 10 Not. p. 36. — Sparsum, minutissimum, aquose album, glabrum, siccum rubescens, capitulo hemisphærico; stipite capillari elongato; ascis..... 864

Hab. ad folia arida graminum pr. Caen in Gallia (ROBERGE).

— Ascoma $\frac{1}{3}$ mm. lat; totus fungillus 1 mm. alt. An *Phialea*?

14. **Helotium Sphagnum** Cr. Finist. p. 47, t. ult. f. 7. — Ascomate 865
pedicellato vel turbinato, albido, glabro, convexo vel subconcavo. 1-2 mm.; ascis majusculis, subcylindricis, octosporis; sporidiis fusoido-oblongatis, granulosis; paraphysibus filiformibus, apice piformi-inflatis.

Hab. ad Sphagna in paludibus Finistère Gallia. — Excipulum prosenchymaticum.

15. **Helotium bryogenum** Peck 30 Rep. Stat Mus. Bot. pag. 61. — 866
Minutum, substipitatum, sparsum, madore pallidum vel flavido-albidum et expansum, siccum livido-rufum v. subviolaceum, concavum tumideque marginatum; sporidiis subfusoidis, sæpe curvulis, 15-18 μ . longis,

Hab. ad muscos e. g. *Hypnum delicatulum*, Maryland America borealis.

16. **Helotium procerum** Karst. M. F. I, p. 130. — Subgregarium, sti- 867
pitatum; cupula convexa, lutescenti-albida v. albida, lat. circiter 1 mm.; stipite pallido, alt. 4-5 mm.; ascis cylindræo-clavatis, 60-70 ≈ 7, obturaculo minutissimo, jodo leviter cœrulescente; sporidiis elongatis vel fusoido-elongatis, subrectis, eguttulatis, 8-16 μ . long.; paraphysibus sat parcis, gracillimis, sursum leviter incrassatulis.

Hab. supra muscos sæpe irrigatos in Fennia, ad folia emortua Sphagni acutifolii in silva Cansiglio Ital. bor.

17. **Helotium geogenum** Cooke Grev. VI pag. 65. — Candidum; cu- 868
pulis obconicis in stipitem abbreviatum productis, hymenio planoconvexo, 2-3 mm. diam.; sporidiis fusiformibus, 25-35 ≈ 5-7; paraphysibus attenuatis, linearibus.

Hab. ad terram, fragmentis ligneis verisimiliter adfixum, in silvis pr. Paris Gallia.

18. **Helotium vaccinum** (Schum.) Fr. Summa pag. 355, *P. vaccinea* 869
Schum. Sael. p. 430, Fr. Syst. Myc. II, p. 126, Dan. t. 1971, f. 1,

P. membranac. bovina Pers. Myc. Eur. p. 299. — Subcæspitosum, pallidum, primo planum, convexiusculum, dein umbilicatum, margine acuto repando, stipite demum elongato.

Hab. in stercore vaccino, locis umbrosis, rarius in Saellandia. — Minus, primo sessile, dein stipite 4-6 mm. longo, cylindrico, apice dilatato. Cupula 2-4 mm. lata.

19. **Helotium politum** Phill. Disc. p. 155. — Substipitatum, planum v. subconca- 870
vum, glabrum, album; margine plano obtuso; stipite brevi, sursum in cupulam incrassato; ascis cylindraceo-clavatis; sporidiis ellipsoideis, subacutis, 10-13 \times 4-5.

Hab. in radicibus plantarum adhuc fere infossis prope Shrewsbury Britannia. — Ascoma 0,5-2 mm. lat. Udum nitens.

20. **Helotium albumineum** C. et Peck 26 Rep. pag. 81. — Ascomate 871
molli, orbiculari vel contorto, mox subplano, albido dein pallido, sicco centro depresso, margine elevato; stipite crassiusculo brevissimo, concolore; ascis cylindraceis; sporidiis allantoideis, 7-8 μ . longis.

Hab. ad ramos decorticatos, North Greenbush Amer. bor. — Albumen nucis Cocöes colore et contextu imitatur. Ascoma are- scendo fissum.

21. **Helotium insititium** Karst. M. F. I, p. 124. — Solitarium, raro 872
cæspitosum, erumpens, obconicum, basi substipitato-constrictum, pallescens v. testaceo-pallidum, siccum sordide pallescens, margine subcrenulato, disco concaviusculo, pallido, 2 mm. lat.; ascis cylindraceo-clavatis, 95-110 \times 9-10, obturaculo jodo dilute cærulescente; sporidiis vulgo oblique monostichis, ellipsoideo-oblongatis v. oblongatis, utroque apice aliquantulum angustatis, 1-2-guttulatis, 11-16 \times 4-6; paraphysibus filiformi-clavulatis.

Hab. in ramulis Aceris campestris siccis in Mustiala Fennia. — Habitu nonnihil accedit hæc species ad *H. epiphyllum*, a quo præsertim forma, colore et magnitudine sporidiorum recedit. Omissa, ut videtur, in auctoris Revis. monogr.

22. **Helotium parile** Karst. M. F. I, p. 115. — Sparsum vel grega- 873
rium, stipitatum, albidum; cupula concava vel planiuscula, sicca dilute lutea vel subflava, 0,5-0,8 mm. lat.; stipite gracili æquali, 0,5-1 mm. alt.; ascis cylindraceo-clavatis, numerosis, 75-100 \times 5, obturaculo minutissimo vix v. obsoletissime jodo cærulescente; sporidiis fusoido-elongatis v. fusoido-filiformibus, guttulis 4 majusculis fœtis v. spurie tenuiter 3-septatis, rectis v. curvulis, 6-11 \times 1,5-2; paraphysibus raris gracilibus.

Hab. ad ramulos *Betulæ* vetustos in par. Messuby Fennicæ. —

H. pallescenti affine, sed cupula adhuc minore, stipite longiori et sporidiis minoribus diversum. — ***languidum** Karst. M. F. I, p. 115: gregarium, stipitatum, album v. albidum; cupula convexiuscula v. subplana, sicca concaviuscula et lutescente 0,3-0,8 mm. lat., stipite subæquali 0,3 mm., ascis cylindræo-clavatis, apice jodo non cœrulescentibus, 52-62 \approx 4,5, sporidiis oblique monostichis, fusoido-oblongatis, 2-guttulatis v. spurie tenuiter uniseptatis, 4-7 \approx 2; paraphysibus gracilibus. Ad lignum et corticem ramulorum *Betulæ*, *Alni* et *Rubi idæi* exsiccatorum in Fennia australi, passim. Sporidia recta; margo interdum tenuissime puberulus v. subtiliter ciliatulus. Variat cæspitosum, stipite brevissimo.

23. **Helotium pallidulum** Sacc. Fung. Ven. Ser. IV, n. 92, F. ital. 874

fig. 1327. — Cupulis ceraceo-mollibus gregariis, mediocribus, $\frac{3}{4}$ -1 $\frac{1}{4}$ mm. alt., patellaribus, breve crassiuscule stipitatis, totis cereo-albidis, disco primitus concavo dein planiusculo, marginato, ex ascis paraphysibusque velutino, circulari seniove repando; ascis cylindræis basi longiuscule attenuatis, 90-100 \approx 5; paraphysibus filiformibus obvallatis, 8-sporis; sporidiis distichis anguste cylindræo-fusoides, 12-15 \approx 2 $\frac{1}{2}$, curvulis, utrinque 1-guttulatis, hyalinis.

Hab. in ramis decorticatis putrescentibus fagineis in silva Cansiglio (Treviso) Ital. bor. — Peraffine *Hel. pallescenti* (Pers.) Fr. ex descript. Karst. Myc. Fenn. I, 114, non Fuckelii (sub *Niptera pallescenti*) Symb. myc. App. I, 46.

24. **Helotium sessile** Schum. Saell. II, pag. 415, Pers. M. E. I, 875

pag. 345, *Pez. helotioides* Fr. Syst. Myc. II, pag. 135, Fl. Dan. t. 1855, f. 3. — Pusillum, pallidum; cupula plano-convexa; disco dilute umbrino vel subochraceo, convexo, stipite brevissimo, basi umbrino-badio; ascis clavatis; sporidiis oblongo-fusoides, 2-pluri-nucleatis.

Hab. in ramis dejectis subputridis in Saellandia et Britannia. — Subcæspitosum, stipite sursum dilatato in cupulam abeunte, cupula 1 mm. haud lata. Caro concolor.

25. **Helotium nigripes** (Pers.) Fr. Summa p. 356, *Peziza* Pers. Syn. 876

p. 661, Fr. Syst. Myc. II, p. 132. — Dilute pallens glabrum; cupula plano-concava marginata, stipite longiusculo nigrescente; sporidiis oblongis, 5 \approx 1,2.

Hab. ad truncos et folia putrida in Suecia et Dania etiam in America boreali, Cuba (var. *alba*) et Tasmania. — β . **cellare** A. S. Lus. p. 132, cupula plana subdifformi sordide lutescente. — γ . **sub-**

tile Fr. l. c., cupula minima, plana, flava, stipite æquali nigro, 1 mm. alt. In conis abiignis in Suecia.

26. **Helotium miserum** B. et C. Cub. Fung. n. 698. — Minutum, albidum, claviforme; stipite brevi; hymenio subgloboso; ascis clavatis; sporidiis subclavatis, endochromate demum quadripartito, 12 μ . longis. 877

Hab. in corticibus muscosis in ins. Cuba.

27. **Helotium imberbe** (Bull.) Fr. Summa p. 356, *P. imberbis* Bull. 878
Champ. p. 245, t. 467, fig. 2, Fr. Syst. Myc. II, p. 136, *P. nivea*
Batsch. El. pag. 117, f. 59 (forma sessilis). — Carnoso-ceraceum, glabrum, album; cupulis plano-concavis, subflexuosis; stipite papillæformi; ascis anguste elongato-clavatis, longe stipitatis, 8-sporis, 76 \approx 7; sporidiis cylindræcis, rectis, 8 \approx 2, hyalinis.

Hab. ad ligna et ramos salicinos, alneos in Gallia, Germania, Britannia. — Habitus *H. lenticularis* sed totum album, demum planum etiam irregulare. De Candolle Fl. Fr. II, p. 81, *H. imberbis* varietatem cineream etiam notat.

28. **Helotium pallescens** (Pers.) Fr. Summa Veg. p. 355, *P. lenticularis* 879
Hoffm. Fl. germ. Crypt. t. 13 nec Bull., P. pallescens Pers.
Obs. 35, Syn. 664, Myc. Eur. p. 294, Fr. Syst. Myc. II, p. 132.
— Confertum, glabrum, dilute flavum v. albido-pallescens; cupula concava; stipite brevi crassiusculo pallido; ascis cylindræceo-clavatis; sporidiis ellipsoideis v. oblongis, 8-11 \approx 2-3, 2-guttatis simulateque 1-septatis, hyalinis.

Hab. ad truncos vetustos, sed rarius in Suecia, Germania, Fennia, Britannia, Belgio, Amer. bor., Ceylon, Tasmania, Nova Zelandia. — Ascii, sec. Fuck., 64 \approx 8; sporidia 8 \approx 4. Revera ab *H. citrino* differt, sed characteres difficiles. Minus, substantia tenuior, discus semper concavus, margo subtumidus regularis, stipes brevior; variat tamen et elongatum (*P. elongata* Schum. Saell. p. 429, h. l.).

29. **Helotium hypocrita** Hazsl. Köggomb. p. 4, t. I, fig. 1. — Gregarium, 880
majusculum, 1 cm. altum, stipitatum, album; stipite cylindrico, basi subbulboso, albo, basi griseo-fuligineo; ascomate plano-infundibuliformi, extus striatulo, margine inflexo, disco subumbilicato, griseo-fuligineo; ascis cylindræcis noduloso-substipitatis, obtusis; sporidiis octonis, ovideis, continuis, initio quaternatim plasmate obvolutis.

Hab. ad ligna pr. Eperies Hungariæ. — Cfr. Hazsl. Einig. Disc. p. 15, ubi ad *Pez. Tubam* Bolt. refertur.

- 30 **Helotium antarcticum** Speg. F. Fueg. n. 326. — Sparsum v. laxe 881
gregarium, turbinato-calyciforme, 2-2,5 mm. diam., firmum, tenacellum, crassiusculum, extus ex albo fulvescens, intus pallescens, margine acuto integerrimo glabrum, basi in pedicellum breviusculum crassiusculum cylindraceo-conoideum, 1-1,5 mm. long., 300-500 μ . crass. sæpe basi connato-confluens candidum productum; ascis cylindraceis, antice obtuse rotundatis, postice attenuato-pedicellatis, 180-200 \simeq 8 octosporis, dense paraphysatis, iodi ope immutatis; sporidiis recte v. oblique monostichis, ellipticis v. subfusoides, utrinque acutatis, 14-15 \simeq 6, non vel biguttulatis, hyalinis, continuis.

Hab. ad truncos decorticatos putrescentes Fagi betuloidis in silvis in Staten island Fuegiæ. — Species formula, tenacella, habitu fere *Ciboriæ firmæ*, a genere nonnihil desciscens.

31. **Helotium aciculare** (Bull.) Pers. Syn. pag. 677, Pat. Tab. anal. 882
f. 288, *Pez. acicularis* Fr. Syst. Myc. II, p. 156, *Helotium agariciforme* DC. gall. II. 75, *Leotia acicularis* Pers. obs. II, 20, t. 5, fig. 1, *Helvella agariciformis* Bolt. Sowerb., *Helvella acicularis* Bull. t. 473, f. 1. — Ascomatibus gregariis glabris candidis, dein pallentibus v. rufescentibus, stipite elongato æquali tenui discum primum utrinque planum dein convexum, subtus marginibus reflexis concaviusculum sustentibus; ascis clavatis, octosporis; sporidiis distichis breve fusoides, continuis, 10-12 \simeq 3-4 (ex icone Pat.); paraphysibus bacillari-clavulatis.

Hab. in truncis cavis *Quercus*, rarius *Robinia*, in Suecia, Britannia, Germania, Gallia, Belgio, Amer. bor. — Gregarium tenax diu persistens, colore candido dein pallido demum cinerescente v. rufescente. Stipes 10 mm. longus, tenuis, firmus, passim curvatus et ramosus; capitulum primo utrinque planum v. centro leviter excavatum, demum vero convexum, subtus concavum, 2-4 mm. latum. Sec. auctores nonnullos sistit formam tenellam *Cudoniellæ Queletii*. — β . **abietinum** Fr. l. c. Alb. et Schw. l. c. *Helotium elongatum* Schum., ascom. minoribus pallidioribus.

32. **Helotium herbarum** (Pers.) Fr. Summa pag. 356, Karst. M. F. I, 883
pag. 117, *Pez. herbarum* Pers. Syn. pag. 664, Fr. Syst. Myc. II, p. 136. — Carnoso-ceraceum, glabrum, album; cupulis plano-convexis adpressis; stipite brevissimo; ascis elongato-clavatis, stipitatis, 8-sporis, 60-75 \simeq 7-8; sporidiis subdistichis, oblongis, parum curvatis, hyalinis, continuis, 10-14 \simeq 2, 2-3-guttatis, subinde simulate septatis.

Hab. ad caules *Urticæ dioicæ*, *Solidaginum*, *Brassicæ*, *Scrophulariæ*, *Senecionum* in Suecia, Fennia, Britannia, Germania, Gallia, Italia, Belgio, Amer. bor., Fuegia. — Huc forte spectat *Peziza Ebuli* Ces. in Klotzsch H. M. n. 1424. — Stipes tenuis v. subnullus; cupula 2 mm. lata et ultra, integerrima, demum subinde rufescens, sæpius immarginata.

33. **Helotium herbicolum** Karst. M. F. I, p. 118, Rehm Ascom. Lojk. 884
n. 15, *Pez. Rubi* Lasch var. *herbicola* Rab. Fung. eur. ed. II, 218. — *H. herbarum* affine, sed differt cupula tenuiore, latiore; margine sæpe repando-flexuoso, colore lætiore (siccò fulvescente testaceo); stipite verruciformi; sporidiis cylindræis, guttulis 2-6 præditis v. spurie tenuiter 1-3-septatis.

Hab. ad caules herbarum variarum, præcipue *Hyperici* et *Umbelliferarum* in Fennia, Germania, Hungaria. — Formis intermediis cum *H. herbarum* conjunctum. Habitu quoque interdum refert *H. discreti* formas brevissime stipitatas, sed colore cupulæ sporidiisque majoribus mox distinctum. Sec. Rehm l. c. asci filiformi-paraphysati; sporidia fusoideo-elongata, 9-12 \approx 1,5, 4-guttulata.

II. Disco rubente, roseo, incarnato, lilacino. (34-43)

34. **Helotium kermesinum** Fr. Summa p. 356, Karst. M. F. I, p. 123, 885
Pez. Girgensohni Dietr. Arch. Liv. Ehstl. 1856, p. 368, *Pez. geminella* Nyl. Obs. Pez. p. 47. — Ferrugineo-rubrum v. subcinabarinum; cupula plana, marginata, circ. 1 mm. lat.; stipite brevi crassulo v. demum brevissimo; ascis 60 \approx 7, obturaculo apicali jodo leviter cærulescente; sporidiis binis, oblongatis v. ellipsoideis, 11-12 \approx 4.

Hab. supra folia *Betulæ* putrescentia ad Onegam lacum Fennia et in Suecia et Germania.

35. **Helotium fraternum** Peck Bull. N. Y. St. Mus. n. 2, p. 21, t. I, 886
f. 12-14. — Ascomate minuto, stipitato, 1-2 mm. lato; disco plano v. concaviusculo pallido v. flavo-rubescente, demum magis concavo et saturatius colorato (in sicco); stipite 1-2 mm. longo; ascis clavatis vel cylindræis, 70-100 \approx 10-12; sporidiis confertis vel biseriatis, subcylindræis, 16-20 \approx 4-5; paraphysibus numerosis, filiformi-clavulatis.

Hab. in petiolis et nervo medio foliorum dejectorum *Aceris saccharini* Adirondack Mount. Amer. bor.

36. **Helotium rubescens** Cr. Fl. Finist. p. 49, nec. alior. — Ascomate 887

stipitato, 2-4 mm., plano v. subtus concavo, supra convexo, rubescente v. brunneolo; ascis cylindricis, octosporis; sporidiis oblongis, utrinque granulosis; paraphysibus filiformibus.

Hab. ad radices graminum humi fusas Finistère Galliæ. — Ascomatis excipulum cellulis ovoideo-elongatis, seriatis, biformibus contextum.

37. **Helotium carneum** Fuck. Symb. App. II, p. 63 vix Fr. — Cupulis 888
sparsis, carnosis, obconicis, in stipitem brevem attenuatis, usque ad 2 mm. latis, glabris, disco concavo, carneo-flavo, marginatis extus dilute carneis, stipite albescente; ascis clavatis, 8-sporis, 48 \approx 6; sporidiis distichis, cylindræo-fusiformibus, rectis, continuis, hyalinis, 8 \approx 2.

Hab. in foliis putridis Scirpi silvatici pr. Mappen Germaniæ.

38. **Helotium alabastrinum** Fr. Syst. Myc. II, p. 125 (*Pez.*). — Carno- 889
sulum, albo-incarnatum; cupula e concavo-explanata integerrima; stipite brevissimo, papillæformi, nigrescente.

Hab. ad culmos locis humidis in Suecia. — An *Phialea*? Gregarium, pusillum, vix 3 mm. latum, carnosoceraceum ob hymenium crassum ascosque amplos, subtus convexum. Stipes e sordibus forsan nigricans.

39. **Helotium polytricum** Cr. Fl. Finist. pag. 48. — Ascomate sub- 890
pedicellato, roseo, glabro, initio infundibuliformi, dein expanso, 1 mm.; ascis suboblongis, octosporis; sporidiis oblongis, biguttulatis; paraphysibus filiformibus.

Hab. in foliis vivis Polytrichi communis Finistère Galliæ. — Cellulæ excipuli sphericæ, granulosis immixtæ.

40. **Helotium fimetarium** Pers. Syn. p. 678, Fr. Summa p. 355, Fuck. 891
Symb. p. 313, *Leotia fimetaria* Pers. Obs. Myc. 2, pag. 21, t. 5, f. 4-5, *P. fimetaria* Fr. Syst. Myc. II, p. 157. — Parvum, amœne rubrum, glabrum, capitulo e conico explanato subangulato, stipite æquali; ascis.....; conidiis (ex Fuckel) numerosis, ovoideis, 1-guttulatis, hyalinis, 6 \approx 4.

Hab. ad fimum vaccinum ovinum etc. pluviis maceratum in Suecia, Germania, Belgio. — Gregarium, perpusillum, sed sat persistens. A reliquis differt forma non juniore, sed ætate planiuscula. — Var. **americana** Schw. Carol. n. 1273, statura majore. In fimo catorum in Carolina.

41. **Helotium claviculare** Wallr. Crypt. Fr. n. 2537 (*Peziza*). — Asco- 892
matibus gregariis, teneris fragilibus, erectis, glabris, stipite e basi

tenuata sensim incrassato pallido, discum convexum pallide roseum, margine dilutiore acuto reclinato cinctum elevantibus.

Hab. ad fimum leporinum pluviis madafactum in Thuringia.

42. **Helotium Phillipsii** Sacc. *Lachnella nuda* Phill. Disc. pag. 247. 893

— Gregarium, planum v. convexum, stipitatum, ceraceum, carneum, glabrum; disco concolore undulato; stipite longo, flexuoso, in ascoma abeunte; ascis cylindraceo-clavatis, $50 \approx 4$; sporidiis fusoides v. oblongo-ellipsoideis, hyalinis, $5-10 \approx 2-3$; paraphysibus fusoides granulosis, ascos superantibus, 70μ . longis.

Hab. ad terram muscosam, in pinetis, Forres Britannicæ. — Ascoma 2 mm. lat., 4 mm. alt. Ascoma *Helotii* sed paraphyses *Lachnellæ*.

43. **Helotium albo-lilacinum** Pat. Tab. an. Fung. pag. 128, fig. 289, 894

Quél. XIII Suppl. t. VIII, f. 23. — Exiguum, 1-2 mm. lat. stipitatum, violaceo-lilacinum, disco initio concavo, dein plano, tenui, membranaceo, albo v. lilacino, margine integro; stipite glabro, basi attenuato; ascis clavatis octosporis; sporidiis minutis, oblongo-ellipsoideis, hyalinis, 2-guttatis, $10-15 \approx 4$; paraphysibus bacillaribus.

Hab. in caulibus emortuis Sambuci Ebuli, quos colore rubro inficit. Stipes 0,2-0,4 mm. long.

III. Disco virente, subolivaceo (Cfr. *Chlorosplenium*). (44-46)

44. **Helotium flavo-virens** (Pers.) Fr. Summa p. 355, *P. flavo-virens* 895

Pers. Myc. Eur. p. 323, Fr. Syst. Myc. II, pag. 139. — Ceraceo-molle, minutum, flavo-virens, primo subumbilicatum, demum convexo-planum; stipite crasso brevissimo.

Hab. in ligno putrido locis udis prostrato in Vogesia (MOUGEOT) et Smolandia (FR.). — Historia fere *H. conigeni*. Totum glabrum, vix marginatum, demum applanatum, 2 mm. latum. Color in siccis rufescit.

45. **Helotium agaricinum** Berk. Engl. Fl. V, p. 207 (*Peziza*), *Helotium* 896

Phillips Disc. pag. 170. — Firmum, atro-virens, convexum, subinæquale; margine revoluto; stipite crassiusculo, obconico; ascis longis flexuosis, obtusis.

Hab. in ligno emortuo, Appin Britannicæ. — Ascoma 4-5 mm. lat.

46. **Helotium subolivaceum** Karst. Ascom. add. p. 449. — Sparsum, 897

stipitatum, glabrum, olivaceo-pallidum; cupula concava, 1 mm. lat.; stipite filiformi, deorsum pedetentim attenuato, diametrum cupule excedente; ascis confertis cylindraceis, infra pedetentim attenuatis obturaculo jodo dilute cœrulescente, $110-140 \approx 10-11$; sporidiis ob-

lique monostichis, fusoido-oblongatis, simplicibus, 1-2-guttulatis, rectis, hyalinis, 12-16 \approx 5-6; paraphysibus parvis, gracillimis.

Hab. ad petiolos (Aceris?) putridos in Mustiala Fennicæ.

IV. Disco flavido, luteo, aurantio. [47-73]

47. **Helotium conigenum** (Pers.) Fr. Summa pag. 355, Fuck. Symb. 898 p. 316, *Pez. conigena* Pers. Syn. p. 634, Fr. *Pezizella conorum* Rehm in Asc. n. 415. — Gregarium, sæpe confluens, brevissime crasse stipitatum, demum sessile, primitus globulosum, siccum concavum, margine ruguloso pallidiore, disco flaveolo, humidum explanatum, orbiculare, stramineum, pellucidum, planum v. subconvexum, 1 mm. diam.; ascis clavatis, stipitatis, apice vix incrassatis, 8-sporis, 40 \approx 6; sporidiis elongato-ovatis vel ellipticis, rectis vel subcurvatis, hyalinis, 6-8 \approx 1,5-2, distichis in asci superiori parte; paraphysibus filiformibus crassis, sæpe sensim clavulatis.

Hab. ad conos Abietum et Pinorum in Suecia, Britannia, Germania, Gallia, Belgio, Fennia. — Variat lividum incarnatum. Ad *Pezizellam* vergit.

48. **Helotium fastidiosum** Peck 27 Rep. St. Mus. N. Y. p. 107. — Asco- 899 matibus minutis, convexis v. planis, stipitatis, pallide flavis v. albidis; stipite gracili circ. diametrum ascomatis longitudine æquante, brunneo v. flavo basi que brunnea; ascis anguste clavatis; sporidiis confertis v. biseriatis, elongatis, subclavatis, multinucleatis, 25 \approx 5, subinde leniter curvulis.

Hab. in petiolis costisque foliorum deciduorum Forestburgh Amer. bor.

49. **Helotium sulphurellum** Ell. et Ever. in Bull. Torr. Club. 1883, 900 p. 98. — Ascomate læte citrino vel subsulphureo, viridulo-tincto; farinoso; stipite firmo, basi brunneo, sursum sensim incrassato, 3-7 mm. longo, disco (in siccis) pallide cinnamomeo-brunneo, concavo vel subplano, subinde umbilicato, 2-4 mm. lato; margine subacuto plano; ascis cylindricis, 75 \approx 7-8; paraphysibus filiformi-clavulatis, flavidis; sporidiis monostichis, imbricatis, naviculari-ellipticis, binucleatis, subhyalinis v. flavellis, 10-12 \approx 3,5-5.

Hab. in petiolis dejectis Fraxini americanæ West-Cester Pa. Amer. bor.

50. **Helotium Buccinula** Speg. Fung. Fueg. n. 327. — Sparsum v. laxe 901 gregarium, epiphyllum, ceraceum, opacum, discoideum, 500-800 μ . diam., superne applanatum v. convexulum flavescens, inferne applanato-subturbatum, glabrum album, obtuse crasseque marginatum;

pedicello longiusculo gracili, 1-1,5 mm. long., 100-150 μ . crass., concolori glabro non v. vix striatulo; ascis clavulatis, sursum breviter cuneato-rotundatis apiceque subtruncatis, late perviis, deorsum in pedicellum mediocrem attenuatis, 90-100 \approx 8-12; paraphysibus paucis filiformibus obvallatis, octosporis; sporidiis oblique monostichis clavulatis sursum obtuse rotundatis, postice attenuato-acutatis, 25 \approx 5, hyalinis grosse 2-3-guttulatis (an demum biseptatis?).

Hab. ad folia dejecta Berberidis ilicifoliæ in dumetis prope Shammacus Fuegiæ. — An *Phialea*?

51. **Helotium serotinum** (Pers.) Fr. Summa pag. 355, Sacc. F. ital. 902 f. 1345, *Helv. aurea* Bolt. fung. t. 98, sec. Nees, *P. serotina* Pers. syn. p. 661, Fr. Syst. Myc. II, p. 119, *Hel. umbelliformis* Pers. M. E. I, p. 346, *Hymenoscypha* Phill. Disc. pag. 125. — Late flavum, cupula plano-convexa, subtenui, stipite brevi firmo crassiusculo; ascis elongatis, stipitatis, 8-sporis, 128 \approx 6; sporidiis elongato-distichis, clavatis, curvatis, hyalinis, continuis, 20-22 \approx 4 (in clavula).

Hab. in umbrosissimis udis (sæpe in ipsa pæne aqua) ad folia ramulosque putridos, altero anno abundans altero parce subsparsum, in Germania, Britannia, Belgio, Italia, Amer. bor. — Gregarium, confertum. Stipes 2-4 mm. longus, concolor; cupula numquam clausa 2-4 mm. lata. — Var. **obesum** Bres. in Hedw. 1885: cupula e subgloboso inverse-conica, medio primitus convexa dein plana tandem parum impressa, 2-7 mm. lata, 2-4 mm. alta, disco orbiculari, ceterum formæ typicæ; sporidiis oblongis, subfusiformibus, 14-16 \approx 3. Ad ligna et folia quercina adhuc solida aut putrida, et juxta ea in terra gregatim in silva Crni gaj et Crkvenac Slavoniæ.

52. **Helotium confluens** Schw. Syn. p. 176 (*Peziza*). — Majusculum, 903 sæpe plagis, 2-3 cm. lat. et ultra confluens (ita ut cupulæ confluentes quasi membranam efficiunt); stipitibus crassiusculis, brevibus, albescentibus, cum cupulis ad basin ceterum vivide citrinis, subtus pallidioribus.

Hab. ad ramos, ligna, Bethlehem Amer. bor. — Affine *H. citrino* sed multo majus.

53. **Helotium infarciens** (Ces.) De-Not. Comm. I, p. 378. — Subcuta- 904 neum, diu tectum, demum per rimas longitudinales erumpens, læte flavum e stipite plus minus compresso dilutiore in ascoma obtuse marginatum dilatatum; ascis perfecte cylindricis, 100 \approx 12; sporidiis fusoideo-ovoideis obtusis, 2-guttatis, 20-22 μ . long.

Hab. ad ramos ramulosque *Cytisi alpini* emortuos in Italia boreali. — Sparsum v. cæspitosum, *Hel. citrino* affine.

54. **Helotium lutescens** (Hedw.) Fr. Summa p. 355, Gill. Disc. p. 157, 905

Phialea lutescens (Hedw.), *Octospora lutescens* Hedw. Musc. p. 30, t. 9, f. 3, *Peziza* A. S. p. 334, Fl. Dan. t. 1440, f. 1, Fr. Syst. Myc. II, pag. 120. — Lutescens, minus; cupula hypocrateriformi, orbiculari; stipite brevi tenui subcylindrico; ascis tereti-clavatis; sporidiis oblongis vel oblongo-ellipsoideis, $12-15 \approx 4$; paraphysibus filiformibus.

Hab. ad ramos dejectos ab ignis in Germania, Suecia, Britannia, Gallia, Sibiria asiatica, etiam in America, sed rarius, autumnis. — Ætate juniore pro more cylindricum, dein apice turbinatum, magis magisque ampliatum.

55. **Helotium Phiala** (Vahl) Fr. Summa p. 355, *Pez. Phiala* Vahl Fl. 906

Dan. t. 1078, fig. 2, Schum. Saell. p. 420. — Cupula cyathiformi integerrima sordide flavescente, disco spadiceo, stipite brevi levi crassiusculo.

Hab. in ramis putridis *Alni* et *Betulæ* in Scandinavia, sed rarum. — Optima species, in hoc genere majuscula, solitaria, firmula. Stipes 3-4 mm. longus, sursum incrassatus, subincurvus, basi subinde villosa; cupula dilatata, 4-7 mm. lata, utrinque levis, disco obscuriore.

56. **Helotium hyalopus** Fuck. Symb. App. II, p. 63. — Cupulis cera- 907

ceis, sparsis, distincte stipitatis, primo excavatis, marginatis, demum planis subconvexisque, patellæformibus, pallide-flavis, glabris, 2 mm. lat., stipite plerumque curvato, hyalino-diaphano, demum pallide-flavo; ascis subclavatis, sessilibus, 8-sporis, $126 \approx 18$; sporidiis plerumque in asci superiori parte conglobatis, oblongo-fusiformibus, continuis, subinæquilateralibus, biguttulatis, hyalinis, $16 \approx 6$; paraphysibus numerosis.

Hab. in sarmentis emortuis *Vitis viniferæ* pr. Budenheim Rhenogoviæ.

57. **Helotium hongkongense** (B. et C.) Sacc. *Pez. hongkongensis* B. 908

et C. North Pac. Exp. n. 154. — Breviter stipitatum; cupula hemisphærica subtus lutea, margine incurvo; hymenio convexulo vel plano, aurantiaco.

Hab. in ramis emortuis Hong-Kong Sinarum.

58. **Helotium crocinum** B. et C. Cub. Fung. n. 701. — Crocatum, ob- 909

conicum; stipite brevi crasso; cupula crateriformi, margine inflexo.

Hab. ad ramos emortuos in insula Cuba. — *Phialeam crocattam* Mont. in mentem revocat.

59. **Helotium citrinum** (Hedw.) Fr. Summa p. 355, *Octospora* Hedw. 910

Musc. II, t. 8, f. B, *Peziza lutea, parva* etc. Ray. syn. 3, p. 18, tab. 24, f. 4, *P. cyathoides* Linn. Suec. n. 1273! With. arr. IV, pag. 349, *P. citrina* Batsch Cont. 2, f. 218, Pers. syn. pag. 663, Schum. Saell. 2, p. 430, Dec. fr. 6, p. 22, *P. aurea* Sowerb. t. 150. — Confertum, citrinum; cupulis plano-concavis cum stipite brevi crasso pallidiore obconicis; ascis clavatis 90-100 = 8-9; sporidiis oblongis, obtusis, hyalinis, duobus nucleis magnis instructis, 10-12 = 4, monostichis, superne sæpe distichis; paraphysibus filiformibus apice haud clavatis.

Hab. ad truncos et ramos putridos Fagi, Carpini, Quercus Alni etc. in Suecia, Gallia, Britannia, Germania, Belgio, Fennia, Italia, Tasmania, Kamtschatka, Amer. bor., Nova Zelandia, Fuegia. — Substantia carnosio-ceracea, crassiuscula, firma contextu prosenchymatico. Cupulæ margo prominens, subinde flexuosus. E situ variat stipite elongato et brevissimo, tantum papillæformi, semper albedo; hæc forma vulgatissima in strobilis abiernis et certe *P. flava* Schum. Saell. p. 418, Pers. Myc. Eur. p. 294. — Var. **Phalaridis** (Lib.) Speg. et Roum. Rel. Lib. I, n. 660, *Pez. Phalaridis* Lib.: a typo recedit cupulis umbrinis, disco albo-rufescente. Fructificatio perfecte congruit. Ad culmos aridos Phalaridis arundinaceæ prope Malmedy in Arduennis.

60. **Helotium Buccina** (Pers.) Fr. Summa pag. 355, Mont. Chil. VII, 911

p. 409, *P. Buccina* Pers. syn. p. 659, Myc. Eur. p. 279, Fr. Syst. Myc. II, p. 129, Alb. et S. p. 331. — Majusculum, infundibuliforme, obscure flavum; stipite incrassato, striato, subincurvo.

Hab. rarius ad ligna et ramulos pineos in Suecia, Germania, Britannia, Chile, etiam in Carolina. — Pro diversa ætate forma varia: ætate juniore incurvo-clavata, adulta campanulata. Color in junioribus flavus, in adultis saturate aureus. Stipes profunde et parallele striatus, imo in speciminibus nonnullis subundulatim sulcato-costatus; cupulæ etiam basis interior quandoque striato-plicata, subcæspitosæ etc. A. S. l. c., *Pez. Buccina* pl. auct. est *Guepinia merulina*; sed Doct. Quélet ita describit *Phialeam Buccinam* (Pers.) Quélet. 11 Suppl. p. 21: cyathiformis, pallide citrina, stipite longo, 5-7 mm. basi fulvo; cupula tenui, 5 mm. lat.; sporidiis virguliformibus, 30 μ . long., 4-5-guttulatis, hyalinis. In ramulis fagi-

neis in Vogesis (R. FERRY). Sec. Mont. l. c. asci $280 \approx 10$; sporidia ellipsoidea, $20-30 \approx 6-8$.

61. **Helotium aureum** Pers. syn. p. 678, *Pez. aurea* Fr. Syst. Myc. 912 II. p. 156. — Obscure flavum, ascomate lenticulare; glabrum, stipite tenui basi tomentoso.

Hab. ad ligna decorticata pinea putrida et in cortice duriore in silvis, in Suecia, Germania, Sibiria. — Gregarium, tenue. Stipes teres, æqualis, subinde ramosus, basi tomentulo delicato niveo cinctus; ascoma leve, 2-3 mm. latum; asci maturi non visi (Fuck.).

62. **Helotium pineum** (Bonord.) Sacc. *Sarea pinea* Bonord. Handb. 913 p. 198. — Ascomate breve stipitato, convexo, flavo, dein brunneo, sub lente puberulo; sporidiis ovato-oblongis curvulis, guttulatis; paraphysibus ramulosis, capitulatis.

Hab. in pariete interiore corticis Pinorum in Guestphalia.

63. **Helotium claro-flavum** (Grev.) Berk. Outl. p. 372, Phill. Disc. p. 165, 914 t. 5, f. 31, *Pez. Grev.* Fl. Edin. p. 424. — Breve stipitatum v. sessile, subplanum, pallide flavum, glabrum, margine emergente, obtuso, sublobato; ascis cylindraceutis, octosporis; sporidiis oblongis v. oblongo-ellipsoideis, $7-10 \approx 2-3$; paraphysibus filiformibus tenuibus.

Hab. in ligno et ramis dejectis prope Edinburgh et Wrekin Britanniae et in Belgio, Australia et Africa austr. — Ascoma vix 1 mm. lat.

64. **Helotium flavum** Klotzsch in Phill. Disc. p. 156. — Gregarium, sti- 915 pitatum, initio subpiriforme, dein expansum, disco læte flavo, extus pallidius; stipite glabro, brevi, basi acuto; ascis tereti-clavatis; sporidiis ellipsoideis, raro subclavatis, $10 \approx 4-5$; paraphysibus filiformibus.

Hab. in ligno decorticato in Britannia. — Ascoma 0,5-1 mm. lat.

65. **Helotium lenticulare** (Bull.) Fr. Summa pag. 356, Sacc. F. ital. 916 fig. 1347, *P. flava* Willd. Ber. n. 1175, *P. lenticularis* Bull. Ch. t. 300, f. a, c, Fr. Syst. Myc. II p. 133, *Octosp. citrina* Fl. Dan. t. 1294, f. 1, *Helotium nigripes* Schum. Sael. p. 412, *P. citrina* **lentic.* Pers. l. c. p. 293, *P. aurea* Sow. t. 156. — Convexum, adpressum, firmum, luteum; stipite papillæformi nigrescente; ascis tereti-clavatis; sporidiis oblongis, oblongo-ellipsoideis vel clavatis, $10-15 \approx 3-4$.

Hab. ad truncos vetustos fagineos etc. abunde in Suecia, Dania, Germania, Gallia, Italia, Britannia, Ceylon, etiam in America boreali — Subsessile, gregarium, glabrum, 2 mm. latum, constanter læte flavum, nitidum, primo cavum, dein convexum.

66. **Helotium sulphuratum** (Schum.) Phill. Disc. p. 161, *Pez. sulphurata* Schum. Fl. Dan. t. 1912. f. 2, an *Friesii* (Cfr. *Humaria*). — Sparsum, turbinatum, stipitatum vel sessile, initio orbiculare, concavum, dein expansum, margine integro, e sulphureo citrinum, extus margineque pallidius; ascis tereti-clavatis, octosporis; sporidiis fusoides rectis curvulisve, 2-3-guttulatis, 12-17 \approx 3-4,5; paraphysibus filiformibus, tenuibus, subinde ramulosis.

Hab. ad lignum et folia pinea terra subinfossa in Dania et Britannia.

67. **Helotium gratum** (Berk.) Cooke Austral. Fungi pag. 51, *Peziza grata* Berk. Fl. Tasm. p. 275. — Cupula plana, hyalina, marginata, breviter stipitata subaurantiaca, 1 mm. lat.; stipite pallidiori cylindrico quandoque compresso; sporidiis fusoides, 10 μ . long.

Hab. ad ligna emortua in Tasmania (ARCHER). — Affine dicitur *Sarcoscyphæ Colensoi* Berk., an ergo hujus generis?

68. **Helotium repandum** Phill. Disc. pag. 161. — Breve stipitatum, planum, repandum, tenue, pallide flavum, margine sublobatum; stipite brevissimo, basi attenuato; ascis cylindraco-clavatis; sporidiis cylindracois vel oblongo-ellipticis, 7-10 \approx 2; paraphysibus filiformibus.

Hab. in caulibus emortuis *Spirææ Ulmaricæ* in uliginosis Scotiæ. — Ascoma 0,5-1 mm. lat.

69. **Helotium erythropus** (Saut.) Sacc. *Pez. erythropus* Saut. Pilz. Salzb. pag. 9. — Ascomate carnosio-ceraceo, concavo, albido, disco aurantiaco; stipite brevi, crasso roseo.

Hab. in caulibus exsiccatis *Angelicæ silvestris* prope Mittersill Salzburg. — Affine *H. carneo*.

70. **Helotium? brassicæcolum** (Schw.) Sacc. *Sarea brassicæcola* Schw. Syn. pag. 178. — Late gregarium, minutum; ascomate initio convexo, rufo-aurantio, demum disco applanato marginato; stipite basi incrassato albo-pulverulento.

Hab. in caulibus vetustis induratis *Brassicarum* inter fibras, Bethlehem. Amer bor. — Genus *Sarea* sec. Schw. sistit præterea *Helot. aureum, aciculare, fimeli, subtile* et *Pityam*.

71. **Helotium spicarum** Rehm Ascom. n. 158: cfr. Cooke in *Grevillea* IV, p. 41, t. 51, f. 258. — Plerumque sparsum, turbinatum, breviter crasse stipitatum c. 1 mm. alt., siccum fuscum, glabrum, stipite plerumque dilutiore, urceolatum, subclausum, humidum apertum, flavescens, 0,5-7 diam., prosenchymatice contextum; ascis clavatis, apice incrassatis, 8-sporis, 40 \approx 5-6; sporidiis oblongis vel

subfusiformibus, obtusis, plerumque rectis, hyalinis, distichis, 6-8 = 2; paraphysibus filiformibus, apice vix incrassatis, hyalinis.

Hab. ad calamos siccos Nardi strictæ in alpiibus editioribus Tyrolensibus juxta glaciem æternam. — An *Phialea*?

72. **Helotium filicolum** Hazsl. Einig. Disc. pag. 14 et Magyar. szab. 923

Disc. t. X, f. 22. — Flavum, stipitatum; disco plano, demum convexo, margine crasso, reflexo; stipite deorsum incrassato, disco subduplo longiore; ascis anguste clavatis, stipitatis, octosporis; sporidiis clavatis, deorsum acutioribus, 8-guttulatis simulateque 7-septatis.

Hab. in stipitibus filicum pr. Eperies Hungariæ.

73. **Helotium Mougeotii** (Pers.) Sacc. *P. Mougeotii* Pers. Myc. Eur. 924

p. 289, t. XII, f. 5, Fr. Syst. Myc. II, p. 135. — Confertum; cupulis tereti-ventricosis cum stipite brevi confluentibus, disco planiusculo aurantiaco, margine tenuissime fimbriato albicante.

Hab. in Vogesia in montium summitate prope nives liquescentes ad terram. — Species pulchra, minuta, carnosa, hinc vix excavata, margine scarioso lacero. Species minus nota, forsan *Bia-tora campestris*. Ex icone carneo-rubra, crusta quadam pulverulenta albicante.

V. Disco ochraceo, lutescente, fulvo, brunneo, testaceo. (74-103)

74. **Helotium epiphyllum** (Pers.) Fr. Summa p. 356, Pat. Tab. anal. 925

fig. 93, *Pez. Stizenbergerii* Rabenh. *Pez. epiphylla* Pers. disp. p. 72, Syn. p. 669, Fr. Syst. Myc. II, p. 137. — Subsessile, glabrum, convexo-planum marginatum, ochraceo-pallidum; ascis tereti-clavatis, 100 = 9-10; sporidiis fusoides curvatis, 2-4-guttatis, 9-12 = 4-5; paraphysibus filiformibus.

Hab. ad folia dejecta putrescentia Fagi, Carpini, Quercus, Betulæ etc., in Suecia, Germania, Gallia, Britannia, Belgio, Italia, etiam in America bor., Fuegia, Africa austr., Ceylon. — Basi papillaris, cum qua adfixa, passim in stipitem e loco plus minus longum elongatur. Cupula carnosoceracea, subtenuis, 3 mm. lata, demum rufescit. Ad ultimas species accedunt plures formæ mediæ v. c. *P. minutissima* et *sigillatoria* Batsch Cont. I, f. 142, 143, *P. pallida* Schum. Saell. p. 428.

75. **Helotium saprophyllum** Peck 29 Rep. p. 55. — Ascomatibus mi- 926

nutis, stipitatis, ochraceis, planis; stipite tenui, sursum incrassatulo, disci diametrum subexcedente; ascis sublanceolatis; sporidiis fusoides v. subclavatis, distichis, 1-binucleatis, 20 = 6.

Hab. in foliis dejectis, Lake Pleasant Amer. bor. — *Helotio fastidioso* affine.

76. **Helotium helodinum** Dur. et Lév. Expl. scient. Alg. Bot. t. 28, 927 fig. 3 (*Peziza*) [absque diagnosi]. — Plano-scutellatum, stipitatum, ochraceo-fulvum; disco badio, concaviusculo, pallidius marginato; stipite cylindraco; ascis tereti-clavatis; sporidiis oblique monostichis, fusoideis, rectis, hyalinis.

Hab. in foliis dejectis Ilicis in Algeria. — Ascoma 2-3 mm. latum, stipes 2 mm. longus.

77. **Helotium leucopus** Mont. Chil. pag. 410, Syll. Crypt. n. 632. — 928 Hypophyllum, erumpens, sparsum, glabrum; cupulis obconico-turbinatis, fulvis, disco planiusculo, stipite breviusculo pallido, basi subbulbosa byssina alba; ascis majusculis, clavatis; sporidiis fusoideis distichis, 4-6-guttulatis.

Hab. ad paginam inferiorem foliorum Perseæ Lingue, Chile (CL. GAY). — Ascoma 2 mm. alt., $\frac{1}{2}$ mm. lat.

78. **Helotium Friesii** (Weinm.) Sacc. *Pez. Friesii* Weinm. Hym. Ga- 928 ster. pag. 469. — Gregarium, totum argillaceum, glabrum, ascomate plano-convexo; margine tumidulo; stipite brevi crassiusculo, obconico.

Hab. ad folia dejecta Populi Tremulæ et Betulæ albæ in Rossia. — Substantia carnosâ, crassiuscula. Ascoma $\frac{1}{2}$ -1 mm. latum, margine plano. Stipes interdum 1 mm. et paulo ultra long. et ad basim obscurior.

79. **Helotium lentum** B. et Br. Fung. of Ceyl. n. 961. — Stipite cy- 930 lindrico, nigro, cupula extus rugosa; hymenio siccatione rufo, madido lutescente; sporidiis brevibus acicularibus, 6-7 μ . longis.

Hab. in foliis, capsulis putridis in insula Ceylon.

80. **Helotium Ostruthii** (Saut.) Sacc., *Peziza Ostruthii* Saut. Pitzl. 931 Salz. p. 9, Wint. Hedw. 1881, p. 132. — Ascomate minuto, 0,5 mm. lato, ceraceo, sordide luteo, plano-convexo; stipite brevissimo; ascis clavatis, octosporis, 90-100 \approx 8-9; sporidiis distichis, cylindraco-fusoideis, demum (spurie?) triseptatis, hyalinis, sæpe parum curvatis, 16-18 \approx 3,5; paraphysibus filiformi-clavulatis.

Hab. in caulibus putridis Ostruthii ad Mittersill Salzburg.

81. **Helotium conisteum** Dur. et Lév. Expl. sc. Alg. tab. 28, fig. 10 932 (*Pez.*) [absque diagnosi]. — Gregarium, cupulato-infundibuliforme, stipitatum, pallide alutaceum; disco concavo; stipite teretiussculo, brevi; ascis clavatis, stipitatis, filiformi-paraphysatis, 8-sporis;

sporidiis distichis cylindræis, inæquilateralibus, latitudine 8-plongioribus, hyalinis.

Hab. ad caules putres in Algeria. — Ascoma 1 mm. lat., stipites $\frac{1}{2}$ - $\frac{3}{4}$ mm. long.

82. **Helotium sublateritium** B. et Br. Ann. Nat. Hist. n. 1488, Phillips 933

Disc. pag. 161. — Pallide lateritium, stipitatum; ascomate plano, subtus venoso; margine elevato; stipite brevi cylindrico, initio albedo-villoso, dein glabro; ascis linearibus; sporidiis monostichis, breve fusoides, biguttatis, $25 \approx 5$.

Hab. in caulibus herbaceis, Glamis Britannicæ.

83. **Helotium vitigenum** De Not. Comm. I, pag. 377, Sacc. Fung. Fl. 934

tab. 1343. — Ascomate stipite mediocri instructo, patellato, disco pallide stramineo, subconvexo, tenuiter marginato, subtus palliscente; ascis $110 \approx 12$; sporidiis ellipsoideo-fusoides, 4-guttulatis, $18-20 \approx 6$, hyalinis.

Hab. in sarmentis emortuis *Vitis viniferæ*, Valle Intrasca et in agro veneto Ital. bor.

84. **Helotium pullatum** Gerard in Cooke Disc. U. S. I, p. 298 et in 935

Thüm. Pilze Weinst. pag. 89. — Gregarium; ascomate 1-2 mm., vivo sordide ochraceo, sicco fuliginoso, primo clavato, dein paululum obconico, extus saturatius colorato; stipite brevi in cupulam expanso; disco plano, sicco concavo; ascis cylindræis angustissimis; sporidiis tereti-truncatis, 2-4-guttatis simulateque septatis, $18-20 \approx 4$.

Hab. in sarmentis *Vitis Labruscæ* ad New York Americæ borealis.

85. **Helotium sepium** (Desm.) Sacc., *Peziza sepium* Desm. 18 Not. 936

p. 5. — Erumpens minimum carnosoceraceum, sparsum v. cæspitosum, stipitato-turbinatum, glabrum; stipite brevi, crasso, pallido; disco plano-convexo, brunneo-ochraceo, sicco subpulverulento; margine vix prominente sinuoso, aurantiaco vel testaceo, subtuberculoso; ascis amplis clavæformibus, $125-150 \mu$. long.; sporidiis magnis, ellipsoideis, $20-25 \mu$. long., hyalinis.

Hab. in ramis exsiccatis *Cratægi Oxyacanthæ* in Gallia bor. — Ascoma $\frac{2}{3}$ mm. diam.

86. **Helotium ochraceum** (Grev.) Phill. Berk. Outl. p. 372, *Peziza* 937

Grevill. Scott. t. V. — Breve stipitatum vel sessile, glabrum, flavido-brunneum, carnosulum; disco pallidiore, concavo, plano v. convexo, granulis nitentibus consperso; ascis cylindræo-clavatis; sporidiis octonis.

Hab. in cortice ramorum dejectorum pr. Edinburgh et Shrewsbury Britanniae.

87. **Helotium platypus** Hazsl. Einig. Disc. p. 14 et Magyar. szab. Disc. 938 t. 11, f. 23. — Stipitatum, flavo-brunneum; disco plano v. subcon-
cavo; stipite longitudine vario, cylindrico, disci diametro pluries lon-
giore, basi mycelio subcirculari stellato instructo; ascis clavatis,
stipitatis; sporidiis oblongo-fusoideis, latitudine triplo-quadruplo
longioribus.

Hab. in ramis Alni in paludosis Hungariae. — An *Phialea*?

88. **Helotium? chlorosplenioides** Speg. Fung. Fueg. n. 330. — Infun- 939
dibuliforme, majusculum 3-5 mm. diam., ligno-pallens, disco gla-
bro obscuriore extus fibrilloso-striatum; stipite tereti, 3-5 mm.
long., vix $\frac{1}{2}$ mm. cr., matrice late infuscata insidente; ascis cylin-
draceo-subclavulatis, antice non v. vix attenuatis apice truncatis,
postice longe attenuato-stipitatis, $100-110 \approx 6-6,5$; paraphysibus
filiformibus non v. vix longioribus laxè obvallatis, octosporis; spo-
ridiis oblique monostichis, elliptico-fusoideo utrinque acutissimis,
 $10 \approx 4-5$, rectis vel subcymbiformibus, hyalinis non vel grosse 1-
guttulatis.

Hab. ad ramulos fagineos dejectos putrescentes in silvis pr.
Port S. John in Staten island Fuegiae. — Species certe a genere
Helotio Fr. separanda, habitu *Chlorosplenio* Fr. simillima. Speg.
loc. cit.

89. **Helotium indepremsum** Bizz. Fung. Ven. nov. v. crit. p. 3, t. III, 940
f. 6, a, b, c, d, e; Sacc. Fungi Ital. t. 1333. — Ascomatibus carno-
sulis, subsessilibus, convexiusculis; margine acutiusculo inflexo,
ochraceo-rufis dein obscurioribus, 0,5 mm. diam., stipite brevissi-
mo, crassiusculo (vix manifesto); ascis subclavatis, octosporis, pa-
raphysatis, $65-75 \approx 8$; sporidiis oblique monostichis, hyalinis, ob-
longo-ellipsoideis, utrinque uniguttulatis, $9-11 \approx 3$.

Hab. in ramulis et foliis siccis sed nondum putrescentibus Thu-
jæ orientalis in horto botanico patavino. — Species repertu dif-
ficilis, quia cum matrice sua sæpius concolor. Ab *Hel. epiphylo*
colore rufescente et forma ascomatum, ascis sporidiisque minoribus
facile distinguenda species.

90. **Helotium salicellum** Fr. Summ. Veg. Scand. p. 356, Karst. M. F. 941
I, p. 113, *Peziza salicella* Fr. Syst. Myc. II, p. 133, Rehm Asc.
n. 208, Sacc. F. ital. 1344. — Gregarium, breviter stipitatum, fir-
mulum, testaceum v. ochraceo-pallescent; cupula planiuscula, orbi-
culari, adpressa, margine vix prominulo, 1-2 mm. lat.; stipite

æquali pallidiore brevi, 0,5-1,5 mm. alt.; ascis cylindraceo-clavatis, 75 = 11-13, obturaculo jodo obsolete cœrulescente; sporidiis distichis fusoido-elongatis, rectis v. subinde leniter curvulis, 2-4-guttulatis v. simulate 1-3-septatis, 25-28 = 5-6; paraphysibus filiformibus, 2 μ . cr.

Hab. in ramulis Salicum in Suecia, Fennia, Britannia, Belgio, Italia, Germania, Amer. bor. — Sec. Fuck. sporidia 12 = 4, an ex errore?

91. **Helotium sublenticulare** Fr. Summ. Veg. Scand. pag. 355, Karst. 942

M. F. I, p. 118, Rehm Ascom. n. 654 (forma sessilis), *Peziza citrina* Flor. Dan. t. 1971, f. 3, nec Batsch., *Pez. subferruginea* Nyl. Obs. p. 42 (ut videtur). — Gregarium, stipitatum, firmulum, albidum vel lutescente albidum, siccum testaceo-pallidum aut interdum ferruginascens; cupula discoidea, plana aut interdum demum convexiuscula, sicca patelliformi, margine integro, disco lutescente, sicco dilute luteo, subvitellino, interdum ferrugineo, 1-5 mm. lat.; stipite plus minus elongato, sursum incrassato, deorsum leviter flocculoso, subinde flexuoso, 1-4, raro-15 mm. alt.; ascis cylindraceo-clavatis, 110-120 = 9-10, obturaculo apicali jodo levissime vel vix cœrulescente; sporidiis vulgo oblique monostichis, oblongato-ellipsoideis, 2-guttatis, plerumque rectis, 15-20 = 4-6; paraphysibus filiformibus.

Hab. ad ramulos exsiccatos Alni, Aceris, Coryli et Rubi in Fennia, Suecia, Dania, Germania.

92. **Helotium conscriptum** Karst. M. F. I, p. 118. — *II. sublenticu-* 943

lari externa facie sat simile; sporidiis autem minoribus, 10-16, (plerumque 12-14) = 3,5-5, eguttulatis aut aliquando guttulis paucis perexiguis præditis; ascis 8 μ . cr.

Hab. ad ramulos Salicis in Fennia et Lapponia. — Var. **caulincolum** Rehm in Hedwigia 1885, p. 223: ascomatibus globosis, dein cyathoideis, stipite crasso 2-4 mm. long., disco explanato, demum 2-3 mm. diam., flavidis v. flavo-vitellinis, sæpe extus striatulis v. rugulosis, stipite interdum dilutiore, margine integro sæpe dilutiore, sparsis prosenchymatice, dilute flavide contextis; ascis clavatis apice incrassatis, 8-sporis, 70 = 6; sporidiis superne 2-stichis, oblongis, obtusis, rectis v. curvatulis, 1-cellularibus, plerumque nucleolis 2 apicalibus instructis, hyalinis, 12 = 3 (denique 2-cellularibus?); paraphysibus hyalinis filiformibus, haud clavatis circ. 2 μ . crass. Ad caules putridos Aconiti Napelli prope Kleines Kohlbach-Thal, Hohe Tatra Hungariæ (PROF. LINHART). — Forma

alpestre Rehm in Hedwigia 1885, p. 229: ascomatibus orbicularibus v. repando flexuosis, plerumque crasse brevissime stipitatis v. subsessilibus, 0,5-1,5 mm. diam., albo-flavidis, margine dilutiore, gregariis, hyalino-prosenchymatico-contextis.

93. **Helotium montelicum** Sacc, *Helotium macrosporum* Sacc. Mich. 944

II, p. 535 (1882), F. ital. f. 1332, nec Peck (1874). — Ascomatibus gregariis, totis lutescentibus, ceraceis subsessilibus, $\frac{1}{2}$ - $\frac{3}{4}$ mm. lat.; disco convexo-pulvinate, margine non discreto, subsinuoso; stipite brevissimo, crassiusculo; ascis late clavatis, 120-130 \approx 20, breve stipitatis, filiformi-paraphysatis, apice tenuato-truncatis, octosporis; sporidiis distichis oblongo-phaseoliformibus, curvulis, utrinque rotundatis, 25 \approx 7,5-8, varie guttatis v. granulosis, hyalinis.

Hab. in ramis corticatis Corni sanguineæ in Valle dell'Aqua silvæ Montello Ital. bor. — Ascomatibus convexis subsessilibus sporidiisque amplis, obtusis mox dignoscenda species.

94. **Helotium uliginosum** Fr. Summ. Veg. Scand. p. 355, Karst. M. 945

F. I, p. 121, *Peziza uliginosa* Fr. Syst. Myc. II, p. 138, *Mollisia uliginosa* Oudem. — Sparsum v. gregarium, breve v. longiuscule stipitatum, ceraceo-aquosum, firmulum; cupula concaviuscula vel convexiuscula, pallido-albida aut e lutescente ochracea, sicca obscurata testacea v. subferruginea, sæpe flexuosa et umbilicata, 2-4 mm. lat.; stipite livido-pallescente v. pallido, cavo, 1-8 mm. alt.; ascis cylindraceo-clavatis, 65-90 \approx 6-8, obturaculo jodo levissime v. vix cærulescente; sporidiis plerumque oblique monostichis, oblongatis, plerumque 2-guttulatis, 7-14 \approx 3-4; paraphysibus filiformibus incrassatulis.

Hab. ad ramulos, cortices lignaque arborum frondosarum, imprimis Betulæ, Salicis et Fraxini in Suecia, Fennia, Hollandia, Britannia. — Stipes deorsum, rarius sursum incrassatus, exsiccatus longitudinaliter plicatus v. compresso-collabens, nunc pallidus nunc fuligineo-virgatus. — Var. β . **cortisedum** Karst. M. F. I, p. 122: cupula fere sessili lutescenti-pallida; sporidiis fusoideo-oblongatis aut elongato-ellipsoideis, 6-9 \approx 3-4; paraphysibus gracilibus, guttulis fulvescentibus præditis. Supra corticem Betulæ vetustum prope Mustiala Fenniæ.

95. **Helotium fuegianum** Speg. Fung. Fueg. n. 332. — Densiuscule 946

sparsum obconicum concaviusculum, 0,6-1 mm. diam., margine acuto integerrimo vel repandulo, intus pulchre flavido-melleum, extus pallidius glabrum, in stipitem brevissimum ac crassum candidum, non v. vix basi puberulum desinente; ascis cylindraceis v. cylin-

draceo-subclavulatis, antice obtuse rotundatis, deorsum plus minusve longe attenuato-pedicellatis, 55-65 \approx 5, octosporis; paraphysibus filiformibus nonnihil longioribus densiuscule obvallatis; jodi ope ascorum apice dilute, obturaculo intense cœrulescente; sporidiis oblique monostichis, ellipticis utrinque obtusis, 5-8 \approx 2-3 rectis v. inæquilateralibus, hyalinis continuis; an demum medio 1-septatis.

Hab. vulgatissimum ad ramulos dejectos putrescentes Fagorum in Fuegia et Staten island Amer. austr.

96. **Helotium fusco-brunneum** Pat. et Gaill. in Bull. Soc. Myc. Fr. 947 IV, pag. 101. — Sparsum vel gregarium; cupula 2-4 mm. diam., concava dein applanata, glabra, in stipitem brevissimum attenuata, ferrugineo-brunnea, nitida, extus levi; ascis clavatis, substipitatis, 45 \approx 6; sporidiis ovoideis, utrinque obtusis, 6-8 \approx 1,5-2, rectis vel leniter curvulis, biguttulatis; paraphysibus linearibus, hyalinis, ascos longitudine æquantibus.

Hab. ad corticem arboris, inter muscos, inter Maipures et S. Fernando Americæ austr. (GAILLARD).

97. **Helotium Fergussoni** Sacc. *Helot. melleum* B. et Br. Ann. N. A. 948 n. 1457 (1875) nec B. et Br. Fung. of Ceyl. (1873). — Pallide melleum, planum, subflexuosum, margine clavato, inflexo; stipite brevi, tereti; ascis elongato-fusoideis; sporidiis distichis, fusoideis, rectis curvulisve, pluriguttulatis 30 μ . longis.

Hab. in ligno putri New Pitsligo Britannicæ (FERGUSSON). — Ascoma 2 mm. lat., stipes 1 mm. long.

98. **Helotium ferrugineum** (Schum.) Fr. Summa p. 356, Sacc. F. ital. 949 f. 1331, Phill. Disc. p. 154, t. V, f. 30, *P. lenticularis* var. Bull. t. 300. — Substipitatum, obconicum, disco concavo luteo-ferrugineo, extus margineque tumido pallide luteum; ascis cylindraceo-clavatis; sporidiis elliptico-fusoideis v. clavulatis, 2-guttulatis, 10-13 \approx 3-5; paraphysibus filiformibus.

Hab. ad truncos vetustos *Quercus*, ad ligna putrida varia in Suecia, Belgio, Britannia, Germania, Italia, America bor., Africa austr. — Valde ad *H. lenticulare* accedit, sed habitu et loco distinctum. Minus, gregarium, primo turbinatum, dein magis dilatatum sed vix 1-2 mm. latum; stipitis rudimentum exiguum pallidum; margo integerrimus. — β . **H. nanum**, *Octosp. nana* Hedw. loc. cit. p. 29, t. IX, f. A: cinnamomeum, inferne in stipitem attenuatum. E terra pullulare dicitur in Germania.

99. **Helotium robustius** Karst. M. F. I, p. 119. — Sparsum vel gre- 970

garium, stipitatum, pallidum lutescens v. interdum rosellum, cupula planiuscula, sicca patelliformi, margine integerrimo, disco lutescente v. subluteo, 1-2 mm. lat.; stipite 1-4 mm. alt.; ascis cylindræo-clavatis, 90-115 \approx 7-10 apice jodo vix v. levissime cœrulescentibus; sporidiis mono- v. subdistichis, oblongatis v. oblongato-ellipsoideis vulgo eguttulatis, 7-14 \approx 3-6; paraphysibus filiformibus, guttulatis, sursum leviter incrassatis.

Hab. ad culmos Phragmitis communis aliorumque graminum, calamos Typhæ latifoliæ nec non ad fructus Cirsii arvensis in Fennia et Ital. bor. — Forma **macrospora** Rehm Asc. n. 562: sporidiis 15-18 \approx 3-5, ascis 60 \approx 9-10. In Germania.

100. **Helotium maritimum** (Rob. et Desm.) Sacc.. *Peziza maritima* 951
Rob. et Desm. XI Not. p. 366. — Erumpens, minutum, stipitatum, carnosoceraceum, glabrum, cinnamomeum; stipite brevi, crasso in cupulam dilatato; cupula crassiuscula, juniore plano-concava, dein subconvexa; ascis magnis, flexuosis tubulosis, 150-160 μ . long.; sporidiis ovato-oblongis, utrinque acutiusculis, 2-guttulatis, 12-13 μ . long.

Hab. in foliis exsiccatis Psammæ arenariæ, Calvados Galliæ. — Stipes $\frac{1}{4}$ - $\frac{1}{3}$ mm. long. et cr.; ascoma $\frac{1}{2}$ -1 mm. lat.

101. **Helotium gramineum** Phill. Disc. p. 155. — Stipitatum, planum 952
v. convexum, glabrum, dilute ochraceum; stipite brevi, subobtusum, subinde medio angustato, sursum in cupulam expansum; ascis subclavatis; sporidiis ellipsoideis, 1-2-guttulatis, 8-11 \approx 4-5; paraphysibus filiformibus.

Hab. ad culmos graminum, Kingsly Britannici (PLOWRIGHT). — Ascoma 1-3 mm. lat. et alt., margo obtusus.

102. **Helotium equisetinum** Quél. X Suppl. pag. 13, t. IX, fig. 13 et 953
Grevillea 1879, p. 38. — Ascomatibus planis, dein excavatis, 500-800 μ . diam., glabris tenuibus, teneris, pallide lutescentibus, breve stipitatis, hymenio plano, nitide citrino; sporidiis bacillaribus 5-6 μ . longis.

Hab. ad caulem Equiseti limosi, Alsace. — Stipes lutescens 0,5 mm. long.

103. **Helotium phascoides** Fr. Summa pag. 355, *Pez. phascoides* Fr. 954
Syst. Myc. II, p. 138, *P. dubia* Batsch Cont. I, fig. 145, vix obstat. — Ceraceo-aquosum, minutum, testaceo-pallidum; cupula turbinata plana; stipite brevi subæquali.

Hab. ad terram humidam stipulis v. Phascis forsan innatum in Suecia, Germania et Britannia. — Solitarium, glabrum, varium.

Stipes farctus, teres 2 mm. longus ecoloratus; cupula 1 mm. lata, pallida. Asci hucusque ignoti.

VI. Disco umbrino, fusco, atro. (104-118)

104. **Helotium hysterioides** Rehm Ascom. Alp. n. 6. — Gregarium, 955
 crasse stipitatum, stipite c. 1 mm. alt., siccum hysteriformiter ellipticum, rima longitudinali labiis crassis marginata marginibusque involutis, fuscum vel nigrofuscum, disco rubro-fusco, humectatum subexplanatum, lentiforme, 1,5-2 mm. diam., prosenchymatico-fuscidulo-contextum; ascis clavatis, subcurvatis, 8-sporis, $50 \approx 8$; sporidiis oblongis, obtusis rectis v. subcurvatis, sæpe centro 1-nucleatis, hyalinis, distichis, $15 \approx 4,5$; paraphysibus superne sensim incrassatis filiformibus, clava hyalina, c. 3 μ . cr.

Hab. ad caulem putrescentem Aconiti varieg. prope glaciem æternam, Kartel-Gletscher in valle Moos alpium Tyrolensium (BRITZELMAYR).

105. **Helotium nigrescens** (Cooke) Rehm Asc. n. 307, *Peziza* (Hymenoscypa) 956
nigrescens Cooke Hedw. 1875, pag. 83. — Stipitatum, atro-brunneum, nigrescens, minimum, firmulum, cupula primum clavata, dein expansa, applanata, 0,3 mm., margine vix elevato, disco pallidiore, subcinereo; stipite crassulo, superne in cupulam expanso, duplo longiore, 0,5 mm. longo; ascis subcylindræis, $60 \approx 9$; sporidiis elongatis, fusiformibus obtusis, rectis v. curvulis, binucleatis hyalinis $12 \approx 3$.

Hab. ad caules Erigeronis, New Jersey Amer. bor.

106. **Helotium fumigatum** S. et Sp. Mich. II, p. 78, F. ital. f. 1337. 957
 — Ascomatibus gregariis, concavis, stipitatis, $\frac{1}{2}$ - $\frac{3}{4}$ mm. altis et latis totis fuscescentibus margine in sicco connivente pallidiore, extus levibus v. obsolete striatulo; excipuli contextu prosenchymatico, fuscidulo; ascis cylindræo-clavatis, $60 \approx 5-6$, apice rotundatis, deorsum acutato-stipitatis, paraphysatis, octosporis; sporidiis distichis, cylindræis, utrinque obtusiusculis, $8-9 \approx 1\frac{1}{4}-1\frac{1}{2}$, rectis vel curvulis, 2-guttulatis granulosive hyalinis.

Hab. in ramulis emortuis *Catalpæ syringifoliæ*, Conegliano Ital. bor., et *Clematidis Vitalbæ* in Gallia. — *Helotio Cacaliæ* sec. descript. affine videtur. *Peziza fumosa* Fr. Summa p. 353 e loco forte huic quoque affinis; sed ubi descripta?

107. **Helotium Krascheninikowii** (Weinm) Sacc., *Pez. Krascheninikowii* 958
 Weinm. Hym. Gaster. p. 465. — Solitarium, ascomate carnosomembranaceo, turbinato-globoso, dilute-brunneo, striatulo,

margine involuto, disco umbrino; stipite brevi, crassiusculo, nigrescente.

Hab. in ramulo rejecto decorticato alneo semel in Rossia. — Minuta species, sed valde memorabilis et elegans. Ascoma, vix $\frac{1}{2}$ mm. latum, initio magis turbinatum, dein turbinato-globosum, humidum obscure, siccum dilute brunneum, striis tenuibus, vagis, subelevatis ornatum, margine semper involuto; stipes $\frac{1}{2}$ mm. et ultra long. subteres, crassiusculus et sub lente subsulcatus.

108. **Helotium complanatum** Fr. Syst. Myc. II, p. 158, *Sarea complanata* Fr. Elench. II, pag. 14. — Atrum, capitulo convexo compresso, stipite inferne dilatato. 959

Hab. in ramulis Alni cordatæ in Kamtschatka. — Totum atrum, habitu *Calicii*, sed crusta nulla et discus solidus. Stipes 4 mm. circiter longus, sursum attenuatus; capitulum subtus planoconvexum adeo complanatum, ut a latere inspectum stipite paullo modo crassius. Primo obtutu facile crederes cupulam esse complicato-complanatam, sed discus omnino levigatus absque rimæ vestigio.

109. **Helotium sclerotioides** Berk. Outl. p. 371. — Convexum, umbilicatum, pallide rufo-brunneum, infra concavum et in stipitem brevem obconicum confluens; ascis tenuibus; sporidiis..... 960

Hab. in ligno putri Appin et near Bristol Britannicæ. — Primo obtuto *Sclerotium quercigenum* in mentem revocat. Ascoma 2 mm. lat.

110. **Helotium rufo-corneum** B. et Br. Fung. of Ceyl. n. 962. — Stipite brevi, sursum dilatato; cupulis subtus rugosis, castaneis; hymenio concolori; paraphysibus clavatis; sporidiis fusiformibus, apicibus auctis, hyalinis, 30 μ . long. 961

Hab. in ligno putri in insula Ceylon.

111. **Helotium sphaerophoroides** Phill. et Harkn. Calif. p. 1. — Ascomate minuto, stipitato, subturbinato, glabro, carneo-fuligineo, disco plano dein depresso, immarginato; ascis late clavatis, octosporis; sporidiis cymbiformibus, crasse uninucleatis, 14-19 \simeq 6. 962

Hab. gregatim in pagina inferiori foliorum Sequoicæ semper virentis in California Amer. bor. — Habitus *Sphaerophori*.

112. **Helotium spadiceo-atrum** (Mont.) Sacc., *Pez. spadiceo-atra* Mont. Prodr. J. Fern. n. 26 et Fl. Chil. VII, p. 401. — Spadiceum; cupula stipitata, hypocrateriformi, tandem planiuscula, disco atro; ascis clavatis inter paraphyses numerosas nidulantibus, 75 μ . long.; sporidiis 8 oblongis utroque fine attenuatis, 10 μ . long. 963

Hab. in silvis montosis Juan Fernandez ad folia dejecta (BERTERO). — Ascoma 1 mm. lat., stipes ascomate paullo longior.

113. **Helotium coracinum** Dur. et Lév. Expl. Sc. Alg. tab. 28, fig. 4 ⁹⁶⁴
(Pez.) [absque diagnosi]. — Gregarium, hypophyllum, infundibuliforme, stipitatum, fuscum, disco concaviusculo, stipite tereti brevi; ascis cylindraceutis, 8-sporis; sporidiis monostichis ovoideis, hyalinis, latitudine duplo longioribus; paraphysibus filiformibus, subinde ramulosis.

Hab. in foliis emortuis Quercus Ilicis in Algeria. — Ascoma $\frac{1}{2}$ mm. lat., stipes paullo brevior.

114. **Helotium titubans** Mont. Fl. chil. 408, t. 8, fig. 6, Syll. Crypt. ⁹⁶⁵
n. 631. — Amphigenum, gregarium; cupula minutula, planiuscula, apice stipitis attenuati atrati inflexo nutante, disco umbrino 70-80 μ . long.; sporidiis oblongo-fusiformibus simplicibus, 10 \approx 3.

Hab. ad utramque paginam foliorum coriaceorum, Chile (GAY).

115. **Helotium vasaense** Karst. M. F. I, p. 125. — Sparsum, breviter, ⁹⁶⁶
stipitatum; cupula planiuscula, brunneo-atra (saltem in statu sicco), circiter 2 mm. lat.; ascis cylindraceuto-clavatis, 8 μ . cr., apice jodo vix tinctis; sporidiis fusoido-oblongatis, utroque apice acutiusculis, 2-guttulatis vel eguttulatis, 10-14 \approx 3; paraphysibus filiformibus, fulvo-guttulatis.

Hab. supra Sphagna emortua in regione vasaensi, Quarken Fenniae. — *Omr. subspadiceæ*, ut videtur proximum. Stipes brevissimus, crassulus; asci et paraphyses arcte conferti.

116. **Helotium triste** Sacc. Mich. II, p. 379, F. it. f. 1338. — Asco- ⁹⁶⁷
matibus gregariis, scutellatis, ubique nigricantibus, glabris, solidiusculis, stipitatis, disco concaviusculo $\frac{1}{2}$ mm. diam.; stipite cylindraceuto $\frac{1}{3}$ mm. alto; contextu excipuli anguste prosenchymatico, castaneo, margine saturatiore; ascis tereti-fusoides, breve stipitatis, apice obtusiusculis, 100-110 \approx 12-14; paraphysibus bacillaribus, hyalinis, exterioribus vero granulato-virescentibus obvallatis, octosporis; sporidiis distichis, crassiusculis, fusoides, sæpe leniter curvis, utrinque acutis, 20-22 \approx 4-5, crasse 1-2-guttatis, hyalinis.

Hab. in stipitibus Aspidii Filicis-maris emortuis in *M. Generoso* (PENZIG). — Affine, ut videtur, *Pezizæ pteridicolæ* Crouan Finist. 50, sed satis differt colore nigricante, nec griseo-virente, sporidiis fusoides nec subcylindricis etc.

117. **Helotium campanulæforme** Fuck. Symb. p. 315. — Sparsum, mi- ⁹⁶⁸
nutum; cupulis campanulatis, in stipitem cupulam æquantem, tenuem, concolorem contractis, pallide fuscis, tot. 1-2 mm. alt., $\frac{1}{2}$

diam.; ascis clavatis, 8-sporis, $60 \approx 8$; sporidiis distichis, oblongo-ellipticis, continuis, 3-guttulatis, $12 \approx 3-4$, hyalinis.

Hab. in stipitibus *Aspidii Filicis-feminæ* in silva Æstrich Germaniæ. — Affine *Pezizellæ chrysostigmati*.

118. **Helotium sordidum** Phill. Grevillea XV, pag. 17. — Sparsum; 969
 ascomate stipitato, concavo dein plano, sordide brunneo, marginæ pallidiore, integro; stipite obtuso, pallido, basi albo, tomentoso; ascis cylindricis octosporis; sporidiis ellipsoideis, $7-9 \approx 3-4$; paraphysibus..... non visis.

Hab. in ligno putri in Nova Zelandia (COLENZO). — *Hel. fibuliformi* affine sed sporidia diversa.

B. Sessilia v. subsessilia.

I. Disco albo, pallido, sordide pallido. (119-127)

119. **Helotium immarginatum** Karst. M. F. I, p. 127. — Gregarium, 97
 sessile, immarginatum, sæpe repando-incisum, convexum, albidum, siccum fere concolor, planiusculum vel convexiusculum, latit. 0,4 mm.; ascis cylindræo-clavatis, $56-75 \approx 8-10$, apice jodo non vel obsoletissime cœrulescentibus; sporidiis distichis vel oblique monostichis, oblongatis, 2-guttulatis v. spurie tenuiter uniseptatis, plerumque rectis, $8-11,5 \approx 2,5-3,5$; paraphysibus sat numerosis, filiformibus, gracilescentibus, intus oleoso-guttulatis, $1-1,5 \mu$. cr.

Hab. supra lignum betulinum vetustum in Fennia saltem australi passim. — *H. trabinello* affine, sed omnibus partibus minus, colore paraphysibusque numerosioribus diversum.

120. **Helotium Kunzei** (Saut.) Sacc., *Peziza Kunzei* Saut. Pilze Salzburg. 971
 p. 10. — Sessile; ascomatibus carnosulis, sordide albis, margine integerrimo.

Hab. in disco putri arborum prope Mittersill Salzburg.

121. **Helotium hydrogenum** Peck 29 Rep. Bot. p. 56. — Gregarium 972
 vel sparsum, sessile, leve, extus brunneolum, disco subplano, marginato, pallido vel flavescente, sicco brunneo vel viridi tincto; ascis subclavatis; sporidiis subcylindræis, leniter curvulis, sæpe guttulas minutas numerosas foventibus, $12-15 \mu$. longis.

Hab. in ligno putrescente in aquis ad Sandlake Americæ borealis, sociis *Mitrolâ paludosâ* et *Vibrissæâ truncorum*.

122. **Helotium Doliolum** (Saut.) Sacc., *P. Doliolum* Saut. Pilz. Salzburg. 973
 pag. 9. — Minimum, turbinatum, annuliforme, subsessile, niveum, ascomate turbinato; stipite brevissimo, æquali.

Hab. in ligno putri prope Mittersill Salzburg.

123. **Helotium scoparium** Cooke in Grevillea IV, p. 112. — Ascoma- 974
tibus sparsis v. subgregariis, sessilibus, pallidis, disco convexo al-
bido totaque planta, demum siccando grisea; ascis clavatis, 100
≈ 20; sporidiis cylindræis obtusis, rectis curvulisve binucleatis,
20-25 ≈ 5 plasmate demum partito; paraphysibus filiformibus, gra-
nulosis.

Hab. in ramis emortuis *Sarothamni scoparii*, Dupplinkastle
Pert Britannicæ. — Ascoma 1 mm. lat.

124. **Helotium eburneum** Cr. Fl. Finist. p. 47. — Ascomate albo, tur- 975
binato, 4 mm. diam., hymenio albido; ascis subclavatis octosporis;
sporidiis fusiformibus, granulosis; paraphysibus capillaribus.

Hab. ad folia putrescentia et emortua locis udis silvarum Fi-
nistère Gallicæ. — Contextus e cellulis basi ovoideis, apicem asco-
matis versus filamentosis, hyalinis, intertextis efformatus.

125. **Helotium niveum** Cr. Fl. Finist. p. 47, tab. ult. fig. 5. — Asco- 976
mate albo, sessili, glabro, disciformi, 200 μ .; ascis late clavatis
octosporis; sporidiis ovoideis, majusculis, granulosis; paraphysibus
filiformibus, ascos superantibus.

Hab. in *Jungermannia albicante* Finistère Gallicæ.

126. **Helotium Blechni** Cr. Finist. pag. 47. — Ascomate albo sessili 977
crasso, hemisphærico subconcavo, 2-4 mm. lat. disco griseo; ascis
clavatis, octosporis; sporidiis oblongis, hyalinis; paraphysibus fili-
formibus.

Hab. in foliis emortuis *Blechni Spicant* in silvis Finistère
Galicæ. — Cellulæ excipuli basi ovoideæ, versus marginem prosen-
chymaticæ constipatæ.

127. **Helotium albidum** Cr. Finist. p. 47. — Ascomate albido, glabro 978
hemisphærico, sessili, 2-3 mm. lat., disco albo; ascis clavatis,
octosporis; sporidiis oblongis, granulosis; paraphysibus simplicibus
v. furcatis, sursum uncinatis.

Hab. ad terram silvaticam Finistère Gallicæ. — Excipuli cellu-
læ prosenchymaticæ perangustæ, stipatæ, anastomosantes.

II. Disco rubente. (128-134)

128. **Helotium rubens** Sacc. et Roum. Reliq. Libert. IV, n. 40. — 979
Ascomatibus gregariis, sessilibus ceraceo-tenacellis prorsus super-
ficialibus, plano-scutellatis, $\frac{1}{2}$ - $\frac{3}{4}$ mm. diam., ambitu sinuatis, disco
roseo persicino velutino, margine exiguo pallidiore; ascis clavatis,
longe sensim stipitatis, 85-100 ≈ 8, paraphysatis octosporis; sporidiis

distichis bacillari-fusoideis, rectis v. curvulis, 18-22 \approx 2-3, hyalinis, nubilosus.

Hab. in cortice Rhamni in Arduennis. — *Mollisiæ rameali* Karst. subaffine videtur. An *Pezizella*?

129. **Helotium subcarneum** (Schum.) Sacc. Mich. II, p. 260, F. ital. 980 f. 1330, *Peziza subcarnea* Schum. in Flor. dan. vol. XII, t. 2084 fig. 1, *P. carnea* Fr. S. M. II, p. 135, *Helotium carneum* Fr. Summa p. 356? — Gregarium, pusillum obconico-sessile, totum sordide rubrum, concaviusculum, udum $\frac{1}{2}$ -1 mm. diam., in sicco valde contractum; ascis tereti-clavulatis, 60 \approx 6; sporidiis octonis subdistichis, tereti-fusoideis, curvulis, 12 \approx 3, hyalinis (rarius plene evolutis).

Hab. in fragmentis ligneis et strobilis Pinorum dejectis in Horto Patavino (BIZZOZERO), ad lignum Fagi, Carpini etc. in Suecia et Saellandia.

130. **Helotium gyalectoides** (Saut.) Sacc. *Peziza gyalectoides* Saut. 981 Pilz. Salz. p. 14, Wint. Hedw. 1881, pag. 133. — Ascomatibus gregariis, minutis, orbicularibus, sessilibus ceraceis, concaviusculis, roseolis, margine integro pallidiore; ascis clavatis, 50-60 \approx 7, octosporis; sporidiis inordinatis, oblongo-fusoideis, sæpe inæquilateralibus, continuis, 8-10 \approx 2, hyalinis; paraphysibus filiformibus.

Hab. in foliis putridis Salicis Salzburg. — Habitus *Gyalectæ faveolaris*.

131. **Helotium querceti** Sacc. Mich. I, p. 68, F. ital. f. 117. — Cu- 982 pulis sessilibus, centro punctiformi adfixis, applanatis, scutellaribus, vix $\frac{1}{4}$ mm. diam., levibus, glabris, siccis quandoque subcontortis sed apertis, ex albido roseis; ascis cylindraceo-clavatis, breve stipitatis, 50-55 \approx 7-8; paraphysibus crassiuscule filiformibus obvallatis, octosporis; sporidiis distichis cylindraceo-fusoideis subbacillaribus, 12-14 \approx $1\frac{1}{2}$ -2, bi-trinucleatis indeque spurie 1-2-septatis, hyalinis.

Hab. in foliorum pag. inf. Quercus pedunculatæ in silva Montello Ital. bor. — *Helotio epiphylo* (Pers.) Fr. subaffine, at rite distinctum.

132. **Helotium nemorosum** Cr. Fl. Finist. p. 47. — Ascomate subhe- 983 misphærico, sessili, rubescente, 1-2 mm.; ascis subclavatis, octosporis; sporidiis fusoideo-elongatis, angustis, granulosis.

Hab. ad terram in nemorosis ad vias Finistère Galliæ. — Contextus anastomotico-filamentosus.

133. **Helotium roseo-rubrum** Cr. Fl. Finist. p. 48. — Ascomate hemi- 984

sphærico vel turbinato, sessili, roseo-rubro, 1-3 mm.; ascis subcylindricis, octosporis; sporidiis ovoideis, uninucleatis; paraphysibus filiformibus, apice clavulato-incurvis.

Hab. ad terram limosam Finistère Galliae.

134. **Helotium Guernisaci** Cr. Fl. Finist. p. 48. — Ascomate turbi- 985
nato, albo-carneo vel brunneo, carnosulo, glabro, leniter concavo, dein convexo, 1-2 cm. diam.; ascis subcylindricis, octosporis; sporidiis oblongis quadriguttulatis; paraphysibus filiformibus.

Hab. ad terram, fimo cuniculorum immixtam, Brest Galliae (DE GUERNISAC).

III. Disco flavo, vitellino, stramineo.

135. **Helotium immutabile** Fuck. Symb. App. I, p. 50. — Epiphyllum, 986
pallide immutabile flavum; cupulis sparsis, sessilibus vel in stipitem brevissimum concolorem deorsum attenuatis, 2-3 mm. latis, planis, acute marginatis, orbicularibus seu parum repandis; ascis clavatis, 8-sporis, 75-88 \approx 8; sporidiis oblique monostichis, oblongo-ovatis, rectis, continuis, hyalinis, 10-12 \approx 3-5; paraphysibus filiformibus.

Hab. in foliis putrescentibus Populi tremulae et nigrae in Germania et Italia.

136. **Helotium Ilicis** Phill. Disc. p. 164. — Sessile, planum vel con- 987
cavum, ceraceum, glabrum, vitellinum, margine pallidiore obtuso repando; ascis clavatis, apice acutis; sporidiis fusoides biguttatis, demum simulate uniseptatis, 6-9 \approx 2,5; paraphysibus filiformibus.

Hab. in foliis emortuis Ilicis, Shrewsbury Carlisle Britanniae. — Ascoma 0,5 mm. lat.

137. **Helotium phacidioides** Sacc. Misc. myc. II, p. 9. — Ascomatibus 988
sparsis, sessilibus plano-scutellatis, initio epidermide velatis (phacidioides), dein prorsus emergentibus, $\frac{1}{3}$ - $\frac{1}{2}$ mm. d., margine breviter elevato, atro-fusco, levi, disco sordide cerineo, concaviusculo; ascis tereti-clavulatis, breve crasse stipitatis, 60 \approx 10, paraphysatis, octosporis; sporidiis oblique monostichis, bacillaribus, apice obtusiusculis, 15 \approx 2, leniter curvis, hyalinis.

Hab. in foliis emortuis Betulae albae, saepius epiphyllum, Malmedy (LIBERT). — Hic *Trochilis*, hinc *Phacidiis* affine, sed propius *Helotio*.

138. **Helotium callorioides** Rehm Ascom. Alp. n. 3. — Gregarium, 989
sessile, patellare, vix stipitatum, planum, aurantiaco-luteum, siccum concavulum humectatum ad marginem pallidius, planum v. convexu-

lum, prosenchymatice flavide contextum, c. 0,8-1 mm. diam.; ascis clavatis, apice incrassatis, 8-sporis, $60 \approx 7$; sporidiis obtuse fusiformibus, rectis hyalinis, distichis $12 \approx 3$; paraphysibus filiformibus, apice hamatis, haud clavatis.

Hab. ad caules putridos *Aconiti varieg.* prope glaciem æternam, Kartel-Gletscher in valle Moos alpium Tyrolensium (BRITZELMAYR).

139. **Helotium citrinicolor** Cr. Fin. pag. 48. — Ascomate sessili, citrino, 2-4 mm. diam., margine pallidiore; ascis cylindraceutis octosporis; sporidiis oblongis 4-guttatis; paraphysibus filiformibus. 990

Hab. in sarmentis emortuis Rubi, Finistère Galliae.

140. **Helotium humile** Sacc. Mich. II, p. 78 (nec Desm.). — Ascomatibus gregariis, subsuperficialibus sessilibus plano-scutellatis, $\frac{1}{4}$ - $\frac{1}{3}$ mm. diam., levibus, glabris, distincte marginatis, ex albo luteolis, disco concaviusculo, sicco aperto; ascis cylindraceutis, 70-80 \approx 8, stipitatis, apice obtusiusculis, paraphysatis, octosporis; sporidiis cylindraceuto-fusoideis, teniter curvis, 15 \approx 2-3, obtusiusculis, hyalinis. 991

Hab. in ramulis *Genistæ scopariæ* inque capsulis *Æsculi* in Normandia Galliae. — *H. Humili* (Lasch.), *H. albello* (With.) et *H. separabili* Karst. subaffinis, sed rite distinguenda species.

141. **Helotium Libertianum** Sacc. et Roum. Reliq. Libert. IV, n. 39. 992
— Ascomatibus subsparsis, sessilibus, scutellato-urceolatis, ceraceis, aurantiis, $\frac{1}{2}$ mm. diam.; ascis tereti-clavulatis, paraphysatis, octosporis, longiuscule sensim stipitatis, 40-58 \approx 5; sporidiis oblique 1-stichis, oblongo-cylindraceutis, curvulis, 6 \approx 2, hyalinis.

Hab. in squamis strobilorum *Pini silvestris*. — A *Pez. chryso-stigmatē* differt ascomatibus multo majoribus, levibus.

142. **Helotium aureolum** Sacc. Mich. II, p. 79, nec Rab. — Ascomatibus gregariis, minutissimis, vix $\frac{1}{10}$ mm. d., plano-scutellaribus, distincte breve marginatis, semper apertis, brevissime stipitatis (simulate sessilibus) amœne citrinis, disco nitidiore; contextu excipuli subprosenchymatico flavo; ascis clavulatis, breviter stipitatis, apice rotundatis, 40-45 \approx 8; paraphysibus filiformibus obvallatis, octosporis; sporidiis fusoideis, curvulis, utrinque v. magis deorsum, acutiusculis, 14-15 \approx $1\frac{3}{4}$ -2, 2-3-nucleatis, hyalinis. 993

Hab. in stipitibus *Pteridis aquilinæ*. — Cum nullâ formâ mihi notâ commutanda species, nisi cum *H. citrinulo* Karst, quod sporidiis brevioribus, cupulis prorsus sessilibus recedere videtur. A *Pez. chryso-stigmatē* ascomatibus glabris, sporidiis fere duplo longioribus etc. recedit.

143. **Helotium rhytidodes** B. et C. Cuban Fung. n. 700. — Sessile, 994
stramineum; cupula crateriformi, subtus rugoso-plicata; sporidiis
ellipticis levibus.

Hab. in insula Cuba.

IV. Disco subvirente.

144. **Helotium collinum** Speg. Mich. I, p. 473. — Ascomatibus laxe 995
gregariis, primo subglobosis dein explanato-patellaribus, sessilibus,
extus glabris, sordide virescentibus, disco amœne griseo-cæruleo,
subhygrophano, $\frac{1}{4}$ - $\frac{1}{2}$ mm. diam.; ascis cylindræis, aparaphysa-
tis, 45-50 \approx 4-5, obturaculo vel apice jodi ope dilute cærulescente;
sporidiis distichis cylindræo-fusoideis subclavulatisque, quando-
que utrinque uniguttulatis, hyalinis, 10 \approx 1-1 $\frac{1}{2}$.

Hab. in pagina inferiore foliorum Viburni Lantanae, Cone-
gliano Ital. bor.

145. **Helotium conglomeratum** Cr. Fin. p. 48. — Ascomatibus brun- 996
neo-virentibus, sessilibus, subhemisphæricis, sæpe glomerulatis;
ascis fusoides, octosporis; sporidiis piriformibus, hyalinis, 5-gut-
tulatis; paraphysibus filiformibus.

Hab. in sarmentis emortuis Rubi, Finistère Galliae. — Conte-
xtus dense cellulosus.

146. **Helotium flavo-viride** Cr. Fl. Finist. pag. 47. — Ascomate 1-2 997
mm. diam., flavo-viridi, sessili, plano v. convexo; ascis clavifor-
mibus, octosporis; sporidiis ovoideis, granulosis; paraphysibus ca-
pillaribus.

Hab. ad truncos putrescentes pineos, Finistère Galliae.

147. **Helotium albo-virens** Cooke Disc. U. S. I, p. 299. — Sparsum 998
v. subgregarium, viridi-album, sessile, subtus filis arachnoideis al-
bis affixum; ascomate convexo demum subplano, sicco obscuriore
1 mm. diam.; ascis cylindræis; sporidiis teretibus obtusis, rectis
v. curvulis, continuis, 18 \approx 3.

Hab. in ligno acerino, New Jersey Amer. bor. (ELLIS).

V. Disco lutescente, ochraceo, fulvo, melleo, alutaceo.

148. **Helotium Humuli** (Lasch) De Not. Comm. I, p. 379, Karst. M. 999
F. I, p. 112, Sacc. F. ital. f. 1361, *Peziza Humuli* Lasch in Rab.
Herb. Myc. ed. II, p. 221 et ed. I, p. 630, *Pez. humilis* Desm. XIV
Notic. n. 84. — Sessile aut sessile, planiusculum, minutum, lu-
tescens; ascis cylindræo-clavatis 70-80 \approx 9-10, obturaculo jodo
leviter cærulescente; sporidiis aciculari-elongatis, 2-3-guttulatis v.

spurie tenuiter uniseptatis, rectis vel leniter curvulis, 16-18 \approx 4, rarius 12-15 \approx 3.

Hab. ad caules Humuli Lupuli siccos in Germania, Fennia, Italia, Gallia, Britannia. — Ab *H. virgultorum* atque formis ejus numerosis ascomatibus sessilibus vel fere sessilibus minoribusque mox distinguendum.

149. **Helotium Iridis** Cr. Fl. Finist. pag. 48. — Ascomate 2-3 mm. 1000
diam., extus griseo-brunneo, sessili, hemisphærico, concavo, dein expanso et convexo, margine undulato atro-fimbriato; disco griseo; ascis clavatis, octosporis; sporidiis longis, subcylindræis, hyalinis, guttulatis; paraphysibus filiformibus, apice incrassatis.

Hab. ad caules emortuos et submersos Iridis Pseudo-acori, Finistère Galliæ. — Excipulum e cellulis hexagoniis, minutis effectum.

150. **Helotium brevisporium** C. et Phil. Grev. VIII, p. 63. — Ochra- 1001
ceum, sessile, sparsum 1-3 mm. lat., applanatum concavum, margine pallido elevato; ascis cylindricis; sporidiis breviter ellipticis, demum (spurie?) uniseptatis 7-10 \approx 3-4; paraphysibus linearibus.

Hab. ad ramos decorticatos, Waitaki Nov. Zelandiæ.

151. **Helotium melleum** B. et Br. Fung. of Ceyl. n. 957 (1873). — 1002
Punctiforme, gelatinosum, subsessile primo planum mox convexum, pallide melleum; sporidiis ellipticis, 20 μ . longis.

Hab. in corticibus, Peradenya Ceylon.

152. **Helotium discolor** (Hedw.) Sacc. *P. discolor* (Hedw.) Fr. S. M. 1003
II, p. 134, *Octosp. discolor* Hedw. Musc. II, p. 65, t. XXII, f. C. — Planum, adpressum, siccum ochraceum, humidum griseo-expallens, basi minima fusco-nigricante.

Hab. in cortice arborum Hannoveræ (EHRHART). — E basi, vix stipitiformi, mox expansum in cupulam orbicularem, tenuem, margine in siccis adparente, in humidis evanido, 1 mm. latam; ex habitu potius *Patelleæ* species.

153. **Helotium propinquum** Sacc. et Ell. Mich. II, p. 572, Fung. ital. 1004
fig. 1358. — Ascomatibus sparsis, sessilibus ceraceis patellaribus levibus, lutescentibus, $\frac{1}{2}$ - $\frac{3}{4}$ mm. diam., disco plano-concaviusculo; ascis teretiusculis, 50-60 \approx 6-7; paraphysibus filiformibus obvallatis, breve stipitatis; sporidiis tereti-fusoideis utrinque obtusiusculis, leniter curvulis, hyalinis.

Hab. in ramis corticatis Corni in Pennsylvania (ELLIS). — Hinc *Helotio albello*, hinc *H. insititio* affiue, sed satis diversum.

154. **Helotium simile** Sacc. et Roum. Reliq. Lib. IV, n. 41. — Asco- 1005

matibus gregariis sessilibus ceraceo-tenacellis, superficialibus, plano-scutellatis, sinuatis, vix $\frac{1}{2}$ mm. diam., disco ochraceo-succineis, margine exiguo pallidiore impolito; ascis tereti-clavatis, breve crasseque stipitatis, octosporis, paraphysatis, 60-70 \approx 6; sporidiis bacillari-clavulatis, 14-15 \approx 3, deorsum tenuatis, hyalinis.

Hab. in ramis corticatis salicinis in Arduennis (LIBERT).

155. **Helotium sarmentorum** De Not. Prof. Discom. in Comm. critt. 1006

I, p. 379, Michel. I, p. 67. — Cupulis sessilibus convexulis, rufo-aurantiacis; ascis clavatis 90-100 \approx 15, deorsum attenuatis, paraphysibus filiformibus obvallatis, octosporis; sporidiis ovato-oblongis, utrinque acutiusculis, sæpe inæquilateralibus, 20-22 \approx 6-7, 2-4-guttatis, hyalinis.

Hab. in sarmentis emortuis *Vitis viniferæ*, Milano et Conegliano Ital. bor.

156. **Helotium disciforme** Fr. Summa p. 356, *Peziza* Fr. Syst. Myc. 1007

II, p. 134. — Sessile, carnosum-ceraceum, glabrum, planiusculum, margine lacerato, disco brunneo.

Hab. ad ramos putridos *Fagi* in Suecia. — Magnum, 4-6 mm. latum, subinde spurie stipitatum, subtus in adultis planum, pallidum et discus convexulus, margine vix prominente.

157. **Helotium Lens** Speg. Fung. Arg. Pug. IV, n. 227. — Sessile, 1008

hinc inde laxissime gregarium, udum hemisphærico-lenticulare, siccum applanato-patellare non v. vix contractulum, glaberrimum, pallide et sordide ceraceo-testaceum 1-1,5 mm. diam.; ascis clavulatis, sursum acutiuscule rotundatis crasseque tunicatis, deorsum parce attenuato-pedicellatis, 80-90 \approx 8-10, octosporis; paraphysibus filiformibus non v. vix apice incrassatulis obvallatis; sporidiis oblique monostichis v. distichis, utrinque subtruncato-rotundatis 15 \approx 3, continuis, 2 v. 4-guttulatis, hyalinis; obturaculo ascorum obsolete cœrulescente.

Hab. ad folia dejecta putrescentia *Eryngii pandanifolii* in uliginosis, Boca del Riachuelo Argentinae.

158. **Helotium trabinellum** Karst. M. F. I, pag. 126. — Gregarium v. 1009

confertum, passim confluens, sessile crassiusculum, subplanum, testaceo-pallidum, siccum concaviusculum, incarnato- v. fulvescenti-testaceum, 0,5 mm. lat.; ascis clavatis, 65-80 \approx 8-10, obturaculo minuto jodo obsolete cœrulescente; sporidiis oblongato-ellipsoideis v. oblongatis, 2-guttulatis, rectis v. subrectis, 9-12 \approx 3-4; paraphysibus sat raris filiformibus 2 μ . cr., apicem versus leniter incrassatis.

Hab. supra lignum arborum frondosarum (Alni?) in Mustiala Fenniaë. — ***H. italicum** Sacc. F. it. fig. 1329 (*H. trabinellum*): ascomatibus breve obconico-stipitellatis, disco subplano, ex incarnato succineo, marginato, extus conspicue pallidioribus, $\frac{1}{2}$ - $\frac{3}{4}$ mm. diam., excipulo prosenchymatico pallido; ascis clavatis, 80-90 \approx 7-8, apice rotundatis, stipitatis, p. s. 60 μ . long.; paraphysibus clavulatis obvallatis, octosporis; sporidiis distichis oblongis v. breve fusoides, subrectis, 8-10 \approx 2-3, 2-nucleatis spurieque 1-septatis, hyalinis. In ligno putri, Conegliano Ital. borealis.

159. **Helotium agyrioides** Cr. Finist. p. 47. — Ascomate flavo-ochraceo pallido, hemisphærico, sessili, 1 mm. diam.; ascis subcylindricis, octosporis; sporidiis ovoideis, hyalinis. 1010

Hab. in ligno putri, spongioso *Quercus*, Finistère Galliaë.

160. **Helotium monticolum** Berk. North Am. Fungi n. 751. — Congestum pallide fulvum, obovatum; disco plano; sporidiis biserialibus, subfusiformibus. 1011

Hab. in ligno putri in montibus Carolinaë sup. Amer. bor.

161. **Helotium Marchantiæ** (Berk.) Fr. Summa p. 356, *Peziza Marchantiæ* Berk. Engl. Fl. V, p. 304. — Obconicum, crassiusculum pallide flavido-brunneum, marginatum, subflexuosum, disco planiusculo; ascis clavatis, 100-120 \approx 8-10; sporidiis ellipsoideis, 12-16 \approx 3-5. 1012

Hab. in frondibus *Marchantiæ polymorphæ*, *M. hemisphæricæ*, *Preissiaë hemisphæricæ* in Britannia, Fennia et Fuegia (forma stipite longiore puberulo, disci margine acuto). — Ascoma 1-2 mm. lat.

VI. Disco badio, castaneo, griseo, atro-fusco.

162. **Helotium badium** Phill. Disc. p. 167. — Gregarium, erumpens, sessile, initio turbinatum et concaviusculum, dein planum, disco badio-brunneo, margine distincto et paullo dilutiore, extus concolor glabrum; ascis late clavatis, basi subabrupte attenuatis; sporidiis oblongo-fusoides v. subclavatis, 3-5-guttulatis, 20 \approx 5; paraphysibus filiformibus. 1013

Hab. in ramis emortuis (*Salicis*?) Oxford Britanniaë (BAXTER). — Ascoma 1-2 mm. lat. Habitus *H. ferruginei*.

163. **Helotium castaneum** Sacc. et Ell. Mich. II, p. 572, F. ital. fig. 1362. — Hypophyllum, minutissimum, castaneum; ascomatibus sessilibus, scutellatis, levibus, $\frac{1}{4}$ mm. diam., subceraceis; ascis terti-oblongis, 45 \approx 16; paraphysibus filiformibus obvallatis, brevissi- 1014

me stipitatis, apice obtusiusculis; sporidiis subtristichis oblongo-fusoideis, 11-14 \approx 3-4, biguttulatis spurieque 1-septatis, hyalinis.

Hab. in pag. inf. foliorum *Quercus laurifoliae*, Florida, (Doct. GEO. MARTIN).

164. **Helotium populinum** Fuck. Symb. p. 316. — Cupulis carnosis, 1015 gregariis, punctiformibus, subsessilibus, primo globosis, umbilicatis demum applanatis, margine elevato, subfusco, integro, crasso, extus pallide griseo, disco subconcavo, concolore, siccis subturbinatis; ascis stipitatis, oblongis, 8-sporis, 36 \approx 8; sporidiis distichis, oblongo-lanceolatis, hyalinis, 9 \approx 4.

Hab. in pag. super. foliorum *Populi pyramidalis* in Münchau pr. Hattenheim.

165. **Helotium lividum** Mont. Fl. Chil. VII, p. 407, Syll. Crypt. n. 630. 1016 — Hypophyllum, erumpens; cupula subsessili tandem explanata, marginata, extus glabra fuscescente, disco pallido tandem livido-fusco; ascis clavatis; sporidiis lineari-oblongis, hyalinis, 7-8 \approx 2-3.

Hab. in pagina inferiore foliorum *Æxtoxici punctati*, in provinciis Chiles meridionalis (CL. GAY). — Ascoma $\frac{1}{2}$ -1 mm. lat.

166. **Helotium microscopicum** (Wallr.) Sacc. *P. microscopica* Wallr. 1017 Fl. crypt. n. 2507. — Ascomatibus omnium minutissimis confer-tim sparsis, glabris, in basin stipitiforem attractis s. obconicis turbinatisve fuscis, dein vertice impressis, veluti in discum punctiformem concolorem obtuse marginatum impressis.

Hab. ad frustula ligni faginei cæsi in Thuringia.

167. **Helotium aglæosporum** Berk. North Am. Fungi n. 752. — Cor- 1018 nicolor, irregulare; hymenio pulvinato; ascis linearibus; sporidiis oblongis curvulis utrinque hyalinis, 8-15 μ . long.

Hab. ad lignum putre in Amer. bor.

168. **Helotium stigmaion** Rehm Ascom. Alp. n. 767, Hedw. 1882, 1019 n. 7. — Gregarium, in foliis dealbatis sessile, conico-truncatum v. subglobosum, apice deplanatum, orbiculare, siccum leviter urceolatum, nigro-fuscum, humidum planum, margine tenuissimo cinctum, disco ferrugineo-nigro, c. 0,3 mm. diam.; prosenchymatico-fusco-contextum; ascis clavatis, 8-sporis, 45 \approx 6, jodi ope cœrulescentibus; sporidiis elongatis, obtusis, hyalinis, 6 \approx 2 (haud rite evolutis visis); paraphysibus filiformibus, ascos superantibus haud distincte clavatis; jodi ope apice ascorum cœrulescente.

Hab. ad folia graminea sicca prope Sölden in valle Cetz alpium Tyrolensium (DR. REHM). — Var. **minusculum** Rehm Ascom. n. 767: ascomate minuto, subgloboso; ascis clavatis, 45 \approx 7-8; spo-

ridiis 2-guttatis, oblongo-ellipsoideis, $.9 \approx 2,5$; paraphysibus æqualibus. In vaginis siccis graminum in Tyrolia.

Subgen. *Calycella* Sacc. Ascoma extus furfuraceum vel puberulum (Cfr. *Lachnella*).

A. Stipitata.

169. **Helotium alutaceum** B. et Br. Fung. of Ceyl. n. 956. — Sessile, 1020
subtus margineque albidum, flexuosum, pulverulentum; hymenio alutaceo; sporidiis ellipticis, 12-13 μ . long.

Hab. ad ramos, Peradenya Ceylon. — Margo initio inflexus.

170. **Helotium lætum** (Boud.) Sacc., *Pachydisca læta* Boud. Bull. Soc. 1021
Myc. IV, p. 78, t. 16, f. 3. — Stipitatum carnosum, luteo-aurantiacum, 2,5 mm. latum, 1-2 mm. altum, lentiforme, crassum, margine vix prominente leve aut sub-crenulato, extus minutissime furfuraceum, hymenio primo plano, dein convexo, ascis prominulis granuloso, concolore; paraphysibus non aut vix incrassatis, simplicibus, cylindricis, hyalinis aut lutescentibus parce septatis, intus granulosus, 3-4 μ . crassis; ascis cylindrico-clavatis, octosporis, 170-180 \approx 10 vacuis, foramine marginato crenulato donatis; sporidiis oblongo-fusoideis, inæquilateralibus et subflexuosis, intus utrinque granulosus, centro libero, 24-30 \approx 5-7.

Hab. ad cortices madidos in paludosis Montmorency Galliæ.

171. **Helotium microspermum** Speg. Fungi Fueg. n. 334. — Cupulis 1022
in ligno denudato hinc inde dense gregariis, majusculis, firmis, cupulato-expansis, 2-3 mm. diam., sessilibus v. subsessilibus, disco concaviusculo sordide rufescente v. melleo, margine acuto integerrimo extus sordide fuscis minutissime albo-pruinulosus; ascis cylindraceis v. subclavulatis, sursum leniter attenuatis, apice obtuse rotundatis crassiuscule tunicatis, deorsum longiuscule crasseque attenuato-pedicellatis, 40-45 \approx 2-3, octosporis; paraphysibus paucis non v. vix longioribus obvallatis; sporidiis recte v. oblique mono- v. distichis, ellipticis utrinque subacutato-rotundatis, exiguis, 3-3,5 \approx 1,5-1,8, minute biguttulatis, hyalinis.

Hab. in ramulis emortuis decorticatis fagineis in silvis pr. Ushuvaia Argentinae.

172. **Helotium maculosum** Ell. et Mart. in Amer. naturalist 1883, 1023
p. 1284. — Ascomate orbiculari, sessili, $\frac{1}{6}$ mm. diam., plano vel convexo, sicco concavo, disco sordide carneo, extus obscuriore, pilis septatis brunneis prope basin oriundis vestito; ascis oblongo-cla-

vatis, $55 \approx 12$; sporidiis distichis, late fusoidis, $16-20 \approx 4-5$, plasmate tripartito.

Hab. in foliis viventibus brunneo-maculatis *Perseæ palustris* New Florida Amer. bor. «An *Trichopeziza?*».

173. **Helotium Stellerii** (Weinm.) Sacc. *Pez. Stellerii* Weinm. Hym. 1024
Gaster. p. 478. — Sparsum v. confertum, sessile, carnosum-tremellosum, ochraceum, applanatum, extus tenerrime granulosum, margine nunc integro, nunc repando.

Hab. in lignis pineis mucidis semel in Rossia. — Pusillum. Ascoma primo globosum, margine involuto, granuloso, mox applanatum, margine aut integro aut repando-crispato, et in hoc statu totius evolutionis vix 1 mm. latum.

B. Sessilia v. subsessilia.

174. **Helotium sambucinum** Cr. Fl. Finist. p. 49. — Ascomate pedicellato, concavo, dein convexo, sordide albo, subtus tomentello, 2-3 mm., stipite subcylindrico brunneo; ascis clavatis; sporidiis piriformibus, 4-guttulatis; paraphysibus filiformibus, granulosis, brunneolis.

Hab. in ramis emortuis *Sambuci* Finistère Gallia. — «An *Dasyscypha?*»

175. **Helotium macrosporium** Peck 26, Rep. p. 82 (1874), nec Sacc. 1026
— Ascomatibus primo subclausis, dein expansis et leniter concavis albidis, extus furfuraceis; stipite brevi, crassiusculo; sporidiis oblongis, grosse uninucleatis, $25-30 \mu$. longis.

Hab. in ligno emortuis fagineo Worcester Americæ borealis. — Fungus siccando leniter brunnescit.

176. **Helotium Laburni** B. et Br. in Phill. Disc. pag. 135 et Bresad. 1027
Trid. pag. 69, t. 74, f. 2. — Ascomate leviter stipitato v. sessili, concavo v. plano, extus furfuraceo pallido, margine inflexo, disco ochraceo, vivido; ascis cylindræo-clavatis; sporidiis fusoidis, subacutis v. clavatis, biquadriguttatis, $17-27 \approx 5-9$; paraphysibus filiformibus obtusiusculis.

Hab. in ramis demum decorticatis *Cytisi Laburni* in Britannia et agro tridentino. — Ascoma $\frac{1}{2}-2$ mm. diam. Caro albo-flavida. Asci, teste Bresad. $120 \approx 10-12$, sporidia $23 \approx 7-8$. *Helot. citrino* affine.

177. **Helotium pateræforme** (Berk.) Cooke Austr. Fung. p. 51, *Peziza pateræformis* Berk. Fl. Tasm. p. 276. — Ochraceum; cupula sessili, sublobata, concava, subtus rugosiuscula subtiliter to-

mentosa; ascis linearibus; sporidiis oblongis utrinque attenuatis subcymbæformibus, 30 μ . longis.

Hab. in ligno muscoso in Tasmania (ARCHER). — *Hel. citrino* affine. Ascoma 4 mm. lat.

178. **Helotium pileatum** Peck 28 Rep. pag. 67, t. I, f. 11-14 et 32 1029
Rep. p. 58. — Ascomate subhemisphærico v. pileiformi, stipitato, glabro, albido subtus applanato, pruinuloso; stipite longiusculo albo-pruinoso; sporidiis oblongis, hyalinis, 10-12 μ . long.

Hab. in caulibus herbaceis emortuis in uliginosis Hunter Greene county Am. bor. — Totus fungus 12 mm. altus. Agaricum minutum simulans.

179. **Helotium sulphurinum** QuéL. 12, Suppl. p. 13, t. VII, fig. 11 et 1030
in Grevillea 1879, pag. 116. — Ascomate cyathoideo, 0,5-1 mm. diam., substipitato, tenero, pruinoso, albo v. citrino; hymenio concavo, nitide sulphureo, udo albescente; sporidiis fusiformibus, 12 μ . longis, 4-guttulatis, rectis v. incurvatis.

Hab. gregarie in ramis exsiccatis Coryli in Jura. — Affine *H. citrino*.

180. **Helotium rhizogenum** E. et E. Journ. Mycol. 1888, pag. 100. — 1031
Ascomate stipitato, pallido, dein læte flavo; stipite cylindrico, curvulo, 2-4 mm. alto, 0,5-1 mm. crasso, pallido et granuloso-puberulo, disco leniter concavo, 1-2 mm. lato, pallide flavo, pallidius marginato; ascis angustis, 65-75 \approx 5, filiformi-paraphysatis; sporidiis distichis, clavato-fusoideis, 6-8 \approx 1,3-1,5, hyalinis.

Hab. ad radices expositas emortuas Andropogonis, Newfield N. J. Amer. bor.

181. **Helotium fibuliforme** (Bolt.) Berk. Outl. p. 371, *Helv. fibuliformis* 1032
Bolt. fung. t. 176, *Pez. Fibula* Pers. syn. p. 660, *Pez. fibuliformis* Fr. Syst. Myc. II, p. 155. — Firmum, capitulo convexo flavo subtus stipiteque brevi crasso subvillosa nigro-fuscis; ascis tereti-clavatis; sporidiis oblongo-fusoideis, 2-guttatis, 9-12 \approx 2-4.

Hab. in truncis ulmeis ad latera fossarum prope Bingley et Bettws-y-Coëd Britanniae. — Ascoma semper apertum lentiforme, 4-6 mm. fere latum.

182. **Helotium Limonium** C. et P. Peck 26 Rep. p. 83. — Citrino- 1033
flavum, extus pallidius; ascomate plano vel leniter convexo, immarginato, primo extus tenuiter farinaceo; stipite gracili, æquali, diametro ascomatis brevior; ascis cylindræis; sporidiis cylindræis, utrinque obtusis, curvulis v. rectis, 7,5 μ . longis.

Hab. ad caules herbarum, Center Amer. borealis.

183. **Helotium rhizophilum** (Fuck.) Cooke Handb. n. 2155, Pat. Tab. 1034
anal. fig. 590, *Ciboria rhizophila* Fuck. Symb. mycol. p. 312. —
Cupulis primo infundibuliformibus, dein applanatis, excavatisque,
usque ad 4 mm. latis, immarginatis, extus et stipite 7-10 mm.
longo albicante-furfuraceis, disco vitellino; ascis linearibus, utrin-
que attenuatis, stipitatis, 8-sporis, $60 \approx 6$; sporidiis subdistichis,
continuis, cylindraceutis, rectis, hyalinis, $12 \approx 2$.

Hab. in rhizomatibus Koeleriaë glaucæ aliorumque grami-
num in silvaticis Rhenogoviæ, Galliæ, Belgii et Britanniaë. — Ex
icone Pat. l. c., sporidia clavulata; furfur ascomatis e pilis bre-
vissimis, 1-septatis, hyalinis constat.

184. **Helotium furfuraceum** Phill. et Harkn. Calif. p. 4. — Sparsum, 1035
minutum, breve stipitatum vel sessile, cyathiforme, alutaceum,
furfuraceum; ascis clavatis, 8-sporis, aparaphysatis; sporidiis ob-
longo-ellipsoideis, leniter curvis, 2-3-guttatis, $15 \approx 5$.

Hab. hypophyllum in foliis Quercus agrifoliaë in California.

185. **Helotium discretum** Karst. M. F. 1, p. 116. — Gregarium, sti- 1036
pitatum; cupula planiuscula, levissime puberula, albida v. lutescenti,
disco subluteo, sicco fulvo-flavo, 0,4-0,8 lat.; stipite æquali, 0,2
mm. alt.; ascis cylindraceuto-clavatis, $40-48 \approx 4$; sporidiis cylindra-
ceis, rectis v. subrectis, 2-5-guttulatis, $4-8 \approx 1,5$.

Hab. ad caules Humuli Lupuli exsiccatos in Mustiala Feni-
niæ.

186. **Helotium agaricicolum** B. et Br. Fung. of Ceyl. n. 959. — Cu- 1037
pulis breviter stipitatis, extus pulverulentis; hymenio vinoso; spo-
ridiis uniseriatis cymbiformibus, pallido fuscis.

Hab. in Agaricis putridis, Peradenya Ceylon.

PHIALEA Fr. Obs. II, p. 305 ut subgen. [1818], (Etym. *phiale* po-
culum), *Helotii* species Karst. et Auct., *Pezizæ* spec. Fuck., *Hy-*
menoscyphe spec. Phillips, *Cyathiculae* spec. De Not. — Ascoma
ceraceo-membranaceum, tenue, initio urceolato-subclausum, mox
apertum concavum vel convexum, glabrum vel pruinatum, longiu-
scule tenuiter stipitatum, margine non dentatum. Asci elongati v.
lineares, 8-spori, filiformi-paraphysati. Sporidia ovoidea, oblonga
vel teretiuscula, continua, hyalina. — Sensim hinc ad *Helotium*,
illinc ad *Pezizellam* transit.

A. Eu-Phialea. Ascoma glabrum, nudum.

I. Disco albo, albido, griseo.

1. **Phialea cyathoidea** (Bull.) Gill. Disc. p. 106, *Peziza cyathoidea* 1038

Bull. t. 316, f. 2, Fr. Syst. Myc. II, p. 124, *Fungoides* etc. Mich. gen. p. 205, n. 14, *Elv. infundibuliformis* Scop. Carn. II, p. 480, *P. Hirudo* Batsch f. 149? *Octosp. albidula* Hedw. l. c. pag. 30, t. 9, f. B, *P. tenella* Batsch Cont. 1, f. 151, Nees Syst. f. 294, *P. tenerrima* Holmsk. Ot. II, p. 33, t. 11, *Helotium cyathoideum* (Bull.) Karst. M. F. II, p. 136, *Cyathicula vulgaris* De Not. — Tenuis, albida, pallida; cupula globoso-cyathiformi, dein explanata integerrima; stipite filiformi longiusculo; ascis clavatis, $45 \approx 5$, filiformi-paraphysatis; sporidiis oblongis, rectis, curvulisve, $6-10 \approx 1,5-2$, hyalinis, sæpe 2-guttatis.

Hab. ad stipites et caules plantarum Epilobii, Dipsaci, Aconiti, Heraclei, Cicutæ, Eupatorii, Nesææ, Ballotæ etc., in Suecia, Gallia, Britannia, Italia, Belgio, Fennia, Germania, Hungaria, Nova Zelandia, Amer. bor. vulgatissima. — Stipes longus, cupula demum planiuscula et tenuis; color in humida stirpe aquose pallidus, albidus, lutescens, subincarnatus; in siccis obscurior. Bulliardus tres notat varietates, albam, luteam, ferrugineam. Sec. Karsten *Ph. albidula* (Hedw.) recedit sporidiis paullo majoribus, $11 \approx 2$. — β . **convivalis** Batsch, Pers. Myc. Eur. p. 286: epiphylla, albida, cupula turbinata, stipite brevior. Cum *H. epiphylla* non commutanda. Ad folia locis humidis. — γ . **violascens** A. et S.: epiphylla, amœne violascens. Distincta forsan. Iisdem locis, autumnis. Ex hac regione quoque Mich. t. 86, f. 13 et *P. pedicellata* Sowerb. t. 369, f. 1.

2. **Phialea Solani** (Pers.) Sacc. *Pez. Solani* Pers. Obs. 2, p. 80, Fuck. 1039
Symb. p. 307. — Cyathiformis, stipitata, firmula, extus longitudinaliter striata, pallida; ascis anguste linearibus, oblique stipitatis, 8-sporis, $52 \approx 4$; sporidiis elongato-distichis, cylindratis, rectis, hyalinis, $8 \approx 2$.

Hab. in caulibus putridis Solani tuberosi, in Germania et Britannia. — Media inter *Ph. cyathoideam* et *Ph. Urticæ*.

3. **Phialea clavata** (Pers.) Gill. Disc. p. 110, *H. clavatum* (Pers.) 1040
Karst. *Peziza clavata* Pers. Myc. Eur. I, p. 283, Fr. Syst. Myc. II, p. 122. — Sparsa vel gregaria, stipitata, firmula, pallescens; cupula cyathoidea, levi, 0,6-0,8 mm. lat.; stipite æquali, crassiusculo, circiter 0,6 mm. alt.; ascis cylindratis-clavatis, $40-50 \approx 4-5$, obturaculo jodo leviter cœrulescente; sporidiis oblongatis aut fusoido-oblongatis, $4-8 \approx 1,5-2,5$.

Hab. ad caules Umbelliferarum e. g. Angelicæ et Fi-

licum in Fennia, Lapponia et Britannia, in caule Teucrii in Rhénogovia. — *Ph. caulicolæ* affinis.

4. **Phialea Urticæ** (Pers.) Sacc. *H. Urticæ* (Pers.) Karst. M. F. I, 1041 p. 133, *Peziza Urticæ* Pers. Myc. Eur. I, p. 286, *P. striata* Fr. Syst. Myc. II, p. 122, *Hymenoscypha* Phill. Disc. p. 141. — Gregaria, stipitata, firmula; cupula turbinata, humida longitudinaliter conferte striatula, pallescenti, sicca fuscescenti aut fusca, margine connivente, leviter pruinoso, circiter 0,5 mm. lat.; stipite æquali levi, crassiusculo, firmo, gilvo-pallido, cupula brevior, subinde longiusculo; ascis cylindræo-clavatis, 40-50 \approx 5-6, obturaculo jodo obsoletissime cœrulescente; sporidiis fuosoideo-oblongatis, 7-8 \approx 2.

Hab. ad caules *Urticæ* dioicæ exsiccatos in Suecia, Germania, Fennia, Britannia. — Sec. Rehm vix differt a *Ph. Cacaliæ*.

5. **Phialea scyphiformis** (Wallr.) Sacc. *Pez. scyphiformis* Wallr. Fl. 1042 crypt. n. 2581. — Ascomatibus exiguis sparsis tenuiter membranaceis, albo-pallescens, extus fibris tenerrimis adpressis parcis æqualiter adpersis, primum e basi stipitifirmi firma crassa subclavato-turbinatis sensim osculo rotundo hiantibus, dein in discum concavum concolorem reclusis abrupte scyphiformibus, siccando margine inflexo subtili tenuissime striato inflexo conniventibus compressis triquetrisve.

Hab. ad caules aridos Chærophyllorum in Germania. — *Ph. Urticæ* similis, differre tamen videtur tegmine fibroso æqualiter diffuso, nec in strias distinctas stipato, cupulis concaviusculis abrupte scyphiformibus, siccando plane difformibus triquetris et stipite brevior, crassior magisque æquali.

6. **Phialea rubicola** (Fr.) Sacc. *Hel. rubicolum* (Fr.) Fuck. Symb. 1043 p. 314, Sacc. F. it. f. 1342, *Peziza fructigena* γ . *rubicola* Fr. Syst. Myc. II, p. 119, *Hel. virgultorum rubicolum* Fr. S. v. Sc. p. 355. — Ascomate orbiculari, plano, albo-pallescens; stipite æquali; ascis elongatis (non clavatis), stipitatis, 8-sporis, 96 \approx 8; sporidiis subdistichis, oblongis, antice obtusis, basi valde attenuatis, subcurvatis, continuis, hyalinis, 20 \approx 4.

Hab. in sarmentis Rubi et Rosæ in Suecia, Germania, Italia, Gallia.

7. **Phialea Perula** (Pers.) Gill. Disc. p. 105, *P. Perula* Pers. Myc. 1044 Eur. I, p. 280, Fr. S. M. II, p. 125. — Cupula submembranacea elongata, infundibuliformi, albida, stipite brevi nigrescente.

Hab. in umbrosis uliginosis ad caules aridos *Angelicæ* silvestris in Germania et Gallia. — Sparsa, forma marsupii; cupula

ore lato aperta 4 mm. alta, exsiccata nigrescens, substantia tenuissima.

8. **Phialea albida** (R. et D.) Gill. Disc. p. 105, *Peziza albida* Rob. 1045
et Desm. 19, Not. p. 28, *Helotium* Pat. Tab. 382. — Sparsa aut
laxe gregaria, stipitata, fragilis; cupula minuta, eburnea, acetabu-
liformi dein plana, margine integerrimo; stipite crassiusculo basi
rufo; ascis clavatis, 100 μ . long.; sporidiis hyalinis, oblongis, ob-
tusis, subcylindricis, 15-17 \times 4, 2-guttatis.

Hab. in petiolis semiputridis Fraxini, in Gallia, Britannia,
Belgio. — Ascoma 1-3 mm. lat.; stipes subæquilongus. — Var.
Æsculi Phill. Disc. p. 138: a typo differt sporidiis majoribus 20-
23 \times 4-5 et sæpius clavulatis. In petiolis Æsculi in Britannia.

9. **Phialea phyllophila** (Desm.) Gill. Disc. p. 105, *Helotium* Sacc. F. 1046
it. fig. 1341, *Pez. phyllophila* Desm. IX, Not. pag. 8, *Pezicula*
phyllophila Karst. M. F. I, p. 167 (?). — Amphigena, exigua, sti-
pitata, glabra, candida, subnervisequa; cupula concava, dein pla-
no-convexa; ascis clavatis, 60-70 μ . long.; sporidiis oblongis cur-
vatis.

Hab. in foliis semiputridis Acerum et Fagorum, in Gallia
et Italia. — Stipes $\frac{1}{2}$ mm. long. In forma fagicola italica: asco-
mata stipitata, $\frac{1}{4}$ mm. diam., pallide straminea, glabra; asci cla-
vulati, breve stipitati, 60 \approx 12, apice rotundati, octospori; sporidia
anguste fusioidea, utrinque acutiuscula, leniter curva, 12-15 \times 2 $\frac{1}{2}$ -
3, 2-4-guttulata, hyalina.

10. **Phialea paludum** Qué. XIII Suppl. p. 9, tab. XII, p. 26. — Asco- 1047
matibus cyathiformibus, 2-3 mm. diam., subtilibus, glabris, albe-
scentibus vel carneis, vix brunneis diaphanisque; stipite filiformi,
brevissimo vel elongato; hymenio albo vel pallide lutescente; spo-
ridiis ellipsoideis, 10 μ . longis.

Hab. gregaria in partibus foliorum emortuorum, Alsace. — Af-
finis *Ph. capillipedi*.

11. **Phialea Berggrenii** (C. et Phil.) Sacc. *Helotium* C. et Ph. Grev. 1048
VIII, pag. 63. — Phyllogena, pallida, stipitata; cupulis sparsis,
cyathiformibus, 0,5-0,7 mm.; stipite gracili, æquali circa 0,5-1 mm.
long.; ascis cylindraceutis; sporidiis ellipticis, nucleatis, 10-13 \times 3-5;
paraphysibus filiformibus.

Hab. in foliis putridis, Melbourne Australiæ.

12. **Phialea simulata** (Ellis) Sacc. *Helotium simulatum* Ellis in Bull. 1049
Torr. Bot. Club. 1881, p. 72. — Ascomate stipitato, disco circu-
lari, plano vel leniter umbilicato, sordide aquoso, 3 mm. lato, te-

nui, dein (sicco) concavo; stipite 3 mm. alto, levi, leniter deorsum contracto et saturatori; ascis sessilibus, cylindricis; sporidiis ellipsoideis, hyalinis, 12 μ . longis; paraphysibus filiformibus.

Hab. in foliis *Aceris* humi fuis putridis, New Jersey Americæ borealis.

13. **Phialea erioloma** (Fr.) Sacc. *Pez. erioloma* Fr. Syst. Myc. II, 1050 p. 121. — Cupula acetabuliformi, pallida, marginem versus subvillosa, stipite longo tenui æquali glabro.

Hab. in ramis putrescentibus *Ericæ* in Suecia (ASPEGREN), ad stramina putrida in Thuringia (WALLROTH). — Sparsa, 2 mm. alta vel paullo altior; discus in siccis pallidus, humectatus lutescenti-olivaceus. Ob villum prope marginem ad *Lachnellas* accedit.

14. **Phialea hirtipes** Mout. et Sacc. (sp. nov.). — Ascomatibus stipitatis, 4-5 mm. altis; stipite elato cylindræo, sordide albo, dein fusco, basi nigro-villoso, disco concolore applanato vel convexiusculo, 2 mm. diam., immarginato; ascis teretibus, tetrasporis, 80 \approx 8; sporidiis monostichis, breve oblongis, continuis, 14 \approx 5. 1051

Hab. in ramis dejectis locis udis *Alni glutinosæ* in Belgio. — Statura fere *Ciboriæ*.

15. **Phialea pulchella** (Fuck.) Sacc. *Peziza pulchella* Fuck. Symb. 1052 p. 299. — Sparsa; cupulis glabris, minutis, candidis, hemisphæricis applanatisve, margine pallidiore, stipite cupulam æquante, basi atro, recto, siccis sordidis; ascis oblongis, 8-sporis, 26 \approx 4; sporidiis oblongo-cylindræis, 6 \approx 2, hyalinis.

Hab. in acubus putridis udis *Pini silvestris* in Rhenogovia. — Sec. Fuck. status conidicus est *Sphæridium candidum* Fuck.

16. **Phialea subtilis** (Fr.) Gill. Disc. p. 161, *Hel. subtile* Fr. Summa 1053 p. 354, Karst. M. F. I, p. 131, *Pez. subtilis* Fr. Syst. Myc. II, p. 157, *Hymenoscypha* Phill. Disc. p. 132, *Fungoidaster minimus*, *discoides*, *albus* etc. Mich. gen. p. 201, t. 82, f. 3, qui *H. album* Pers. Myc. Eur. p. 347, a nostro haud essentialiter differt. Altera vero species *Fungoidastri* l. c. t. 82, f. 4 (*H. incarnatum* Pers. l. c.) ad hoc genus non pertinet. — Candida, minuta, firmula; capitulo plano-convexo; stipite tenui brevi; ascis tereti-clavatis, 66 \approx 4; sporidiis elliptico-fusoideis, 5-6 \approx 2; paraphysibus filiformibus.

Hab. in foliis dejectis præcipue *Abietis excelsæ* et *pectinatae* in Suecia, Gallia, Britannia, Germania, Italia. — Non cum *P. chionea* commutanda; stipes 2 mm. haud longus, subattenuatus. Ascoma 2 mm. latum, demum leviter convexum, subtus plano-concavum.

17. **Phialea strobilina** (Fr.) Sacc. nec Gill. (quæ *Ciboria*), *H. strobilinum* (Fr.) Fuck. Symb. p. 313, *Pez. strobilina* Fr. S. M. II, p. 125, *Ombrophila* Karst. M. F. II, p. 92. — Piriformis, firma; cupula concava pallide rufescenti, margine tumido integerrimo; stipite brevi nigro; ascis subcylindricis, tenuibus, sursum leniter dilatatis; sporidiis oblongo-fusoideis, 8-12 \approx 2-2.5 hyalinis; paraphysibus filiformibus. 1054

Hab. ad strobilos abiegnos, frequens, in Suecia, Britannia, Germania, Italia, Gallia, Blue Canon Amer. bor. — Distinctissima, eximie gregaria, valde tenax, minuta, vix 2 mm. alta: passim adest subiculum floccoso-furfuraceum (*Chalara strobilina* Sacc.). Cupula junior urceolata, dein magis dilatata, sicca nigrescens, humectata expallens. — β . **opaca** Fr. l. c.: cupula olivacea, humida spadicea. Primo subglobosa, disco punctiformi; dein lenticularis, disco concavo, margine semper obtuso integerrimo. Ad conos Pini silvestris in Suecia.

18. **Phialea proximella** (Karst.) Sacc., *Helotium proximellum* Karst. M. F. I, p. 133, Sacc. F. ital. f. 1336. — Minuta, gregaria, stipitata; cupula convexa, subtus concava, virescente v. subolivascens albida, sicca subfuscescente, hymenio albo v. candido, circiter 0,7 mm. lat.; stipite tenuiusculo, subæquali, stricto, firmulo, fulvescenti v. rufescenti, sicco fusco v. fusco-nigrescenti, latitudine cupulæ brevior; ascis cylindræo-clavatis, 28-32 \approx 4; sporidiis vulgo oblique monostichis, eguttulatis, 4-8 \approx 1-4,5; paraphysibus parvis, gracilibus. 1055

Hab. ad acus Pini silvestris et Abietum putrescentes Mustiala Fennicæ et Susegana Ital. bor. — In forma **abietina** italica: asci fasciculati, clavato-cylindræi, sæpe e basidio unico plures orientes, 35-40 \approx 4, octospori; sporidia cylindræo-fusoidea, 5 \approx 1½, hyalina.

19. **Phialea advenula** (Phill.) Sacc., *Hymenoscypha* Phill. Disc. pag. 133. — Stipitata, concava vel plana, duriuscula, alba vel flavido-alba; stipite æquali, tenui; ascis tereti-clavatis; sporidiis oblongo-ellipsoideis, 8-9 \approx 2,5-4; paraphysibus parvis, filiformibus. 1056

Hab. in foliis dejectis Laricis, North Wales Britannicæ. — Habitus omnino *Phialeæ subtilis* sed sporidia fere duplo majora.

20. **Phialea Sabinæ** (Fuck.) Sacc., *Hel. Sabinæ* Fuck. Symb. mycol. p. 313. — Sparsa, piriformis demum magis dilatata, 1 mm. alta; ascis stipitatis, elongato-clavatis, 8-sporis, 108 \approx 10; sporidiis mo- 1057

nostichis, ovatis, hyalinis, nucleo granuloso, $10 \approx 5$; paraphysibus linearibus, ascis subbrevioribus.

Hab. in foliis et ramulis induratis Juniperi Sabinæ et communis in silva Æstrich Rhenogoviæ.

21. **Phialea juniperinella** (Karst.) Sacc. *H. juniperinellum* Karst. M. 1058

F. I, p. 133. — Gregaria, stipitata, firmula; cupula convexa, subtus concava, alba vel candida, latit. 0,2-0,3 mm.; stipite filiformi, sæpe flexuoso, fusco-nigricante vel nigrescente, apice fusco-pallido, altit. 1,5-2 mm.; ascis gracilibus, cylindraceo-clavatis, 15-20 \approx 2-3; sporidiis minutissimis.

Hab. ad acus Juniperi communis putrescentes prope oppid. Tammerfors et Mustiala Fenniæ. — E longinquo adspecta facile pro specie *Stilbi* Tode sumitur, sed vera *Phialea*, potissimum *Ph. subtili* aut potius *Ph. proximellæ* proxima; stipes crassit. 60 μ . circiter.

22. **Phialea alniella** (Nyl.) Sacc. *H. alniellum* (Nyl.) Karst. Symb. 1059

p. 239, *Peziza alniella* Nyl. Obs. p. 45, Karst. Monogr. Pez. p. 140, *Hel. Grenseri* Auersw. in Rab. Fung. eur. ed. II, 1122. — Subgregaria, stipitata, alba vel pallido-alba, plana, latit. 0,4-0,8 mm.; stipite tenello brevi vel brevissimo; ascis cylindraceo-clavatis 50-55 \approx 6-7, obturaculo jodo obsolete cærulescente; sporidiis distichis vel oblique monostichis, oblongatis, eguttulatis, 6-12 \approx 2-4.

Hab. ad amenta Alni in Fennia et in Hungaria. — Cupula primum tenuissime furfuraceo-pulverulenta, deinde subglabra, disco sæpe dilute luteolo; stipes pallido-albus, tandem fuscens.

23. **Phialea Amenti** (Batsch) Sacc. *Peziza Amenti* Batsch Cont. I, 1060

p. 211, fig. 148 (*Pez.*) *Helotium Amenti* (Batsch) Fuck. Symb. p. 313, Gill. Disc. c. ic. — Tenuis, albida; cupula convexula cicatrice centrali notata; stipite brevi sursum incrassato; ascis stipitatis, elongatis, 8-sporis, 54-72 \approx 6; sporidiis oblique submonostichis, ovato-oblongis, 6-8 \approx 3-4, hyalinis.

Hab. in amentis fructibusque Salicum et Alnorum in Germania, Gallia, Britannia, Italia. — Sparsa, minuta, tota glabra, aquose pellucida, demum fuscens; cupulæ margo reflexus, affinitatem cum *Helotiis* indicat.

24. **Phialea chlorella** (Saut.) Sacc. *Pez. chlorella* Sauter in Flora 1061

1845, p. 133 (*Peziza*). — Gregaria, tenuis; cupula primo plana et aquose-albida, demum convexa pileiformi viridula; stipite æquali aquose-albido.

Hab. ad radices pineas pr. Aubach Austriæ (SAUTER). — P.

rhodoleuccæ et *P. amenti* proxima. Stipes 1 mm. circ. longus, cupula circ. 1 mm. lata.

25. **Phialea Utriculus** (Berk.) Sacc. *Peziza Utriculus* Berk. Exot. 1062
Fung. p. 396. — Sparsa; cupulis albis, hemisphæricis, membranaceis, levibus, crispis; stipite gracili, longiusculo.

Hab. in lignis putrescentibus, Juan Fernandez (BERTERO). — *Belonid. Campanulæ* similis sed minor.

26. **Phialea concolor** (Phill.) Sacc. *Peziza concolor* Phill. in Stev. 1063
Myc. Scot. p. 321, *Hymenoscypha* Phill. Disc. p. 139. — Gregaria, minuta, stipitata, pallida v. albida, firma, tenuis, hemisphærica, rugulosa, margine minuto fimbriato; ascis cylindræo-clavatis, octosporis; sporidiis oblongis, utrinque rotundatis, 8-10 \times 2-3; paraphysibus filiformibus.

Hab. in ligno indurato, decorticato in Scotia (J. KEITH). — Ascoma $\frac{1}{4}$ -1 mm. lat., stipes $\frac{1}{2}$ mm. alt.

27. **Phialea Craginiana** (E. et E.) Sacc. *Peziza* Ell. et Ev. in Journ. 1064
Mycol. I, p. 47. — Ascomate stipitato, 2-3 mm. lat. levi, discoideo, madore albido, obscuriore in sicco; stipite filiformi, 2-3 mm. long.; ascis cylindræis, 75 \times 6, subsessilibus; sporidiis ovato-ellipsoideis, e flavido hyalinis, binucleatis, 5-6 \times 2,5-3, monostichis v. subdistichis.

Hab. in ligno valde putri, Topeka Amer. bor. — Affine *Ph. gracilipedi*.

28. **Phialea eburnea** (Desm.) Sacc. *Peziza* Desm. XIX, Not. p. 28, nec 1065
Cr. — Amphigena, sparsa aut vix gregaria, stipitata, minutissima eburnea; cupula hemisphærica, margine denticulato subpruinoso; stipite brevi; ascis clavatis, tenerrimis, 30 μ . long.

Hab. ad folia exsiccata graminum, in Gallia (ROBERGE). — Ascoma $\frac{1}{4}$ mm. lat., stipes $\frac{1}{6}$ mm. long.

29. **Phialea Volutella** (Fr.) Sacc. *P. Volutella* Fr. S. M. II, p. 127, 1066
Volutella nuda Tod. Meckl. fung. I, p. 29, t. 6, f. 44. — Fugax, cupula primum revoluta, demum disciformi punctato-umbilicata alba; stipite setaceo nigro.

Hab. in culmo triticeo putrido in agro Mecklenburgensi. — Diameter pilei linearis; structura fungilli tam tenera, ut vita solum ephemera gaudeat; cupula junior revoluta, dein depressa, centro nonnumquam umbonato. An a *P. culmigena* diversa?

30. **Phialea tenuissima** Quél. X Suppl. p. 13, t. IX, f. 9, Pat. t. 284. 1067
— Ascomatibus cyathiformibus, 200-400 μ . diam., ceraceis, hyalinis, margine subtili, hyalino-flocculoso; stipite capillari, glabro;

ascis cylindraceutis; sporidiis bacillaribus, 5-7 μ . longis; paraphysibus filiformibus.

Hab. in culmis et foliis graminum Jura. — *Ph. caulicolâ* minor.

31. **Phialea petasata** (Karst.) Sacc., *H. petasatum* Karst. M. F. I, 1068 p. 131. — Sparsa, stipitata, dilute albida vel aquose pallida; cupula convexa, subtus concava, latit. 0,7-0,8 mm.; stipite subæquali, altit. circiter 0,7 mm.; ascis cylindraceuto-clavatis, 48-50 \approx 4-5, obturaculo jodo vix v. obsoletissime cœrulescente; sporidiis vulgo oblique monostichis, fusoideo-elongatis, rectiusculis, eguttulatis, 10-15 \approx 2-3; paraphysibus parcis, filiformibus, apicem versus incrassatis.

Hab. ad culmos Phragmitis communis vetustos in par. Tammela Fenniae passim. — Externa facie a *Ph. culmigena* haud dissimilis, partibus autem internis diversa.

32. **Phialea pileata** (Karst.) Sacc., *Helotium pileatum* Karst. M. F. 1069 I, p. 130, *Pez. pileata* Karst. Monogr. Pez. pag. 150 (1869) nec Peck (1874). — Sparsa, stipitata, livido- vel cæsio-pallida; cupula convexa, margine deflexo sæpeque repando-lobato, latit. circiter 2 mm.; stipite sursum incrassatulo, altit. 2-3 mm.; ascis confertis cylindraceuto-clavatis, 70-90 \approx 7-8, obturaculo jodo intense cœrulescente; sporidiis fusoideo-elongatis, rectis v. curvulis, simplicibus ac guttulatis, 16-32 \approx 2,5-4; paraphysibus gracilescentibus sat parcis.

Hab. ad culmos calamosque putridos nec non supra terram locis aquosis v. humidis et in margine rivulorum in Fennia et Britannia.

33. **Phialea confinis** (Karst.) Sacc. *H. confine* Karst. M. F. I, p. 139. 1070 — Dilute albida, stipitata; cupula scyphoidea, dein explanata, margine pruinoso-crenulato, 0,3-0,7 mm. lat.; stipite fuscescente, 0,4-0,7 mm. alt.; ascis cylindraceuto-clavatis, 36-42 \approx 4,5-5,5, obturaculo jodo vix v. obsoletissime cœrulescente; sporidiis fusoideo-elongatis, distichis 10-15 \approx 2.

Hab. ad culmos Junci conglomerati emortuos, locis udis dejectos, fine mensis Octobris in Mustiala Fenniae. — A *Ph. cyathoidea*, cui proxima, margine cupulae crenulato et sporidiis majoribus nec non colore differt.

34. **Phialea culmigena** (Fr.) Sacc. *H. culmigenum* Fr. Summ. Veg. 1071 Scand. p. 355, Karst. M. F. I, p. 129, *Peziza culmigena* Fr. Syst. Myc. II, p. 127. — Subgregaria, dilute pallida vel albida, stipitata, pellucens; cupula plana, ambitu reflexa, subumbilicata, cir-

citer 0,4-0,6 mm. lat.; stipite æquali subcapillari, 0,5-1,5 mm. alt.; ascis cylindraceo-clavatis; sporidiis ellipsoideis vel oblongatis eguttulatis, 9-14 \approx 4-6.

Hab. ad culmos Tritici repentis emortuos in Fennia et Suecia. — Var. **scirpina** Fr. l. c. utrinque plana margine prominente stipite brevi firmiore. In calamo Scirpi lacustris in Suecia.

35. **Phialea culmicola** (Desm.) Gill. Disc. p. 103, *Hel. culmicolum* 1072 (Desm.) Karst. Symb. p. 237, M. F. I, p. 134, *Peziza culmicola* Desm. Espec. nouvell. 1836, p. 10, *Cyathicula culmicola* De Not. Disc. pag. 28. — Sparsa v. subgregaria, stipitata, firmula; cupula turbinata, pallescente vel albo-fuscescente sicca subfusca, pruinosa v. furfurella, margine connivente, longitudinaliter striatula, vix 0,5 mm. lat.; stipite æquali, brevi, crassiusculo, firmo, interdum subroseo; ascis cylindraceo-clavatis, 126 \approx 10, obturaculo jodo leviter cœrulescente; sporidiis fusoideo-elongatis, rectis v. subrectis, 9-12 \approx 1,5-2; paraphysibus gracilibus.

Hab. in culmis Avenæ, Secalis, Hordei, Tritici in Gallia, Fennia, Amer. bor.

36. **Phialea Constantini** (Boud.) Sacc. *Helotium Constantini* Boud. 1073 Bull. Soc. Myc. IV, p. 81, t. 17, f. 1. — Stipitata, 2-3 mm. lata et totidem alta, uda omnino hyalina, siccitate albida levis, intus gelatinosa, stipite subcrasso, etiam pellucido; hymenio primo concavo, dein expanso convexoque medio subumbilicato; paraphysibus simplicibus cylindraxis, ad apicem non aut vix incrassatis, non septatis nisi ad basim, intus guttulatis, 3 μ . cr.; ascis cylindraceo-clavatis, octosporis, vacuis foramine submarginato, 170-190 \approx 7-8; sporidiis maxime arcuatis, apicibus subattenuatis, intus utrinque varie guttulatis, centro vacuis, 15-18 \approx 3.

Hab. ad folia putrida Caricum in paludosis, Montmorency Galliæ (COSTANTIN).

37. **Phialea pteridicola** (Cr.) Gill. Disc. p. 104, *Peziza pteridicola* 1074 Cr. Fl. Finist. pag. 50. — Ascomate levi, griseo, pedicellato, 1-2 mm., disco virente; ascis clavatis, octosporis; sporidiis teretiusculis, hyalinis; paraphysibus filiformibus granulosis, viridulis.

Hab. ad basim Pteridis aquilinæ, Finistère Galliæ.

II. Disco flavo, flavido, aureo, aurantio.

38. **Phialea Hedwigii** (Phill.) Sacc. *Hymenoscypha* Phill. Disc. p. 130, 1075 *Octospora fungoidaster* Hedw. Frond. II, p. 53, t. XIX, fig. 1-4, *Pez. virgultorum* Fl. Dan. t. 1016, fig. 2. — Stipitata, concava v.

plana, flava, aurantio-tincta, margine integro, infra pallidior; stipite longiusculo, supra medium tomentosum, albo, incrassato; ascis tereti-clavatis; sporidiis oblongis v. oblongo-ellipsoideis, 2-guttulatis, $7-10 \approx 3$.

Hab. in ramis emortuis Coryli prope Shrewsbury Britanniaë. — Ascoma 1-3 mm. lat. et alt., stipes matrici mycelio albo affixus.

39. **Phialea Tuba** (Bolt.) Gill. Disc. pag. 99, *Helotium* Fr. Summa 1076 p. 355, Hazsl. Ein. Disc. p. 15, t. III, f. 3, *Pez. Tuba* Bolt. fung. t. 106, f. 1, Pers. Myc. Eur. p. 278, Fr. Syst. Myc. II, pag. 128, *Hymenoscypha* Phill. Disc. pag. 126, *P. ochracea* Schum. Saell. p. 431. — Lutea; cupula turbinata, disco plano, margine tumido, stipite longo gracili; ascis (teste Hazsl. l. c.) cylindraceis, breve stipitatis, octosporis; sporidiis ellipsoideis, oblique monostichis, hyalinis.

Hab. ad ramos locis humidis prostratos in Britannia, Belgio, Suecia, Hungaria. — Sec. ic. Hazsl. loc. cit., stipes 10 mm. long, basi nodulosus. Stipes subfiliformis, æqualis, incurvus v. flexuosus, e loco longitudine varius. Cupula extus levis, primo clavata.

40. **Phialea salicina** (Pers.) Sacc. *H. salicinum* (Pers.) Fuck. Symb. 1077 p. 314, *Peziza salicina* Pers. Syn. p. 663, *Helotium virgullorum* $\beta.$ *salicinum* Fr. S. v. Sc. p. 355, Syst. Myc. II, p. 119, sub *Peziza fructigena* $\beta.$ *salicina*, *Pez. flavescens* Holms. Ot. t. XI. — Ascomate flavo, tenui, flexuoso, difformi, stipite tenui deorsum attenuato; ascis stipitatis, clavatis, 8-sporis, $120 \approx 14$; sporidiis in asci apice subdistichis, oblongis, parum curvatis, utrinque acuminatis subtilissime apiculatis, hyalinis, $24 \approx 6$.

Hab. in ramulis tenellis, valde humidis Salicis triandræ ad Rhenum pr. Æstrich, in Italia et in Suecia.

41. **Phialea Aspegrenii** (Fr.) Gill. Disc. p. 107 c. ic. *Pez. Aspegrenii* 1078 Fr. Syst. Myc. II, p. 131, *P. bicolor* Sowerb. t. 369, f. 7, Fries Obs. 2, p. 305, nec Bull. *P. Calicium* Pers. Myc. Eur. p. 280 nec Decand. — Cupula subrepanda, glabra, disco flavo extus stipiteque subadscendente albis; ascis cylindraceis, octosporis; sporidiis oblongis v. oblongo-ellipsoideis, 2-guttatis, $8-10 \approx 3,5$ (Phill.).

Hab. ad ligna mucida in Britannia, Gallia, Suecia. — Gregaria, 5-7 mm. alta, stipite subtenui.

42. **Phialea crocea** (Schw.) Sacc. *P. crocea* Schw. Syn. p. 116. — 1079 Subcorneo-indurata, crocea, fasciculata, 2-3 cm. alta; stipite crasso sulcato incurvo; cupula varie contorta et lobata, 4 mm. lat., margine obtuso subflexuoso; sporidiis obovatis, minutis, 5 μ . longis.

- Hab.* ad ramos Abietis Fraseri etc. in Carolina sup. et New York. — An *Ciboria?*, an *Guepinia?*
43. **Phialea quercicola** (Saut.) Sacc. *Peziza quercicola* Saut. Pilz. 1080
Salzb. p. 15, Wint. Hedw. 1881, pag. 133. — Ascomate tenui, al-
bido, cyathiformi, cernuo, disco aurantiaco, stipite brevi, filiformi;
ascis elongato-clavatis, octosporis, 45-53 \times 5; sporidiis subdistichis,
cylindraco-fusoideis, utrinque rotundatis, continuis, hyalinis, 7-9
 \times 1,5-2; paraphysibus cylindracois crassis, apice cuspidatis, ascos
superantibus.
Hab. in cortice Quercino putrescente, Salzburg. — Ob para-
physes ad *Dasyscypham* nutat.
44. **Phialea verpoides** (Saut.) Sacc. *Peziza verpoides* Saut. in Hedw. 1081
1876, p. 149. — Ascomate disciformi, rotundo, flavido, 4 mm. lato,
margine integro, revoluto, disco sicco rugoso, subtus levi, pallido,
stipite 2-3 cm. longo, dilatato, flexuose contorto, nudo, fusco, 2
mm. crasso.
Hab. ad ligna putrida pr. Salzburg, raro.
45. **Phialea crocata** (Mont.) Sacc. *Pez. crocata* Mont. Cent. II, n. 19, 1082
Syll. Crypt. n. 625. — Minuta, tenuis, stipitata; cupula demum
applanata amœne crocea utrinque glabra; stipite albido-succineo al-
bo-villosulo, demum glabrescente pellucido.
Hab. ad petiol. folior. deject. in silvis sinnamariensibus (LÉ-
PRIEUR).
46. **Phialea micans** (Saut.) Sacc. *Pez. micans* Sauter in Flora 1841, 1083
p. 380. — Epiphylla, sparsa, punctiformis, sulphurea, cupulis ex
urceolato deplanatis cum stipite brevi conicis.
Hab. in foliis Arabidis pumilæ in agro urbis Stiriaë pr.
Mühlbach, altit. circ. 1000 m.
47. **Phialea Hymenula** (Fuck.) Sacc. *Peziza* Fuck. Symb. p. 308. — 1084
Cupulis breviter stipitatis, 1-1½ mm. lat., primo concavis, demum
explanatis, extus pallidioribus, disco flavo, marginato; ascis longis-
sime stipitatis, clavatis, 8-sporis, 76 \times 4; sporidiis subdistichis, cy-
lindracois, parum curvatis, 3-4-guttulatis, hyalinis, 8-10 \times 2, con-
idiis, ut in fungo conidiophoro, commixtis.
Hab. in caulibus putridis Sambuci Ebuli et Georginaë in
Rhenogovia. — Sec. Fuck. l. c. status conidici hujus *Phialeæ* sunt
Hymenala vulgaris Fr., *H. Georginaë* Wallr. et *H. Ebuli* Corda.
48. **Phialea vitellina** (Rehm) Sacc. *Helotium vitellinum* Rehm Ascom. 1085
n. 513. — Distincte et graciliter stipitata, primitus cyathoidea, cu-
pula urceolata, pallide fusca, dein explanata, vitellina, disco auran-

tiaco, rubro, prosenchymatico-contexta, gregaria, c. 2 mm. alta, 1,5 mm. diam.; ascis clavatis, 8-sporis, 75-80 \approx 9; sporidiis elongato-cuneiformibus, uno apice obtusis, altero acutatis, rectis v. subcurvatis, nucleis 1-2 magnis præditis, hyalinis, distichis, 18 \approx 4; paraphysibus filiformibus, clavulatis, hyalinis.

Hab. ad caules putridos Spirææ Ulmaricæ prope Augustam Vindelicorum seu Augsburg (BRITZELMAYR).

49. **Phialea Phragmitis** (Saut.) Sacc. *Peziza Phragmitidis* Sauter 1086 in Flora 1845, pag. 133. — Tenuis, albida; cupula hemisphærica, disco flavido subexcavato, margine aquose pallido, stipite basi bulboso filiformi elongato.

Hab. in culmis putrescentibus Phragmitis in agro urbis Stiricæ. — *Stamn. Personii* proxima dicitur. Stipes cupula circ. 1 mm. lata, 4-6-plo longior.

50. **Phialea piriformis** (Hedw.) Gill. Disc. pag. 107, *P. piriformis* 1087 (Hedw.) Fr. Syst. Myc. II, p. 121, *Octospora* Hedw. Musc. I, p. 32, t. 10, f. 4. — Cupula globoso-turbinata, sordide flavescens, margine subprominulo, albidior, stipite filiformi albido.

Hab. ex alis Muscorum Mnii, Bryi locis udis erumpens in Suecia et Germania. — Distinctissima, solitaria, subaquosa, stipite adscendente, 6 mm. circiter longo, æquali. Variat colore magis fusco margineque crenulato.

51. **Phialea bryophila** (Fr.) Sacc. *Pez. bryophila* Fr. Syst. Myc. II, 1088 pag. 119. — Flavescens, tenuis; cupula hypocrateriformi, stipite elongato tenui æquali subflexuoso.

Hab. ad muscos locis humidis in Suecia, Gallia et Belgio. — Sparsa, radicibus muscorum insidens. Stipes 12 mm. circiter longus, deorsum subfibrillosus, flaccidus; cupula hemisphærica, in stipitem vix attenuata, integerrima, 2-5 mm. lata. Habitus fere *Omphalicæ Fibulæ*. Huc Fl. Dan. t. 1016, f. 1 pertineret.

52. **Phialea epigæa** (Karst.) Sacc. *Helotium epigæum* Karst. Rev. mon. 1089 p. 126. — Sparsa, ceracea, stipitata, glabra, flava; cupula planoconvexa, subtus concava, sat tenui, circiter 0,8 mm. lat., stipite diametrum cupulæ æquante; ascis cylindræo-clavatis, apice jodo haud vel vix cœrulescentibus, 8-10; sporidiis in parte asci superiore, distichis v. subdistichis, fusoideo-oblongatis, rectis, simplicibus, subeguttulatis, hyalinis, 13-14 \approx 4-5; paraphysibus filiformibus, sat numerosis, apicem versus incrassatis, gracilescentibus.

Hab. prope Mustiala supra terram nudam. — Ad *Ciboriam macilentam*, quæ ad *Phialeam* facile trahitur, proxime accedit.

III. Disco rubente, roseo, incarnato.

53. **Phialea Broomei** (Phill.) Sacc. *Hymenoscypha* Phill. Disc. p. 129, 1090
t. V, f. 27, *Pez. araneosa* Herb. Kew. — Sparsa, stipitata, cyathi-
formis vel plana, carneo-rubra, glabra, firmula, margine integro,
stipite gracili, cylindrico, flexuoso; ascis tereti-clavatis; sporidiis
oblongis, utrinque rotundatis v. subfusoides, $15 \approx 5$.

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

54. **Phialea leucopsis** (B. et C.) Sacc. *Pez. leucopsis* B. et C. Cub. 1091
Fungi n. 691. — Carneopallida, irregularis, margine primum erecto
demum reflexo; ascis linearibus; sporidiis allantoides, 5μ . long.

Hab. in ligno putri in insula Cuba. — Ascoma 3-6 mm. lat.

55. **Phialea rubescens** (Saut.) Sacc. *Peziza rubescens* Saut. Pilz. 1092
Salzb. pag. 14, Wint. Hedw. 1881, pag. 132, nec *Hel. rubescens*
Crouan. — Ascomatibus gregariis, ex urceolato patellatis, extus
rubescentibus, intus coccineis, margine integro, stipite brevissimo,
firmo; ascis elongato-clavatis, basi attenuatis, octosporis, 100-110
 $\approx 6-7$; sporidiis (immaturis), oblongis, hyalinis, $8 \approx 3$; paraphysi-
bus filiformi-clavulatis.

Hab. ad ligna putrida prope Salzburg. — Ascoma 1,5 mm. alt.,
2,5 mm. latum, extus hyphulis patulis levibus vestitum. « An *He-
lotium?* ».

56. **Phialea littorea** (Fr.) Sacc. *Pez. littorea* Fr. Syst. Myc. II, p. 121, 1093
Cyathicula De Not. Comm. I, pag. 389, *Helotium* Crouan Finist.
pag. 48. — Stipitata; cupula hemisphærico-depressa, disco rube-
scente, margine sublacero; ascis.....; sporidiis exiguis oblongo-
teretiusculis, hyalinis.

Hab. ad littora lacuum supra Arundinis culmos siccos in
Suecia, Germania, Belgio, Gallia. — Sec. Crouan Finist. pag. 49:
asci subclavati, 8-spori; sporidia suboblonga; paraphyses filiformes,
granulosæ. Parca, glabra, gregaria. Stipes brevis, sursum in cupu-
lam dilatatus, unde tota fere obconica; margo inflexus, primo ve-
latus. Affinis *P. alabastrinæ*, sed paullo major, nec ita pellucida.

57. **Phialea pallide-rosea** (Saut.) Sacc. *Pez. pallide-rosea* Saut. Pilz. 1094
Salzb. p. 14. — Breviter stipitata, gregaria; ascomate hemisphæ-
rico, roseolo, margine inflexo integro.

Hab. in culmis graminum in paludosis prope Salzburg. — Af-
finis *P. inflexæ* sed colore margineque diversa.

58. **Phialea rhodoleuca** (Fr.) Sacc. *H. rhodoleucum* Fr. Summa p. 355, 1095
Karst. M. F. I, p. 128, *Peziza* Fr. Syst. Myc. II, p. 127. — Te-

nuis, roseo-albida; capitulo utrinque plano; stipite æquali; ascis tereti-clavatis, 4-8-sporis; sporidiis oblongo-ellipsoideis, 10-14 \approx 4-5; paraphysibus filiformibus.

Hab. in stipitibus Equiseti arvensis aliisque quisquiliis locis udis dejectis in Suecia, Fennia, Britannia. — Substantia aquose pellucida; stipes glaber, 1 mm. longus, subinde vero ad 6 mm. elongatus; cupula orbicularis, integerrima, 2-4 mm. lata.

59. **Phialea subcarnea** (C. et P.) Sacc. *Peziza subcarnea* C. et P. 1096

Peck 27 Rep. p. 107 (*Peziza*) et Disc. of Un. St. I, p. 295. — Ascomatibus sparsis, stipitatis, tenuibus, initio clavatis, dein infundibuliformibus, omnino carneis; stipite longo, basi attenuato, sursum dilatato, margine contracto, pallido; ascis cylindraceutis; sporidiis teretiusculis, obtusis, hyalinis.

Hab. ad Hepaticas in truncis vetustis in silvis Indian lake Am. bor. — Maculas suborbiculares efformat matricemque necat.

IV. Disco ochraceo, rufo, alutaceo.

60. **Phialea fructigena** (Bull.) Gill. Disc. p. 99 c. ic., *Peziza* Bull. 1097

Ch. p. 236, t. 228, Sowerb. t. 117, Fr. S. M. II, p. 118, Nees Syst. p. 267, f. 282, *Helotium* Fuck. Pat. t. 383, *Hel. flavescens* Pers. M. E. I, p. 346. — Tenacella, glabra, pallida, lutescens; cupula patellæformi; stipite longo tenui flexuoso; ascis elongato-clavatis, 8-sporis, 120 \approx 8; sporidiis oblongo-clavatis, antice obtusis, basi attenuatis, subinæquilateralibus, hyalinis, continuis, 14-17 \approx 4-5, 2-guttatis; paraphysibus filiformi-clavulatis.

Hab. in cupulis, glandibus Quercus, Fagi, capsulis Castaneæ, strobilis Coniferarum in Suecia, Gallia, Britannia, Fennia, Germania, Italia, Amer. bor. — Gregaria, quam maxime varia. Color albidus, flavus, rufescens; stipes e loco plus minus elongatus, non semper basi floccosa adhærens, sed passim nigricante subattenuata. Cupula 2-5 mm. lata, demum et convexa. (*P. convexa* Holmsk. Ot. 2, p. 34, t. 16).

61. **Phialea gracilis** (C. et P.) Sacc. *Helotium gracile* C. et P. in 1098

Peck 26 Rep. St. Mus. pag. 83. — Ochracea; cupula plana, dein convexa, immarginata, tenuiuscula, extus leniter pallidiori; stipite gracili, æquali, basim versus brunneolo, circiter diametrum cupulæ longitudine æquante; ascis cylindraceutis; sporidiis cylindraceutis vel subfusiformibus apice obtusis, 2-3-nucleatis, 17-20 μ . longis.

Hab. in caulibus herbarum Center Americæ borealis. — Habitu

et magnitudine *Ph. cyathoideam* in mentem revocat at cupulæ nunquam clausæ.

62. **Phialea Scutula** (Pers.) Gill. Disc. pag. 108, *Pez. Scutula* Pers. 1099
M. E. I, p. 284, Fr. Syst. Myc. II, p. 123, *Helotium* Karst. M. F. I, p. 110, Pat. Tab. f. 94, *Hymenoscypha* Phill. Disc. p. 137, *P. virgultorum* var. *Scutula* pl. auctorum. — Firmula, hypocra-
teriformis, demum subplana, levis, luteo-testacea, margine integer-
rimo, stipite tenui æquali; ascis tereti-clavatis, 80-90 \approx 8-10; spo-
ridiis fusoides v. fusoides-clavulatis, 2-3-guttulatis, subinde pseu-
do-septatis, 16-20 \approx 3-5.

Hab. ad caules plantarum exsiccatos e. g. *Artemisiæ*, *Ballo-
tæ*, *Teucris*, *Gei*, *Rumicis*, *Cirsii* in Suecia, Britannia, Germa-
nia, Italia, Gallia, Belgio, Amer. bor. — Stipes pro ratione tenuis, cu-
pulæ diametro brevior, paullo dilutior; cupula magis magisque dila-
tata, leviter concava, 1 mm. lata. Colore et cupula firma a sequ. dif-
fert. — Var. **petiolicola** Sacc.: sporidiis uno apice minus acuminatis.
In petiolis *Robiniaë Pseudacaciaë* in Ital. bor. — Var. **fucata**
Phill. Disc. p. 137: ascomate subhemisphærico, margine incurvo,
disco brunneo-flavido, extus albido, flavo-variegato. In caulibus
Polygoni aqua immersis Ellesmere Britanniaë. — Var. **Menthæ**
Phill. Disc. p. 137: ascomate plano v. convexo, disco læte flavo,
stipite tenui; sporidiis 14-20 \approx 3-5, bi-triguttatis simulateque 1-
septatis. In caulibus emortuis *Menthæ*, *Shrewsbury* Britanniaë.
— Var. **Rudbeckiæ** Phill. Disc. p. 138: ascomate 2 mm. lato, sti-
pitate 2-3 mm. alto, tereti, in cupulam expanso; sporidiis 18-25 \approx
4-6. In caulibus emortuis *Rudbeckiæ*, *Batheaston* Britanniaë
(BROOME).

63. **Phialea virgultorum** (Vahl) Sacc. *Peziza* Vahl Fl. Dan. t. 1016, 1100
fig. 2, *Helotium virgultorum* (Vahl) Karst. M. F. I, p. 109, *Hy-
menoscypha* Phill. Disc. p. 134. — Gregaria, stipitata, rigidula,
glabra, patellaris v. subinde convexa, extus pallida, disco flavido-
rufo; stipite tenui subflocculoso; ascis cylindræo-clavatis; spori-
diis fusoides, sæpe curvulis, 2-guttatis, 14-23 \approx 3-5, demum simu-
late 1-2-septatis, hyalinis; paraphysibus filiformibus.

Hab. in ramis emortuis arborum in Germania, Dania, Fennia,
Gallia. — Ab affini *Ph. fructigena* differt colore disci et sporidiis.

64. **Phialea alutipes** (Phill.) Sacc. *Peziza alutipes* Phill. *Grevillea* 1101
VII, p. 23. — Gregaria stipitata, infundibuliformis, dein plana alu-
tacea, margine integra; stipite firmo primo, gracili, longo et fle-
xoso, rarius brevi, in cupulam rugosam dilatato, concolore; ascis

crasse clavatis; sporidiis oblongo-ovoideis, multinucleatis, 18-20 \approx 5-8; paraphysibus filiformibus, clavulatis, subcoloratis.

Hab. in foliis dejectis Libocedri decurrentis in California.

65. **Phialea ceratina** (Berk.) Sacc. *Peziza ceratina* Berk. Fl. Tasm. 1102 p. 275. — Turbinata, stipitata, glabra, pallide fulvo-cornea, hymenio plano marginato; sporidiis 20-21 μ . long. oblongo-clavatis.

Hab. in foliis Eucalypti in Tasmania (ARCHER). — Ascij majusculi. *Phialeæ cyathoidæ* et *titubanti* subaffinis. Minuta 1 mm. alta.

66. **Phialea longipes** (C. et P.) Sacc. *Peziza longipes* C. et Peck Disc. 1103 Unit. St. I, p. 295. — Flavida; ascomate longe stipitato, concavo, 5-7 mm. lat., leniter concavo, demum subplano, disco rufo-flavo; stipite æquali, gracili, prælongo; 2-3 cm.; ascis cylindræis; sporidiis anguste ellipsoideis, rectis v. curvulis, uninucleatis, 5-6 \approx 2-2,5.

Hab. in petiolis foliorum New York, Memphis in America boreali (PECK).

67. **Phialea byssogena** (Berk.) Sacc. *Peziza byssogena* Berk. Fl. 1104 Tasm. p. 275. — Ochracea; cupula concava, stipite elongato, cylindrico subtiliter pruinoso e floccis intertextis radiantibus oriundo; ascis clavatis; sporidiis elliptico-oblongis, 8-9 μ . longis.

Hab. in lignis dejectis in Tasmania (ARCHER). — *Ph. lutescenti* affinis. Ascoma 1-1,3 mm. lat., stipes 2-2,5 mm. long.

68. **Phialea aquatica** (Curr.) Sacc. *Helotium aquaticum* Curr. Linn. 1105 Trans. XXIV, p. 154, tab. XXV, fig. 19. — Solitaria, stipitata, ascomate minuto, concavo vel convexo, stipite paullo latiore; stipite filiformi tenui; ascis cylindræis vel cylindræo-clavatis; sporidiis ellipsoideis vel clavulatis, biguttulatis, 13-15 \approx 5-6, hyalinis.

Hab. in fragmentis ligneis aqua immersis Kent Britannia. — Ascoma 1-2 mm. lat.; stipes 5-7 mm. long.; color fungi non indicatus.

69. **Phialea Calyculus** (Sow.) Gill. Disc. pag. 108, *P. Calyculus* Sow. 1106 werb. fung. t. 116, Pers. Syn. p. 660, Fr. Syst. Myc. II, p. 129, *Pez. Infundibulum* Batsch. f. 147, *P. Calycula* Schum. — Lutescenti-brunnea, stipitata, glabra; cupula concava elevato-marginata; stipite brevi crasso, deorsum attenuato; ascis cylindræo-clavatis; sporidiis oblongis vel oblongo-ellipsoideis vel subclavatis, rectis curvulisve 15-18 \approx 3-5; paraphysibus filiformibus.

Hab. ad ligna et sub cortices in Britannia, Suecia, Germania, Gallia, Belgio. — Unicolor, subinde rufo-ferruginea; cupula 2-3 mm. lata, margine in siccis involuto.

70. **Phialea exarata** (Berk.) Sacc. *Peziza exarata* Berk. North Am. 1107
Fungi n. 750. — Mellea; cupula irregulari concava, margine inflexo; stipite crasso, eximie costato pruinoso; sporidiis minutis oblongis.

Hab. in ligno putri in Carolina infer. Amer. bor.

71. **Phialea emergens** (Cooke et Phill.) Sacc. *Hymenoscypha* C. et 1108
Phill. Disc. p. 139. — Sparsa vel fasciculata, e cortice emergens hemisphærica vel infundibuliformis, stipitata, glabra, dilute ochracea, disco obscuriore, margine integro; stipite flexuoso, deorsum attenuato; ascis cylindræis vel tereti-clavatis; sporidiis fusiformibus, continuis, rectis curvulisve, 12-14 \approx 1-1,2; paraphysibus non visis.

Hab. ad ramos emortuos terra subinfossos in Scotia. — Ascoma 0,5-1,5 mm. lat., stipes 1-1,5 mm. longus.

V. Disco fusco, brunneo, fumoso.

72. **Phialea glanduliformis** (Rehm) Sacc. *Helotium glanduliforme* 1109
Rehm Ascom. Lojk. n. 14 et Ascom. n. 255, *Helotium cyathoides* var. *multicolor* Karsten Myc. Fenn. II, pag. 136. — Ascomatibus sparsis, crasse stipitatis, stipite fuscidulo, basi subhyalino, turbinatis, c. 1-1,5 mm. altis, c. 5-7 mm. diam., siccis jodo apice cœrulescente, margine urceolato-involuto fuscis, humidis concavo-urceolatis, flavidulis, prosenchymatico-flavido-contextis, glabris, siccis extus subruguloso-striatis; ascis clavatis, 8-sporis, 45 \approx 6; sporidiis ellipticis subobtusis clavulatis, rectis, hyalinis, distichis, 9 \approx 2,5; paraphysibus filiformi-clavulatis ascos vix superantibus.

Hab. ad ramulos siccos *Ononidis spinosæ* prope Windsheim Franconiæ bav. et prope Pesth. — Var. **Bartsiæ** Rehm Asc. n. 559: ascis 36-42 \approx 6; sporidiis 8-10 \approx 2-2,5. In caule *Bartsiæ* in Germania.

73. **Phialea perelegans** (Saut.) Sacc. *Peziza perelegans* Sauter in Flo- 1110
ra 1845, p. 133. — Tenuis, albida, urceolato-hemisphærica, margine inflexo integro, disco nigrescente, stipite tenui longiusculo.

Hab. in culmis graminum vetustis in agro urbis Stiriæ. — *P. litoreæ* et *cyathoides* affinis. Stipes 2,5 mm. longus; cupula minuta, globosa.

74. **Phialea Cacaliæ** (Pers.) Gill. Disc. p. 104, *Pez. Cacaliæ* Pers. 1111
M. E. I, p. 285 (*Pez.*) Fr. S. M. II, p. 122, *H. Urticæ* forma Rehm Asc. n. 59. — Turbinata, levis, fuscescens, ore subconnivente albidiore, stipite sublongo crassiusculo; ascis linearibus, 8-sporis, 50-

68 \approx 6; sporidiis elongato-distichis, angustissime cylindræis, subcurvatis, 8 \approx 6-2.

Hab. ad caules plantarum, Compositarum, e. g. Cardui, Senecionis, Cacaliæ, Carlinæ, Lappæ, Daturæ, in Helvetia, Germania, Belgio, Britannia. — Glaberrima, subnitens, firmula, junior albida adulta et sicca fusca, humida infundibuliformis, immo explanata, 0,5 mm. lat.; stipes quam *P. cyathoidæ* brevior et firmior. — ***pallidior** Sacc. Mich. II, p. 328: ascomatibus typo minoribus atque pallidioribus; ascis 50-60 \approx 5; sporidiis tereti-fusoideis, 7-9 \approx 1-1 $\frac{1}{4}$, hyalinis. In caule putri Amaranthi in Gallia.

75. **Phialea sordida** (Fuck.) Sacc. *Helotium sordidum* (Fuck.) Rehm 1112
Ascom. n. 414 nec Phill. (= *Helotium*), *Pezizella sordida* Fuck. Symb. pag. 414. — Gregaria, sordida; cupulis glabris, 1-2 mm. latis, patelliformibus, marginatis, margine demum crispo-lacerato, involuto, stipite firmo, cupulæ diametrum vix æquante, disco demum rubello; ascis linearibus, stipitatis, 8-sporis, 30-40 \approx 6-7; sporidiis distichis, cylindræis, curvatis, hyalinis, 8-9 \approx 2.

Hab. in ramis putridis plerumque decorticatis Rosæ caninæ in Germania.

76. **Phialea fumosella** (C. et E.) Sacc. *Peziza fumosella* C. et E. 1113
Grevillea VI, p. 91. — Stipitata, minuta, fumosa; cupulis clavatis, demum apertis, cyathiformibus, margine discoque pallido; stipite obscuriore sursum in cupulam expanso; ascis cylindræo-clavatis; sporidiis linearibus, rectis vel curvulis, 10 μ . longis; paraphysibus filiformibus.

Hab. in foliis Pinorum in New Jersey Amer. bor. — Ascoma $\frac{1}{4}$ - $\frac{1}{3}$ mm. lat., $\frac{1}{2}$ mm. alt.

77. **Phialea uveata** (Schum.) Sacc. *Pez. uveata* Schum. Saell. p. 430, 1114
Fries Syst. Myc. II, pag. 126, Fl. Dan. t. 2034, fig. 1. — Pallide fusco-umbrina; cupula subhemisphærica concava, margine tumido, stipite brevissimo crassiusculo.

Hab. ad stipulas, radices exsiccatas graminum raro in Suecia. — Affinis *Cib. Cauco*; an ex hoc genere? Gregaria, subcæspitosa, ceracea, 1 mm. lata, glabra, levis; stipite sursum dilatato.

78. **Phialea nitidula** (B. et Br.) Sacc. *Peziza nitidula* B. et Br. Ann. 1115
Nat. Hist. n. 570, *Hymenoscypha* Phill. Disc. p. 142. — Ascomate minuto, subhemisphærico, irregulari, extus aquose brunneo, minute furfuræo, nitidulo, sat firmo, stipite brevi æquali; ascis cylindræo-clavatis; sporidiis fuscoideis, 7-10 \approx 3; paraphysibus filiformibus.

Hab. in foliis emortuis Airæ cæspitosæ prope Bath in Britannia. — *Phialeæ Cacaliæ* affinis.

79. **Phialea palustris** (Saut.) Sacc. *Pez. palustris* Saut. Salz. p. 9. 1116
— Albido-nigrescens; stipite cylindrico; ascomate hemisphærico, urceolato, margine inflexo integro.

Hab. in radicibus Equiseti palustris in Pinzgau. — $\frac{1}{2}$ mm. crassa, gregaria, levis; stipite brevi, in sicco nigrescente. Affinis *P. littoreæ*.

B. Hymenoscypha Sacc. Ascoma pruinosa v. puberulum.

1. Disco albo, albido, cinereo, dein sæpe diverse colorato.

80. **Phialea tigillaris** (Karst.) Sacc. *Hel. tigillare* Karst. M. F. I, 1117
p. 145. — Subsparsa, substipitata, obconica, villosulo-vel puberulo-furfurella, albida; cupula sicca subsphæroideo-contracta, pallida, albo-puberulo-furfurella, 0,3-0,4 mm. lat.; stipite crassulo, brevissimo, in cupulam abeunte vel fere nullo; ascis clavatis, 63-73 \approx 8-10, obturaculo minutissimo jodo vix vel obsolete cærulescente; sporidiis plerumque distichis, oblongatis, curvulis vel rectis, 2-raro 4-guttulatis vel spurie uniseptatis, 10-16 \approx 3-4-5; paraphysibus haud bene discretis, 1 μ . cr.

Hab. ad lignum fabrefactum pineum putridum in par. Tam-mela Fenniæ.

81. **Phialea sauciella** (Karst.) Sacc. *Hel. sauciellum* Karst. M. F. I, 1118
p. 143. — Gregaria, primum obconica, pallida vel lutescens, albo-vel albido-furfurello-villosula, deinde distincte stipitata, pallida vel lutescens vel sanguinea vel rubella vel fuscenscens vel atrata, glabrescens; cupula e sphæroideo-hemisphærica, margine obtuso, repando-lacero, 0,3-0,4 mm. lat.; ascis cylindræo-clavatis, 30-60 \approx 5-7; sporidiis fusoido-vel ovoideo-oblongatis aut ovoideis aut subellipsoideis, 4-10 \approx 2-3.

Hab. ad lignum ramorum Alni incanæ putrescens, prope Mustiala Fenniæ. — Facillime dignoscitur colore sanguineo vel sanguineo-purpureo, quo matricem inficit.

82. **Phialea pertenuis** Sacc. *Peziza pertenuis* Sacc. Fung. Ven. Ser. 1119
IV, n. 84, *Helotium* Sacc. F. ital. fig. 1334. — Cupulis ceraceo-mollibus, microscopicis, cum stipite brevi crassiusculo infundibuliformibus, niveis, furfurellis, totis 120-130 μ . altis, stipite 80 \approx 20, disco concaviusculo concolori, margine minutissime crenulato; ascis tenellis clavulatis, 30 \approx 4, sessilibus; paraphysibus filifor-

mibus clavulatis, obvallatis, 8-sporis; sporidiis oblique monostichis v. subdistichis, ovoideis, $3\frac{1}{2} \approx 2$, hyalinis.

Hab. in ramis decorticatis fag in eis in silva Cansiglio, Ital. bor. — Affinis videtur *Trichopezizæ tenuissimæ* (KARST).

83. **Phialea gibba** (A. S.) Sacc. *Hel. gibbum* A. S. Nisk. p. 350, t. 1120

IV, f. 1, *Pez. tubæformis* Wall. Crypt. n. 2583. — Ascomatibus umbonato-gibbis, margine inflexo cupulatis, sparsis, tenuissime membranaceis pallidis, extus fibrillis tenerrimis delicatis floccoso-furaceis gryseo-cinereis undique æqualiterque superfusis, siccando margine inflexo fissis angulatisve; stipite gracili delicatulo.

Hab. ad strobilos Pini in Lusatia et ad ramulos Rosæ humi jacentes agri heringens. Thuring. (WALLR.). — An potius *Cyphella*? Stipes 6-7 mm. long., ascoma vix 1 mm. lat.

84. **Phialea tenera** (Saut.) Sacc. *Peziza tenera* Saut. Pilz. Salz. 1121

p. 9. — Albida, cupulata, tenuis, concava; margine niveo, flocculoso, stipite brevi crassiusculo.

Hab. in foliis putrescentibus Berberidis prope Mittersill. — Affinis *P. chionæ*; $\frac{1}{4}$ mm. crassa.

85. **Phialea sordidata** (K. et Starb.) Sacc. *Helotium sordidatum* Karst. 1122

et Starb. Hedw. 87, p. 124 et Symb. XXIV, pag. 15. — Subgregaria, sessilis vel breviter stipitata, firmula, glabra; cupula primitus sphæroidea, dein explanata, subpuberula, fuscescente-pallida, disco pallido, circiter 0,3 mm. lata; stipite æquali brevi crassiusculo, firmulo, sæpe nullo; ascis clavatis, $60 \approx 9$; sporidiis distichis, fusoido-oblongatis, 1-2-guttulatis, $15 \approx 3-4$.

Hab. in foliis putrescentibus Spirææ Ulmariaæ ad Mustiala Fennia (STARBACK).

86. **Phialea Eschscholtziæ** (P. et H.) Sacc. *Peziza Eschscholtziæ* 1123

Phill. et Harkn. Calif. p. 2. — Sparsa, breviter stipitata, cyathiformis, cinerea, pruinosa; margine subinciso, disco concolori; ascis cylindræis; sporidiis fusoidis, biguttulatis, $10 \approx 2$; paraphysibus non visis.

Hab. in caulibus emortuis Eschscholtziæ californicæ in California. — Ascoma 0,5-0,7 mm. latum.

87. **Phialea gemmarum** (Boud.) Sacc. *Helotium gemmarum* Boud. 1124

Bull. Soc. Myc. IV, pag. 81, tab. 17, fig. 2. — Minuta, alba, stipitata 0,3-0,7 mm. lata, 1-1,5 mm. alta, tenuis, crateriformis, marginata, nivea, extus pube tenui vix conspicuâ conspersa; hymenio levigato concolore et stipite gracili etiam puberulo ad basim lutescente; paraphysibus parcis, simplicibus aut divisis, non septatis,

intus subgranulosis, ad apicem non incrassatis, 2-3 μ . crassis; ascis cylindrico-clavatis, octosporis, 50 \approx 6-7, vacuis submarginatis; sporidiis minutis, oblongo- aut clavato-fusoideis, intus vix v. tenuiter granulosis, 6-8 \approx 3-4.

Hab. ad gemmas putridas Populi nigræ prope Paris Gallia.

88. **Phialea lateritio-alba** (Karst.) Sacc. *Helotium lateritio-album* 1125
Karst. Rev. Myc. 1887, p. 159 et Symb. XXIII, p. 3. — Sparsa, breviter stipitata, cyathoidea, alba vel lateritia, tomento pertenui niveo obtecta, 0,2-03 mm. alta; ascis cylindræo-clavatis, 33-40 \approx 6; sporidiis distichis, fusoideo- vel clavulato-bacillaribus, rectis, vulgo guttulatis, 6-10 \approx 1,5.

Hab. in foliis siccis Scirpi silvatici in prato mustialensi, Myllypera Fennia.

89. **Phialea Morieri** Gill. Disc. p. 104. — Cyathiformis, madore aperta, siccitate clausa, rufo-pallida, glabra, excepto margine albo-pulveraceo, 2-3 mm. lat.; disco albido; stipite brevi, deorsum leniter incrassato, albido vel pallide rufo. 1126

Hab. ad gramina et herbas varias in Gallia. — Ascoma siccando fuscescit.

90. **Phialea versicolor** Quél. V Suppl. p. 329, tab. VI, f. 10, *Calycella mira* Quél. Enchir. p. 305. — Ascomatibus cyathiformibus, 500-800 μ . diam., breviter stipitatis, pruinosis, margine involuto, sub lente puberulis niveo-albis sed mox flavo-citrinis v. roseis; sporidiis ellipsoideis, fusiformibus, 6 μ . longis, binucleatis. 1127

Hab. in Filicibus e. g. Scolopendrio putrescentibus, Jura. — Stipes teretiusculus ascomate paullo brevior.

II. Disco flavo, flavido, lutescente.

91. **Phialea affinissima** (Peck) Sacc. *Helotium affinissimum* Peck 33 1128
Rep. p. 32. — Ascomatibus subcæspitosis, stipitatis, planis vel convexis, 2-4 mm. lat., flavis, margine extusque, pruinulosis, stipite subcylindrico, flavido 4-9 mm. long.; ascis cylindræis; sporidiis oblongis obtusis, 8-10 μ . longis.

Hab. in ramis putridis terra infossis, Albany Amer. bor. — A *Ph. lutescente* differt habitu cæspitoso, sporidiis minoribus etc.

92. **Phialea fugitiva** Quél. X Suppl. p. 13, tab. IX, f. 7. — Ascomatibus ceraceis, urceolatis, 500-800 μ . diam., breviter stipitatis, tenuiter puberulis, margine crenulato, isabellinis diaphanis; hymenio concavo, primo flavescente dein croceo; sporidiis ellipsoideo-lanceolatis, 11 μ . longis, binucleatis. 1129

Hab. in cortice emortuo Tiliæ in Jura.

93. **Phialea subgranulosa** (Rehm) Sacc. *Helotium subgranulosum* 1130

Rehm Ascom. Illustr. et Exsicc. n. 607. — Gregaria, minutissima cyathoideo-substipitata, albido-flavidula, scabra, sicca cyathoideo-involuta, humida subexplanata, disco flavidulo c. 0,4 mm. diam., prosenchymatico-hyalino-contexta, fragilissima; sporidiis evoideis, hyalinis, 5 \approx 2,5, 1-2-stichis; ascis clavatis, c. 30-36 \approx 5; paraphysibus perpauca, filiformibus.

Hab. ad corticem putrescentem Abietis excelsæ in faucibus montis Hochgrad alpium Allgovia, c. 1500 m. alt. (BRITZELMAYR). — A *Pseudohelot. hyalino* ascomate stipitato, sporidiis rectis etc. dignoscitur.

94. **Phialea straminella** (Karst.) Sacc. *Helotium straminellum* Karst. 1131

Symb. M. F. XXIII, pag. 27. — Subsparsa, obconica, stipitata, straminea vel subaurea, marginem versus tenuiter albido-furfurella, 0,1-0,2 mm. alt., disco concaviusculo, stipite glabro, cupulam æquante; ascis cylindraceo-subclavatis, 38-40 \approx 5; sporidiis cylindraceis, rectis, eguttulatis, 4-4,5 \approx 1; paraphysibus discretis.

Hab. ad lignum Betulæ prope Mustiala Fennia. — *Ph. lectissima* affinis.

95. **Phialea Galbula** (Karst.) Sacc. *Helotium Galbula* Karst. M. F. I, 1132

p. 140. — Sparsa, stipitata, aureo-lutea, puberula, circiter 0,3 mm. alt.; cupula concava, sicca sphæroidea, 0,2-0,3 mm. lat.; stipite in cupulam dilatato, brevissimo; ascis cylindraceo-subclavatis, 28-30 \approx 4, jodo non cœrulescentibus; sporidiis subellipsoideis vel ovoideo-oblongatis, sæpe 2-guttulatis, 3-4 \approx 2; paraphysibus paucis gracilibus.

Hab. ad corticem et lignum Alni incanae pr. Mustiala Fennia.

96. **Phialea sulphurella** Sacc. Fung. Ven. Ser. IV, n. 83, F. ital. f. 1133

1328. — Cupulis gregariis, tenuissimis, 200 μ . altis, 120 latis, flavis, subdiaphanis, breve sensim stipitatis, glabris sed undique minutissime verruculoso-fibrillosis, disco excavato obtusiusculo marginato, excipuli contextu prosenchymatico tenerrimo; ascis oblongo-cylindraceis sessilibus apice rotundatis, brevibus, 48 \approx 5-6; paraphysibus filiformibus obvallatis, 8-sporis; sporidiis in asci parte superiore distichis, oblongo-ovoideis, 4-5 \approx 2, eguttulatis, hyalinis.

Hab. in ramis decorticatis putrescentibus Quercus pedunculatae in silva Montello (Treviso). — A *Ph. Galbula* Karst. vix differt cupulis minoribus non vere puberulis, ascis sporidiisque paullulo majoribus.

97. **Phialea improvisa** (Karst.) Sacc. *Hel. improvisum* Karst. M. F. 1134
I, pag. 141. — Gregaria, stipitata; cupula sphæroideo-cyathoidea, extus præcipue marginem versus sulphureo-farinoso-puberula, 0,3-0,5 mm. lat.; stipite glabro; cupula brevior; ascis cylindræo-clavatis, 35 \approx 4; sporidiis distichis, fusoido-oblongatis, 4-6 \approx 1,5-2,5; paraphysibus gracilibus.
Hab. ad truncum abietinum mucidum loco uliginoso silvatico prostratum prope prædium Bukkila parœciæ Lemo Fenniæ.
98. **Phialea lectissima** (Karst.) Sacc. *H. lectissimum* Karst. M. F. 1135
I, p. 141. — Sparsa, substipitata, obconica, flava, marginem versus tenuiter albido-furfurella, disco planiusculo, sicco concavo, circiter 0,2 mm. lat.; ascis cylindræo-clavatis, 40-56 \approx 6-7,5, obturaculo minutissimo jodo obsoletissime cœrulescente; sporidiis oblongatis vel fusoido-oblongatis, rectis vel curvulis, 8-11 \approx 2-3; paraphysibus gracilibus.
Hab. ad corticem ramulorum Salicis phyllicifoliæ exsiccatorum in regione mustialaensi Fenniæ. — Stipes sursum sensim in cupulam dilatatus, *Ph. Galbulæ* et *Ph. albohyalino* affinis, externa facile subliciformem in memoriam aliquantulum referens.
99. **Phialea phyllogena** (Rehm) Sacc. *Helotium phyllogenum* Rehm 1136
Ascomyc. fasc. XVI, p. 7, n. 768. — Ascomatibus parenchymatico-hyalino-contextis, ex cyathoideo patellaribus, tenuiter stipitatis, stipite 1 mm. longo, extus pallide farinoso-flavidulis, disco flavo, 1-1,2 mm. diam., margine dilutiore cinctis, planis, gregariis; ascis clavatis, subcurvatis, 8-sporis, 75 \approx 8; sporidiis distichis, ellipticis vel elongato-clavatis, continuis, crasse binucleatis, plerumque rectis, hyalinis, 12-15 \approx 3,5; paraphysibus filiformibus, apice vix incrassatis.
Hab. ad folia Populorum putrida prope Ungarisch Altenburg Hungariæ (LINHART).

III. Disco rubente, testaceo.

100. **Phialea calathicola** (Rehm) Sacc. *Helotium calathicolum* Rehm 1137
Ascom. n. 305. — Gregaria, crasse stipitata, cyathiformis, stipite c. 0,5 mm. crasso, 1 mm. long., recens extus fusco-rubella, sicca complicata, flavido-carnea, extus pilosula, humectata explanata, disco rubro vel rubello, 2-3 mm. diam., contextu prosenchymatico flavidulo; ascis clavatis, apice incrassatis, 8-sporis, 45 \approx 6; sporidiis ellipticis, hyalinis, fere monostichis, 7-8 \approx 3; paraphysibus filiformibus, superne subincurvatis, clavulatis, hyalinis.

Hab. ad calathides putridas *Cirsii spinosissimi* in alpidibus Tyrolensibus juxta glaciem æternam.

101. **Phialea dolosella** (Karst.) Sacc. *Helot. dolosellum* Karst. M. F. 1138

I, p. 137. — Albida vel testaceo-albida; cupula e cyathoideo explanata, primo furfurella vel leviter puberula, disco sicco testaceo, circiter 1 mm. lat.; stipite tenui, æquali, circiter, 0,8 mm. alt.; ascis 50-60 \approx 5,5; sporidiis bacillaribus vel fusoido-bacillaribus plerumque curvulis, tenuiter spurie uniseptatis, 10-16 \approx 1,5-2,5; paraphysibus gracilibus.

Hab. ad partem inferiorem culmorum *Tritici repentis* emortuorum, ad radices *Rubi idæi*, in caule *Angelicæ* in Mustiala et Abo Fennicæ, in Germania et Hungaria. — In forma *graminum* sec. Rehm ascis 60-66 \approx 7-8; sporidia 15-17 \approx 2,5-3; in forma *Angelicæ* ascis 45-50 \approx 5-6; sporid. 9-12 \approx 2. — * **Ph. albinea** Karst. l. c.: priori similis, sed sporidiis longioribus 14-25 \approx 1-2. Ad caules *Galii veri* aridos in Mustiala. — * **Ph. nivella** Karst. l. c., *Ph. albincæ* similes sed minor, plantula 0,3 mm. alt., cupula 0,3 mm. lat., stipite altitudine cupulæ; sporidiis fusoido-bacillaribus guttulatis vel tenuiter uniseptatis 16-18 \approx 2. Ad folia *Caricis ampullacæ* putrida in Mustiala.

IV. Disco brunneo, fusco, atro.

102. **Phialea concolor** (Phill.) Sacc. *Hymenoscypha* Phill. Disc. p. 139. 1139

— Hemisphærica, tenuis, firma, pallida vel sordide alba, extus pruinosa, disco pallide brunneo; margine minute fimbriato; stipite brevi, subobtusio; ascis tereti-clavatis; sporidiis oblongis vel subfusoidis, 8-10 \approx 2-3; paraphysibus filiformibus.

Hab. in ligno duro decorticato Forres Britannicæ (KEITH). — Ascoma circ. $\frac{1}{4}$ -1 mm., stipite 0,5 mm. long.

103. **Phialea viridi-fusca** (Fuck.) Sacc. *Pez. viridi-fusca* Fuck. Symb. 1140

p. 309. — Cupulis stipitatis, plerumque obliquis, 2-4 mm. altis, stipite in cupulam sensim dilatato, turbinatis, 2 mm. latis, margine crasso, inflexo, integerrimo, extus stipiteque amœne flavo-viridi furfuraceis, disco concavo, atro-fusco; ascis elongatis, stipitatis, 8-sporis, 64 \approx 8; sporidiis elongato-distichis, oblongo-ovatis, 8 \times 4, hyalinis.

Hab. in amentis femineis putridis *Alni glutinosæ* pr. Æstrich Rhenogovicæ.

PEZIZELLA Fuck. Symb. p. 299, ex max. p. [1869] (Etym. demin. a

Peziza), *Mollisia* sect. *Dilutella* Phill. Br. Disc. p. 193, *Helotium* et *Mollisia* Auctor. p. p. — Ascoma ceraceo-membranaceum, tenue, urceolatum cupulatum v. discoideum, sessile, glabrum, leve, pallidum vel læte coloratum, excipulo quoque pallido et molli. Asci tereti-clavati, filiformi-paraphysati, octospori. Sporidia ellipsoidea oblonga, teretiuscula, hyalina, continua. — Est *Phialea* sessilis v. *Mollisia* læticolor, excipulo quoque pallido.

I. Disco albo, albido, pallente-flavido. (1-29)

1. **Pezizella albo-puncta** (Peck) Sacc. *Helotium albo-punctum* Peck 31 1141
Rep. p. 47. — Ascomate perexiguo, albo, disco dein plano v. concaviusculo, margine plerumque distincto; ascis cylindraceutis; sporidiis biseriatis, oblongis, angustis, sæpe binucleatis, 15-18 μ . long.
Hab. in foliis dejectis fagineis in silvis Adirondak Am. bor. — Siccando flavescit et vix visibile. Stipes tam brevis ut ascoma subsessile videatur.
2. **Pezizella glagosa** (E. et C.) Sacc. *Mollisia glagosa* E. et C. Journ. 1142
Myc. 1888, p. 56. — Minuta, orbicularis, sessilis, levis, lacteo-alba, sicca rufo-succinea; ascis clavulatis, 70-75 \approx 7-8; sporidiis subdistichis, oblongis vel clavato-oblongis, sæpe curvulis, hyalinis, nucleatis simulateque 1-2-septatis, 8-10 \approx 2,5-3; paraphysibus filiformibus copiosis.
Hab. in foliis nondum putridis in paludosis New Field N. J. Am. bor. — Ascoma 250-275 μ . lat.
3. **Pezizella tumidula** (R. et D.) Sacc. *Peziza tumidula* Rob. et Desm. 1143
19 Not. p. 30. — Amphigena, erumpens, minutissima, sparsa aut laxe gregaria, sessilis, ceracea, glabra, albida, dein subplana, sicca concava ochroleuca v. argillacea, margine lacerato subdenticulato; ascis tubulosis; sporidiis hyalinis ellipsoideis subcylindricis.
Hab. in foliis semiputridis Betulæ in Gallia bor. — «An *Cyathicula*?»
4. **Pezizella leucella** (Karst.) Sacc. *Hel. leucellum* Karst. M. F. I, 1144
p. 151. — Gregaria vel sparsa, sessilis, planiuscula, subnuda, subimmarginata, hyalino-albida, sicca albida 0,1-0,2 mm. lat.; ascis clavatis, 45-65 \approx 6,5-8,5 obturaculo minutissimo jodo leviter vel obsolete cœrulescente; sporidiis distichis vel oblique monostichis, fusideo-bacillaribus, rectis vel curvulis, guttulatis, 13-18 \approx 1,5-2,5; paraphysibus 1,5-2 μ . cr. apicem versus leniter incrassatis.
Hab. supra folia Betulæ, Salicis et Alni putrescentia vel putrida locis udis in Fennia saltem australi.

5. **Pezizella minutissima** (Karst.) Sacc. *Helotium minutissimum* Karst. 1145
et Starb. Hedw. 87, pag. 124. — Sparsa vel subgregaria, sessilis;
cupula plana v. concaviuscula, nuda, pallescente, sicca pallida, di-
sco dilutiore, circiter 0,1 mm. lata; ascis clavatis; sporidiis.....
non descriptis.

Hab. in foliis putrescentibus Comari palustris prope Mu-
stiala Fenniae (K. STARBACK).

6. **Pezizella pulvinata** (Karst.) Sacc. *Helotium pulvinatum* Karst. M. 1146
F. I, p. 140. — Gregaria, sessilis, convexa, fulvescens, disco albo,
siccò lutescente, circiter 0,5 mm. lat.; ascis cylindraceo-clavatis,
50-62 \approx 5-6, apice jodo non tinctis; sporidiis fusoido-elongatis,
rectis v. leniter curvulis, eguttulatis, 6-10 \approx 1-2.

Hab. ad acus Pini silvestris putrescentes Mustiala Fenniae.

7. **Pezizella dilutella** (Fr.) Fuck. Symb. pag. 300, *Peziza* Fr. Syst. 1147
Myc. II, p. 147, *Mollisia* Gill. et Phill. *Helotium xeroplasticum*
Rehm Ascom. n. 655. — Sessilis, gregaria, primitus subglobosa,
subclausa, sicca urceolata, flavo-ceracea v. albo-grisella, margine
integro pallidiore, humectata explanata v. subinfundibuliformis, fla-
vido-diaphana, $\frac{1}{2}$ -3 mm. diam., plerumque saltem 1 mm., prosen-
chymatico-contexta; ascis clavatis, apice incrassatis, 8-sporis, 36-
45 \approx 6 (Rehm), 24 \approx 6 (Fuck.); sporidiis oblongis, obtusis, rectis v.
subcurvatis, hyalinis, distichis, 8-10 \approx 1-1,5 (Phill.), 6-7 \approx 2-2,5
(Fuck. Oudem.); paraphysibus filiformibus superne subincrassatis,
2,5 μ . cr.

Hab. ad caules putridos Epilobii, Dahliæ, Rubi, Angeli-
cæ, Adenostylidis in Suecia, Germania, Britannia, Hollandia.
— Var. **Smyrnii** Phill. et Plow. Disc. p. 192: gregaria, sessilis,
hemisphærica dein expansa, carnosula, glabra, pallide argillacea,
margine minute fimbriato; ascis tereti-clavatis; sporidiis fusoidis
v. tereti-fusoidis, 3-guttatis, 10-13 \approx 3; paraphysibus filiformibus.
In caule emortuo Smyrnii, King's Lynn Britanniae (PLOWRIGHT).

8. **Pezizella leucostigmoides** (Sacc.) Rehm Ascom. n. 855, *Calloria* 1148
leucostigmoides Sacc. Mich. II, p. 77, F, ital. f. 119. — Cupulis
superficialibus, sparsis, scutellaribus, minutissimis $\frac{1}{3}$ - $\frac{1}{4}$ mm., di-
lute chlorino-flavis, diaphanis, levissimis, glabris, jugiter (et in sicco)
apertis; ascis clavulatis, 30-45 \approx 3 $\frac{1}{2}$ -4 $\frac{1}{2}$, octosporis; sporidiis cy-
lindraceis, curvulis, minutissimis, 4-5 \approx $\frac{3}{4}$ -1, hyalinis; paraphysi-
bus filiformibus, tenellis.

Hab. in caulibus herbarum majorum in silva Montello Ital. bor.,
in Gallia et Germania. — Maculis latis æqualiter atratis innasci-

- tur. Ascoma, sec. Rehm, basi minute parenchymaticum, margine pseudoprosenchymaticum.
9. **Pezizella pulviscula** (Cooke) Sacc. *Peziza* (Mollisia) *pulviscula* 1149
Cooke Hedw. 1875, p. 84, Disc. U. S. I, p. 297. — Gregaria, minutissima, saccharina, subtremelloidea; cupula globosa, applanata, glabra, pallida, aquoso-lutescente, 0,4 mm. lata; ascis cylindraceis 30 = 5; sporidiis minutissimis spermatoideis.
Hab. ad caules *Phytolaccæ*, New York Am. bor. (GERARD).
10. **Pezizella Œnotheræ** (C. et E.) Sacc. *Peziza Œnotheræ* C. et E. 1150
Grev. VI, pag. 90. — Sparsa, ochraceo-albida; cupulis demum expansis, margine elevato, flexuoso; ascis cylindraceis; sporidiis linearibus, rectis, obtusis 8 μ . long.; paraphysibus filiformibus.
Hab. in caulibus *Œnotheræ*, New Jersey Americæ bor. — Ascoma 1 mm. lat.
11. **Pezizella albo-viridis** (Saut.) Sacc. *Peziza albo-viridis* Saut. Pilz. 1151
Salzb. p. 10. — Sessilis, minuta, submembranacea, glabra, concava, albida, disco viridulo.
Hab. in sarmentis putrescentibus *Rubi idæi*, Salzburg. — Affinis *P. xanthostigmati*. $\frac{1}{2}$ cm. lata. Sec. Wint. vix diversa a *M. dilutella*.
12. **Pezizella chlorinella** (Ces.) *Peziza chlorinella* Ces. Bot. Zeit. 1152
1854, pag. 186 et Kl. Herb. myc. 1812. — Minutissima, viridula, gregaria, semipellucens.
Hab. ad herbarum caules, Vercelli Ital. bor. — *Pezizellæ leucostigmoidi* affinis videtur.
13. **Pezizella Carolinæ** (De-Guer.) Sacc. *Peziza Carolinæ* De-Guer. 1153
in Cr. Fin. p. 49. — Ascomate 2-3 mm. diam., albo, dein brunneo, hemisphærico, subpedicellato, primo concavo, dein plano, margine undulato; ascis clavatis, 8-sporis; sporidiis ovoideis; paraphysibus filiformibus, sursum granulosus et brunneo-coloratis.
Hab. in ramulis emortuis *Aceris*, Morlaix Finistère Gallia. 1154
14. **Pezizella vulgaris** (Fr.) Sacc. *Peziza vulgaris* Fr. Syst. Myc. II, pag. 146, *P. albella* With. arr. IV, p. 350. — Sessilis, subcæspitosa, membranacea, mollis, glabra, utrinque concolor, albido-pallescentis v. roseo-expallens, orbicularis.
Hab. ad cortices ramorum exsiccatorum, v. c. *Coryli*, *Rubi* in Suecia, Germania, Belgio, America bor., Cuba, Ceylon, Veraquaz. — Conferta, subcæspitosa, concaviuscula, orbicularis, sed ob mutuam pressionem flexuosa et quasi contorta, præcedente major, sed vix lineam superans. Hymenium discretum nullum. *P. cera-*

cella pilis tantum paginæ inferioris differt. — Forte eadem est **Pezizella** (Niptera) **vulgaris** Fuck. Symb. App. II, p. 59: cupulis asceris sparsis seu gregariis, carnosodiaphanis, mollibus, albidis, glabris, 1-3 mm. latis, sessilibus, primo urceolatis, demum concavo-subexplanatis, margine distincto, integro, regulari seu pressione repando, disco concolori; ascis elongato-clavatis, 8-sporis, $54 \approx 8-10$; sporidiis subdistichis, cylindraceo-subclavatis, rectis seu parum curvatis, continuis, hyalinis, $10-12 \approx 3-4$; paraphysibus copiosis, linearibus, simplicibus. In fragmentis (Zapfen) putridis Pini silvestris in Rhenogovia. Sec. Fuck. l. c., hujus status conidiophorus est superficialis, acervulos gelatinose molles, orbiculares, 1-2 mm. latos, convexos, demum planos, albidocinereos formans; conidiis cylindraceis, rectis, continuis, $8-9 \approx 2$. — Var. **myceticola** Berk. N. A. Fung. p. 137: magis concava. In Polyporis vetustis ad Quercus in Carol. inf., Santee River et Britannia. — Var. **sanguinella** Berk. l. c.: extus alba, disco pallide aurantio. In Liquidambare, Carolina inf. et New England Amer. bor.

15. **Pezizella leucostigma** (Fuck.) Sacc. *Nipt. leucostigma* Fuck. Symb. 1155
App. II, p. 59 nec *Peziza leucostigma* Fries. — Cupulis sparsis, aquoso-diaphanis, 1 mm. lat., albis, sessilibus, orbicularibus, primo concavis, demum planis, glaberrimis, margine obscuro, disco concolori, siccis lutescentibus; ascis substipitatis, cylindraceis, 8-sporis, $48 \approx 9$; sporidiis oblique monostichis, cylindraceo-oblongis, parum curvatis, biguttulatis, continuis, hyalinis, $10-12 \approx 4$; paraphysibus filiformibus.

Hab. ad basim putridam truncorum Fagi v. Betulæ supra Hallgarten Rhenogoviæ.

16. **Pezizella diaphanula** (Cooke) Sacc. *Peziza* (Mollisia) *diaphanula* 1156
Cooke Hedw. 1875, p. 84, Disc. U. S. I, p. 295. — Gregaria, minutissima, diaphana albida, pallescens, hemisphærica, demum applanata $\frac{1}{10}$ mm. lata; ascis clavatis; sporidiis elongato-ellipticis, uninucleatis, $17-20 \approx 8$; paraphysibus linearibus vix incrassatis.

Hab. ad ligna vetusta, New Jersey Amer. bor. (ELLIS).

17. **Pezizella uvidula** (Karst.) Sacc. *Hel. uvidulum* Karst. M. F. I, 1157
p. 127. — Gregaria, sessilis, sphæroideo-pulvinata, immarginata, hyalina, glabra, 0,1-0,2 mm. lat.; ascis oblongatis, longe pedicellatis, $75-100 \approx 18-20$, parte sporif. 40μ . long.; sporidiis distichis ellipsoideis v. ovoideo-ellipsoideis sæpe irregularibus, intus subgrumosis, $12-13 \approx 6-7,5$.

Hab. ad lignum mucidum (Betulæ?) loco udo prope Mustiala

Fenniæ. — Facillime prætervidenda ob summam minutiam (in sicco statu fere invisibilis); ab aliis *Pezizellæ* speciebus ascis et sporidiis pro ratione maximis optime distincta.

18. **Pezizella sordidula** (Speg.) Sacc. *Helotium sordidulum* Speg. 1158

F. Fueg. n. 336. — Densiuscule sparsa, turbinato-calyceiformis, minutissima, 300-400 μ . diam. subpellucida, disco infundibulari, dilutissime alutacea, margine acutissimo integro v. irregulariter erosodenticulato, extus sordide albo non v. vix tenuissime pruinuloso, sessilis v. pedicello brevissimo ac crassiusculo concolore suffulta; ascis cylindraceo-subclavulatis, sursum leniter attenuatis, apice subtruncato-rotundatis, crassiuscule tunicatis, minute 1-foveolatis, deorsum attenuato-pedicellatis, 45-50 \approx 3-3,5, octosporis; paraphysibus parvis, filiformibus, apice non v. vix subclavulatis, obtusis, obvallatis; sporidiis oblique monostichis, elliptico-cylindraceutis, utrinque obtusiuscule rotundatis 4-4,5 \approx 1,5, rectis v. inæquilateralibus, hyalinis, continuis.

Hab. ad corticem fagineum putrescentem peridermio denudatum in silvis prope Port Cook in Staten island Fuegiæ. — Iodope tunica ascorum dilute, obturaculus intensius cœrulescunt. Prope Ushuvaia specimina nonnulla notis externis perfecte cum typo congruentia, internis autem nonnihil recedentia (ascis 45 \approx 3; paraphysibus apice non clavulatis, sporidiis minoribus 2,5-3,2 \approx 1,5 μ .) legiit; cl. SPEGAZZINI an, ex ipso, species distincta?

19. **Pezizella soleniiformis** (B. et C.) Sacc. *Pez. soleniiformis* B. et 1159

C. North Am. Fung. n. 749. — Minuta, candida, primum hemisphærica, margine tumido, dein cylindrica, demum ore expanso flexuoso.

Hab. in ligno putri Alabama Amer. bor. (PETERS).

20. **Pezizella lactea** (Cooke) Sacc. *Helotium lacteum* Cooke Grev. 1160

VIII, p. 63. — Sparsa, lactea, sessilis; cupulis concavis, 2-3 mm. lat., margine flexuoso; ascis cylindraceutis; sporidiis uniseriatis, lanceolatis, nucleatis, 20-30 \approx 4-6; paraphysibus filiformibus.

Hab. in ligno valde putrido, Maungaroa Novæ Zelandiæ. — Diaphana, sicca subochracea.

21. **Pezizella albella** (With.) Sacc. *Peziza albella* With. Arr. vol. 1161

IV, pag. 350, sec. Fr. *Pez. vulgaris* Fr. Syst. Myc. II, pag. 146, *Pezizella Avellanæ* (Lasch) Fuck. Symb. p. 299, *Peziza Avellanæ* Lasch in F. E. n. 28, *Helotium albellum* (With.) Karst. M. F. I, pag. 116. — Conferta, subcæspitosa, membranacea, sessilis, concaviuscula, albida v. albido-pallens, 1 mm. lat.; ascis cylindra-

ceo-clavatis, 35-45 \approx 5-6, filiformi-paraphysatis; sporidiis oblongo-tereti-uscis, 6-9 \approx 1,5-2, rectis v. curvulis, hyalinis.

Hab. in ligno putri et cortice Coryli etc. in Suecia, Germania, Gallia, Fennia, Sibiria asiatica. — Var. **incarnata** Fr. l. c. In Rubo in Suecia et Germania.

22. **Pezizella Cyathus** (Nees) Sacc. *P. Cyathus* Nees in Mart. Erl. 1162 p. 463, Pers. Mycol. Eur. p. 287, Fr. Syst. Myc. II, p. 114. — Sessilis, subcylindrica, fusca, ore denticulato, connivente, disco albido.

Hab. in ramulis Betulæ albæ, Erlangen in Germania. — An *Mollisia*? Cupula membranacea, 1 mm. lata, extus rimuloso-substriata.

23. **Pezizella turgidella** (Karst.) Sacc. *Helot. turgidellum* Karst. M. 1163 F. I, p. 158. — Gregaria v. subsparsa, sessilis, convexa, immarginata, subnuda, albido-hyalina, sicca convexiuscula, subluteola, 0,2-0,4 mm. lat.; ascis fusoido-clavatis, 25-34 \approx 5-7; sporidiis distichis vel oblique monostichis, fusoido-elongatis, guttulis, vulgo rectis, 7-13, plerumque 9-12 \approx 1,5-2; paraphysibus gracilescensibus.

Hab. ad culmos graminis putridos locis udis in Fennia.

24. **Pezizella planodisca** P. et C. in Peck 31 Rep. Bot. Mus. p. 46. 1164 — Cupulis minutis, sessilibus, albidis, disco plano v. leniter convexo, margine oblitterato; ascis brevibus; sporidiis confertis v. distichis, subfusiformibus, 7,5-8,5 μ . longis.

Hab. in foliis emortuis Andropogonis scoparii, Buffalo Americæ borealis (CLIFTON).

25. **Pezizella microspis** (Karst.) Sacc. *Helotium microspis* Karst. M. 1165 F. I, p. 152. — Gregaria, sessilis, subnuda, convexa, subimmarginata, hyalino-albida, sicca planiuscula v. concaviuscula, albida, 0,1-0,2 mm. lat.; ascis clavatis, 25-35 \approx 4-5, apice jodo non tinctis; sporidiis elongatis vel fusoido-elongatis, plerumque 2-guttulatis, 6-8 \approx 1-1,5; paraphysibus vix ullis propriis.

Hab. supra folia Phragmitis communis putrescentia in Fennia usque ad oppid. Vasa.

26. **Pezizella Filicum** (Phill.) Sacc. *Mollisia* Phill. Disc. p. 191. — 1166 Gregaria, minuta, initio globosa, dein cupulata, demum expansa, alba, glabra; ascis tereti-clavatis; sporidiis oblongo-ellipsoideis, rectis v. curvulis bi-triguttatis, demum simulate 1-2-septatis, 8-12 \approx 3; paraphysibus tenuissimis.

Hab. in caule emortuo Aspidii Filicis-maris, Sohbden in

- Britannia. — Ascoma 100-300 μ . lat. In *Grevillea tamen* (XIII, p. 74), ascoma indicatur 1-3 mm. lat., quod probabilius.
27. **Pezizella epithallina** (Ph. et Pl.) Sacc. *Mollisia epithallina* Ph. 1167 et Plow. Disc. p. 173. — Congregata, sessilis, disciformis, immarginata, albo-pallens v. flavido-alba; ascis cylindraceo-clavatis, octosporis; sporidiis oblongo-ellipsoideis, $8 \approx 2$; paraphysibus tenuibus, sursum incrassatulis.
- Hab.* in thallo *Peltigeræ caninæ*, King's Lynn Britannia.
28. **Pezizella Glæocapsæ** (Boud.) Sacc. *Epiglia Glæocapsæ* Boud. 1168 Disc. charn. pag. 25. — Ascomatibus minutis, $\frac{1}{4}$ - $\frac{1}{2}$ mm. diam., rotundatis, subturbinatis v. lenticularibus, albescentibus v. griseis, glabris; hymenio leviter papillato; ascis $110 \approx 10$ -12, paraphysatis; paraphysibus gracilibus, dichotomis et apice hamatis; sporidiis obtuse fusiformibus, granulosis, continuis, 12 - $16 \approx 5$ -6, hyalinis.
- Hab.* ad humum inter muscos, *Glæocapsa* invasos, Montmorency in Gallia.
29. **Pezizella albula** (Phill.) Sacc. *Mollisia* Phill. Disc. pag. 192. — 1169 Gregaria, minuta, sessilis, concava, demum plana v. convexa, glabra, nitidula, albida; ascis clavatis; sporidiis subcylindricis v. fusoides, hyalinis, 6 - $10 \approx 2$; paraphysibus filiformibus tenuibus.
- Hab.* in fimo cuniculorum Forres Britannia (KEITH). — Ascoma 300-400 μ . lat., carnosulum. Excipulum prosenchymaticum.

II. Disco roseo, rubro-aureo, lilacino.

30. **Pezizella Rhemii** Sacc. *Pezizella Aconiti* Rehm Ascom. n. 163, 1170 Lojk. n. 34, nec Saut. — Gregaria, sessilis, orbicularis, primitus subglobosa urceolata, dein plus minusve expansa, sicca albido-rosea, extus scabra, disco roseo, humida dilatata plana, margine crasso, albedo, denticulato cincta, roseo-cinerea, tenerrime, contextu subhyalino, prosenchymatico, c. 3-5 mm. diam. (humida); ascis clavatis, apice incrassatis, 8-sporis, 45 - $50 \approx 7$, jodo cœrulescentibus; sporidiis subellipticis, obtusis, 2-plerumque 4 nucleis præditis, rectis vel subcurvatis, hyalinis, distichis, 12 - $14 \approx 3$; paraphysibus filiformibus.
- Hab.* ad caules putridos *Aconiti Napelli* in alpe Dzurowa prope Teplicska, Liptau, Hungaria (LOJKA).
31. **Pezizella Nectriella** (Karst.) Sacc. *Helotium Nectriella* Karst. 1171 Fragm. mycol. XIX, p. 5, Revisio Ascom. Fenn. p. 127. — Gregaria vel sparsa, subinde confluens, sessilis, convexa, subimmarginata, ceracea, incarnata, glabra, 0,3 mm. lat.; ascis clavatis, 33-

45 \approx 7; sporidiis distichis, elongatis, 6-7 \approx 1,5-2; paraphysibus filiformibus, apice incrassatis.

Hab. ad caules aridos Solani tuberosi in Mustiala Fenniæ.

32. **Pezizella exigua** (Cooke) Sacc. *Peziza exigua* Cooke Hedw. 1875, 1172
p. 83, Disc. U. S. I, p. 296. — Sparsa, minutissima, sessilis, subtremellosa, miniata, cupula hemisphærica, dein applanata vel convexa, margine vix elevato; ascis minutis lanceolatis; sporidiis linearibus hyalinis, vix 0,5 mm. long.

Hab. ad caules Erigeronis, New Jersey Amer. bor. (ELLIS). — Oculo nudo inconspicua.

33. **Pezizella Rozei** (Quél.) Sacc. *Orbilia Rozei* Quél. Grev. X Suppl. 1173
p. 14, t. IX, f. 15. — Punctiformis 0,3 mm. lat., gibbosa, lobulata, granulosa, glabra, mollis, ex aurantio-incarnato roseola; sporidiis ellipsoideis 5 μ . long., deinde fusiformibus et guttulatis.

Hab. in caulibus emortuis Hellebori fœtidi, Jura Galliæ.

34. **Pezizella elæina** (Pass. et Beltr.) Sacc. *Niptera elæina* Pass. 1174
et Beltr. — Cupulis sparsis, depressis, pallide miniatis, margine (in sicco) undulato, truncato, nudo; ascis brevibus cylindricis, 8-sporis, jodo immutatis, 27-30 μ . long.; sporidiis tenuibus, bacillaribus, continuis, 12 \approx 4; paraphysibus ascos æquantibus.

Hab. in ligno indurato Oleæ europææ, Monostalla Siciliæ.

35. **Pezizella lilacina** Sacc. *Niptera lilacina* Sacc. Fung. Ven. Ser. 1175
IV, n. 70, *Ombrophila lilacina* (Wulf.) Karst. Myc. Fenn. I, 90?? — Cupulis gregariis, ceraceo-mollibus, plano-patellaribus, adpresse sessilibus, marginatis, $\frac{1}{2}$ -1 mm. diam., vivis amœne lilacinis, siccis pallide lilacinis, disco pallidior et ob ascos minutissime velutino; ascis copiosissimis, cylindræo-clavatis, basi attenuato-stipitatis, 120 \approx 6-7, p. s. 50-60 longa; paraphysibus filiformibus obvallatis, 8-sporis; sporidiis in asci parte superiore subdistichis, ovoideis, 7-8 \approx 5, crassiuscule 1-2-guttulatis, hyalinis.

Hab. in ligno fagineo putrescenti in silva Cansiglio (Treviso) Ital. bor. — Species certe pezizacea nec bulgariacea.

36. **Pezizella brassicæcola** (Berk.) Sacc. *Peziza brassicæcola* Berk. 1176
North Am. Fung. n. 736, Cooke Disc. U. S. I, p. 297. — Tenuis, expansa, flexuosa, extus intusque rufa; sporidiis ellipticis concatenatis («?»), uninucleatis, 10 μ . longis.

Hab. in caulibus Brassicæ putridis, New England Amer. bor. (SPRAGUE). — Habitus *Pezizellæ vulgaris*.

37. **Pezizella rufula** (Schw.) Sacc. *Peziza rufula* Schw. Syn. p. 177. 1177
— Basi affixa, margine crasso subalbescente, ceterum e rubro rufa,

disco impresso, quasi umbilicato, limbo interdum undulato, plerumque regulariter orbicularis.

Hab. in lignis ad Bethlehem Amer. bor. — *P. rubellæ* affinis sed major et minus tremellosa. An *Calloria*?

38. **Pezizella elegans** (Saut.) Sacc. *P. elegans* Saut. Pilz. Salz. p. 9. 1178

— Sessilis, glabra, gregaria, ceraceo-mollis, carnea, ascomatibus urceolatis.

Hab. in ligno putri prope Mittersill Salzburg. — Affinis *Pez. mycophilæ*. Ascoma $\frac{1}{2}$ -1 mm. lat.

39. **Pezizella hæmatoidea** (C. et Ph.) Sacc. *Peziza hæmatoidea* C. 1179

et Phil. Grevillea VIII, p. 62. — Sparsa, sanguineo-rubra, ceraceo-mollis, sessilis; cupulis demum applanatis, 1-1 $\frac{1}{2}$ mm., margine elevato; ascis clavatis; sporidiis cylindricis, utrinque attenuatis, guttulatis 16 \approx 3-4; paraphysibus filiformibus.

Hab. in ligno decorticato Waitaki Novæ Zelandiæ. — *P. rubellæ* subaffinis.

40. **Pezizella carneo-rosea** (C. et H.) Sacc. *Peziza carneo-rosea* 1180

Cooke et Hark. Grev. IX, pag. 130. — Discoidea, sessilis, carneo-rosea, subcarnosa, $\frac{1}{3}$ mm. diam.; ascis cylindræis; sporidiis ellipticis 5 \approx 3; paraphysibus linearibus.

Hab. ad ramos Eucalypti in California.

41. **Pezizella rosea** (Mont.) Sacc. *Niptera rosea* Mont. Fl. Chil. VII, 1181

p. 415, t. 10, f. 7, Syll. Crypt. n. 636. — Cupula rosella, variæformis, turbinata vel obovata, supra plano-concava, submarginata, margine tenui vel crassiusculo.

Hab. ad ramos decorticos, Valdivia (CL. GAY).

42. **Pezizella regalis** (C. et E.) Sacc. *Peziza regalis* C. et E. Grev. 1182

VI, pag. 91. — Sparsa, miniata; cupulis sessilibus, subhemisphæricis, demum expansis; margine elevato, albo-crenato; ascis cylindræo-clavatis; sporidiis linearibus, rectis 7 μ . longis; paraphysibus superne globoso-clavatis.

Hab. in cortice pirino, New Jersey Amer. bor. — Ascoma 1 mm. lat. *P. lasiæ* affinis.

43. **Pezizella cruenta** (Schw.) Sacc. *Peziza cruenta* Schw. Syn. 177. 1183

— Minuta, sparsa, sessilis, applanata, subpellucida, margine elevato albidulo aut pruina adperso; disco concavo, forma totius fungi orbiculata, vix 1 mm. excedens.

Hab. in cortice ramorum, Bethlehem Amer. bor. — An *Calloria*?

44. **Pezizella conchella** (Schw.) Sacc. *Peziza conchella* Schw. Syn. 1184

Amer. bor. p. 177, — Minutissima, conchiformis, sessilis, subpellucida, rubra, sicca, connivens, margine acuto.

Hab. ad ramos dejectos Mori albæ, Bethlehem in Pennsylvania Amer. bor.

45. **Pezizella carneo-pallida** (R. et D.) Sacc. *Peziza carneo-pallida* 1185
Rob. et Desm. 19, Not. pag. 31. — Amphigena, minutissima, plerumque laxe gregaria, sicca epidermide tecta, humida, erumpens, sessilis, subimmersa, rotundata, crassa, pallide carnea; disco convexo fere tremelloso, margine subdenticulato; ascis mediocribus, clavatis, 50 μ . long.; sporidiis hyalinis, continuis, ellipsoideis, subcylindricis, obtusis, 15 μ . long.

Hab. in foliis semiputridis Ulmi in Gallia bor. — Ascoma $\frac{1}{4}$ - $\frac{1}{3}$ mm. diam.

46. **Pezizella incarnata** (Cooke) Sacc. *Pez. incarnata* Cooke Grev. I, 1186
p. 131. — Sparsa, minuta incarnata, sessilis, mox expansa, fere explanata, extus pallida; ascis cylindraceis; sporidiis linearibus, obtusis, hyalinis, 10 \approx 1,5.

Hab. in foliis Pinorum in Scotia (A. JERDON).

47. **Pezizella Cucurbitæ** (Ger.) Sacc. *Peziza Cucurbitæ* W. K. Ger. 1187
Torr. Bot. Club. Jun. 1874. — Ascomatibus sessilibus, udis cereaceis, scutatis, margine integro, disco pallide brunneo siccis contortis subcarneis, disco atro-purpureo; sporidiis ovoideis continuis, 10 μ . longis.

Hab. in epicarpio putri Cucurbitæ, sociâ *Phoma Cucurbitacearum*, Poughkeepsie Amer. bor.

48. **Pezizella phymatodes** (Phill.) Sacc. *Mollisia phymatodes* Phill. 1188
in Grevillea V, p. 517, t. 88, fig. 9. — Sessilis, sparsa, sphaerica, rubescenti-carnea, glabra, subtiliter striata, margine tenui, serrato, pallidiori; ascis subclavatis; sporidiis oblongo-fusoideis, continuis, 13-16 \approx 3-4; paraphysibus filiformibus.

Hab. in culmis, Blue Canon Sierra, Nevada Californiæ.

III. Disco flavo, aureo, flavido.

49. **Pezizella aureola** (Rabenh.) Sacc. *Peziza* Rabenh. F. E. n. 1622, 1189
Hedw. 1873, pag. 139. — Sessilis sparsa v. subsparsa humiditate expanso-patelliformis, carnosomollis, fusco-ferruginea, distincte plicato-striata; margine leviter inflexo, crenulato subdenticulata, siccitate involuta, subclausa, disco subaureo; ascis linearibus, 6 μ . crassis, octosporis; sporidiis subcylindraceis, monostichis, rectis, utrinque obtusis; paraphysibus nullis.

Hab. ad caules siccos Eupatorii cannabini Dresden Germaniæ.

50. **Pezizella hungarica** Rehm Ascom. Lojk. n. 35, cfr. Winter in 1190
Flora 1872, p. 526. — Minutissima, c. 0,3 mm. diam., gregaria,
sessilis, primitus globosa, dein urceolata, sicca flavidula, humectata
hyalinella, prosenchymatico-contexta; ascis clavatis, 8-sporis, 30 =
4; sporidiis elongato-cuneiformibus, rectis, hyalinis, obtusis, 5-7 =
1,5, distichis; paraphysibus teneris, filiformibus; jodii ope apice
ascorum cœrulescente.

Hab. ad caules putridos Umbelliferarum in horto Esterházyano Kaposvár (Somogy) Hungariæ (LOJKA). — Var. **Heraclei**:
differt sporidiis subcurvatis, 6-8 = 1, paraphysibus apice globosa
clava c. 3 μ . crassa instructis. Ad caulem putridum Heraclei
palmati infra montem Retyezát (Hunyad) Transylvaniæ (LOJKA).

51. **Pezizella tyrolensis** Rehm Ascom. Lojk. n. 36. — Plerumque 1191
sparsa, rarius gregaria, sessilis, primitus globosula, dein substipitata,
serius explanata, sicca junior aureo-vel aurantiaco-flavida,
scabra, concava, plicata, margine, subfimbriato et rugoso, dein explanata,
disciformis, haud distincte marginata, margine albido-fimbriata,
humida flavida, expansa, prosenchymatico-flavidulo-contexta, 1-1,2 mm. diam.;
ascis clavatis, apice incrassatis, 8-sporis, 40-60 = 6-8 jodo cœrulescentibus;
sporidiis oblongis vel obtuse oblongatis, ellipticis, hyalinis, rectis, sæpe 1-2
nucleolis præditis 6-9 = 2,5; paraphysibus filiformibus, apice haud clavatis,
hyalinis, p. p. crassis ascisque superantibus, c. 2 μ . diam.

Hab. ad caules putridos Angelicæ circa lacum Zenoga infra alpem Retyezát (Hunyad) Transylvaniæ (LOJKA), et Cirsii spinosissimi in Alpibus tyrolensibus. — *Pezizella hungarica* Rehm huc forte pertinet, ex ipso auctore.

52. **Pezizella Sedi** (Karst.) Sacc. *Helotium Sedi* Karst. Rev. monogr. 1192
p. 128. — Sparsa vel subgregaria, sessilis aut distincte stipitata;
cupula planiuscula immarginata, luteo-rubella, sicca subaurantiaca
mollis, sicca cornea, glabra, 0,3-0,5 mm. lat.; ascis crassule clavatis,
deorsum in pedicellum pedetentim attenuatis, apice obtusissimis,
jodo haud cœrulescentibus, 100-110 = 18-20; sporidiis distichis,
ellipsoideis, massa minute granulosa fœtis, eguttulatis, hyalinis,
17-21 = 9-10; paraphysibus filiformibus, ramosis, sat confertis
gracilibus.

Hab. in Sedo acri putrido prope Mustiala Fenniæ.

53. **Pezizella crocitincta** (B. et C.) Sacc. *Peziza crocitincta* B. et 1193

C. North Am. Fungi n. 749, Grev. t. I, fig. 5. — Sessilis, mollis, primum globosa dein expansa, extus glabra, rivulosa, vivide crocicolor; hymenio concavo citrino; ascis cylindraceis; sporidiis allantoideis exiguis, luteolis.

Hab. ad lignum quercinum putre in Georgia, Pennsylvania, Poughkeepsie, North Greenbush Amer. bor. — Conferenda cum *Chlorosplenio Chlora* Schw.

54. **Pezizella translucens** (Gill.) Sacc. *Mollisia translucens* Gill. Disc. 1194 p. 212 cum icone Pat. Tab. pag. 36, n. 88. — Sessilis, expansa, tenuissima, margine undulato, flavo-straminea, translucida, basi hyphulis albidis, septatis prædita; ascis cylindraceis; sporidiis filiformibus brevibus curvulis, $4 \approx 0,5$.

Hab. in ligno putri *Quercus* et *Fagi*, Alençon et Poligny Galliæ.

55. **Pezizella floriformis** (Peck) Sacc. *Mollisia floriformis* Peck 33 1195 Rep. 31. — Minuta, tenuis, glabra, cyathiformis, regularis, dein ob marginem undulato-inflexum floriformis, sordide flavida; ascis brevibus cylindricis, 18-20 μ . longis; sporidiis spermatoideis.

Hab. in ligno dejecto *Aceris* Verona Amer. bor. — Ascoma 1-2 mm. lat.

56. **Pezizella infixæ** (Wallr.) Sacc. *Pez. infixæ* Wallr. Crypt. Germ. 1196 n. 2504. — Ascomatibus sessilibus glaberrimis exiguis sparsis, basi punctiformi insculptis, primum urceolatis, dein discum concavum centro saturatiore notatum, margine elevato conformi patulo cinctum recludentibus, vivis pallide cerinis subtremellosis, siccis aurantio-flavis.

Hab. ad ligna salicina putredine exesa in Thuringia. — Adfigendi modo peculiaris.

57. **Pezizella excavata** (Saut.) Sacc. *P. excavata* Saut. Pilz. Salzb. 1197 p. 60. — Exigua, sessilis, gregaria, submembranacea glabra, lutea, ex cavata, margine repando, undulato.

Hab. in ligno putri prope Mittersill Salzburg. — Affinis *M. leucostigmati* $\frac{1}{2}$ μ . lat.

58. **Pezizella citrinella** (Schw.) Sacc. *Peziza citrinella* Schw. Syn. 1198 p. 177. — Gregaria ac sparsa minuta, sessilis junior subglobosa, demum applanata, semper margine crassiusculo obtuso distincta varie flexuoso et linea albida notato, ceterum unicolor citrinella.

Hab. in lignis cariosissimis salicinis, Bethlehem Amer. bor. — Affinis *Call. chrysocomæ*: an ergo *Calloria*?

59. **Pezizella crispa** (C. et Phill.) Sacc. *Peziza crispa* C. et Phill. 1199

Grev. VIII, p. 62. — Aurantiaca, sparsa, sessilis, 1-4 mm. lat.; cupulis concavis, crispulis, subtus pallidioribus, tenuibus; ascis cylindraceutis; sporidiis linearibus, $8 \approx 3$ utrinque rotundatis.

Hab. ad lignum, Maungaroa Novæ Zelandiæ.

60. **Pezizella exidiella** (B. et C.) Sacc. *Peziza exidiella* B. et C. 1200
North Am. Fung. n. 740 et Cooke Disc. U. S. I, p. 297. — Gregaria regularis extus intusque flavo-rufa; ascis clavatis; sporidiis oblongis angustis hyalinis.

Hab. ad ramos Corni floridæ in Carol. inf. Amer. bor.

61. **Pezizella Aquifolii** (C. et E.) Sacc. *Peziza Aquifoliæ* C. et E. 1201
Grev. VI, pag. 91. — Foliicola, sparsa, subaurantia, ceracea; cupulis sessilibus, concavis, margine incurvo, ad basim fibrillis albis radiantibus affixis; ascis cylindraceutis; sporidiis arcte ovalibus, hyalinis $7-10 \approx 2,5$; paraphysibus vix distinctis.

Hab. in foliis emortuis Ilicis opacæ, New Jersey Amer. bor.

62. **Pezizella citrinula** (Karst.) Sacc. *Hel. citrinulum* Karst. M. F. I, 1202
pag. 139. — Sparsa, sessilis plana, subaurantiaco-lutea vel citrina, 0,7 mm. lat.; ascis cylindraceuto-clavatis, $45-60 \approx 6$, apice jodo vix vel obsolete cœrulescentibus; sporidiis fusoido-elongatis, curvulis vel subrectis, vulgo guttulis paucis (plerumque 2 apicalibus) præditi, $6-12 \approx 1,5-3$; paraphysibus paucis, gracilibus sursum leviter incrassatulis.

Hab. in culmis graminum exsiccatis pr. Helsingfors et Mustiala Fenniæ et in vaginis culmisque Phragmitis communis in Gallia. — Pulchra et facile distincta species, cupula carnosoceracea, integerrima. Ad *Ph. alabastrinam* Fr. ut videtur, vergit. Ascomata (in specim. gallicis) sessilia, patellulata, integra v. subsinuosa, glabra, luteola, ceracella; asci teretiusculi $50-55 \approx 4-5$, paraphysati, octospori; sporidia elongata, curvula $8-9 \approx 2-2,5$, hyalina.

63. **Pezizella flaveola** (Cooke) Sacc. *Peziza flaveola* Cooke Grev. I, 1203
p. 131. — Sessilis, minuta, vivide flava, submembranacea tenera, mox discoidea glabra levis; ascis cylindraceutis; sporidiis subfusoidis rectis v. curvulis $8 \approx 2$.

Hab. in frondibus Pteridis aquilinæ King's Lynn Britanniæ (PLOWRIGHT).

64. **Pezizella chryso stigma** (Fr.) Sacc. *Peziza chryso stigma* Fr. S. 1204
M. II, p. 128 (*Peziza*), *Helot. chryso stigma* Fr. Summa p. 355, *Calloria chryso stigma* Phill. Disc. p. 328, *Pez. mellina* Pers. M. E. I, p. 290 (f. major), *Pez. versicolor* Desm. — Minima, punctiformis, aurea, disco plano immarginato, stipite brevissimo; ascis

elongato-clavatis, stipitatis, 8-sporis, 25-40 \approx 6-8; sporidiis oblique monostichis, oblongo-ovatis, inæquilateralibus, 4-guttulatis, hyalinis, continuis, 10-12 \approx 2-3; paraphysibus filiformibus.

Hab. ad stipites putrescentes *Aspidii Filicis-maris* et *Filicis-feminæ* locis umbrosis in Suecia, Germania, Fennia, Italia. — Pulcherrima, nudo oculo vix discernibilis. Stipes constanter adest, paullo dilutior, sursum dilatatus in cupulam planam, margine nullo prominente cinctam. Ascomata (in exempl. italicis) perexigua, vix ac ne vix puberula. Asci clavulati 35 \approx 6 $\frac{1}{2}$ -7, tetraspori (mihi saltem visi!), paraphysibus bacillaribus, raro furcatis obvallati; sporidia curvula, 9-11 \approx 2, hyalina. Ab hoc *H. aureolum* meum differt ascomatibus nitidis, sporidiis octonis, multo longioribus etc.

65. **Pezizella? Hypnorum** (Fr.) Sacc. *P. Hypnorum* Fr. Syst. Myc. II, 1205 p. 149, Wallr. Crypt. n. 9489. — Sessilis, minor, cupulata, sicca, lutea, margine subflexuoso.

Hab. in silvis ad saxa majora irrigua supra *Hypnum* cupressiforme etc. in Suecia et Germania. — Sparsa, parce obvia, 1 mm. lata, glabra, demum convexa et irregularis. Scutella *Biatoræ* refert nec cum *P. muscorum* commutanda.

66. **Pezizella minima** (Fr.) Sacc. *P. minima* Fr. Elench. II, p. 13. — 1206 Minima, globosa, levissima, glaberrima, firmula, spadicea, ore conivente albido.

Hab. in *Hydno* farinaceo copiose hieme primoque vere in Suecia. — Species bella, eximia, omnino libera, fere mobilis, intense spadicea, pæne nigrescens, nitida!, urceolata persistens. Nudo oculo inconspicua.

IV. Disco virescente.

67. **Pezizella mycophila** (Fr.) Sacc. *P. mycophila* Fries Obs. I, p. 164 1207 Summa p. 353. — Sessilis, ceraceo-mollis, glabra, pallide viridis, cupulis concavis marginatis.

Hab. in *Russula* adusta putrida, semel visa, in Suecia. — An, ex ipso auctore, eadem ac *Hum. Jungermannicæ*? Conferta, passim confluens, *Hum. Jungerm.* in mentem revocans sed tenuior ceracea. *Pez. diluta* γ . *fungorum* A. S. pag. 338 ad præsentem accedit, sed cupula substipitata roseo-rubella; hinc propria species.

V. Disco fulvo, rufo, brunneo-flavo, cinereo-rufo.

68. **Pezizella versatilis** (Fr.) Sacc. *Pez. versatilis* Fr. Summa p. 353. 1208

— Ascomate sessili, ceraceo-membranaceo, concavo, dilute fulvo, mycelio brevi radiante cincto, hymenio exoleto, reticulato-poroso.

Hab. ad folia betulina putrida coacervata in Suecia. — Ascoma 2-3 mm. lat., margine in siccis involuto et flexuoso, mycelium maculam orbicularem sistit.

69. **Pezizella Spirææ** (R. et Desm.) Sacc. *Pez. Spirææ* R. et Desm. 1209

24 Not. p. 7. — Hypo-rarius epiphylla, sessilis, minutissima, ceraceo-mollis, glabra, sparsa, punctiformis, junior globosa, adulta aperta, concava v. plana, sicca rufo-brunnea, humida disco subcinerescente, margine subdenticulato; ascis clavatis, rectis v. arcuatis, 60 μ . longis; sporidiis ellipsoideis, 2-guttulatis, 10 \approx 5.

Hab. in foliis vetustis Spirææ Ulmariae in Gallia bor. — Ascoma $\frac{1}{5}$ - $\frac{1}{4}$ mm. diam.

70. **Pezizella Leguminum** (Schw.) Sacc. *Pez. Leguminum* Schw. Syn. 1210

Amer. bor. p. 176. — Minuta, sparsa, emergens, globosa, ceracea, sessilis, glabra, rufa, disco excavato concolori, margine albescente.

Hab. in leguminibus Catalpæ et Tecomæ, Bethlehem Amer. bor., parce.

71. **Pezizella Pastinacæ** (Schw.) Sacc. *Peziza Pastinacæ* Schw. Syn. 1211

pag. 176. — Miniata, stipite brevissimo crasso, interdum sessilis, cupulis sparsis apertis, margine tumidulo obtuso, albescenti-luteo, disco subconvexulo rufo-lutescente.

Hab. in caulibus exsiccatis duris Pastinacæ, Bethlehem Americæ borealis.

72. **Pezizella Aconiti** (Saut.) Sacc. *Peziza Aconiti* Saut. in Rabenh. 1212

Crypt. Fl. I, p. 344 et Wint. in Hedw. 1881, p. 134. — Sparsa, erumpens, punctiformis, subclausa, initio orbicularis, dein globoso-depressa, brunneo-flava, expallens, corrugata, margine inflexo; ascis anguste clavatis, 70-75 \approx 5; sporidiis oblongo-fusoideis, hyalinis, 7-11 \approx 1,5.

Hab. in caulibus emortuis Aconiti, Pinzgau.

73. **Pezizella juncina** (Pers.) Fuck. Symb. Myc. p. 299, *Peziza juncina* 1213

Per. Myc. Eur. I, p. 314. — Sessilis, sparsa glabra, subceracea, applanata, margine prominulo, obscure rufa; ascis stipitatis, oblongis, 8-sporis, 32 \approx 4; sporidiis distichis, cylindraceutis, 8 \approx 2, quandoque curvatis.

Hab. in calamis putrescentibus Junci effusi et J. conglomerati prope Æstrich Rhenogoviæ et in Belgio.

74. **Pezizella lutiseda** (Karst.) Sacc. *Helotium lutisedum* Karst. M. 1214

F. I, pag. 126. — Sparsa, sessilis, convexa, testacea vel subflava,

demum obscurior, fulvo-fusca, circiter 1 mm. lat.; ascis cylindraceo-clavatis, 100 \approx 9-10, apice summo jodo haud v. leviter cœrulescentibus; sporidiis oblique mono- v. distichis, fusoideo-oblongatis, plerumque inæquilateralibus, 13-21 \approx 3,5-4,5, guttulis 2-pluribus præditis; paraphysibus gracilibus.

Hab. supra terram locis uliginosis prope Mustiala Fenniæ.

PSEUDOHELOTIUM Fuck. Symb. mycol. p. 298 [1869] (Etym. *pseudēs* falsus et *Helotium*), *Mollisia* sect. *Mollisiella* Phill. Disc. p. 193, *Helotii* spec. Karst. — Ascoma ceraceum, tenue, cupulatum v. scutellatum, sessile v. subsessile, extus brevissime puberulum; granulatum vel pruinatum. Asci tereti-clavati, filiformi-paraphysati, octospori. Sporidia hyalina, oblonga vel teretiuscula vel (in subg. *Mollisiella*) globulosa.

A. Pseudohelotium: sporidiis tereti-oblongis.

I. Disco albo, albido, mox sæpius flavicante v. fuscescente.

1. **Pseudohelotium hyalinum** (Pers.) Fuck. Symb. p. 298, *P. hyalina* 1215

Pers. Syn. p. 655, Myc. Eur. pag. 316 excl., Nees Syst. f. 270, extus granulosa, *Helotium* Karst. M. F. I, pag. 144, *Lachnella* Phill. Disc. p. 267, t. VIII, f. 48. — Sessile, punctiforme, subglobosum, humidum vitreo-pellucidum, extus puberulum; ascis lineari-oblongis, 8-sporis, 24 \approx 4; sporidiis oblongis, hyalinis, 6-9 \approx 2-3.

Hab. ad truncos putridos (ligna et cortices) in Suecia, Germania, Britannia, Gallia, Italia, Belgio, Amer. bor., Cuba, Ceylon, Tasmania. — Juniore ætate subglobosum clausum, demum applanatum marginatum, variat irregulare, aquose albidum vel omnino candidum.

2. **Pseudohelotium microstomum** (Wallr.) Sacc. *Pez. microstoma* Wallr. 1216

Fl. crypt. n. 2589, ? *Peziza hyalina* β . *granulata* Pers. myc. II, p. 316, *P. hyalina* Nees syst. f. 270, nec Pers. — Ascomatibus sessilibus, exilissimis, albidis, extus concoloribus, tenuiter papulosis, dein hemisphæricis in osculum circumscriptum immarginatum angustum dilatatum reclusis, urceolaribus.

Hab. ad Coryli truncos vetustos in Thuringia.

3. **Pseudohelotium vitreolum** (Karst.) Sacc. *H. vitreolum* Karst. M. 1217

F. I, p. 145. — Gregarium, sessile, convexulum, immarginatum, pilosellum vel demum subglabrum, hyalinum vel aquose albidum, siccum hemisphærico- vel difformi-contractum, lutescens vel lutescenti-pallidum, 0,4-1 mm. lat.; ascis cylindraceo-clavatis vel cla-

vatis, 60-65 \approx 8-11, apice jodo vix tinctis; sporidiis plerumque distichis, fusoideo-elongatis, rectis vel leniter curvulis, guttulas 2-4 sat minutas, rudes foventibus, 10-15 \approx 3-4; paraphysibus haud bene discretis, gracilibus.

Hab. ad lignum putrescens Betulæ et Padi in Fennia meridionali. — A *P. hyalino*, cui proximum, ascis sporidiisque majoribus, pilis cupulæ subtilioribus et brevioribus (30-40 μ . long.), dein evanescentibus aliisque notis differt. Ascomata interdum conflunt.

4. **Pseudohelotium Bullii** (Sm.) Sacc. *Peziza* Sm. in Gard. Chron 1873, 1218
Mollisia Phill. Disc. p. 194, tab. 6, fig. 35, Grevil. I, p. 120, t. 8, f. 3. — Subhemisphæricum, demum inæquale, sessile vel brevissime stipitatum, albidum, margine inflexo, pulverulentum, disco sæpe prolifero; ascis subclavatis; sporidiis subellipticis minutis 5-7 \approx 3.

Hab. in aquæ ductibus ligneis in Britannia. — Ascoma $\frac{1}{3}$ mm. lat.

5. **Pseudohelotium ceracellum** (Fr.) Sacc. *Peziza ceracella* Fr. S. 1219
 M. II, p. 114. — Cupulis gregariis, ceraceis, duriusculis, $\frac{1}{2}$ -1 $\frac{1}{4}$ mm. diam., subsessilibus, subtus turbinatis v. prorsus sessilibus, patellaribus, ex albo pallidissime (præcipue disco) flavescentibus, extus margineque setulis tenuissimis subvelutinis; disco e concavo plano marginato; ascis cylindræis, breve attenuato-stipitatis, 80 \approx 5-6, paraphysatis, 8-sporis; sporidiis oblique monostichis v. distichis fusoideis v. subclavulatis, 10-12 \approx 2 $\frac{1}{2}$, hyalinis.

Hab. ad ligna populea et quercina in Suecia, Germania, Italia. — Sec. Fries l. c.: gregarium, subinde cæspitosum, tenue, margine tenuissime ciliato; discus albidus, 2-4 mm. latus, junior et siccus urceolatus, humidus expansus planiusculus subrepandus.

6. **Pseudohelotium opalinum** (Quél.) Sacc. *Mollisia opalina* Quél. 12
 Suppl. p. 13, tab. VII, f. 9 et in Grevillea 1879, p. 177. — Ascomate discoideo, 1 mm. diam., ceraceo, firmo, pruinoso, glabro, diaphano, hyalino vel opalino; hymenio plano, lilacino vel glauco, in sicco amethysteo; sporidiis bacillaribus, 12 μ . longis, hyalinis.

Hab. in ramis putrescentibus in turfosis, Alsace.

7. **Pseudohelotium firmulum** (Karst.) Sacc. *Helotium firmulum* Karst. 1221
 Symb. XXVII, pag. 32. — Gregarium, sessile, subiculo dematieo (*Tapesia fusca*?) insidiens, sphæroideum vel late obovoideum, ore minuto apertum, prosenchymatico-contextum, firmulum, album vel lutescens, albo-puberulum, demum cupulari-apertum et sordidatum, 0,2-03 mm. latum; ascis cylindræo-clavatis, 6-7 μ . crassis; sporidiis distichis, fusoideo-elongatis, rectis vel curvulis, continuis,

eguttulatis, hyalinis, 7-12 \approx 1,5; paraphysibus filiformibus coalescentibus.

Hab. in caulibus aridis Rubi idæi in ditione mustialensi Fenniae. — *Lachn. inquilinæ* proximum.

8. **Pseudohelotium scrupulosum** (Karst.) Sacc. *Helotium scrupulosum* Karst. M. F. I, p. 152. — Gregarium, tenue, sessile, subhemisphaericum v. subsolenioideum, albidum v. lutescenti-albidum v. cinerescens, papillose exasperatum, circiter 0,2 mm. lat.; ascis cylindræo-clavatis vel subcylindræis, 20-30 \approx 3,5-4,5, obturaculo jodo vix cœrulescente; sporidiis elongato- vel aciculari-elongatis plerumque 2-4-guttulatis, rectis, 4-8 \approx 1-2; paraphysibus gracillimis.

Hab. supra caules Rubi idæi et R. odorati putrescentes in Mustiala in Thornwood Britanniae (MASSEE). — Var. **Carpini**: ascomate sessili, suburceolato, perexiguo, flavido, margine pallidiore, pruinoso-puberulo; ascis 35-38 \approx 4, filiformi-paraphysatis; sporidiis 8, suballantoideis, 4-6 \approx 1, hyalinis. In ligno decorticato Carpini, Fontainebleau (THERRY). — Var. **caulium**: ascis brevioribus et crassioribus, nempe 24-28 \approx 5; sporidiis 5-6 \approx 1,5-2. In caule Spirææ Ulmariae Rouen (LETENDRE).

9. **Pseudohelotium cæspitosulum** (Bres.) Sacc. *Helotium cæspitosulum* Bres. Fung. Trid. p. 70 et 105, t. 75, f. 2 a. — Ascomatibus sessilibus, dense gregariis, ceraceo-carnosis, e concavo explanato-convexis, glabris v. vix in junioribus extus puberulis, albidis, in sicco lutescentibus, $\frac{1}{2}$ -1 mm. latis, substantia concolore; ascis clavatis, jodo obturaculo minutissimo obsolete cœrulescente, 60-85 \approx 6-7; paraphysibus apice clavato, guttulis flavis majusculis repletis, 3-3 $\frac{1}{2}$ μ . crasso; sporidiis subfusoides, rectis v. curvulis, hyalinis, 10-12 \approx 3.

Hab. ad caules siccos Aconiti Napelli in alpibus Monte Peller in Valle di Sole. — Videtur *Helotio carnosulo* Rehm affine. Subiculum: **Chalara Aconiti** Bres. l. c., cæspitulis atro-olivaceis, congestis, ex hyphis subcylindræis, basi attenuatis, interdum ramosis, septatis, fuligineo-olivaceis, 100-120 \approx 5-7 compositis, conidiis, hyalinis, cylindræis, utrinque truncatis, biguttulatis 8-10 \approx 2.

10. **Pseudohelotium deparculum** (Karst.) Sacc. *Helotium deparculum* Karst. M. F. I, p. 150. — Gregarium, primitus sphaeroideum, dein planiusculum, siccum hemisphaericum v. concavum, sessile, furfurello-puberulum, pallidum v. flavo-pallidum, siccum ochraceo-luteum v. testaceo-flavum; 0,3-0,4 mm. lat.; ascis cylindræo-cla-

vatis, 4-sporis, 30-45 \approx 4-5, apice jodo non cœrulescentibus; sporidiis fusoido-bacillaribus, rectis vel curvulis, simplicibus vel spurie tenuiter septatis, 12-15 \approx 1,5; paraphysibus parvis gracilibus.

Hab. ad caules Spirææ Ulmariae exsiccatos in Fennia et Germania.

11. **Pseudohelotium effugiens** (Desm.) Sacc. *Hel. effugiens* (Rob.) Karst. 1225

M. F. I, p. 149, *P. effugiens* Desm. XXII, Not. p. 19. — Sparsum, sessile, o sphæroideo-hemisphæricum, in statu humido et vegeto concaviusculum vel planiusculum, siccum subsphæroideo-contractum, farinoso-subtomentellum, tenue, albidum, siccum lutescens, margine subtilissime fimbriato, 0,3-0,4 mm. lat.; ascis cylindraceo-subclavatis, apice attenuatis, 25-35 \approx 4-5; sporidiis fusoido vel aciculari-elongatis, simplicibus, incoloribus 6-9 \approx 1-1,5; paraphysibus filiformibus, gracillimis.

Hab. ad caules plantarum, ad ferulas Cerefolii silvestris exsiccatas, in Gallia, Fennia, Britannia. — Pro *Ps. micacei* varietate possit haberi, at cupula tenuiore, colore vix numquam fulvo siccitateque minus regulariter contracta distinctum.

12. **Pseudohelotium tenuiculum** (Karst.) Sacc. *Helotium tenuiculum* 1226

Karst. M. F. I, p. 149. — Sparsum v. subsparsum, tenue, sessile, planiusculum v. concaviusculum albidum v. lutescenti-albidum, siccum difformiter contractum, lutescens furfuraceum vel furfuraceo-tomentellum, margine fimbriatum, 0,5-1 mm. lat.; ascis fusoido-clavatis, 70-80 \approx 8, obturaculo minutissimo, jodo obsolete cœrulescente; sporidiis distichis, fusoido-elongatis v. fusoido-bacillaribus, ut plurimum curvulis, incoloribus, simplicibus v. raro tenuiter 1-3-septatis, 14-20 \approx 3; paraphysibus gracillimis.

Hab. supra ferulas Cerefolii silvestris exsiccatas in Mustiala Fenniae.

13. **Pseudohelotium millepunctatum** (Lib.) Sacc. *Moll. millepunctata* 1227

(Lib.) Sacc. Fung. Ard. p. 8, nec *Pyrenop. millepunctata* Sacc. *Peziza millepunctata* Lib. Exs. n. 128. — Gregaria, punctiformis, sessilis, globoso-urceolata, tenerrima, albo-hyalina, extus exasperata; ascis cylindraceutis; sporidiis ovatis (Libert).

Hab. ad caules putres Seneciois Fuchsii in Arduennis. — Ascos et sporidia non vidi.

14. **Pseudohelotium Teucris** (Fuck.) Sacc. *Niptera Teucris* Fuck. 1228

Symb. App. I, p. 355. — Cupulis quandoque dense gregariis, $\frac{1}{2}$ -1 mm. lat., sessilibus, aquoso-diaphanis, pallidissime flavo-albis, subochroleucis, primo subclausis, excavatis; demum planis, orbiculari-

bus, marginatis, extus margineque vix puberulis, disco concolori, siccis flavescentibus; ascis globuloso-stipitatis, cylindræis, 8-sporis, $50 \approx 8$; sporidiis in asci superiori parte dense congestis, cylindræis, parum curvatis, continuis, $8 \approx 1-2$; paraphysibus filiformibus, guttulatis.

Hab. in caulibus emortuis Teucris Scorodoniæ in Germania. — Sec. Rehm Ascom. Ill. n. 757, excipulum tenui-parenchymaticum, flavidum; asci $30-36 \approx 5$; sporidia $5-6 \approx 1$.

15. **Pseudohelotium punctiforme** (Grev.) Sacc. *II. punctiforme* (Grev.) 1229

Phill. Disc. p. 169, *Helotium punctatum* Fr. Summa p. 356, Sacc. F. it. fig. 1351, *Peziza punctiformis* Grev. Scot. t. 63 nec Auctorum. — Cupulis minutis, $\frac{1}{4}-\frac{1}{5}$ mm. diam., sessilibus, centro punctiformi adfixis, denique applanatis, disco albido, subinde lutescente, extus margineque crenulato albido-pilosellis; ascis cylindræo-clavatis, deorsum longiuscule attenuatis, $40 \approx 4$, octosporis; sporidiis distichis fusoideis, $6 \approx 1\frac{1}{2}$, utrinque minute 1-guttulatis, hyalinis.

Hab. in foliis quercinis dejectis in Scotia et Padova e Conegliano Ital. bor. — *Hel. punctoideum* Karst. Fenn. I, 151, huic peraffine videtur. — Var. **robustellum** Sacc. Mich. I, p. 427, F. it. f. 1352: recedit ascomatibus majoribus, eximie margine sinuosis, ascis sporidiisque duplo majoribus (nempe primis $60 \approx 7-8$, postremis clavulato-bacillaribus $12-15 \approx 1\frac{1}{4}-1\frac{3}{4}$); excipuli contextu anguste parenchymatico, fuscescente ad marginem extusque prosenchymatico-spinuloso, dilutiore. In foliis dejectis et arescendo (ob mycelium?) aurantiaco-coloratis quercinis in silva Montello Ital. bor.

16. **Pseudohelotium punctoideum** (Karst.) Sacc. *Pezizella punctoidea* 1230

(Karst.) Rehm Ascom. n. 162, *Pseudohelotium chloroticum* Kunze: Cfr. Grevill. V, p. 61, *Hel. punctoideum* Karst. M. F. I, p. 151. — Gregarium, sessile vel substipitulatum; cupula subimmarginata, subnuda, convexa, sicca plana vel concaviuscula, hyalino-albida, disco siccitate testaceo, 0,4 mm. lat.; ascis e basi tenuata, flexuosa, cylindræo-clavatis vel clavatis, $38-43 \approx 5-6,5$, apice jodo non tinctis; sporidiis distichis, fusoideo-elongatis, ut plurimum rectis, subeguttulatis, $5-8 \approx 2-3$; paraphysibus gracilescentibus.

Hab. ad folia Epilobii angustifolii putrida locis udis in Mustiala Fenniæ et Germania. — Ascomata siccitate interdum subhemisphærico- vel subsphæroideo-contracta, leviter furfurella, sessilia vel stipite punctiformi.

17. **Pseudohelotium Pineti** (Batsch) Fuck. Symb. pag. 298, *Peziza* 1231
Batsch Elench. p. 201, f. 140, Fr. S. M. II, p. 101, *Helotium* Karst.
M. F. I, p. 142, Pat. Tab. f. 493, *Pez. abieticola* Nyl. — Sessile,
adnatum, subplanum, firmulum, puberulum, sordide album, disco
albido; ascis stipitatis, subclavatis, 8-sporis, $24 \approx 8$; sporidiis fu-
soideo-cylindræis, rectis, $8-12 \approx 2-3$, hyalinis; paraphysibus fili-
formi-clavulatis.
- Hab.* ad acus Pinuum putrescentes in Suecia, Germania, Fennia,
Britannia, Belgio. — Ascoma $\frac{1}{2}$ -1 mm. lat., minute urceola-
tum, mox explanatum, margine integro inflexo obtuso. Sec. Rehm
Ascom. n. 561, sporidia $18-20 \approx 1,5$.
18. **Pseudohelotium dispersellum** (Karst). Sacc. *H. dispersellum* Karst. 1232
M. F. I, p. 135. — Sparsum, sessile vel subsessile, cyathoideum
aut subhemisphæricum, albidum, marginem versus furfurillum,
siccum obovoideo-contractum, fuscescens, margine connivente, fir-
mulum, 0,6 mm. lat.; ascis cylindræo-clavatis, sessilibus, $70 \approx 6-7$;
sporidiis elongatis v. fusoideo-elongatis, vulgo rectis, $14-21 \approx 2,5-3,5$;
paraphysibus filiformibus, sursum incrassatulis.
- Hab.* ad folia Caricis elongatæ emortua prope pagum
Kytö par. Tammela Fennicæ.
19. **Pseudohelotium Jerdoni** Sacc. *Helot. pruinolum* Jerdon in B. et 1233
Br. Ann. Nat. Hirt. n. 1174, t. V, f. 33 nec Wallr. — Sessile,
planum, crassiusculum, firmum, marginatum v. immarginatum, cal-
ceo-album, pruinolum; ascis tereti-clavatis; sporidiis oblongis v.
oblongo-ellipsoideis, triquadriguttulatis, demum (spurie?) bisepta-
tis, $20-22 \approx 4$; paraphysibus filiformibus.
- Hab.* in Hypoxylo fusco et Diatrype Stigmatæ ad ligna
putrida in Britannia et Belgio. — Ascoma 1 mm. lat., hymenium
subinde cyanescens.
20. **Pseudohelotium versicolor** (Desm.) Sacc. *Pez. versicolor* Desm. 1234
22 Not. p. 18. — Minutissimum, sessile, albo-hyalinum, vix tactum
flavescens, fragile, glabrum, primo globosum, dein turbinato-con-
cavum, extus leviter furfuraceum, margine subdenticulatum; ascis
clavatis, 30 μ . long.
- Hab.* ad folia stipitesque Aspidii Filicis-maris in Gallia.
— Ascoma $\frac{1}{2}$ mm. diam. Ad *Cyathiculam* vergit.
21. **Pseudohelotium miliare** (Wallr.) Sacc. *P. miliaris* Wallr. Fl. Crypt. 1235
n. 2605. — Ascomatibus sessilibus sparsis microscopicis pallenti-
bus, extus tenuiter pruinosis immarginatis, cum disco demum con-
vexiusculo concoloribus.

Hab. ad *Peltigeræ caninæ* paginam superiorem in locis udis Thuringiæ passim.

II. Disco flavo, flavido, stramineo-aurantio.

22. **Pseudohelotium pruinosum** (Wallr.) Sacc. *P. pruinosum* Wallr. 1236

Crypt. n. 2564, nec Jerd. — Ascomatibus sessilibus gregariis stramineis carnosomembranaceis, extus tenuiter farinosis, primum subglobosis vertice hiantibus deinceps discum pallide lutescentem recludentibus scutellaribus, demum dilatatis planiusculis, marginem flexuosum reclinantibus glabrescentibus, facile decoloribus.

Hab. ad *Solani tuberosi* caules putres agri Northusani, vere (WALLR.)

23. **Pseudohelotium eurotioides** (Karst.) Sacc. *Helotium eurotioides* 1237

Karst. M. F. I, pag. 146. — Subsparsum, sessile, hemisphæricum, siccum sphæroideo-contractum, stramineo-aureum vel sulphureum, albo-puberulum, circiter 0,2 mm. lat.; ascis cylindræo-clavatis v. clavatis, 31-43 \approx 5-6; sporidiis ovoideo-oblongatis v. aciculari-elongatis, guttulis majusculis præditis, 5-8 \approx 2-2,5; paraphysibus obsoletis.

Hab. ad caules *Artemisiæ vulgaris* et *Cerefolii silvestris* aridos in Mustiala Fenniæ.

24. **Pseudohelotium pulchellum** (Quél.) Sacc. *Mollisia pulchella* Quél. 1238

11, Suppl. p. 21, t. XII, f. 10. — Ascomate globuloso, urceolato, 100-200 μ . diam. tenui, glabro, nitide aureo, aculeis tenuibus pulchre marginato; hymenio concavo, concolori; sporidiis cuneatis, 5-6 μ . longis, hyalinis.

Hab. in caulibus exsiccatis *Orobi verni*, *Dentariæ pinatæ* in Jura. — *Helotio punctato* et *H. eurotioidi* simile.

25. **Pseudohelotium Absinthii** (Lasch) Sacc. *Peziza Absinthii* Lasch 1239

in Klotzsch H. M. n. 1317 et in Bot. Zeit. 1850, pag. 438. — Ex flavido fuscens, sessile, subrotundum, ruguloso-fibrillosum, margine inflexo albido-fimbriato, disco dilutiore flavido.

Hab. in caulibus *Artemisiæ Absinthii*, Driesen Germaniæ.

26. **Pseudohelotium separabile** (Karst.) Sacc. *H. separabile* Karst. 1240

M. F. I, p. 118. — Confertum vel gregarium, sessile, primitus leviter puberulum, dein glabrescens, e subsphæroideo applanatum, album vel albidum, disco flavescente, margine integrum, subinde flexuosum, 0,5-1 mm. lat.; ascis cylindræo-clavatis, apice jodo non tinctis, 60-80 \approx 5-6; sporidiis, fusoideo-elongatis, 2-guttulatis

vel spurie tenuiter uniseptatis, rectis vel curvulis 8-15 \times 2-3; paraphysibus gracilibus.

Hab. ad caules Rubi idæi exsiccatos prope Mustiala Fennicæ.

27. **Pseudohelotium gemmiferum** (Wallr.) Sacc. *P. gemmifera* Wallr. 1241

Fl. Crypt. n. 2596. — Ascomatibus gregariis parvis subcarnosis flavicantibus, extus gemmulis pellucidis plurimis splendentibus obsessis, primum obconicis clausis, dein in discum marginibus inflexis cinctum saturatiorem reclusis sensimque in basim stipitiformem desinentibus.

Hab. ad caudices quercinos in Hercynia inferiore passim. — Habitus externus *P. citrinæ*; nec quoque *P. pallida* Schum. Saell. II, 428, dubia Friesio, dissimilis esse videtur.

28. **Pseudohelotium sacchariferum** (Berk.) Sacc. *Peziza saccharifera* 1242

Berk. North Am. Fungi n. 738, Cooke Disc. U. S. I, p. 196. — Mollis, gregaria, pallide aurantiaca, irregularis, extus saccharina; margine tumidula; disco concavo.

Hab. in truncis Liquidambaris, Alabama in America boreali (PETERS).

29. **Pseudohelotium fibrisedum** (B. et C.) Sacc. *Peziza fibriseda* B. 1243

et C. North Am. Fungi n. 737, Cooke Disc. U. S. I, pag. 296. — Irregularis, aurantiaca, extus saccharino-granulosa; margine fracto, laciniato; disco concavo.

Hab. ad truncos Ulmi americanæ in montanis Virginicæ Amer. bor.

30. **Pseudohelotium minutum** (Pass.) Sacc. *Peziza minuta* Pass. Fung. 1244

Abiss. n. 17, t. IV, f. 7, Fl. Bog. p. 137. — Sparsum v. subgregarium, pusillum, ceraceo-carnosum, flavescens vel subcarneum, subhyalinum, disco concavo, margine furfuraceo, siccitate versiformi contracto; ascis cylindricis, basi attenuata incurvis, apice obtuso subtruncato, 8-sporis; sporidiis minutis obscure distichis fusiformibus, rectis, hyalinis, apicibus acutis, 8 \simeq 1-1,5 (ex icone); paraphysibus tenuibus paucis.

Hab. ad fragmenta vetusta corticis, Keren Abyssinicæ.

31. **Pseudohelotium nipteroides** (Speg.) Sacc. *Helotium? nipteroides* 1245

Speg. Fung. Fueg. n. 335. — Cupulis densiusculis sparsis, udis applanato-concavis 1-2 mm. diam., siccis subcontractulis angulosis sessilibus crassiusculis rigidulis, extus pulchre griseo-fuscis minutissime pruinosis, papillis pusillis 1-cellularibus obtusis flexuosis 10-25 \times 5 vestitis, contextu subparenchymatico carnoso subindistincto, disco plano ceraceo flavescente, margine acutiusculo integro

v. repandulo; ascis cylindræis, antice acutato-rotundatis v. subtruncatis, postice longiuscule attenuato-pedicellatis, 80-90 \approx 7-8; paraphysibus paucis filiformibus ovallatis, octosporis; sporidiis recte v. oblique mono- v. distichis ellipticis v. elliptico-ovoideis utrinque obtusis 12-13 \approx 3-3,5, hyalinis, continuis (an per ætatem medio 1-septatis?).

Hab. in truncis cariosis putrescentibus fagineis? in silvis in Staten island Fuegiæ.

32. **Pseudohelotium succineum** (Quél.) Sacc. *Mollisia succinea* Quél. 1246

X Suppl. p. 13, t. IX, f. 11, Grevillea 1879, p. 38. — Ascomatibus turbinatis, obconicis, 1 mm. diam., breviter stipitatis, subtilibus, in sicco subscariosis, diaphanis, flavo-albis, margine pruinoso albescente, hymenio concolori; sporidiis bacillaribus, 8 μ . longis.

Hab. in lignis exsiccatis ad ripas rivorum, Jura.

33. **Pseudohelotium stramineum** (B. et Br.) Sacc. *Peziza* B. et Br. 1247

Ann. N. H. n. 571. — Confertum vel sparsum, sessile hemisphæricum dein expansum, pallide flavum, granulis crystallinis conspersum; disco rubro-flavo v. carneo; margine inflexo; ascis teretibus clavatis; sporidiis fusoides rectis vel curvulis, 3-4-guttatis, 7-10 \approx 1,5; paraphysibus tenuissimis.

Hab. in vaginis foliisque graminum in Britannia. — Ascoma 1 mm. lat.

34. **Pseudohelotium epicalamium** (Fuck) Sacc. *Pez. epicalamia* Symb. 1248

mycol. App. II, p. 61. — Cupulis carnosis, sparsis seu dense gregariis, subsessilibus, primo globosis, clausis, demum explanatis, vix $\frac{1}{2}$ mm. latis, orbicularibus, integris, extus margineque subtilissime lacerato demum involuto, striato, albicante-flavescente, furfuraceis, disco concavo seu explanato, luteo-ochraceo; ascis elongato-clavatis, sessilibus, 8-sporis, 52 \approx 6; sporidiis distichis, fusiiformibus, continuis, rectis, 2-3-guttulatis, 9 \approx 2 $\frac{1}{2}$, hyalinis.

Hab. in culmis Tritici repentis, Iudensand prope (Æstrich R henogoviæ.

35. **Pseudohelotium arundinellum** (S. et Sp.) Sacc. *Helotium arundi-* 1249

nellum Sacc. et Sp. Mich. I, p. 426, Sacc. F. it. f. 1353. — Ascomatibus gregariis minutissimis, sessilibus, concaviusculis, $\frac{1}{6}$ mm. diam., pallidis, extus tomentello-furfuraceis, disco sordide luteolo; ascis cylindræo-clavatis, 40 \approx 5-6, breve crassiuscule stipitatis, apice obtusiusculis; paraphysibus bacillaribus, guttulatis, octosporis; sporidiis distichis v. oblique monostichis, cylindræo-oblongis utrinque rotundatis, curvulis, 8-10 \approx 1 $\frac{1}{2}$ -2, 2-guttulatis, hyalinis.

Hab. in vaginis Arundinis Donacis putrescentibus Conegliano Italiae bor. — *Pseud. micaceo* (Pers.), *P. microspi* Karst. *H. parvulo* (De Not.) etc. affine sed notis nonnullis satis diversum.

36. **Pseudohelotium costatum** (Boud.) Sacc. *Helotium costatum* Boud. 1250
in B. S. B. Fr. 1881, p. 95, t. III, f. 6. — Ascomate perexiguo, griseo-albido, sessili, urceolato, marginato, disco griseo-flavido, vix $\frac{1}{3}$ mm. diam., extus præcipue inferius pubescente, pilis albidis, septatis in costulas conniventibus; ascis perexiguis, 22-26 \approx 5-7, cylindræis, apice obtusis; sporidiis fusoideo-elongatis, 8-9 \approx 1-1,5 pluriguttulatis, hyalinis; paraphysibus bacillaribus.

Hab. in calamis putridis Junci acutiflori, Montmorency.

37. **Pseudohelotium elaphoides** Sacc. *Mollisia elaphines* Qué. Champ. 1251
Norm. pag. 32 nec Berk. et Br. — Tenue, discoideum, dein expansum, undulatum, fulvum, margine pubescenti pruinoso, hymenio plano, flavido, dein obscuriore; sporidiis ellipsoideo-oblongis, 4 μ . longis.

Hab. in caulibus siccis Equiseti, Jura Galliae. — Sec. Qué. l. c. ascoma 0,1 mm. lat. Videtur diversum ab homonymo Berk.

38. **Pseudohelotium strumosum** (E. et E.) Sacc. *Helotium strumosum* E. et E. Journ. Mycol. 1888, p. 56. — Ascomatibus gregaris, sessilibus, læte citrinis, initio clauso-subsphæricis, dein aperitis, cupulatis, demum expanso-subplanis, $\frac{1}{6}$ - $\frac{1}{3}$ mm. diam., extus tomentoso-putrescentibus basi que hyphulis albidis, affixis; ascis clavatis, 70-80 \approx 10-12; sporidiis distichis, ellipsoideis vel ovato-ellipsoideis, granuloso-multinucleatis, dein 2-3-nucleatis simulate que uniseptatis, 10-12 \approx 3-4,5.

Hab. in Dichæna strumosa Newfield N. J. Amer. bor. — Substantia mollis, subcarnosa; margo acutus.

39. **Pseudohelotium puberulum** (Lasch) Fuck. Symb. p. 298, *Peziza* 1253
puberula Lasch in Kl. Hb. myc. 1529. — Ceraceum, minutum, sessile v. substipitatum, luteum vel albidum, cupula ex hemisphærico planiuscula, extus puberula, disco demum convexo; ascis oblongis, curvato-stipitatis, 8-sporis, 64 \approx 8; sporidiis in asci parte superiore inordinatis, oblongis, utrinque attenuatis, subcurvatis, hyalinis, 10 \approx 3-4.

Hab. in foliis putridis arborum frondosarum in Rhenogovia.

III. Disco melleo, virente, olivaceo.

40. **Pseudohelotium pomicolor** (B. et R.) Sacc. *Peziza pomicolor* B. 1254
et R. North Am. Fungi n. 735, Grev. t. 51, f. 260. — Sparsum,

subhemisphæricum, sero apertum, extus pomicolor furfuraceum; disco olivaceo; ascis cylindraceutis filiformi-paraphysatis; sporidiis....

Hab. in cortice Taxodii distichi in Carolina inf. (RAVENEL). — Ascoma extus colore viridi pomorum tinctum.

41. **Pseudohelotium melichroum** (Cooke) Sacc. *Pez. melichroa* Cooke 1255
Grev. VII, pag. 47. — Sparsum, sessile; cupulis minimis, vix $\frac{1}{2}$ mm., mellicoloribus, demum applanatis, extus saccharino-granulatis; margine leniter elevato; ascis cylindraceutis; sporidiis subellipticis 5 μ . longis; paraphysibus filiformibus.

Hab. ad cortices, Alabama Amer. bor. (PETERS).

42. **Pseudohelotium Mali** (Rehm) Sacc. *Pezizella Mali* Rehm Ascom. 1256
n. 460, *Mollisia* Phill. Disc. p. 194. — Gregarium, minimum, primitus subglobosum, dein urceolatum, denique plus minusve expansum, siccum margine involuto, dilutiore scabro, disco viridulo-flavo, humidum orbiculare, margine crasso, disco plano, c. 0,3-5 mm. diam., contextu prosenchymatico tenerrimo, fere hyalino; ascis clavatis, subcurvatis, 4-8-sporis, $40 \approx 8$; sporidiis oblongis, obtusis, hyalinis, plerumque subcurvatis, distichis, $9 \approx 3$; paraphysibus filiformibus, superne sensim clavulatis.

Hab. in superficie corticis interioris distantis Piri Mali in Franconia bavarica et in cortice Ilicis, Shrewsbury Britanniae. — Ascoma sec. Phill. pruinose, disco melleo.

43. **Pseudohelotium elaphines** (B. et Br.) Sacc. *Mollisia elaphines* 1257
B. et Br. Ann. Nat. Hist. n. 1325, t. 19, f. 18, Phill. Disc. p. 179. — Ascomate subgloboso, pallide cervino, margine pallidiori, granulis saccharinis consperso; disco aquose albido; ascis 45 μ . longis; sporidiis fusoides, levibus, hyalinis, monostichis, 8,5-10 μ . longis.

Hab. in ligno putri prope Shrewsbury Britanniae.

44. **Pseudohelotium alligatum** (B. et Br.) Sacc. *P. alligata* B. et Br. 1258
Fung. of Ceyl. n. 954. — Sparsum v. congestum, subtus albo-pulverulentum, flexuosum, hymenio melleo; paraphysibus apice curvatis; ascis clavatis; sporidiis uniseriatis ellipticis 15 μ . long.

Hab. in foliis emortuis, quibus arcte adpressum, Peradenya Ceylon.

45. **Pseudohelotium incrustatum** (Ellis) Sacc. *Mollisia incrustata* Ellis 1259
Am. Nat. 1883, p. 192. — Gregarium, rarius subconfluens, sessile vel in basim stipitiformem contractum, disco immarginato convexo vel concaviusculo in siccis, melleum, pruinose, crystallis minutissimis saccharinis quasi conspersum, $\frac{1}{6}$ mm. diam.; ascis clavatis te-

nuitur stipitatis, 30-35 \approx 4; sporidiis partim distichis, ovato-oblongis, 5-6 \approx 1, hyalinis.

Hab. in Polyporo quodam resupinato ad truncum Juniperi virginianæ dejectum, New Jersey Amer. bor.

IV. Disco rubente, testaceo, fusco, lurido, livido.

46. **Pseudohelotium micaceum** (Pers.) Sacc. *Hel. micaceum* (Pers.) 1260

Karst. M. F. I, p. 149, *Peziza micacea* Pers. Myc. eur. I, p. 268, Fr. Syst. Myc. II, p. 105, *Pez. melleopallens* Karst. Monogr. Pez. p. 190. — Gregarium vel sparsum, sessile, e sphæroideo-hemisphæricum, marginem versus farinoso-subtomentellum vel furfuraceum, pallidum vel pallide helvolum vel subfulvum, subnitens 0,3-0,4 mm. lat.; ascis cylindraceo-clavatis 30-38 \approx 4-5; sporidiis fusoideo-vel aciculari-elongatis, 5-11 \approx 1-2; paraphysibus filiformibus, sat numerosis, 1 μ . cr.

Hab. ad caules putrescentes Cardui nutantis, Ligustici Levistici et Artemisiæ vulgaris in Germania, Gallia, Fennia.

47. **Pseudohelotium incarnatinum** (Quél.) Sacc. *Mollisia incarnatina* 1261

Quél. XIII, Suppl. p. 9, t. VIII, f. 22. — Ascomatibus hemisphæricis, 200-300 μ . diam., dein concavis, ceraceis, margine puberulis, pallide roseo-carneis, hymenio roseo; sporidiis navicularibus 10 μ . longis, subfusiformibus, 2-guttulatis, hyalinis.

Hab. in caulibus plantarum majorum e. g. Cirsii, prope Paris et Jura Galliæ (BOUDIER). — A *Ps. roseolo* fabrica et minutie differt.

48. **Pseudohelotium Fairmani** (E. et E.) Sacc. *Mollisia Fairmani* E. 1262

et E. Journ. Myc. 88, p. 56. — Sessile, centro affixum, gregarium concavum, margine subincurvo, dein expansum, planum vel convexulum, $\frac{1}{3}$ - $\frac{3}{4}$ mm. diam., disco livido, margine pallidiore extusque pilis glandularibus brevibus, hyalinis, obtusis, basi longioribus, demum obscuris obsessum; ascis tereti-clavatis sessilibus, paraphysatis, 35-40 \approx 5-6; sporidiis subdistichis, ovato-ellipsoideis, 3,5-5 \approx 2-2,5.

Hab. in cortice interiore dejecto Lyndonville N. Y. Amer. bor. — In sicco fere clausum.

49. **Pseudohelotium xylitum** (Karst.) Sacc. *Helotium xylitum* Karst. 1263

M. F. I, p. 144. — Gregarium, sessile, primo sphæroideum, dein planiusculum vel concaviusculum, pallide helvolum vel testaceum,

albido-furfuraceum, siccum hemisphærico- v. difformi-contractum, rosello-helvolum, 0,4-1,2 mm. lat.; ascis fusoido-clavatis, 37-45 \approx 4,5-5,5, apice jodo non tinctis; sporidiis distichis v. oblique monostichis, aciculari- vel fusoido-elongatis v. oblongatis, rectis v. subrectis, eguttulatis vel 2-guttatis, 6-10 \approx 2,5-1,5; paraphysibus gracilescentibus sursum leviter incrassatis, 2 μ . cr.

Hab. supra lignum induratum vetustum Alni, Betulæ et Populi in Fennia meridionali.

50. **Pseudohelotium granulosellum** (Karst.) Sacc. *Helotium granulosellum* Karst. M. F. I, p. 142. — Gregarium v. subsparsum, sessile, tenue planiusculum, hyalino-albidum, siccum subsphæroideo-hemisphæricum, albidum v. stramineo-albidum, disco subtestaceum, 0,4-0,6 mm. lat.; ascis cylindraceo-clavatis, 38-54 \approx 5-6, obturaculo minutissimo jodo cœrulescente; sporidiis oblique monostichis, fusoido- vel aciculari-elongatis aut ovoideo-oblongatis, eguttulatis, rectis, 5-9,5 \approx 2-2,5; paraphysibus sat raris, gracilibus sursum leviter incrassatis.

Hab. in ligno betulino vetusto ad Mustiala Fenniæ.

51. **Pseudohelotium Aspidiorum** (Rehm) Sacc. *Helotium Aspidiorum* Rehm Ascom. n. 563. — Minutissimum, gregarium, c. 0,1 mm. altum, turbinato-globosum, fusco-atrum, sæpe subpulverulentum, disco plus minusve gracili et dilutiore, prosenchymatico-contextum, fibris c. 5 μ . crassis, obtusis, sæpe distantibus, fuscis; ascis teneris, clavatis, apice subincrassatis, 36-45 \approx 5-6, 8-sporis, apice jodo cœrulescente; sporidiis elongato-ellipticis, obtusis, rectis, binucleatis, hyalinis, distichis, 12-15 \approx 2,5; paraphysibus teneris, filiformibus; jodo cœrulescente apice ascorum.

Hab. ad putrescentem frondem Athyrii Filicis-feminæ, Rindalphorn alpium Allgovix c. 1500, mm. alt. (BRITZELMAYR).

52. **Pseudohelotium hymeniophilum** (Karst.) Sacc. *H. hymeniophilum* Karst. M. F. I, p. 143. — Gregarium, sessile, primo sphæroideum, dein planiusculum, siccum hemisphærico-applanatum, sæpissime difforme, furfurellum, cinerescenti-albidum vel pallens, disco sublurido, circiter 0,4 mm. lat.; ascis cylindraceo-clavatis, 30-40 \approx 4,5-5,5, apice jodo non tinctis; sporidiis elongatis vel oblongatis 4-6 \approx 1,5.

Hab. supra hymenium Polyporum resupinatorum in Fennia et Lapponia orientali. — Substratum colore roseo-sanguineo late pertingens, qua nota facillime distinctum.

B. Mollisiella Phill. emend.: sporidiis globulosis.

53. **Pseudohelotium ilicinolum** (B. et Br.) Sacc. *Peziza* B. et Br. 1267
Ann. N. H. n. 958, tab. 16, f. 17, *Mollisia ilicincola* Phill. Disc.
p. 193. — Fasciculatum, furfuraceum, hemisphæricum dein expan-
sum, extus sordide album; disco concavo pallide brunneo vel pur-
pureo v. roseo-cinereo; margine erecto v. incurvo; ascis clavatis;
sporidiis globosis, 1-guttatis 5 μ . diam.; paraphysibus filiformi-
clavulatis.

Hab. in ramis Ilicis sæpe in thallo Myriangii, Cheiselhurst
et Forres Britannicæ.

54. **Pseudohelotium apicale** (B. et Br.) Sacc. *Pez. apicalis* B. et Br. 1268
Fung. of Ceyl. n. 951. — Pallide aurantiacum, congestum, subglo-
bosum, margine incurvo, extus pulverulentum; ascis clavatis; spori-
diis, minimis subglobosis, 3-4 μ . d.

Hab. ad caules Macromitrii sulcati in ins. Ceylon. — Per-
exiguum, nonnisi plura specimina congesta oculo inermi visibilia:
excipulum e cellulis longitud. seriatis constans.

55. **Pseudohelotium hydnicolum** (B. et Br.) Sacc. *Pez. hydnicola* B. 1269
et Br. Ann. N. H. n. 1327, t. XX, f. 20, *Mollisia hydnicola* Phill.
Disc. p. 194. — Orbiculare, dein irregulare, planum, atro-virens;
ascis cylindraceutis; sporidiis subglobosis 1-seriatis, 10 = 7,5-9; para-
physibus filiformibus ramulosis.

Hab. in Hydno ochraceo in Britannia. — Conidia adsunt
obtusa 2-4 μ . long. Ascoma a cl. B. et Br. furfuraceum non de-
scribitur, sed subg. *Mollisiella*, quo a cl. Phillips includitur et
ascomate furfuraceo-pulvereo dignoscitur.

CYATHICULA De Not. Prof. Disc. in Comm. I, p. 381, ex p. (1864)
Sacc. Consp. Disc. p. 5 ex p. (ut subg.) [Etym. *Cyathus*], *Trichoscy-
pha* et *Peristomialis* Phill. Disc. p. 126 et 201 (ut subg.), *Calycellæ*
et *Cistellæ* spec. Quél. — Ascoma ceraceo-membranaceum, tenue,
initio suburceolatum, mox apertum, stipitatum vel sessile, margine
distincte dentatum. Asci fusoides v. teretiusculi, 8-spori, filiformi-
paraphysati. Sporidia oblonga v. teretiuscula, continua, hyalina.

I. *Eu-Cyathicula*. Stipitatae.

1. **Cyathicula coronata** (Bull.) De Not. Discom. p. 381, *P. coronata* 1270
Bull. Champ. p. 251, t. 416, f. 4, *P. armata* Roth. cat. I, p. 240,
P. radiata Pers. Myc. Eur. p. 237, Nees Syst. f. 293, *P. subu-*

lata Schum. Saell. 2, p. 418, Fl. Dan. t. 1380, f. 1, Pers. l. c. p. 286, *Helotium coronatum* Karst. Pat. Tab. 593, *P. denticulata* Fl. Dan. t. 1016, fig. 1 (forma lignatilis). — Stipitata, pallescens, cupula concava, margine dentibus setaceis coronata; ascis oblongis, stipitatis, 8-sporis, $88 \approx 8$; sporidiis distichis, oblongo-fusiforibus, curvatis, hyalinis, $16-18 \approx 3-4$.

Hab. ad caules dejectos plantarum *Urticæ Sedi*, *Scrophulariæ* etc. in Suecia, Gallia, Britannia, Italia, Belgio, Amer. bor. — Sparsa, subgregaria, levis, glabra, albida, sicca pallescenti-fusca. Stipes 2-5 mm. longus, subincurvus; cupula 2 mm. lata, dentibus primo conniventibus, dein erectis.

2. **Cyathicula inflexa** (Bolt.) Sacc. *Peziza inflexa* Bolt. t. 106, Sow. 1271 t. 306, Fr. Syst. II, 120, *P. Coronilla* Pers. M. E. I, p. 287. — Ascomatibus majusculis stipitatis albidis, cupulæ subhemisphæricæ margine dentibus triangularibus brevibus cincto.

Hab. in caulibus *Urticæ* etc. in Britannia, Belgio. — A præcedente, cum qua confusa fuit, differre videtur statura majori, colore dilutiori dentiumque forma. Ita Fr. l. c. Sec. Phill. Disc. p. 127 est var. *C. coronatæ*.

3. **Cyathicula alba** (Pat.) Sacc. *Calycella alba* Pat. Tab. anal. Fung. 1272 II, p. 37, f. 594. — Sparsa, plana v. leniter convexa, stipitata, glabra, omnino alba, margine in dentes acutos erectos diviso; stipite basim versus attenuato; ascis clavatis; paraphysibus linearibus, guttulatis; sporidiis fusoides rectis v. curvulis, guttulatis, $14-16 \approx 3$.

Hab. in caulibus herbaceis putridis in Gallia. — Stipes $\frac{3}{4}$ mm. longus.

4. **Cyathicula petiolorum** (Desm.) Sacc. *Helotium petiolorum* (Desm.) 1273 De Not. Comm. Critt. I, p. 378, *Peziza* Desm. IX Not. p. 6. — Majuscula, stipitata, sæpe solitaria, cupula fulva, concava, dein plana, margine dentibus subtriangularibus cincta; stipite plus minusve longo, basi brunneo; ascis clavatis, 100 μ . long.; sporidiis oblongis, curvatis, 2-guttulatis, 10 μ . longis.

Hab. in petiolis foliorum emortuorum *Fagi* etc. in Gallia. — Ascoma 2 mm. lat.

5. **Cyathicula clavuligera** Speg. Fung. Fueg. n. 329. — Sparsa, amphigena, minutissima, discoideo-applanata, 600-800 μ . diam., rufescens, inferne subturbinata, glabra pulchre rubescenti-ochracea, margine acutiuscula hinc inde denticulato-subfimbriata, stipite breviusculo ac crassiusculo, 700-1000 \approx 130-160, inferne non vel vix incrassato sæpius nigricante rigidulo; ascis cylindræis v. cylindra-

ceo-subfusoides, antice truncatis vel truncato-rotundatis, postice attenuato-pedicellatis, 75-80 \approx 7-9, octosporis; paraphysibus filiformibus non vel vix longioribus continuis apice clavulatis, ascorum obturaculo minutissimo iodi ope cœrulescente; sporidiis oblique monostichis, ellipticis v. ovoideis, utrinque plus minusve obtusatis 9-10 \approx 4 non v. nubiloso-farctis, hyalinis.

Hab. ad folia dejecta putrescentia Fagi betuloidis in silvis in Staten island Fuegiæ.

6. **Cyathicula incarnata** (Quél.) Sacc. *Phialea incarnata* Quél. V 1275
Suppl. p. 329, t. VI, fig. 9. — Ascomatibus hemisphæricis, 2 mm. diam., coriacellis, albis, margine fibrilloso, denticulato-fimbriato; stipite 1 mm. alto, glabro albo; hymenio roseo-pallido; sporidiis 20-25 \approx 4, oblongo-bacillaribus, (spurie?) 5-septatis.

Hab. ad culmos in silvis humidis Juræ. — Si sporidia vere septata, species ad *Belonidium* accederet, sed habitus omnino *Cyathiculæ*.

7. **Cyathicula Queletii** Sacc. *Phialea ciliata* Quél. Esp. nouv. Champ. 1276
Fr. 1878, p. 291 et X Suppl. p. 13, t. IX, f. 6. — Stipite filiformi, 1-2 cm. alto, glabro, brunneo; ascomatibus 2-4 mm. diam., griseis, ciliatis, h. e. denticulis subulatis, brunneis præditis; sporidiis fusiformibus, 15 μ . longis, sæpe curvis.

Hab. in caulibus herbarum, Jura.

8. **Cyathicula denigrans** (Fuck.) Sacc. *Peziza denigrans* Fuck. Symb. 1277
mycol. p. 309. — Cupulis stipitatis, 4-6 mm. altis, hemisphæricis, in stipitem contractis, fuscis 2 mm. diam., margine fasciculato-ciliatis, fasciculis triangularibus, fuscis, stipite in foliorum petiolo nigricato insidente, basi nigro, disco pallide fusco; ascis elongatis, stipitatis, 8-sporis, 70 \approx 8 (p. sporif.); sporidiis monostichis, oblongis, utrinque obtusis, continuis, rectis, 8 \approx 2-3, hyalinis.

Hab. in nervis foliorum dejectorum Fagi silvaticæ in silva Æstrich Rhénogoviæ. — Status conidicus, sec. Fuckel, est *Sphaeridium flavo-virens* Fuck.

II. *Peristomialis* Phill. (*Cistellæ* spec. Quél.). Sessiles.

9. **Cyathicula ciliata** (Cr.) Sacc. *Helotium ciliatu* Cr. Finist. p. 47, 1278
t. ult. f. 6. — Ascomate flavo-aurantio pallido, sessili, subcylindrico, $\frac{1}{5}$ mm. lat., margine ciliato-dentato; hymenio aurantio-flavo; ascis subclavatis, crassis octosporis; sporidiis fusoides-elongatis.

Hab. in caulibus emortuis Urticæ, Finistère Galliæ. — Cellulæ excipuli prosenchymatico-anastomosantes.

10. **Cyathicula aquilina** (Rehm) Sacc. *Coronellaria aquilina* Rehm 1279
in Hedwigia 1885, p. 231. — Ascomatibus sparsis in pagina inferiore frondis, sessilibus, siccis fere globosis, extus flavidulis et dilutius marginatis, humidis concavis v. subplanis, extus et margine subfimbriato dilute flavidulis, contextu parenchymatico flavido, tennerrimo, fimbriis marginalibus hyalinis discoque hyalino, 2-3 mm. diam.; ascis clavatis, apice obtuse acutatis, latis basi sessilibus, 8-sporis, $33 \approx 6-7$; sporidiis oblongis haud acutatis, rectis, 1-cellularibus, hyalinis, distichis, $9 \approx 2$; paraphysibus paucis, teneris, filiformibus, haud clavatis, hyalinis.

— *Hab.* ad frondem siccam Pteridis aquilinæ, Gruneswald prope Berlin, in Germania (P. Sydow).

11. **Cyathicula Marchantiæ** (Somm.) Sacc. *P. Marchantiæ* Sommerf. 1280
Lapp. p. 295, Fr. Elench. II, p. 12. — Sessilis, infundibuliformis, glabra, albida, margine ciliata, ciliis erectis distinctis.

Hab. in Marchantia polymorpha marcescente ad rivulos subalpinos Nordlandiæ. — Magnitudine seminis sinapeos et minor; ob defectum stipitis et minutiem cum *C. coronata* confundi non potest.

12. **Cyathicula pseudo-ciliata** (Phillips) Sacc. *Helotium* Phill. Grev. 1281
XV, p. 17. — Sparsa; ascomatibus 1-2 mm. lat., sessilibus v. substipitatis, concavis carneo-rufis, margine squamulis setiformibus fimbriato; ascis cylindræo-clavatis, octosporis; sporidiis oblongo-fusoides v. clavatis, subinde curvulis, $20-25 \approx 5-6$; paraphysibus filiformibus, gracilibus.

Hab. in ligno putri New Zealand (COLENSO).

13. **Cyathicula crystallina** (Quél.) Sacc. *Helotium crystallinum* Quél. 1282
V Suppl. pag. 329, t. VI, fig. 12. — Ascomatibus semper apertis, 300 μ . diam., concavis, tenuissimis, eleganter dentato-crenulatis, glabris, diaphanis, nitentibus; sporidiis teretiusculis curvulis 12 μ . longis.

Hab. inter strata fibrosa Salicis et Quercus prope Paris et Jura Galliæ.

14. **Cyathicula dentata** (Pers.) Sacc. *Pez. dentata* Pers. ic. et descr. 1283
p. 5, t. 1, f. 6,7, Fries. Syst. Myc. vol. II, p. 147, *Calloria* Phill. Brit. Disc. p. 332. — Sessilis, minutissima, albido-pallens subfarinacea, margine dentato; ascis clavatis; sporidiis biseriatis, fusoides, $5 \approx 1-2$.

Hab. in ligno carioso, materia virescente sæpius obducto, in Suecia, Germania, Britannia. — Ab initio subglobosa, dein hemi-

sphærica, tenera, 300-400 μ . diam., margine dentato-inciso. — Var. **straminea**, *Nipt. dentata* var. Fuck. Symb. App. I, p. 335: ascis stipitatis, primo oblongis, demum magis elongatis, 8-sporis, 56-80 \approx 9-10; sporidiis primo oblique monostichis, dein in asci superiori parte stipatis, subclavatis, biguttulatis, continuis, hyalinis, 8 \approx 3; paraphysibus filiformibus. — In ligno putri Juglandis pr. Johannisberg Rhenogoviæ.

15. **Cyathicula peristomialis** (B. et Br.) Sacc. *Peziza peristomialis* 1284
B. et Br. Ann. Nat. Hist. n. 1169, t. V, f. 32, Phill. Disc. t. VI, fig. 37. — Minuta, sessilis, cylindræa, pallida, margine dentibus longis triangularibus, albis ornato, disco subplano; ascis lanceolatis; sporidiis distichis, fusoideis, multiguttulatis, 20-27 \approx 4-5.

Hab. in cortice putri Ilicis, Penzance Britannicæ. — Ascoma 300-400 μ . alt., 200 μ . lat.

16. **Cyathicula lepidula** March. Fung. coproph. Belg. p. 38. — Ascomatibus subgregariis, patellæformibus, demum valde expansis, glabra, albis, 250-450 μ . diam., margine tenui, laciniato, laciniis irregularibus, elongatis, approximatis, 20 μ . et ultra longit, disco concavo ad marginem ascis paucis leviter papillato; paraphysibus tenuibus, hyalinis, continuis, apice non incrassatis, ascos æquantibus v. eos vix superantibus; ascis fusoideo-clavatis, sæpe curvatis, breviter stipitatis, 55-65 \approx 7,5-8,5 μ .; sporidiis subdistichis, oblongis, utrinque rotundatis, primo 2 guttulis præditis, dein spurie vel distincte 1-septatis, 10,5-11 \approx 3,3-3,5 μ . 1285

Hab. in fimo putrido damarum Tervueren Belgii. — An hujus generis?

17. **Cyathicula pusilla** (Oed.) Sacc. *Helv. pusilla* Oed. Fl. Dan. t. 779, 1286
f. 1 (nec 3), *Pez. Oederi* Pers. Syn. p. 668, *P. pusilla* Fr. Syst. Myc. II, p. 148. — Sessilis, minuta, glabra, subtus albida, disco cærulescente, margine crenato.

Hab. ad truncos putridos in Dania.

ALLOPHYLARIA Karst. Monogr. Pez. Fenn. pag. 103 [1869] (Etym. *allophylos* heterogeneus), *Helotidium* Sacc. Consp. gen. Disc. p. 4. — Ascoma clavato-turbinatum vel obconice stipitatum, glabrum, subdiaphanum, lutescens vel ochraceo-pallidum, disco concavo-truncato. Excipulum ceraceum. Asci clavati, paraphysati, octospori. Sporidia oblonga, continua, hyalina. — Ab *Helotio* differt ascomatibus turbinatis, apice subtruncatis, subdiaphanis. *)

*) Post *Allophylariam* cl. Karst. collocat suam *Clibanitem*, quæ vero, teste

1. **Allophylaria nana** Sacc. *Helotium nanum* Sacc. Fung. Ven. Ser. 1287 IV, n. 91, F. ital. f. 115. — Cupulis gregariis cum stipite crassiusculo obconicis, ceraceis, subdiaphanis, flavidis, in sicco extus longitudinaliter striolatis, glaberrimis, $\frac{1}{2}$ mm. alt., disco aperto concaviusculo, margine acutiusculo crenulato, excipulo e fibris longis, fusoides, parallelis efformato; ascis clavatis longiuscule stipitatis, 100 μ . long., p. s. 50 \approx 9, paraphysibus copiosis filiformibus, apice clavulatis obvallatis, 8-sporis; sporidiis distichis cylindraco-fusoides, 12 \approx 3-3 $\frac{1}{2}$, rectis curvulisve, continuis, hyalinis.

Hab. in caule Galeobdolonis, Senecionis nemorensis et Dulcamaræ in silva Montello (Treviso) Ital. bor.

2. **Allophylaria byssacea** (Karst.) Rev. mon. p. 131, *Pezicula* Karst. 1288 M. F. I, p. 165. — Sparsa v. subgregaria, primitus obconice elongata, demum deorsum substipitato-constricta, hyalina, sicca subtestaceo-pallida vel concolor, disco concaviusculo, circiter 0,3 mm. alt., 0,1-0,2 mm. lat.; ascis clavatis, 85 \approx 9-10, obturaculo minutissimo ope jodi leviter violaceo-fuscescente; sporidiis distichis, fusoides-elongatis, guttulis 2-4 majusculis præditis v. spurie tenuiter septatis, rectis v. leniter curvulis, 15-20 \approx 3-4,5; paraphysibus sat numerosis, gracilibus, 0,5-1 μ . cr.

Hab. supra folia Caricis putrescentia in Tammela Fennicæ.

3. **Allophylaria phyllophila** (Karst.) Rev. Monogr. p. 131, *Pezicula* 1289 *phyllophila* Karst. M. F. I, p. 167, vix *Peziza phyllophila* Desm. (Cfr. *Phialea phyllophila*). — Gregaria v. subsparsa, breviter stipitulata vel sessilis, albido-hyalina, sicca lutescenti-albida vel albida, disco plano-concavo, demum convexiusculo, 0,3 mm. lat.; ascis clavatis, 105 \approx 8-10, obturaculo minuto, ope jodi leviter violaceo-fuscescente; sporidiis distichis, oblongatis, rectis v. lenissime curvulis, guttulas 2 sat minutas foventibus, 10-16 \approx 3,5-5 plerumque 4 μ . cr., chlorino-hyalinis; paraphysibus numerosis, 1 μ . cr.

Cooke Grev. XIII, pag. 8, inter Pyrenomycetes juxta *Hypocream* aptius inserenda sit. Donec fungi indoles melius innotescat, ejusdem diagnosim refero.

— **Clibanites** Karst. M. F. I, p. 14. Ascoma sessile, glabrum, irregulare et difforme, ceraceum. Asci fusoides-cylindraco, membrana tenuissima instructi. Sporidia cylindraco, hyalina, guttulata vel spurie tenuiter septata. Paraphyses parum notabiles. — **Clibanites paradoxa** Karst. l. c. Gregaria v. confluens, sessilis, tuberculosa, fulvo- vel rufo-testacea, 0,2-0,6 mm. lat.; ascis teretibus fusoides, 30-36 \approx 4; sporidiis subdistichis, bacillaribus, 4-guttulatis v. spurie septulatis, 6-10 \approx 1-1,5; paraphysibus obsolete.

Hab. in ligno quercino vetusto in insula Runsala pr. Abo Fennicæ.

Hab. ad folia et petiolos *Aceris platanoidis* in Fennia australi. — Ascomata primitus subobconica, dein deorsum stipitato-constricta.

4. ***Allophylaria clavuliformis*** Karst. Rev. mon. p. 131, *Pezicula clavuliformis* Karst. M. F. I, p. 164. — Gregaria, stipitata, firmula, hyalino- v. lutescente-pallida, subinde sublutea v. rufescens, sicca lutescens, circiter 0,5-0,6 mm. alt., cupula convexa, subimmarginata, sicca concaviuscula, 0,3-0,5 mm. lat., stipite breviusculo, sensim in cupulam dilatato; ascis clavatis, 135-140 \approx 10-11, obturaculo jodo leviter violaceo-fusco; sporidiis plerumque distichis, oblongatis, spurie uniseptatis vel guttulis 2 majusculis præditis, curvulis v. rectis, 11-20 \approx 4-4,5; paraphysibus gracilibus, 1,5 μ . cr. sursum leniter incrassatis.

Hab. ad caules *Rubi idæi* putrescentes, Mustiala Fenniae.

5. ***Allophylaria subliciformis*** Karst. Rev. mon. p. 131, *Pezicula subliciformis* Karst. M. F. I, p. 164. — Gregaria, stipitata, firmula, 0,3 mm. alt., cupula lutescente, cum stipite brevissimo, crasso, pallido v. lutescente-pallido, obconica, disco planiusculo, 0,1-0,2 mm. lat.; ascis clavatis, 160-170 \approx 11-15; sporidiis subdistichis v. oblique monostichis, fusoideo-ellipsoideis v. fusoideo-oblongatis, guttulas 2 majusculas distincte foventibus, inæquilateralibus vel leniter curvulis, 15-26 \approx 6-7; paraphysibus numerosis, gracilibus, 1,5 μ . cr., apicem versus leniter incrassatis.

Hab. ad caules *Artemisiæ vulgaris* et *Cerefolii* dejectos aridos in Mustiala, ad caules *Epilobii angustifolii* in par. Messuby Fenniae.

PEZICULA Tul. S. F. C. III, p. 182 [1865] (Etym. demin. a *Peziza*), *Dermatea*, *Cenangium*, *Peziza* Auct. — Ascoma mediocre, ceraceo-tenacellum, sessile, subinde erumpens v. furfurellum, patellatum v. cupulato-patellare, haud nigrum. Asci paraphysati, typice majusculi, clavati, 4-8-spori. Sporidia ellipsoidea v. oblonga, hyalina, nucleata vel guttulata, continua, subhyalina. — A *Dermatella*, cui analoga, differt sporidiis continuis nec septatis, sed adsunt species sporidiis pseudoseptatis ambiguæ, hinc sub utroque genere inquirendæ.

1. ***Pezicula carpinea*** (Pers.) Tul. Carp. III, p. 183, Sacc. F. I, 1419, 1292 Pat. Tab. 221, *Peziza* Pers. Syn. p. 673, *Dermatea* Fr. Summa p. 362, *Cenangium Carpini* Wallr. — Ascomatibus subcæspitosis exiguis, primum clausis, mox in discum planum carneo-flaventem, margine dilutiore tenuiter farinoso cinctum apertis, sessi-

libus, patellaribus, strato carnosio primum subcutaneo; ascis clavatis apice incrassatis obtusis, $200 \approx 18$, jodoque violascentibus; sporidiis octonis ovato-oblongis, subinæquilateralibus, subdistichis, continuis nucleatis, hyalinis, $18-22 \approx 9-10$.

Hab. in ramis corticatis Carpini Betuli et americanæ in Germania, Gallia, Belgio, Italia, Amer. bor. — Ob ascomata initio erumpentia epidermideque fissâ cincta ad *Ocellariam* vergit. Quoad status secundarios cfr. Tul. loc. cit. — ***tetra spora** Sacc. Mich. II, pag. 613: asci cylindranei $120 \approx 20$, brevissime stipitati, paraphysati; sporidia quaterna, oblique monosticha, oblongo-ellipsoidea, $24 \approx 12-14$, granulosa, hyalina. In cortice Carpini in Gallia (GILLET).

2. **Pezicula acericola** Peck in litt. et Sacc. Misc. Myc. Ser. II, n. 66. 1293
Nodularia acericola Peck 25 Rep. 98. — Cæspitosa, tenuis, subcarnosa, irregularis, pallide flava, primitus aperta, disco plano vel convexo, subpruinosa, margine obsolete; ascis clavulatis, 4-8-sporis, $80-90 \approx 10-18$; sporidiis oblongo-clavulatis, sæpe curvulis, $24-26 \approx 8$, hyalinis; paraphysibus filiformi-clavulatis, subflexuosis.

Hab. in cortice Acerum North Elba Amer. bor. — Cæspituli e 3-7 cupulis formati, 2 mm. lat.

3. **Pezicula cinnamomea** (DC.) Sacc. Mich. II, p. 332, *Pez. cinnamomea* DC. fr. 6, p. 23, Pers. Myc. Eur. p. 268, *Dermatea* Phill. 1294
 Disc. p. 342. — Erumpens, sessilis, carnosio-coriacea, tenuis, rubiginoso-lateritia, subtus pruinosa, disco subimmarginato; ascis clavatis, octosporis; sporidiis oblongis, utrinque rotundatis inæquilateralibus, 2-3-guttatis simulateque septatis, $20-30 \approx 8-10$.

Hab. ad Quercus caudices inter Lichenes ad Neufchatel et ad cort. acerinum pr. Bristol Britannicæ (BUCKNALL). — Gregaria v. fasciculata, parum carnosio, plana aut margine undulato-sinuata, 1-2 mm. lata, subtus glabra, sed pulverulenta, ut vix cum Persoonio ad Lachneas referri possit. — Forma **Castaneæ** Sacc. l. c. et Fung. ital. f. 1420: ascomatibus erumpenti-superficialibus, flavo-cinnamomeis, subfragilibus, sessilibus, complanatis; ascis crasse clavatis $80 \approx 18$, subsessilibus, apice rotundatis, octosporis; sporidiis distichis ellipsoideo-oblongis inæquilateralibus $20-25 \approx 8-9$, crasse 3-4-guttatis, hyalinis. In cortice Castaneæ vescae, sociâ *Endothia gyrosa* in Amer. bor. (RAVENEL).

4. **Pezicula rhabarbarina** (Berk.) Tul. S. F. C. III, p. 183. *Patellaria* 1295
Rubi Lib. Exs. 231, *Peziza rhabarbarina* Berk. Engl. T. V. 2, p. 197, *Lachnella rhabarbarina* Fr. S. v. Sc. p. 365, *Helotium*

Rubi Sprée in Rbh. F. eur. 717, *P. Rubi* Lasch. Bot. Zeit. 1845, p. 65, *Pez. arduennensis* Mont. Ann. Sc. nat. V, p. 287, t. XIII, f. 9. — Sessilis, patellata, flavo-fulva, sparsa, pilis clavulatis flavis minutis adpersa, carne rhabarbarina; ascis cylindraceo-clavatis, breve crasseque stipitatis, $96-110 \approx 13-18$, paraphysibus filiformibus apice subincrassatis obvallatis, octosporis, apice jodo violascentibus; sporidiis oblongo-cylindraceis, utrinque rotundatis, $18-20 \approx 6-7$, curvulis, granulosis, hyalinis.

Hab. ad ramos putrescentes *Rubi* fruticosi, cæsii et fastigiati in Gallia, Germania, Britannia, Italia, Belgio, in Rubo nec non in Fago, Corno in Amer. bor. — Quoad status secundar. cfr. Tul. loc. cit. An huc pertineat *P. rhab.* Hazsl. Magg. Kögg. t. XII, f. 20 sporidiis cuboideo-4-nucleatis, dubium. — **P. Rosæ* Sacc. Mich. II, p. 323, Fung. ital. f. 1421: cupulis sparsis erumpentibus minutis, $\frac{1}{6}-\frac{1}{8}$ mm. diam., brevissime stipitatis, crasse lenticularibus, disco subplanis, lutescenti-rubiginosis; ascis crasse clavatis substipitatis, $70 \approx 20$, 8-sporis; sporidiis subdistichis oblongo-ovatis v. subcylindraceis, $28 \approx 10$, continuis, hyalinis, tandem fuscescentibus. In ramis emortuis *Rosæ* caninæ in silva Montello Ital. bor. et Rouen Galliæ.

5. ***Pezicula laricicola*** Fuck. Symb. myc. p. 279. — Cupulis sparsis 1296
coacervatisve, subsessilibus, lentiformibus convexis, 1 mm. diam., emarginatis, carneo-ochraceis, pulverulentis; ascis elongatis, subclavatis, 8-sporis, $104 \approx 18$; sporidiis oblongis, inæquilateralibus, 1-nucleatis, hyalinis, $24 \approx 8$; paraphysibus linearibus.

Hab. in ramis siccis corticatis *Laricis* prope Æstrich Rheno-goviæ.

6. ***Pezicula minuta*** Peck Bull. N. Y. St. Mus. n. 2, p. 21 (1887). — 1297
Minuta, sparsa v. 2-3-aggregata, puncto exiguo matrici affixa, grisea, pulverulenta, margine obtuso v. obsolete, disco plano v. convexo, subochraceo; ascis oblongo-clavatis; sporidiis stipitatis oblongo-ellipsoideis, hyalinis, 20-25 μ . long.; paraphysibus filiformi-clavulatis.

Hab. in ramis emortuis *Viburni lantanoidis* in monte Catskill Amer. bor. — Ascoma $\frac{1}{4}-\frac{1}{2}$ mm. diam.

7. ***Pezicula myrtillina*** Karst. M. F. I, p. 165. — Sparsa v. subgre- 1298
garia, sessilis, convexa, immarginata, testaceo-pallida v. lutescens vel testacea, 0,4 mm. lat.; ascis clavatis, $90-100 \approx 14-18$, obturaculo jodo leviter violaceo-fusco; sporidiis di- vel subdistichis, fussoideo-oblongatis v. elongatis, rectis v. curvulis, guttulatis 1-2 ma-

jusculis præditis, 17-30 \approx 6-7; paraphysibus 1,5 μ . cr., apice sphaeroideo v. obovoideo-incrassato, 8 mm. cr.

Hab. ad caules Myrtilli nigræ aridos in Mustiala Fenniæ.

8. **Pezicula saccharina** (Bresad.) Sacc. Mich. II, p. 536, *Peziza sac-* 1299
charina Bresad. F. Trident. II, p. 24, t. XXIX, f. 1. — Convexa dein convexo-marginata vel explanato-marginata, subtus planiuscula, ligno adhærens, ceraceo-subgelatinosa, sessilis, 4-8 mm. lata, extus pallida, centro colore sacchari crystallizati, in siccis nigra, sub lente granulosa, carne hyalino-fuscidula, subpellucida, inodora; ascis cylindræis, basi constrictis, 8-sporis, 360 \approx 18; paraphysibus apice clavatis, intus luteolo-granulosis; sporidiis oblongo-ellipticis, hyalinis, biguttulatis, oblique monostichis, 21 \approx 12; excipuli cellulis hexagonis.

Hab. in ramis corticatis Tiliæ parvifoliæ in agro Tridentino. — A *Pezicula carpinea*, cui valde accedit, distinguitur ascis cylindricis, sporidiis monostichis etc.

9. **Pezicula lilacina** Bresad. Trid. p. 68, t. 74, f. 1. — Sessilis, ra- 1300
rissime substipitata, ceraceo-tenacella, extus puberula, dein glabra, plano-concava, marginibus elevatis tumidiusculis, tota dilute lilacina, 2-4 mm. lata, gregaria v. subcæspitosa, substantia ceraceo-carnosa subconcolore, inodora; ascis cylindræo-stipitatis, apice operculo minuto jodo cœrulescente, 8-sporis, 180-210 \approx 8-12; paraphysibus filiformibus, ramosis, guttulatis, æqualibus, 1-2 μ . cr.; sporidiis ellipticis v. subcylindræis, interdum uno latere subcurvatis, hyalinis, 14-16 \approx 7-8, intus minutissime granulosis.

Hab. ad ramulos Alni gelatinosæ locis humidis v. in rivulis sub aqua, Valle di Sole, Trento. — Ab *Ombrophila violacea* et *lilacina* certe distincta.

10. **Pezicula nectrioides** (Phill.) Sacc. *Dermatea nectrioides* Phill. 1301
Disc. p. 340. — Gregaria v. cæspitosa, erumpens, sessilis, subglobosa dein planiuscula, subcircularis, rubro-brunnea, disco aurantio-rubro, demum pallide brunneo; ascis tereti-clavatis; sporidiis oblongo-ellipsoideis vel oblongis utrinque rotundatis, 1-2-guttatis rectis curvulisve, 20-25 \approx 7; paraphysibus filiformibus ramulosis.

Hab. in conis Pini silvestris pr. Birmingham Britannicæ (W. B. GROVE). — Ascoma $\frac{1}{3}$ - $\frac{1}{2}$ mm. diam. initio nectriæforme.

11. **Pezicula dryina** (Cooke) Sacc. *Dermatea dryina* Cooke Grev. 1302
VII, p. 62, Phill. Disc. p. 340. — Sparsa vel subinde 3-4-aggregata, convexo plana, carnea, 1 mm. diam., erumpens, margine vix vel non elevato, substantia carnosulo-lenta; ascis clavatis; spori-

diis ellipsoideis, utrinque subattenuatis, rectis curvulisve, 30-35
 ≈ 10-12.

Hab. in cortice quercino pr. Hereford Britanniae.

12. **Pezicula populea** Hazsl. *Einig. Disc.* p. 11, Magyar. szab. *Disc.* 1303

tab. I, f. 18. — Stromati tuberculariaceo conidiophoro pulvinate inserta, scutellata, margine exiguo, obtuso, luteola; ascis teretibus, octosporis; sporidiis ovoideis, hyalinis, continuis; paraphysibus bacillaribus, apice conidium («?»), subreniforme exserentibus.

Hab. in radicibus defossis Populi nigræ pr. Eperies Hungariae. — Ascoma habitu *Peziculæ carpineæ*.

13. **Pezicula rivularis** (Cr.) Sacc. *Patellaria rivularis* Crouan Fl. 1304

Finist. p. 45. — Ascomate extus brunneo, 2-4 mm. diam., crassiusculo, disciformi, margine sublobato, disco ochraceo; ascis cylindraceis, octosporis; sporidiis ovoideis, granulosis, monostichis, limbatis; paraphysibus ramulosis, sursum crassiusculis, granulosis.

Hab. in ramis emortuis Quercus rivulo immersis, Finistère Galliae. — Contextus prosenchymatico-granulosus, densus.

14. **Pezicula Herminiera** Rabenh. in Hedwigia 1878, p. 146. — Gre- 1305

garia, plus minus approximata vel sparsa, sessilis, nuda, glabra, ceraceo-carnosa, vix 1 cm. lata, sicca plana v. concaviuscula, humectata concaviuscula; disco aurantio-luteo, non nunquam expallescente, margine tumidulo, integerrimo dilutiore; ascis breve clavatis, jodo non tinctis; paraphysibus filiformibus intertextis, octosporis; sporidiis oblongo-fusiformibus, recte v. oblique monostichis (passim subdistichis), 6 ≈ 3, hyalinis, medio spurie uniseptatis.

Hab. ad folia emortua, Muscos etc. in Guadalupa (L' HERMINIER).

15. **Pezicula Kalmiæ** (Peck) Sacc. *Peziza Kalmiæ* Peck 25 Rep. St. 1306

Mus. p. 99, *Dermatea* Cooke *Disc. U. S. II*, p. 23. — Minuta, sessilis, subplana, marginata, extus furfuracea, sordide grisea, margine initio incurvato, disco rufo-brunneo; sporidiis ellipsoideis, plerumque nucleatis, 10 ≈ 5.

Hab. in ramis emortuis Kalmiæ angustifoliæ subinde supra Dothidellam Kalmiæ, Sandlake Amer. bor.

16. **Pezicula Cenangium** (De Not.) Sacc. *Peziza Cenangium* De Not. 1307

Dec. IV, n. I, E. C. It. n. 637, Rab. et Gonn. M. E. p. 10, t. VI. f. 1. — Ascomatibus gregariis, flavo-virentibus erumpenti-superficialibus, 1 mm. lat., rarius cæspitulosus, subcoriaceis, cupulatis, dein expansis subsessilibus subcontortis, disco albido, nitidulis; ascis teretibus-clavatis, filiformi-paraphysatis; sporidiis oblongo-ellipsoideis, ex hyalino citrinis, 12-14 ≈ 4-5 (De Not.), 9-12 ≈ 3-4 (Rab.).

Hab. in ramulis dejectis *Rhododendri* et forte *Laricum* in monte Cenisio et Valsesia. — «Quoad genus dubia stirps».

17. **Pezicula viridi-atra** (B. et C.) Sacc. *Pez. viridi-atra* B. et C. 1308
 Cub. Fungi n. 692, nec Fr. — Sessilis, atro-viridis, subtus granulata, undulata, irregularis; sporidiis ellipticis demum subfuscis, 5 μ . longis.

Hab. in ligno putrescente, cum *Polypori* specie in insula Cuba. — Ascoma 8 mm. lat., lignum haud fœdans. Verisimiliter novi generis typus.

18. **Pezicula? Philadelphi** (Schw.) Sacc. *Peziza Philadelphi* Schw. 1309
 Syn. 177. — Cupulis sessilibus aut stipite papillæformi præditis, interdum aggregatis, siccis subrotundis, sparsis superficialiter epidermidi adnatis, extus ferrugineo-lutescentibus, subpulverulentis, margine subprominulo, disco demum convexo, punctato, umbrino 2 mm. lat.

Hab. in ramulis *Philadelphi* inodori culti in hortis Bethlehem Amer. bor.

Species indescripta.

19. **Pezicula Cratægi** (Auersw. in Sched.) Fuck. *Symb. App.* II, p. 56 1310
 Hazsl. *Mag. szab. Disc.* p. 220.

Hab. in ramis duris corticatis *Cratægi Oxycanthæ*, rarius, pr. Neuchâtel Helvetiæ et in Hungaria. — Sporidia sec. Hazsl. l. c. 22-24 \approx 10.

CHLOROSPENIUM Fr. *Summa* p. 356 [1849] (Etym. *chloros* viridis et *splen* lien, ob colorem). Ascoma breve stipitatum, ceraceum, cupulatum vel subplanum, sæpe flexuosum, æruginosum v. olivaceum, matricem sæpius colorans. Asci tereti-cavati, paraphysati, octospori. Sporidia ovoidea v. fusoideo-oblonga, continua, guttulata, subhyalina.

1. **Chlorosplenium æruginosum** (Æder) De N. *Disc.* pag. 22, nec Tul. 1311
Helvela æruginosa Æd. *Fl. Dan.* t. 534, f. 2, *Peziza æruginosa* Vahl *Flor. Dan.* t. 1260, f. 1, *Pers. Syn. Fung.* p. 617, *Hel. æruginosum* Fr. *Summa* p. 355, Sacc. *F. it.* f. 1348. — Breviter stipitatum, æruginosum; cupula turbinata, dein expansa et subflexuosa, disco albicante, 1-4 mm. lat.; ascis tereti-clavatis, 65-75 \approx 6, obturaculo jodo leviter cœrulescente; sporidiis plerumque distichis, fusoideo-elongatis, rectis v. curvulis, hyalino-chlorinis, plerumque 2-guttatis, 10-14 \approx 3,5-4; paraphysibus sat numerosis.

Hab. ad lignum mucidum *Quercus*, *Betulæ*, *Alni*, *Fagi*, *Populi* in Suecia, Fennia, Germania, Britannia, Sibiria, Italia, Gallia, Belgio, Amer. bor., Africa austr., Australia, Fuegia. — Quoad spermogonia cfr. Tul. l. c. — Var. **subgriseum** Holmsk. Ot. pag. 28, t. 12. In Dania. — Admodum versiforme, lignum colore æruginoso late profundeque tinctum passim adhibetur in usum fabrile.

2. **Chlorosplenium æruginascens** (Nyl.) Karst. M. F. I, p. 103, *Pez.* 1312
æruginascens Nyl. Obs. Pez. p. 42. *Ch. æruginosum* Multorum, Tulasne Carp. III, p. 187, t. XX, f. 15-19. — Stipitatum, æruginosum, cupula concava, dein expansa et flexuosa, stipite plus minus elongato aut abbreviato, subinde fere nullo; ascis cylindræo-clavatis v. cylindræis, tenellis, $50-60 \approx 4$, obturaculo jodo levissime cœrulescente; sporidiis plerumque distichis, fusoidæo-elongatis, rectis v. curviusculis, ut plurimum guttulatis, $6-8 \approx 1.5-2.5$; paraphysibus gracilibus.

Hab. ad lignum mucidum arborum frondosarum et *Pini* per totam Fenniam, Lapponiam, Galliam, Germaniam. — Spermogonia discreta v. cæspitosa, interdum ascomatibus recentibus sociata, sessilia sphæroidea, glaberrima, nonnihil rugosa, atro-virentia multilocularia, locellis angustis periphericis, poris numerosis minutissimis instructa sterigmata filiformia, cæspitosa, ramosa, circiter 16 μ . long., sporulæ elongatæ, rectæ, simplices, circiter 3,5-5 μ . long.

3. **Chlorosplenium omnivirens** (Berk.) Cooke Austr. Fung. p. 51. — 1313
Peziza omnivirens Berk. Ph. Tasm. p. 275. — Æruginosum, cupula breviter stipitata subturbinata, hymenio plano; sporidiis amplis 18-20 μ . longis.

Hab. in ligno putrescente, Leith Creek Tasmaniæ (ARCHER). — Præcipue forma magis regulari et sporidiis magnis dignoscitur a *Ch. versiformi* et *æruginoso*.

4. **Chlorosplenium æruginellum** (Nyl.) Karst. M. F. I, p. 104, *Peziza* 1314
æruginella Nyl. Obs. Pez. p. 40. — Sparsum, stipitatum, æruginæum, cupula planiuscula, tenui, subinde subflexuosa, 0,4-0,9 mm. lat., stipite æquali, 0,3-0,5 mm. long.; ascis cylindræo-clavatis, $46-56 \approx 5-7$, apice jodo vix vel non tinctis; sporidiis distichis vel oblique monostichis, fusoidæo-elongatis, guttulatis, $7-12 \approx 2-3$.

Hab. ad caules *Spirææ Ulmariaæ* putrescentes prope Mustiala Fenniæ.

5. **Chlorosplenium versiforme** (Pers.) Karst. M. F. I, pag. 102, *P.* 1315
versif. Pers. ic. et deser. p. 25, t. 7, f. 7, Syn. p. 647, Fr. Syst.

Myc. II, p. 130. — Gregarium, substipitatum, cupula difformi subcontorta, flavo-olivacea, externe subpurpurascens; ascis tereti-clavatis, 90-100 \approx 7-8; sporidiis submonostichis, ovoideo-oblongatis, sæpe curvulis, 9-14 \approx 3-4, guttulis spurieve septatis; paraphysibus gracilibus.

Hab. in truncis abiegnis rarius betulinis, quercinis et fraxineis in Britannia, Germania, Belgio, Gallia, Helvetia, Amer. bor. — Primo subvillosum, mox nudum, colore olivaceo-flavescente, forma nunc regulari, nunc compressa subundulata, disco convexo v. depresso.

6. **Chlorosplenium brasiliense** B. et Cooke Fung. Bres. n. 434. — 1316

Æruginosum; cupula turbinata demum expansa, stipite brevi æquali; ascis cylindræis, 45 \approx 2; sporidiis linearibus 3-4 μ . longis; paraphysibus filiformibus.

Hab. in lignis Rio Tapajos Brasilæ (TRAILL). — Sporidia nondum matura, tamen tenuiora videntur quam *Ch. æruginosi*. Matrix non decolorata.

7. **Chlorosplenium fuegianum** Speg. F. Fueg. n. 338. — Cupulis hinc 1317

inde gregariis, udis infundibuliformi-explanatis 1-2,5 mm. diam., siccis contractulis involutis, extus intusque sordide atro-olivaceis, extus in juventute rufescenti- v. fulvescenti-pruinulosis dein glabratis, margine integerrimis, tenacellis, rigidulis, postice in stipitem brevem et crassiusculum, 1-2 mm. long., 0,5 mm. cr., sæpe basi connatum concolorem glabrum vel olivaceo-pruinulosum cuneato-attenuatis; ascis clavulatis, antice rotundatis crassiuscule tunicatis non v. minute bifoveolatis, postice longe stipitato-attenuatis, p. sp. 40 \approx 8, ped. 70-90 \approx 3-5, octosporis; paraphysibus filiformibus densiusculis; sporidiis apice ascorum subconglobatis, recte distichis, elliptico-fusoideis, utrinque acutato-obtusatis, 10 \approx 4-5, hyalinis, continuis (an per ætatem 1-3-septatis?)

Hab. ad ramos decorticatos putrescentes Fagi betuloidis prope Port Vancouver in Staten island Fuegiæ. — Jodi vis nulla; lignum maculis latiusculis fusco-olivaceis, sæpe furfure rufescenti conspersis donatum.

8. **Chlorosplenium Puiggarii** Speg. Fung. Arg. Pug. III, n. 226. — 1318

Stipitatum, pulchre viridi-ærugineum, glaberrimum; cupulis primo regularibus, concavis, dein lateraliter expansis, 5-15 mm. diam., irregularibus, undulatis, crassiuscule membranaceis, coriaciusculis; stipite brevi, 1-3 \approx 0,5 mm. quandoque fere nullo, excentrico, sursum ærugineo, inferne sordide fuscescente; ascis cylindræo-clava-

tis, sursum rotundatis crasseque tunicatis, deorsum brevissime stipitatis, 40-45 \approx 3-3,5; paraphysibus simplicibus, filiformibus, hyalinis obvallatis, octosporis; sporidiis elliptico-fusoideis, utrinque attenuato-rotundatis, sæpe inæquilateralibus, 5-7 \approx 1-1,5, 2-guttulatis, hyalinis; obturaculo ascorum jodi ope cœrulescit; substratum profunde æruginascens.

Hab. in truncis ramisque decorticatis, dejectis putrescentibus, in nemorosis prope Apiaby, Brasilia meridionali (Dr. J. PUIGGARI). — An huc *Ch. brasiliense* Berk. et Br. ducendum? An unum et alterum *Ch. æruginascentis* (Nyl.) Karst. tantum varietates?

9. **Chlorosplenium ærugineum** (Berk.) Sacc. *Peziza æruginea* Berk. 1319
Dec. of Fungi n. 474. — Cupulis cyathiformibus, subregularibus, extus ærugineo-obscuris, disco pallidioribus; ascis linearibus; sporidiis subfusiformibus, 7-8 μ . longis, mycelio lignum superficialiter viridi-tingente.

Hab. in lignis putridis Khasia Indiæ (HOOKER et THOMPSON). — Ascomata 2 mm. lata, sparsa, extus metallico-viridia; stipes cupulam vix æquans, atro-virens. Affine *Ch. æruginoso* sed magis regulare, tenuius, obscurius sporidiisque minoribus. Sec. Cooke spor. 10-12 μ . long.

10. **Chlorosplenium Kriegerianum** (Rab.) Sacc. *Ciboria Kriegeriana* 1320
(Rab.) Rehm Asc. n. 660, *Ombrophila?* *Kriegeriana* Rab. Hedw. 1878, p. 31. — Turbinatum demum profunde cyathiforme, tremulum, distincte stipitatum, olivaceum, nudum subnitens, margine initio inflexo dein erecto, nigro-denticulato, stipite crassiusculo, solido, concolore; ascis elongatis clavatis, substipitatis, 96-100 \approx 6; sporidiis ellipsoideis, rectis vel subcurvulis, biguttatis, hyalinis, 12-18 \approx 6; paraphysibus filiformibus, clavulatis, subolivaceis.

Hab. ad ramos in Germania et Helvetia. — Sec. Rhem l. c., ascomate distincte prosenchymatico ad *Ciboriam* spectat, teste Winter (Hedw. 1881, p. 70) a *Chl. elatino* (A. et S.) vix differt.

11. **Chlorosplenium elatinum** (A. et S.) Sacc. *P. elatina* A. S. p. 330, 1321
t. 2, f. 3, Pers. Myc. Eur. p. 291, Fr. Syst. Myc. II, p. 112, *Helotium* Quéll.ENCH. pag. 309. — Obconicum, viride, extus nigro-striatum, margine lato inflexo, stipite firmo sursum incrassato.

Hab. ad ramos emortuos lumi jacentes Abietum, frequens in Lusatia, Helvetia etc. — Ceraceum, firmum, crassiusculum, 4-7 mm. altum, 6-10 mm. latum, extus fibrillis nigris striatum vel venoso-pilosum, margine subserrato. Initio, præsertim intus, fusco-virens; dein totum viride, disco demum explanato sordide lutescente.

12. **Chlorosplenium lividum** (A. et S.) Karst. Rev. mon. pag. 124, *P.* 1322
versiformis β . *livida* A. et S. Consp. p. 314, *Pez. versiformis* β .
nigrescenti-olivacea Weinm. Hymen. Gast. pag. 467, *Chlor. nigre-*
scenti-olivac. Karst. Symb. M. F. IX, pag. 56, *Rutströmia bulga-*
rioides (Rab.) Karst. M. F. I, pag. 105, *Peziza bulgarioides* Rab.
 Fung. eur. II, 1008, *Peziza ciborioides* Fr, *P. strobilaria* Nyl. Obs.
 p. 36. — Gregaria, stipitata subsessilis, primum cyathoidea et regula-
 ris dein expansa, difformis et undulata, initio livida, dein fuliginea v.
 subolivacea, tandem nigrescens v. cinerescens, disco concolori, sæpe
 ruguloso, margine integro, 2-8 mm. lat.; ascis subcylindræis, 90-
 125 \approx 6-8, obturaculo jodo dilute cœrulescente; sporidiis monosti-
 chis, ellipsoideis vel oblongatis, rectis, eguttulatis, 6-11 \times 4-4,5;
 paraphysibus gracilibus.

Hab. ad strobilos Abietis e Fennia meridionali ad prov. Æster-
 botten (Wasa, Jakobstad) usque, in Germania, Hungaria. — Cum
Chl. versiformi, cujus varietatem b. *lividam* Fr. Syst. Myc. II,
 p. 131, forsan sistit, multum commune habet.

13. **Chlorosplenium repandum** Fr. Summa pag. 356 in nota, *Peziza* 1323
chlorascens Schw. Syn. 175, Berk. Cub. Fung. n. 690. — Maju-
 sculum, 7-10 mm. diam., gregarium, siccum valde contortum, cra-
 teriforme, sessile aut brevius stipitatum, extus floccoso-fibrosum,
 nigrum aut nigro-fuscum (statu sicciori), madefactum autem ærugi-
 nosum, disco lato chlorascenti aut luteo-viridi, demum subpulve-
 rulento; ascis, teste Berk., clavatis; sporidiis fusoides 12-15 μ . long.

Hab. ad cortices Taxodii, Quercus etc. in Carolina, Pen-
 sylvania et ins. Cuba.

14. **Chlorosplenium amenticum** Karst. Fung. nov. Fenn. p. 1 (Rev. 1324
 myc. 1887). — Sparsum, ceraceum, stipitatum, pruinatum v. fur-
 furaceum, subsulphureo-virens, cupula e concavo explanata, sæpe
 repanda, 1-2 mm. lata, stipite cupulæ latitudine vel infra; ascis
 cylindræo-subclavatis, 55-60 \times 6; sporidiis oblique monostichis,
 ellipsoideis v. suboblongatis, simplicibus, 6-7 \times 3; paraphysibus pa-
 rum notabilibus.

Hab. in amentis Alni glutinosæ emortuis prope Rouen in
 Gallia (LETENDRE).

15. **Chlorosplenium chloromelum** (Phill. et Hark.) Sacc. *Peziza chloro-* 1325
mela Phill. et Hark. Grevill. vol. XIII, pag. 22. — Sparsum v.
 congregatum, stipitatum, 1 mm. long., glabrum, atro-viride, sti-
 pite pallidiori, disco plano, immarginato, luteo-viridi 0,6 mm.; ascis
 cylindræo-clavatis, octosporis; sporidiis fusiformibus v. clavatis;

plerumque curvulis, hyalinis, viridi-tinctis, 20-25 \times 4-5; paraphysibus filiformibus, indistinctis cohærentibusque, hymenio granuloso, subgelatinoso.

Hab. in foliis Sequojæ sempervirentis in California (HARKNESS).

16. **Chlorosplenium epimyces** Cooke Disc. U. S. I, pag. 299. — Sessile, viridi-flavum dein olivaceum, pulverulentum, 2 mm. latum, planum, disco pallidiore; ascis clavatis; sporidiis distichis, late fusoides, 20 \approx 10. 1326

Hab. ad Corticium vetustum New Jersey Amer. bor. (ELLIS). — Pulvis e granulis globosis brunneis 7 μ . diam. constans.

17. **Chlorosplenium luteo-virens** (Fr.) Sacc. *P. luteo-virens* Fr. Syst. Myc. II, p. 133, *Helotium* Fr. Summa p. 356. — Turbinatum, sessile, carnosu-ceraceum, glabrum, viridi-luteum, disco plano immarginato. 1327

Hab. ad ramos putridos dejectos Fagi, Fensio in Suecia. — Distinctissimum, 1 mm. tantum latum, substantia carnosu-ceracea, pallescente. Cupula late turbinata, absque stipite distincto, junior quidem concava, sed vetusta etiam convexa.

18. **Chlorosplenium Schweinitzii** Fr. Summa Veg. p. 356, nota, *Pez.* *Chlora* Schw. Carol. n. 1235. — Sessile, carnosu-ceraceum, luteo-virens, margine plicato-crenato, extus squamuloso-pulveraceum. 1328

Hab. frequens ad latera interiora truncorum Carolinæ. — Cfr. Ellis N. A. F. n. 664.

19. **Chlorosplenium tortum** (Schw.) Fr. Summa p. 356, in nota, *Peziza torta* Schw. Syn. p. 175. — Subfasciculata aut sparsa; stipite crasso sulcato, torto ferrugineo-fusco æque ac cupula extus, disco explanato undulato, immarginato, æruginoso-viridi, pulverulento, substantia demum subcoriacea. 1329

Hab. raro in lignis vetustis, Salem Amer. bor. — Totus fungus 8 mm. latus et altus. Affinis forte *Cib. bolari*.

CORONELLARIA Karst. M. F. I. pag. 14 [1871] (Etym. *corona*). — Ascoma obconicum, sessile, glabrum, margine pallide ciliato v. fimbriato, excipuli contextu fuscescente. Asci oblongo-clavati, octospori, paraphysati. Sporidia fusoides-oblonga v. acicularia, continua guttulata, hyalina. — A gen. *Cyathicula* (Sect. II) differt excipulo fuscescente, sporidiis majoribus.

1. **Coronellaria Delitschiana** (Auersw.) Karst. M. F. I, p. 183, *Pez.* *Delitschiana* Auersw. in Rab. F. E. n. 912 Hedw. V, p. 189. — 1330

Gregaria aut sparsa, sessilis, subobconica, margine fimbriato, testaceo-pallida v. pallida, dein fusco-pallida v. interdum (sicca) nigrescens, disco planiusculo, griseo-pallido v. lutescente, subinde (sicco) albicante, 0,2-0,5 mm. lat.; ascis ellipsoideo-oblongatis aut oblongato-clavatis, sessilibus, 75-110 \approx 16-20; sporidiis di-tristichis, oblongatis aut fusoideo-oblongatis v. fusoideo-oblongatis, rectis v. inæquilateralibus, guttulas 1-4 majusculas foventibus v. demum spurie tenuiter septatis, 25-40 \approx 6-7; paraphysibus crassiusculis.

Hab. in calamis Scirpi lacustris vetustis in Germania et Fennia.

2. **Coronellaria pulicaris** Karst. M. F. I, p. 184. — Sparsa vel sub- 1331
gregaria, obconica aut hemisphærico-cupulata, albida v. lutescens v. pallide testacea v. viridi-lutea dein fusco-pallida v. lutescens vel (sicca) nigrescens, margine fimbriato, sicco albicante, 0,2-0,3 mm. lat.; ascis oblongato-clavatis, sessilibus, apice sæpe attenuatis, 55-85 \approx 12-16, obturaculo violaceo-fuscescente; sporidiis di-tristichis, interdum oblique monostichis, oblongatis aut fusoideo-oblongatis v. aciculari-oblongatis, rectis v. inæquilateralibus, vulgo 2-guttulatis, 14-24 \approx 3,5-4,5; paraphysibus mollibus, flexuosis, 1,5 μ . cr. apicem versus incrassatis.

Hab. in calamis et foliis Scirpi silvatici et Sc. lacustris vetustis in Fennia australi. — *C. Delitschianâ* omnibus partibus minor, ceterum peraffinis.

3. **Coronellaria caricinella** Karst. Symb. p. 248, M. F. I, p. 185. — 1332
Gregaria v. sparsa, obconica, pallida v. fuscescente-pallida, margine albo-ciliato, disco pallido, 0,1-0,2 mm. lat.; ascis ellipsoideo-oblongatis aut oblongato-clavatis, 42-50 \approx 10-13; sporidiis di-vel tristichis, oblongatis, spurie uni-triseptatis aut guttulis 2 majusculis præditis, rectis, 13-16 \approx 3,5-4; paraphysibus crassiusculis, sursum incrassatis.

Hab. in foliis Caricum majorum putrescentibus in Fennia meridionali. — Ascomata interdum lutea v. aurea conspiciuntur.

MOLLISIA Fr. Syst. Myc. II, p. 137 [1822], ut subg., emend. (Etym. *mollis*), *Niptera* et *Micropeziza* Fuck. ex p., *Mollisia* Karst. et Sacc. ex p., non *Niptera* Fr. — Ascoma superficiale v. suberumpenti-superficiale, sessile, minutum, ceraceum scutellato-patellare, excipulo fusco, duriusculo, disco initio pallente. Asci filiformi-paraphysati, 4-8-spori. Sporidia ellipsoidea oblonga, fusoidea, teretiusscula, continua, hyalina.

A. Eu-Mollisia. Ascoma subcirculare, subsuperficiale. Sporidia breviuscula.

I. Caulicolæ.

1. **Mollisia Polygoni** (Lasch) Gill. Disc. p. 120, *Pez. Polygoni* Lasch 1333
in Rab. H. M. n. 1127, Desm. 24 Not. pag. 7, *Niptera Polygoni*
Rehm Ascom. n. 70 (1871), Wint. Flora 1872, pag. 542, *Peziza*
luctuosa Cooke in Hedwigia 1875, pag. 83. — Gregaria, sessilis,
primo hemisphærica, margine incurvo, crenulato, demum aperta,
difformis, extus fuligineo-badia, hyalino-papillata, basi pilis ara-
chnoideis repentibus hyalinis cincta, disco e concavo plano conco-
lore, dein pallente, 0,5-1 mm. lato; ascis tereti-oblongis, sessili-
bus, 30-40 \approx 5-6; sporidiis elongato-clavulatis rectis curvulisve,
utrinque uniguttulatis, 7-9 \approx 2; paraphysibus filiformibus.

Hab. in caulibus Polygonorum putridis in Hungaria, Tran-
sylvania, Germania, Britannia, Gallia, America boreali. — Var.
Rumicis Sacc. F. Gall. n. 2231: ascis tereti-clavatis, paraphysatis,
35-38 \approx 7; sporidiis distichis, oblongo-fusoideis, 6-8 \approx 1½-2, 2-gut-
tulatis, hyalinis, rectis. In caule Acetosæ emortuo Rouen Gal-
liæ (LETENDRE).

2. **Mollisia atro-cinerea** Cooke in Phill. Disc. p. 176. — Gregaria v. 1334
sparsa, sessilis, leniter concava v. plana, extus nigra, glabra, disco
cinereo; ascis clavatis; sporidiis fusoideis vel cylindraceis, rectis
curvulisve, 5-7 \approx 1; paraphysibus non visis.

Hab. in caulibus herbaceis e. g. Dipsaci in Britannia et Hun-
garia et in caulibus Solidaginis, Hyperici, Desmodii in
Amer. bor. — Ascoma ⅓-½ mm. lat. Sec. Rehm Asc. Lojk. n. 38:
asci 24-30 \approx 5; sporidia 6 \approx 1,5.

3. **Mollisia Solidaginis** Karst. Rev. mon. atque Syn. p. 173. — In- 1335
nato-erumpens, concaviuscula, sicca contracta, margine lacero-fi-
broso, fuscescens, disco albido; ascis fusoideo-clavatis, obturaculo
jodo cœrulescente, 55-60 \approx 7-8; sporidiis distichis, elongatis, cur-
vulis, 12-15 \approx 2,5-3, 2-guttulatis.

Hab. in caulibus aridis Solidaginis Virgaureæ, Kola Lap-
poniæ rossicæ.

4. **Mollisia fusco-rubra** (Rehm) Sacc. *Niptera* Rehm Ascom. Ill. n. 69, 1336
Winter Flora 1872, p. 526. — Cupulis gregariis vel basi congre-
gatis, hemisphæricis, ovatis v. difformibus, glabris, rugulosis, sessi-
libus extus fuscillis v. fusco-rubris, margine involuto v. incurvo,
fisso et hyalino-fimbriato (fimbriis basi pallide luteolis, antice hya-
linis, marginem dense fasciculatimque vestientibus), disco concavo-

luteo-rubro, 0,8-1,0 mm. latis; ascis lineari-cylindræis, sessilibus 8-sporis, 50-64 \approx 5-6; paraphysibus crassis, filiformibus, guttulatis, ascos æquantibus; sporidiis breviter cylindræis, rectis subcurvatisve, hyalinis, utrinque uni-guttulatis et paullulum attenuatis, 10 \approx 2.

Hab. in caulibus putridis Artemisiæ campestris prope Sugenheim Germaniæ.

5. **Mollisia erigeronata** Cooke Hedw. 1875, pag. 83, Disc. U. S. I, 1337 p. 290. — Gregaria, ceraceo-mollis, sessilis, cupula hemisphærica, demum applanata, atro-umbrina, nigrescens, $\frac{1}{2}$ mm. lata, disco livido cinereo, margine leniter elevato; ascis brevibus clavatis; sporidiis biseriatis v. stipatis, elliptico-linearibus, 10 \approx 2.

Hab. ad caules Erigeronis, New Jersey Amer. bor. (ELLIS).

6. **Mollisia cœrulans** QuéL. X Suppl. p. 13, t. IX, f. 10, Grev. 1879, 1338 p. 37. — Ascomatibus gregariis sæpe confluentibus, discoideis, 500-800 μ . diam., crassis, ceraceis, teneris, griseis, margine pruinoso, albescente; hymenio convexo-plano, obscure cœruleo-nigrescente; sporidiis acicularibus, 10 μ . longis, curvatis.

Hab. gregarie in caulibus plantarum majorum e. g. Eupatorii, Jura Galliæ.

7. **Mollisia astericola** C. et E. Grev. VI, p. 90. — Sparsa, mollis; cupulis demum applanatis, extus atro-brunneis; disco aquoso; ascis cylindræo-clavatis; sporidiis linearibus, leniter curvulis, 10 μ . longis; paraphysibus filiformibus.

Hab. in caulibus Asteris, New Jersey Amer. bor. — Ascoma $\frac{1}{2}$ -1 mm. lat. Forte huc spectat *P. Artemisiæ* Lasch.

8. **Mollisia sarmentorum** Sacc. F. Ven. Ser. IV, n. 72 (*Niptera*), F. 1340 ital. fig. 1383. — Cupulis minutissimis, gregariis, plano-scutellariibus, sessilibus, $\frac{1}{6}$ mm. diam., griseis margine pallidiore, excipulo fuscescente; ascis clavatis, 32 \approx 8, deorsum attenuatis, subsessilibus; paraphysibus cylindræis obvallatis, 4-sporis; sporidiis fusoideis, 11-12 \approx 3, curvulis initio 2-3-guttulatis, hyalinis.

Hab. in sarmentis Humuli Lupuli, Selva (Trev.) Ital. bor. — Affinis *M. Mercurialis* et *M. Polygoni* sed sporidiis quaternis amplioribusque præ ceteris differt.

9. **Mollisia urticicola** Phill. Disc. p. 177. — Gregaria, sessilis, sub-1341 hemisphærica, demum subplana, extus glabra, pallide rufo-brunnea, margine fimbriato, disco e pallido-cinereo brunneolo; ascis cylindræo-clavatis; sporidiis fusoideis vel cylindræis, 7 \approx 1; paraphysibus filiformibus.

Hab. in caulibus *Urticæ* locis inundatis, Shelton Rough Britanniae. — Ascoma 0,5 mm. lat.

10. **Mollisia lycopincola** Rehm Asc. n. 910. — Ascomatibus poculiformibus, dein discoideis, circularibus, rarius angulosis, margine tenui albido, mox inflexo, disco applanato extus nigricante, $\frac{1}{2}$ -1 mm. lat.; ascis clavatis, 30-40 \approx 5-6; sporidiis oblongis, rarius clavulatis, rectis curvulisve, utrinque uniguttulatis, 7-10 \approx 2-2,5; paraphysibus filiformibus. 1342

Hab. in caule putri *Lycopi europæi* prope Berlin Germaniæ (SYDOW). — Excipulum sphaerico-parenchymaticum, brunneum; ascomata macula nigra insidentia.

11. **Mollisia brachyspora** Sacc. Fung. Ven. Ser. IV, n. 74 (*Niptera*) 1343
F. ital. f. 111. — Cupulis sparsis gregariisque, minutis, $\frac{1}{6}$ - $\frac{1}{8}$ mm. diam., totis ochraceo-pallidis, margine pallidiore, ex urceolato patellaribus, sessilibus, levibus, glabris, disco concolori concaviusculo, siccis varie tortis v. conchiformibus, excipuli contextu anguste proenchymatico lutescente; ascis cylindraceo-clavatis vel subfusoides 50 \approx 6, p. s. 35 long.; paraphysibus parvis, filiformibus, obvallatis, 8-sporis; sporidiis inordinatis, ovoideis, 6-7 \approx 3 $\frac{1}{2}$ -4, plerumque 2-guttulatis, hyalinis.

Hab. in caule putrescente *Galeopsidis grandifloræ*, Selva (Treviso) Ital. bor. — Sporidiis subovoideis, brevibus, a ceteris speciebus mihi notis diversa. Ad *Pezizellam* accedit.

12. **Mollisia Grappensis** Sacc. Mich. I, pag. 442 (*Niptera*), F. ital. 1344
f. 1385. — Ascomatibus ceraceo-tenacellis, erumpenti-superficialibus, gregariis, sessilibus, scutellaribus, brunneis, disco margineque breve fibrilloso pallidioribus, $\frac{3}{4}$ -1 $\frac{1}{4}$ mm. diam., contextu excipuli minute celluloso fuligineo, marginis subradiante dilutiore; ascis cylindraceis, breve stipitatis, apice, tunica integra, rotundatis, 70-80 \approx 12-13; paraphysibus bacillaribus obvallatis, octosporis; sporidiis distichis, oblongo-cylindraceis, inæquilateralibus, 15-17 \approx 5, utrinque rotundatis, 3-nucleatis simulateque 1-septatis, hyalinis.

Hab. in caulibus emortuis *Myrrhidis odoratæ* in Monte Grappa, Bassano, Ital. bor. (BIZZOZERO). — Ascomatibus majusculis tenacellis, sporidiis ascisque crassis ab affinibus speciebus dignoscitur.

13. **Mollisia fuscidula** Sacc. F. Ven. Ser. IV, n. 73, F. ital. f. 1381 1345
(ut var. *M. Dehnii*). — Cupulis sparsis scutellaribus, minutis, $\frac{1}{3}$ - $\frac{1}{2}$ mm. diam., sessilibus, siccis margine contortis, ceraceo-duriusculis, disco griseo-lutescente, concavo, marginato, excipulo obscure fuli-

gineo, villo nullo insidentibus; ascis cylindraceo-clavatis, 50-60 \approx 6-7, brevissime stipitatis; paraphysibus filiformibus obvallatis, 8-sporis; sporidiis inordinate distichis, fusoides, 10-12 \approx 2 $\frac{1}{2}$ -3 rectiusculis hyalinis.

Hab. in caule emortuo Vincetoxici a Vittorio (Treviso) Ital. bor. — Affinis quoque *M. Polygoni*, a qua cupula pallidior, villi defectu et sporidiis longioribus satis differt.

14. **Mollisia Euphrasiæ** (Fuck.) Sacc. *Nipt. Euphrasiæ* Fuck. Symb. 1346 mycol. p. 293. — Cupulis gregariis, sessilibus, 2 mm. latis, irregularibus, extus rugulosis, fusco-nigris, margine distincto, denticulato, demum complicato, disco griseo; ascis anguste elongatis, 8-sporis, 64 μ . long.; paraphysibus asci longitudine, simplicibus; sporidiis farctis, anguste clavatis, sæpe curvatis, continuis, multiguttulatis, hyalinis, 18 \approx 2-3.

Hab. in caulibus siccis adhuc stantibus Euphrasiæ luteæ pr. Budenheim Rhenogoviæ.

15. **Mollisia Dehnii** (Rabenh.) Karst. M. F. I, p. 20, *Peziza* Rabenh. 1347 bot. Zeit. 1842, p. 12. — Gregaria, innato-sessilis, demum planiuscula, fusca, sicca nigricans, disco livido-cinereo, sicco sæpe subgilvo, 0,5-1 mm. lat.; ascis cylindraceo-clavatis, 50-60 \approx 6-7,5; sporidiis distichis, fusoides-elongatis, simplicibus, sæpe guttulatis, leniter curvulis v. subrectis, 10-16 \approx 3.

Hab. in foliis caulibusque Potentillæ argenteæ, pulchellæ, norvegicæ, emarginatæ in Germania, Fennia, Spetsbergia et Amer. bor. — Sporidia in exempl. amer. 20 μ . long. Sec. Rehm Ascom. n. 759, paraphyses clavulatæ ascos superantes; sporidia 12-15 \approx 3; asci 45-50 \approx 8-9.

16. **Mollisia montiæcola** (Berk.) Sacc. *Peziza montiæcola* Berk. Fl. 1348 New Zeal. p. 201. — Atra, expansa, margine angusto; ascis clavatis amplis; sporidiis subcymbæformibus endochromate partito.

Hab. in Montia fontana putri, Ahuriri, Eastern Coast Novæ Zelandiæ (COLENSO). — *Pyrenopezizæ atratæ* affinis; an ergo hujus generis?

17. **Mollisia microstigma** Passer. Diagn. Fungh. nuov. pag. 258. — 1349 Sparsa vel gregaria, punctiformis, mollis, fusca, cupula madore aperta, disco concavo pallidior, margine tumido integro, vix extus rugulosa; ascis clavato-fusififormibus, 8-sporis; sporidiis fusiformi-lanceolatis integris; paraphysibus ascorum longitudine.

Hab. in caulibus siccis Trifolii pratensis, Vigheffio pr. Parma Ital. bor.

18. **Mollisia Mercurialis** (Fuck.) Sacc. *Nip. Mercurialis* Fuck. Symb. 1350
mycol. pag. 293. — Cupulis sessilibus, 1 mm. latis, primo clausis
globosisque, dein apertis, subplanis, extus atris, squamulosis, mar-
gine connivente, albido, fimbriato, disco griseo; ascis oblongo-cla-
vatis, 8-sporis, $44 \approx 4$; sporidiis oblique monostichis, subcylindra-
ceis, rectis, hyalinis, $10 \approx 2$.

Hab. in caulibus putridis Mercurialis perennis in Rheno-
govia et Britannia.

19. **Mollisia melanogramma** (Boud.) Sacc. *Spilopodia melanogramma* 1351
Boud. Disc. charn. p. 32. — Ascomatibus minutis 0,25-0,50 mm.
diam., nigris, margine irregulari, fimbriato macula nigra elongata,
lineari insidentibus, extus rugosis, intus cinereis v. olivaceis; ascis
magnis, cylindraceis, basi vix attenuatis, octosporis, 80-82 \approx 9-10,
paraphysatis; paraphysibus indistincte septatis, fasciculatis; spori-
diis oblongis, granulosis, 10-12 \approx 3-4, hyalinis.

Hab. in caulibus senescentibus emortuis Mercurialis per-
ennis in Gallia. — An *Pyrenopeziza*?

20. **Mollisia rubidula** Rehm Ascom. Alp. n. 23. — Minuta, sessilis, 1352
plerumque oblonga, rarius rotundata, fusca v. fusco-nigricans, hu-
mida explanata, dilacerato-marginata, margine fusca, disco rubi-
dulo, c. 0,2 mm. diam., gregaria contextu parenchymatico, fuscido-
dulo; ascis clavatis, subcurvatis, 8-sporis, 70 \approx 10; sporidiis obtuse-
ellipticis, 1-cellularibus, hyalinis, distichis, 12-14 \approx 6; paraphysibus
filiformibus, subcurvatis, apice haud incrassatis.

Hab. ad caulem siccum Campanulæ?, Mittagkogel pr. Mit-
telberg in valle Piz alpium tyrolens. alt. c. 2000 m. (REHM).

21. **Mollisia plicata** (Rehm) Sacc. *Niptera plicata* Rehm Ascom. n. 1353
570. — Solitaria vel gregaria, sessilis, primitus sphæroidea, sub-
clausa, dein urceolata, sicca plicata, fusco-cervina, margine albido
connivente, humectata concaviuscula, margine tenui albido subdi-
lacerato cincta, orbicularis; disco livido-albo, contextu parenchyma-
tico fuscidulo, 1 mm. diam.; ascis clavatis, apice incrassatis, 8-
sporis, 45-60 \approx 6-9, jodo cœrulescentibus; sporidiis ellipticis, plus
minusve obtusis, rectis vel subincurvatis, distichis, 1-cellularibus,
hyalinis, 9-12 \approx 2-3; paraphysibus obtuse lanceolatis, plus minusve
ascos superantibus, 4-5 μ . crass., hyalinis, in fungo evoluto vix
rite cognoscendis.

Hab. ad caules putrescentes Aconiti Napelli et Angeli-
cæ in M. Rigi Helvetiæ, in alpinis Tyrolæ, Allgoviæ et in al-
pibus transylvanicis. — Forma **albo-marginata** Rehm in Hedwigia

1885, p. 231: ascomatibus plerumque gregariis, sæpe confluentibus, distincte albo-marginatis, majoribus quam in typo sæpe elongatis, parenchymatico-fusco-contextis, fibris marginalibus distantibus septatis, c. 30-40 \approx 3, subhyalinis, creberrimis. In caulibus *Aconiti* in Hungaria.

22. **Mollisia? Alismatis** (Pers.) Sacc. *Peziza Alismatis* Pers. M. E. 1354
I, p. 301, *Patellaria* Fr. Syst. Myc. II, pag. 161. — Carnoso-tremellosa, sessilis, minuta, glabra, ex cinereo purpurascens, cupulis depressis, margine subcomplanatis.

Hab. in caulibus siccis *Alismatis Plantaginis* emortuis in aqua adhuc persistentibus, vere in Gallia. — Cupulæ discus passim pulvere rubello tectus.

23. **Mollisia? Browniana** (Blox.) Sacc. *Peziza Browniana* Blox. in B. 1355
et Br. Ann. N. H. 1865, n. 1072. — Cupulis hemisphæricis, sessilibus, colore corneo; margine pallidiori, ciliato; disco pallido; sporidiis breviter fusiformibus, hyalinis, 11 μ . long.

Hab. in caulibus emortuis *Epilobii hirsuti* Twycross. Britannia. — *M. lacustri* proxima dicitur sed margo pilis flexuosis delicatis ciliatus. «An *Trichopeziza?*»

II. Foliicolæ (non graminicolæ).

24. **Mollisia Pumilionis** Rehm Ascom. Alp. n. 18. — Gregaria, sessilis, 1356
substipitata, sphæroidea, demum concavula, sicca fusco-cervina, humida disco fuscidulo, contextu parenchymatico, fusco, c. 0,8 mm. diam.; ascis clavatis, apice incrassatis, 8-sporis, 75 \approx 9, apice jodo violascente; sporidiis obtuse ellipticis, rectis v. subcurvatis, 1-cellularibus, hyalinis, 12-14 \approx 3; paraphysibus filiformibus, laxis apice haud incrassatis, hyalinis.

Hab. ad acus *Pini pumilionis* putridos, Haspelmoos prope Augustam Vindelicorum seu Augsburg (BRITZELMAYR). — «An *Pyrenopeziza?*»

25. **Mollisia Pinastri** (C. et P.) Sacc. *Peziza Pinastri* C. et P. Disc. 1357
U. S. I, p. 297. — Sessilis, molliuscula, sparsa, initio pruinâ albidâ evanidâ conspersa, mox nuda, griseo-brunnea, hemisphærica dein plana, margine sæpe lacerato; disco pallide griseo; ascis tereti-clavatis; sporidiis anguste fusoides, obtusis, 12-15 μ . longis.

Hab. in foliis *Pini rigidæ* New York Amer. bor. (PECK).

26. **Mollisia minutissima** Karst. Symb. Fenn. XXII, p. 15. — Sparsa 1358
v. subgregaria, sessilis, cupula plana v. concaviuscula, nuda, palle-

scens, sicca fusco-pallida, disco dilutiore, circiter 0,1 mm. lata; ascis clavatis, 36-40 \approx 6-7; sporidiis 7-8 \approx 1-2.

Hab. in foliis putrescentibus Comari palustris in regione mustialensi juxta lacum Salois (K. STARBAECK).

27. **Mollisia Earliana** (Ell. et Ever.) Sacc. *Peziza Earliana* Ell. et 1359

Ever. Torr. Club. 1884, p. 74. — Erumpens, sparsa, hepatica, sicca obscurior, epidermide arcte cincta, dein expansa, disco pallido, margine vix eroso; ascis sessilibus oblongis, 50-55 \approx 12; sporidiis tereti-oblongis, obtusiusculis, 3-4-nucleatis, hyalinis, 15-18 \approx 2-3; paraphysibus clavulatis, obtusis.

Hab. in pag. inf. foliorum emortuorum Fragariæ, Anna Illinois Amer. bor. (EARLE). — Ascoma 1,2-1,7 mm. lat.

28. **Mollisia Cotoneasteris** Starbäck in Bot. Centralblatt 1888, I, p. 1360

351. — Superficialis v. basi innata, sparsa vel subgregaria, sphaeroidea et clausa, demum ore orbiculari v. perlato aperta, cinereo-fusca, sicca nigricans, disco pallidiore, 0,3-0,5 mm. lat.; ascis cylindraceo-clavatis, 55-64 \approx 8-10; sporidiis octonis, ellipsoideis vel elongato-ellipsoideis, monostichis vel superne distichis, eguttulatis, 10-15 \approx 5-6; paraphysibus numerosis, 2-2,5 μ . cr. apice subclavato.

Hab. ad folia arida Cotoneasteris vulgaris in regione upsaliensi Sueciæ. — «An *Pyrenopeziza*?»

29. **Mollisia Trollii** (Wettst.) Sacc. *Micropeziza Trollii* Wettst. Fung. 1361

nov. Austr. I, p. 14, t. II, f. 16-19. — Gregaria v. solitaria, carnosa, orbicularis vel elliptica, 0,5-1 mm. diam., initio velata, mox erumpens, sessilis, plana v. subconcava, luteola, demum fuscescens, margine obscuriori, crenulato; ascis oblongo-clavatis, 60-70 \approx 10-14; sporidiis cylindraceutis, curvulis, obtusis, 14-20 \approx 5-6, sæpe 2-guttulatis.

Hab. in foliis petiolisque putridis Trollii europæi ad pedem montis Hochswab Austriae. — Sec. Rehm non differt a *Necvia rubella*.

30. **Mollisia singularis** Peck 25 Rep. St. Mus. pag. 142. — Minuta, 1362

ceracea, sessilis, applanata v. convexa, vix marginata, macula indefinita pallida insidens, sordide grisea v. pallida, succineo-brunnea; ascis tereti-clavatis, 50-70 \approx 7-10; sporidiis confertis vel distichis, oblongis, subinde uno apice acutioribus, 10-15 \approx 4-5; paraphysibus filiformibus.

Hab. in pagina inf. foliorum viventium Ranunculi hispidi East Berne Amer. bor. — «An forma *Pseudopezizæ Ranunculi*, monente ipso auctore?»

31. **Mollisia islebiensis** (J. Kunze) Sacc. *Pyrenopeziza islebiensis* J. 1363
Kunze Fung. sel. exs. n. 64 (absque diagnosi). — Ascomatibus superficialibus, patellatis, sessilibus, vix $\frac{1}{2}$ mm. lat., plumbeis, dein nigricantibus; ascis....; sporidiis ovoideis, inæquilateralibus, hyalinis, 9-10 \approx 4.

Hab. in foliis aridis *Helianthemum Chamæcisti* in Saxonia.

32. **Mollisia Rehmii** Sacc. *Mollisia fuscidula* Rehm Ascom. Alp. n. 1364
17, nec Sacc. — Gregaria, minuta, sessilis, c. 0,2 diam., orbicularis, humida marginata, patellaris, sicca corrugata, fusca, disco vix dilutiore, contextu parenchymatico; ascis clavatis, apice incrassatis, 8-sporis, 45 \approx 8, apice jodo cœrulescente; sporidiis fusoideo-ellipticis, 1-cellularibus, rectis, hyalinis, distichis, 8 \approx 2; paraphysibus apice subincrassatis et fuscidulis.

Hab. ad paginam infer. foliorum putridorum *Vaccinii* uliginosi prope glaciem æternam, Taschach-Gletscher in valle Piz alpium tyrolens., c. 2000 m. (DR. REHM).

33. **Mollisia Uredo** Rehm Ascom. Alp. n. 22. — Gregaria in acervulis 1365
Uredinis instar, patellæformis, submarginata vel concava in statu sicco, humida convexula, immarginata, sicca rufo-fusca v. fuscidula disco parum dilutiore, humida flavo-fuscidula, sessilis, c. 0,3 mm. diam., contextu parenchymatico fuscidulo; ascis clavatis, apice incrassatis et obtuse acuminatis, 8-sporis, 50-60 \approx 8; sporidiis haud plane evolutis visis, fusoideo-elongatis, 1-cellularibus (?), nucleis 3 præditis, parallelis, hyalinis, 16-18 \approx 1-5; paraphysibus ascos superantibus, subramosis, subincurvatis, apice non incrassatis.

Hab. ad paginam inf. foliorum putridorum *Vaccinii* uliginosi, Taschach-Gletscher in valle Piz alpium tyrolensium, alt. c. 2000 m. (DR. REHM).

34. **Mollisia nemophila** Sacc. Fung. Ven. Ser. IV, n. 75, Fung. ital. f. 1366
1382 (*Niptera*). — Cupulis amphigenis, præcipue nerviculis, sparsis, scutellaribus, minutis $\frac{1}{5}$ - $\frac{1}{7}$ mm. diam., totis fulvo-ferrugineis, sessilibus, minute rugulosis, basi hyphis brevibus parvis articulatis fuligineis cinctis; excipuli contextu laxo parenchymatico, fuligineo; ascis oblongo-clavatis, subsessilibus, 55 \approx 8, 8-sporis pseudoparaphysibus crasse filiformibus, obvallatis; sporidiis distichis, cylindraceis v. subfusoideis, 14 \approx 3-3 $\frac{1}{2}$, utrinque rotundatis, 4-guttulatis, rarius 2-nucleatis simulateque 1-septatis, hyalinis.

Hab. in foliis putrescentibus *Carlinæ vulgaris* in silva Montello (Treviso) Ital. bor.

35. **Mollisia parasitica** (Wint.) Sacc. *Niptera parasitica* Wint. Hedw. 1367

1884, pag. 173. — Cupulis in macula irregulari, plerumque angulato-rotundata, 2-6 mm. lata, in foliorum pagina inferiori pallide lutea, in pagina superiori arescendo albida, fusco-cincta et zona luteola indeterminata circumdata, hypophyllis, gregariis, sessilibus, disciformibus, primo submarginatis, demum immarginatis, convexiusculis, subrepandis, ceraceis, luteo-fuscis, disco pallidiore siccis, irregularibus, sæpe umbilicatis undulatisque, obscurioribus, fusco-atris, usque $\frac{1}{2}$ mm. latis; ascis clavatis, in pedicellum sublongum attenuatis, 8-sporis, $75-88 \approx 16$; sporidiis inordinatis, ovato-ellipticis, parum inæquilateralibus, hyalinis, $14 \approx 7$; paraphysibus filiformibus, ascos æquantibus.

Hab. in foliis vivis *Melastomaceæ* cujusdam prope S. Francisco prov. S. Catharina Brasilæ.

36. **Mollisia nervicola** (Desm.) Gill. Disc. p. 128, *Peziza nervicola* 1368

Desm. 8 Not. p. 5. — Amphigena, subnervisequa, sessilis, ceraceo-mollis, minuta, glabra, griseo-brunnea, primo subglobosa, ore albicante, adulta plana, margine subprominente denticulato, disco albedo pallescente; ascis clavatis, minutis, 50μ . longis; sporidiis oblongis, linearibus, 10μ . longis.

Hab. in foliis exsiccatis *Quercus* et *Fagi* in Gallia bor.

37. **Mollisia prinicola** E. et E. Journ. Myc. 1888, pag. 99. — Hypo- 1369

phylla, subgregaria, carnosomembranacea, hepatico-brunnea, 0,5 mm. diam., fibroso-contexta, puncto centrali affixa; ascis teretibus, sessilibus, $35 \approx 6$; sporidiis distichis, clavato-fusoideis, continuis, hyalinis, $8-11 \approx 1,5$; paraphysibus filiformi-clavulatis.

Hab. in foliis emortuis *Quercus Prini*, Louisiana Amer. bor. (LANGLOIS).

38. **Mollisia olivacea** (Speg.) Sacc. *Pyrenopeziza olivacea* Speg. F. 1370

Argent. III, n. 80. — Applanato-patellaris, minuta $\frac{1}{4}-\frac{1}{5}$ mm. diam. sicca non vel vix rugulosa, inferne fuligineo-atra, superne (disco) olivascens, tenacella, matrici arcte adnata, sessilis; ascis cylindraceo-clavatis, sursum attenuato-rotundatis, deorsum attenuato-pedicellatis, $50 \approx 5-6$, apice jodo cærulescente; paraphysibus filiformibus apice coalescentibus; sporidiis cylindraceo-ellipticis, inæquilateralibus, utrinque plus minusve acuminato-rotundatis ac 1-guttulatis, hyalinis, $12 \approx 3$.

Hab. in foliis caulibusque dejectis *Eryngii agavifolii* in paludosis à la Boca del Riachuelo Argentina.

39. **Mollisia? Saniculæ** (Wallr.) Sacc. *Phlyctidium Saniculæ* Wallr. 1371

Fl. crypt. n. 2328. — Ascomatibus hypophyllis, primum insculptis

fusciscentibus, dein adnatis orbiculatis convexiusculis, nigris opacis, confertissimis, minutis, maculam nigro-fuscam mentientibus, demum deplanatis, verticem irregulariter reclinantibus discumque planum flaventem, margine scisso nigro cinctum recludentibus.

Hab. ad Saniculæ europææ foliorum vegetorum faciem inferior. in Thuringia.

40. **Mollisia Iridis** (Rehm) Sacc. *Micropeziza Iridis* Rehm Ascom. 1372

Lojk. n. 161. — Sicca oblonga v. rotundata, plus minusve hemisphærice contracta, humida explanata v. concava, sessilis, gregaria, subfusca, margine viridi-flavo cincta, disco fuscidulo, contextu parenchymatico fusco, c. 0,2 mm. diam.; ascis clavatis, apice incrassatis, 4-8-sporis, $50 \approx 9$, apice jodo cœrulescente; sporidiis elliptico-elongatis, haud acuminatis, rectis, 1-cellularibus, nucleis magnis 1-4 præditis, hyalinis, distichis, $18-21 \approx 4$; paraphysibus filiformibus, hyalinis, superne sensim $3,5 \mu$. incrassatis.

Hab. ad folia et caules putridos Iridis spuria prope Tököl Hungariæ (LOJKA).

41. **Mollisia olivaceo-lutea** Berk. North Am. Fungi n. 746 et Cooke 1373

Disc. U. S. I, pag. 297. — Minuta, erumpens, cito decidua, extus olivacea, margine albido; disco concavo, pallide luteo.

Hab. in foliis emortuis in Carolina inf. Amer. bor.

III. Strobilicolæ.

42. **Mollisia fallax** (Desm.) Gill. Disc. p. 119, Phill. Disc. p. 174, *Pe-* 1374

ziza fallax Desm. 11 Not. p. 367. — Suberumpens, minuta, gregaria v. sparsa, sessilis, glabra, extus brunneo-fusca, junior plano-scutellata, dein convexa, flexuoso-sublobata, sicca concava, disco humido griseo, sicco ochroleuco vel brunneo-lutescente; ascis clavatis, 50μ . long.; sporidiis oblongis, rectis v. subcurvatis, $10 \approx 2$.

Hab. in ramis exsiccatis Pini silvestris, sæpius vero in ejusdem strobilis, in Gallia, Britannia. — Ascoma $\frac{1}{2}$ -1 mm. lat.

43. **Mollisia suecica** Starbäck in Bot. Centr. I, 1888, p. 350. — Su- 1375

perfacialis, gregaria, primo sphæroidea et clausa deinde concava, sicca depressa, margine connivente, atra, disco pallidiore, 0,1-0,4 mm. lat.; ascis cylindræis vel cylindræo-clavatis, $44-51 \approx 5-9$; sporidiis octonis, elongatis vel fusoideo-elongatis, biguttulatis vel multiguttulatis v. interdum eguttulatis, distichis-subdistichis, interdum in parte inferiore monostichis, $6-9 \approx 2,5-3,5$; paraphysibus numerosis multiguttulatis, apice incrassatis, $2-2,5 \mu$.

Hab. ad squamas conorum *Pini silvestris* in insula Sandon Sueciæ, sat frequens. — « An *Pyrenopeziza?* »

44. **Mollisia rubicunda** Rehm Ascom. Alp. n. 19. — Sparsa, sessilis, 1376
orbicularis, patellaris plana, margine spurio, sicco tumidulo cincta, rubicunda, circ. 1 mm. diam., contextu parenchymatico fuscidulo; ascis clavatis, 8-sporis, $60 \approx 7$; sporidiis obtuse ellipticis, 1-cellularibus, hyalinis, mono- v. subdistichis, $8 \approx 4,5$; paraphysibus filiformibus, ascos superantibus, clavula elliptica, fuscidula.

Hab. ad conos putridos *Abietis excelsæ* in silva prope Biring pr. Augustam Vindelicorum (BRITZELMAYR).

IV. Ramicolæ.

45. **Mollisia myocopron** Speg. Fung. Fueg. n. 341. — Cupulis dense 1377
sparsis, applanato-expansis, discoideis, 9,5-1 mm. diam. tenui-membranceis, sessilibus late arcteque matrici adnatis, glabris, levibus, contextu majusculè parenchymatico olivaceo-fusco; ascis cylindraceo-clavulatis, antice subtruncato-rotundatis crassiusculè tunicatis, postice breviter crasseque attenuato-pedicellatis, $40 \approx 3-3,5$, octo-sporis; paraphysibus filiformibus obvallatis; jodi ope nulla; sporidiis recte distichis, obovatis vel elongato-ellipticis superne obtuse rotundatis, inferne acutiusculis, $5-7 \approx 1-1,5$, rectis v. inæquilateralibus, hyalinis, continuis.

Hab. in ramis fagineis decorticatis ad tuguria incolarum in Gertrude Cove Fuegiæ.

46. **Mollisia fallens** Karst. M. F. I, p. 191, *Trochila fallens* Karst. 1378
Symb. p. 217 et 244. — Gregaria, subinde confluens, subimmarginata, sessilis, glabra, plana v. convexiuscula, sicca varie contracta et concava v. concaviuscula, grisea, vulgo basi subfuscescens, sicca fuscescens, margine sæpe albidiori, disco griseo, sicco cinerescente, 0,4-0,6 mm. lat.; ascis cylindraceo-clavatis, $50-60 \approx 7-9$, apice jodo vix tinctis; sporidiis distichis, oblongatis, rectis vulgo guttulatis, $9-14 \approx 3,5-4,5$.

Hab. supra corticem ramorum dejectorum *Salicis* in Mustiala Fenniæ. — Ab affini *Mollisia cinerea* cupulis minoribus tenuioribusque, sporidiis majoribus aliisque notis differt.

47. **Mollisia ramealis** Karst. M. F. I, p. 187. — Gregaria, sessilis, 1379
convexa aut plana, subtus fusca v. fuscescens, disco in statu vegeto albedo vel albo, siccitate ochraceo, orbicularis aut interdum subirregularis, circiter 1 mm. lat.; ascis anguste clavatis, apice attenuatis, $75-90 \approx 7-8$, obturaculo minutissimo, jodo dilute cœru-

lescente; sporidiis distichis, fusoideo-bacillaribus, rectis v. leniter curvulis, guttulatis vel spurie tenuiter uniseptatis aut eguttulatis, chlorino-hyalinis, 14-30 \times 2-3; paraphysibus parcis, sursum levissime incrassatulis.

Hab. supra cortices ramulorum Betulæ exsiccatorum in Fennia meridionali.

48. **Mollisia stictella** S. et S. Mich. I, p. 425, F. ital. f. 1387 (*Niptera*) 1380
ptera). — Ascomatibus gregariis, initio peridermio velatis dein erumpentibus, denique prorsus superficialibus, scutellatis, undulatis, sessilibus, ceraceis, siccis contortis, disco concaviusculo, sordide lutescente; excipuli contextu parenchymatico ad marginem prosenchymatico, fuligineo; ascis cylindraceo-clavatis, brevissime noduloso-stipitatis, 55-65 \times 6-7; paraphysibus bacillaribus obvallatis, octosporis; sporidiis oblique monostichis vel distichis, oblongo-cylindraceis clavulatisve, 8-14 \times 2-3, granulosis hyalinis.

Hab. in ramulis Alni incanæ emortuis, Pieve di Soligo, Ital. bor. — Affinis *Mollisiæ cinereæ*, a qua imprimis ascomatibus initio tectis statim dignoscitur, et Sticteis accedit.

49. **Mollisia benesuada** (Tul.) Phill. Disc. p. 174, *Peziza benesuada* 1381
 Tul. Am. Sc. Nat. 1853, t. 15, f. 8-9, *Niptera benesuada* (Tul.)
 Rehm Ascom. n. 756. — Erumpens, sessilis, gregaria v. subfasciculata, subhemisphærica, dein expansa, demum convexa, difformis, ceracea, extus glabra, aqueose cinerea, disco pallido vel brunneo; ascis tereti-clavatis, 45 \times 6; sporidiis fusoideis v. oblongo-fusoideis, hyalinis, 9-10 \times 2-2,5, distichis; paraphysibus filiformibus, 2 μ . cr.

Hab. in ramis emortuis Alni in Gallia, Britannia et Germania. — Sec. Phillips l. c. sporulæ seu spermatia raro occurrunt. Species *M. cinereæ* et *fallaci* peraffinis.

50. **Mollisia aquosa** (B. et Br.) Phill. Disc. p. 172, *Peziza aquosa* 1382
 B. et Br. Ann. Nat. Hist. n. 1326, t. 20, fig. 19. — Initio clausa, dein expansa v. concaviuscula, viridi-brunnea, levis; disco aqueose-griseo; ascis elongatis, 50 μ . longis; sporidiis distichis, ovoideo-apiculatis, 5-6 \times 2,5-3,5, jodi ope aurantiis.

Hab. ad ramos salicinos ad *Lasiosphæriam hirsutam* in Britannia. — Cupulæ $\frac{1}{2}$ - $\frac{3}{4}$ mm. diam.

51. **Mollisia tyrolensis** Sacc. *Micropeziza fuscidula* Rehm Ascom. 1383
 Alp. n. 26. — Gregaria, sessilis, sicca plerumque longitudinaliter complicata, fusco-nigra, humida explanata, orbicularis, disco rubro-fusco, margine sublacerato, obscuriore, tenui cincta, contextu prosenchymatico (?), c. 0,4 mm. diam.; ascis clavatis, 8-sporis, 45-

50 \approx 9; sporidiis oblongis, obtusis, subcurvatis, hyalinis interdum mucro involutis, 1-cellularibus, distichis, 9 \approx 3; paraphysibus filiformibus, clava piriformi, 4-5 μ . crassa, plerumque fuscidula instructis.

Hab. ad ramulos siccos, decorticatos Rhododendri ferruginei prope Kühtai (Oetz) alpium tyrolensium alt. c. 2000 m. (DE REHM).

52. **Mollisia rhododendricola** Rehm Ascom. Alp. n. 24. — Gregaria, 1384
erumpens, demum sessilis, plana, ceracea, sicca subcomplicata vel plana, humida explanata, fusco-rubra, margine spurio vix dilutiore, extus fuscidula, contextu parenchymatico, fusco, c. 1 mm. diam.; ascis clavatis, subcurvatis, 8-sporis, 90 \approx 12, apice jodo cœrulescente; sporidiis ellipticis, nucleis magnis 2 præditis (an demum 2 cellularibus?), hyalinis, distichis, 16-18 \approx 6; paraphysibus filiformibus, superne sensim 3 μ . crassis et flavidulis.

Hab. ad ramum siccum Rhododendri ferruginei prope Kühtai (Oetz) alpium tyrolensium, alt. c. 2000 μ . (DR. REHM).

53. **Mollisia miltophthalma** B. et C. North Am. Fung. n. 741 et Cooke 1385
Disc. U. S. I, p. 296 (ex errore *multophthalma*). — Minuta hemisphærica extus nigra intus cinnabarina; ascis linearibus paraphysibusque flexuosis; sporidiis oblongis minutis hyalinis.

Hab. ad ramos Corni floridæ in Carolina inf. Amer. bor.

54. **Mollisia discolor** (Mont.) Phill. Disc. p. 175, *Patellaria discolor* 1386
M. et Fries, Notice etc., in Ann., 2, V, pag. 290 et Syll. Crypt. n. 644. — Ceracea, suberumpens, gregaria, sessilis, plano-patellata, extus umbrino-fusca; disco cerino-lutescente; ascis clavatis; sporidiis fusiformibus, hyalinis, 4-guttulatis, 8 \approx 2 (Phill.).

Hab. ad ramos Corni sanguineæ ad ligna Sedan Galliæ et in Britannia, nec non ad caules Polygoni pensylvanici in Carolina sup. — Sec. Karst., sporidia 10-15 \approx 2-3, vulgo (spurie?) 1-septata. — ***M. chilensis** Nyl. Pez. pag. 79 nota, *Pat. discolor* Mont. l. c. (quoad stirpem chilensem): sporidiis multo majoribus, 3-septatis (spurie?). Ad ramos, Valdivia in Chile.

55. **Mollisia subcornea** Phill. et Harkn. Calif. pag. 2. — Sparsa vel 1387
gregaria, sessilis, patellata, rufo-cornea, margine crasso levi; ascis clavatis; sporidiis distichis oblongo-fusoideis, simulate uniseptatis, 10-12 \approx 3; paraphysibus filiformibus.

Hab. in ramulis emortuis Eucalypti Globuli in California. — Ascomate $\frac{1}{2}$ -1 mm. lat. senectute sæpius coalescentia.

56. **Mollisia viticola** (Pers.) Sacc. *P. viticola* Pers. Myc. Eur. p. 309, 1388

Fr. Syst. Myc. II, pag. 151. — Sessilis, subcoriacea, crassiuscula; cupulis planiusculis sordide nigris, margine tenui cinctis, disco superficiali rufo-carneo.

Hab. in rimis ramorum *Vitis viniferæ* in Germania et Gallia. — Subiculum tenue, nigrescens, subpulverulentum. Cupulæ subseriatae, irregulares, *P. atro-virentis*, præsertim colore, haud absimiles.

57. **Mollisia sensitiva** (Hazsl.) Sacc. *Niptera sensitiva* Hazsl. Einig. 1389
Disc. p. 12. — Uda disciformis, adpressa, sicca sphæroideo-contracta, disco flavido, margine nigrescente; ascis cylindræo-elongatis, sessilibus; sporidiis cylindræeis, $10 \approx 2-3$.

Hab. in ramis putridis Rubi Idæei pr. Eperies Hungariæ.

58. **Mollisia ribesia** Cooke et Ph. Grevill. IX, pag. 105. — Sparsa, 1390
atra, ceræeo-mollis; cupulis globosis, arcte apertis, dein concavis, hemisphæricis, glaberrimis, 1-4 mm. diam.; ascis clavatis; sporidiis exiguis, hyalinis, $5 \approx 1$.

Hab. ad ramos Ribis rubri in Arduennis (LIBERT). — « An *Pyrenopeziza?* »

59. **Mollisia umbonata** (Pers.) Sacc. *P. umbonata* Pers. ic. et descr. 1391
fung. p. 35, t. 9, f. 5, Syn. p. 669, Myc. Eur. p. 315, A. S. p. 539, *P. nigro-olivac.* Schwein. l. c. n. 1220. — Sessilis, glabra, albido-cæsia, disco subgelatinoso, ut plurimum umbonato.

Hab. ad ramos putridos et ligna in Germania et Carolina Amer. bor. — Maxime affinis priori, sicca vix distinguenda. In lignis fila observantur nigra, radiatim diffusa, centro cupularum affixa. Cupula 6-10 mm. lata, orbicularis v. lobato-rotundata, margine involuta elevato subcrenulato, extus ceterum glabra. Intus cinereo-nigra, demum tota nigrescit. — Var. **amenticola** cfr. Fuck. Symb. p. 292: ascis elongato-clavatis, stipitatis, $56 \approx 4-8$ -sporis; sporidiis inordinatis, cylindræeis, subcurvatis, $4 \approx 2$, hyalinis. In amentis femineis putridis Alni glutinosæ in Rhenogovia.

60. **Mollisia cæspiticia** Karst. M. F. I, p. 188. — Plerumque cæspitose 1392
aggregata, planiuscula, flexuoso-sublobata, cinereo-pallida, basin versus fuscescens, sicca concava, disco (sicco) centro fuliginoso v. subnigrescente v. ochroleuco, 0,5-1,5 mm. lat.; ascis cylindræo-clavatis, $30-40 \approx 3-4,5$, apice jodo non cœrulescente; sporidiis fusoidæo-elongatis, rectis vel leviter curvulis, guttulatis, $4-6 \approx 1$; paraphysibus parum notabilibus.

Hab. ad ramos Salicum, Ribis rubri, R. nigri et Sambuci racemosæ, Humuli in Fennia et Gallia. — Pro *Mollisia*

cinerea primo obtutu facile sumitur, sed notis micrologicis et vegetatione admodum differt. Variat sporidiis paullo majoribus, $8 \approx 2$. Ad *Pezizellam* vergit.

V. Ligni-corticicolæ.

61. **Mollisia cinerea** (Batsch) Karst. M. F. I, pag. 189, *P. cinerea* 1393
 Batsch Cont. I, p. 196, f. 137, Sowerb. t. 64, Nees Syst. f. 269,
P. callosa Bull. Champ. pag. 252, t. 416, f. 1, Batsch. Cont. II,
 p. 95, f. 219 (icon non obstat.) Flor. Dan. t. 1490, f. 2, *P. plana*,
P. alnea et *obconica* Schum. l. c. pag. 417, 423, *P. subcarneo-*
pallens A. S. p. 307, *P. salicaria* Pers. Nipt. cin. Fuck. Sacc. F.
 it. f. 1376. — Sessilis, mollis, minuta, scutellata, cinerea, margine
 integerrimo albidiore; ascis tereti-clavatis, $40-50 \approx 4-6$; sporidiis
 oblongo-teretiusculis, rectis curvulisve, hyalinis, $6-12 \approx 1-2,5$.

Hab. ad ligna, ramos, caules et quascumque quisquillas putrescentes in Suecia, Germania, Belgio, Gallia, Italia, Britannia, Brasilia, Nova Zelandia, Tasmania, Ceylon, Africa austr., Kamtschatka, America boreali. — Sparsa vel gregaria, carnosomollis, sed non vere tremellosa; junior urceolata, dein dilatata omnino plana, regularis, margine integerrimo. Color variat in humidis fuscus et sæpius cinereus, in siccis expallens, albicans. *P. nivea* et *grisea* Batsch El. f. 55 et 56, etiam ad hanc prope accedunt. Plures formas, forte specificè distinguendas notavi in Mich. pl. 1. — a. **luteola**: ascomatibus griseis $\frac{3}{4}$ mm. diam., margine undulato, disco amœne cerino; ascis clavulatis, $25-35 \approx 4-5$; sporidiis oblongo-cylindræis, 2-guttulatis, $5-6 \approx 1-1\frac{1}{4}$. In ramis decorticatis Castaneæ in Italia et Germania. — b. **grisella**: ascomatibus minutis, depressis $\frac{1}{3}$ mm. diam., griseis, disco pallidiorè; ascis clavulatis, $40-45 \approx 4$; sporidiis cylindræis, $9-10 \approx 1\frac{1}{4}-2$, 2-guttulatis, rectis. In caulibus Eupatorii cannabini, Conegliano, Ital. bor. — c. **culmina**: ascomatibus depressis $\frac{1}{2}$ mm. diam., aquose albidis extus fuscidulis; ascis cylindræo-clavulatis, $35-45 \approx 3\frac{1}{2}-4$; sporidiis cylindræis, curvulis, $5-6 \approx 1\frac{1}{2}$. In culmis putrescentibus Triticorum Selva, Ital. bor. — d. **caricina**: ascomatibus depressis $\frac{1}{3}$ mm. diam. cinereo-albis, extus fuscescentibus; ascis clavato-fusoideis, $55-60 \approx 5$; sporidiis fusoideo-cylindræis, $10-12 \approx 1\frac{1}{2}-2$, 2-nucleatis, curvulis. In foliis Caricis glaucæ Susegana, Ital. bor. — e. **olivascens** Sacc. F. ital. 1377: ascomatibus depressis, undulatis, fuscescentibus, disco atro-olivaceo; ascis cylindræo-clavatis, $60 \approx 5$; sporidiis cylindræo-fusoideis, $8-10 \approx 2-2\frac{1}{2}$, subinæquilateralibus.

In ligno putri quercino in Silva Montello. Ital. bor. — f. **macrosperma** Sacc. F. it. t. 1378: ascomatibus griseo-fuscis, majusculis; ascis clavatis, $60 \approx 10-12$; paraphysibus quandoque furcatis obvallatis; sporidiis cylindræis curvatis, $12-14 \approx 2-3$, 2-nucleatis, hyalinis. In ligno putri, Padova. — g. **albo-nigella**: ascomatibus suburceolatis, atris, albo-marginatis; ascis tereti-clavulatis, paraphysatis, $40-50 \approx 7$; sporidiis distichis cylindræis, curvulis vel rectis, $9-11 \approx 1,7-2$, hyalinis. In caule Atriplicis in Gallia. — h. **minutella**: ascomatibus dense gregariis, suberumpentibus, minutis, applanatis, griseis; ascis $36-40 \approx 5-6$; sporidiis teretiusculis $7-8 \approx 1,5-2$, hyalinis, rectiusculis. In caule Spirææ Ulmaræ in Gallia. — i. **leptospora**: ascis tereti-clavatis, $40-50 \approx 5-6$; sporidiis distichis, bacillari-fusoideis, utrinque acutiusculis, $13-14 \approx 2$, leviter curvis, hyalinis. In caulibus Epilobii in Gallia. — j. **Epilobii** Kunze F. sel. n. 179: ascis $40-45 \approx 5$; sporidiis clavulatis, rectis, $6-7 \approx 2,5$. In caule Epilobii in Germania. — l. **canella** Karst. M. F. I, p. 190: alba, albida vel cinerescenti-albida, $\frac{1}{2}-1$ mm. lat.; ascis $50-67 \approx 6-7$; sporidiis $8-14 \approx 2-3,5$. Ad lignum et corticem Alni et Quercus in Fennia. — m. **revincta** Karst. l. c.: ascomatibus basi ciliis albicantibus adfixis, totis cinereis, $0,5-0,6$ mm. lat.; ascis $40-45 \approx 4$; sporidiis $6-8 \approx 1-1,5$. In caulibus Spirææ in Fennia et Germania. — Buillard notat varietates sequentes: 1) *ardosiaca*, primo subcœrulea, dein nigra; 2) *alba* primo subalbido-cinerea, vetustate plumbeo-cinerea; 3) *viridis* primo viridiuscula, dein dilute cœrulea aut subnigricans.

62. **Mollisia melaleuca** (Fr.) Sacc. *Pez. melaleuca* Fr. Syst. Myc. II, 1394 p. 150, *Niptera melaleuca* (Fr.) Fuck. Symb. p. 292, F. it. f. 1375, *P. leucomela* A. S. p. 342, nec Pers. — Sessilis, ceraceo-sicca, plano-patellata, extus rugulosa nigrescens, disco albicante; ascis oblique stipitatis, linearibus, acuminatis, 8-sporis; sporidiis distichis, cylindræis, parum curvatis, hyalinis, $8 \approx 2$ (Fuckel).

Hab. ad ligna vetusta decorticata duriora et in ramis putridis Corni in Suecia, Lusatia, Rhenogovia, Gallia, Italia. — Superficialis, nec erumpens, concava, mox explanata, 2 mm. lata, distincte marginata, subtus applanata, rugulosa, atra, vix pulverulenta, disco primo nigricante pallido, mox præcipue centro exalbicante. Margo variat leviter inflexus. Adsunt formæ (distinguendæ?), alia ascis $75-80 \approx 5$, sporidiis $8-10 \approx 1,5-2$ (in ligno quercino et castaneo in Italia bor.), alia ascomate toto nigricante, disco dilutiore, margine pallescente; cellulis marginalibus breviusculis; ascis cylin-

draceis, 80-90 \approx 8; sporidiis fusoides, 10-12 \approx 1 $\frac{1}{2}$ -2. In ligno putri Gallie. — ***M. echinicola** Sacc. Mich. I, p. 424: ascomatibus adnato-sessilibus, gregariis, $\frac{1}{2}$ - $\frac{1}{3}$ mm. diam., concavis, fuscis, disco margineque pallidioribus; excipuli contextu parenchymatico ad marginem prosenchymatico, fuligineo; ascis cylindraceo-clavatis, 50-60 \approx 7-8, breviter stipitatis, apice rotundatis, paraphysatis, octosporis; sporidiis distichis v. oblique monostichis, 8-10 \approx 2-3, clavulatis v. subfusoides, brevissime curvis, hyalinis. In spinis capsularum putrescentium Castaneæ vescæ, Susegana Ital. bor. (SPERGAZZINI).

63. **Mollisia Riccia** Sacc. Myc. Ven. Spec. p. 162, t. XVI, f. 3-6. — 1395

Cupulis gregariis sparsisve, sessilibus, applanatis, concaviusculis, ceraceis, 2-3 mm. diam., margine profunde lobato-crenato, disco subsulcato, cinerescenti-luteolo, extus limboque nigricantibus, sublevigatis; ascis dense fasciculatis, tereti-clavulatis, basi attenuatis, 50-55 \approx 4,5-5,5, octosporis; sporidiis inordinate distichis, tereti-oblongis, 8-10 \approx 2,5-3, subcurvatis, hyalinis.

Hab. in ligno putri Robinie in Ital. bor. et Britannia. — Ob marginem lobatum *Ricciam* in mentem revocat. Sec. Phill. est var. *M. discoloris* sed sat diversa videtur; ceterum *M. discolor* Mont. ut species collecticia censenda est. — Status spermogonius: **Hymenula Riccia** Sacc. cfr. F. Ven. ser. IV, n. 76: pulvillis in ligni superficie et in fungi ascophori consortio, valde extensis, ex albo luteolis, subceraceis; basidiis densissime fasciculatis cylindricis, 40 \approx 1, apice in sterigmata 2 furcatis ibique conidia cylindracea, 3 $\frac{1}{2}$ -4 $\frac{1}{2}$ \approx $\frac{3}{4}$, utrinque obtusa, recta v. curvula hyalina gerentibus. In trunco denudato Robinie Patavii.

64. **Mollisia cinerella** Sacc. F. ital. f. 1379 et in Bizz. Fl. critt. Ven. 1396

I, p. 334. — Ascomatibus sparsis extus fuscis, disco cinerescente-olivaceo v. cyaneo, cellulis marginalibus excipuli valde elongatis, parenchymaticis, fuligineis; ascis tereti-clavatis, 50-52 \approx 6-6,5 paraphysibusque filiformibus, basidiis brevibus clavulatis suffultis; sporidiis fusoides, 10-11 \approx 2,5.

Hab. in ligno decorticato Fagi in silva Cansilio Ital. bor. — Ascoma $\frac{3}{4}$ -1 mm. lat.

65. **Mollisia subgilva** Kalch. et Cooke Grev. IX, p. 25. — Sparsa, 1397

sessilis, ceraceo-mollis; cupulis totis subgilvis, $\frac{3}{4}$ -1 $\frac{1}{2}$ mm. diam. concavis; margine rotundato, subtumido; ascis cylindraceis; sporidiis ellipticis, hyalinis, 8 \approx 4; paraphysibus filiformibus.

Hab. ad lignum putre in Africa australi.

66. **Mollisia tasmanica** (Berk) Sacc. *Patellaria tasmanica* Berk Fl. 1398
Tasm. f. 276. — Sessilis; cupulis e concavo planis, hymenio e rufo nigro; ascis clavatis; sporidiis oblongis curvulis, 10-13 μ . longis.
Hab. in ligno emortuo in Tasmania (ARCHER). — Minuta initio subglobosa, concava dein applanata.
67. **Mollisia introviridis** C. et E. Grev. VII, p. 7. — Gregaria; cu- 1399
pulis atro-brunneis, punctiformibus, $\frac{1}{2}$ mm.; disco fuligineo vel subolivaceo; ascis cylindrico-clavatis; sporidiis elongato-ovatis, 7 \approx 3; paraphysibus filiformibus, supra et gelatinâ, viridibus.
Hab. in lignis denudatis, New Jersey Amer. bor.
68. **Mollisia aureo-fulva** Cooke Hedw. 1875, p. 83. — Subgregaria, 1400
ceraceo-mollis, minuta; cupula hemisphærica, dein expansa $\frac{1}{2}$ mm. lata, sicca contracta; disco convexo, aureo-fulvescente, margine extusque brunneo, vix elevato, in statu sicco obscuriore; ascis clavato-cylindræis; sporidiis ellipticis variabilibus, binucleatis, obtusis, hyalinis, 8-15 \approx 5; paraphysibus superne incrassatis.
Hab. ad ligna vetusta New Jersey Amer. bor. (ELLIS). — « An *Pezizella?* »
69. **Mollisia? cruenta** (Bong.) Sacc. *P. cruenta* Bong. in Weinm. 1401
Hym. Gaster p. 476. — Gregaria, sessilis, glabra, atra, planiuscula, læsa succum sanguineum fundens.
Hab. ad ligna dejecta humida nuda in Rossia minore (DR. BONGARD). Adest in herbario Acad. Imperial. scient. Petrop. — Ascoma applanato-sessile, orbiculare, margine tumidulo, subelevato, vix 1 mm. latum.
70. **Mollisia sanguinolenta** (A. et S.) Sacc. *P. sanguinolenta* A. S. 1402
p. 336, t. VIII, fig. 7, Pers. Myc. Eur. p. 300, Fr. Syst. Myc. II. p. 145. — Sessilis, glabella, depresso-hemisphærica ochroleuca v. dilute ochracea, ad tactum cruentata.
Hab. ad ligna varia humida in Lusatia. — Sparsa gregariaque, intacta tota unicolor straminea aut pallide ochracea; at læsa sanguine illico emisso maculis persistentibus rubellis pingitur. Latitudo vix 2 mm.
71. **Mollisia complicata** Karst. M. F. I, p. 192. — Gregaria, sessilis 1403
v. substipitata, concaviuscula, cinereo-livida v. pallida, sicca compressa vel marginibus utrinque conniventibus, umbrino-pallens vel nigricanti-fusca, 0,4-1 mm. lat.; ascis cylindræo-clavatis, 50-60 \approx 5-7, apice jodo non cœrulescente; sporidiis oblongatis vel elongatis, rectis vel leviter curvulis, simplicibus v. spurie tenuiter 1-septatis, 6-12 \approx 2-3; paraphysibus gracilibus, apice incrassatis.

Hab. supra lignum vetustum in Fennia australi.

72. **Mollisia uda** (Pers.) Gill. Disc. p. 127, *P. uda* Pers. syn. p. 634, 140
Fr. Syst. Myc. II, p. 142, *Niptera uda* (Pers.) Fuck. Symb. p. 293.
— Sessilis, ceraceo-aquosa, applanata, immarginata, levis, livido-
fuscescens; ascis anguste linearibus, longe stipitatis, 8-sporis, $120 \approx 4$;
sporidiis elongato-distichis, cylindraceo-fusiformibus, curvatis,
continuis, hyalinis, $11 \approx 3$ (Fuck.).

Hab. ad ligna prostrata humida in Germania, Gallia, Suecia et Italia. — A *M. cinerea* habitū parum distincta, ad *P. conigenam* etiam accedens. Sparsa, orbicularis, crassiuscula, 2-6 mm. lata, sublivida in olivaceum colorem disco præsertim vergens, subtus demumque fuscescens.

73. **Mollisia decipiens** (De Not.) Sacc. *Trochila decipiens* De Not. 140
Crouam. I, p. 369. — Ascomate parvo patellulato, atro, in siccio collabescente subchartaceo; excipulo cellulis parenchymaticis, fuscis, periphericis radiantibus contexto; sporidiis exiguis, ellipsoideis, hyalinis, continuis.

Hab. in palis siccis, Cambiasca Valle Intrasca Ital. bor. — An *Pyrenopeziza*?

74. **Mollisia cæsia** (Fuck.) Sacc. *N. cæsia* Fuck. Symb. App. I, p. 335. 140
— Cupulis ascigeris gregariis, 2 mm. lat., sessilibus, planis, demum convexis, extus glabris, griseo-cæsis, margine repando, pallidiore, disco concolori; ascis elongatis, 8-sporis, $112 \approx 8$; sporidiis in asci superiore parte stipatis, fusiformibus, biguttulatis, continuis, $16 \approx 3$.

Hab. ad lignum putre Fagi prope Æstrich Rhénogoviæ. — Fungus conidiophorus in ligni superficie, lineari-effusus, [gelatinosus, cæsius; conidiis oblongo-ovatis, continuis, biguttulatis, hyalinis, $4-5 \approx 2$.

75. **Mollisia microcarpa** (Fuck.) Sacc. *Nip. (?) microcarpa* Fuck. Symb. 140
mycol. App. I, pag. 334. — Cupulis ascigeris gregariis sparsisve, minutis, 1 mm. diam., sessilibus, diaphano-aquosis, pallide fuscis, extus margineque parum strigosis, primo clausis demum apertis, pallide fuscis, extus margineque parum strigosis, primo clausis demum apertis, concavis, flexuosis, disco concolori; ascis oblongis, sessilibus, 8-sporis, $30 \approx 8$; sporidiis distichis, fusiformibus sed utrinque obtusis, continuis, hyalinis, $8 \approx 2\frac{1}{2}$; paraphysibus linearibus, simplicibus, multiguttulatis.

Hab. in truncis putridis, madidis, cavis Fagi ad Mittelheimer Æpfelbach Rhénogoviæ. — Stat. conid. sec. Fuck. est *Cladobotryum gelatinosum* Fuck.

3. **Mollisia sublividula** (Nyl.) Karst. M. F. I, p. 193, *Peziza sublividula* Nyl. Obs. p. 61 in not. — Sparsa v. gregaria, explanata, pallido-cinerea v. pallido-albida v. grisea, sicca concava sæpeque anguloso-contracta, obscurior, interdum fere nigricans, 0,5 mm. lat.; ascis fusoideo-clavatis, 32-42 \approx 4,5-5,5; sporidiis fusoideo-oblongatis v. fusoideo-elongatis vulgo guttulatis, 4-7 \approx 1,5; paraphysibus parum notabilibus. 1408

Hab. ad lignum vetustum Pruni et Alni in Mustiala Fenniae. — *Mollisia complicata* proxima, sed differt cupulis minoribus, numquam siccitate subplicato-compressis, ascis sporidiisque minoribus etc. Quamquam asci speciminum nostrorum apice jodo non tinguntur, differentia nulla alia inventa, vix dubitare licet, ea ad *Trochilam sublividulam* (Nyl.) pertinere. Ita Karst. l. c.

7. **Mollisia arctata** Karst. Discom. nov. p. 447. — Gregaria, ligno adnata, obconoidea, ut plurimum distincte stipitata, disco concaviusculo (in statu humido), sicca varie valde contracta et atrata, glabra, circiter 0,3 mm. lat.; ascis clavatis, deorsum in pedicellum pedetentim attenuatis, apice obtusis, 100 \approx 14; sporidiis distichis, elongatis, curvatis, simplicibus, hyalinis, 14-20 \approx 3-4; paraphysibus filiformibus, gracilibus. 1409

Hab. in ligno ramorum Alni incanæ dejectorum ad Mustiala Fenniae. — Proxime accedit *Pyrenopez. ligni* (Desm.), sed differt cupulis minoribus, ascis sporidiisque majoribus etc. Lignum circa basim ascomatum ut plurimum colore sordide fulvescente vel rufescente tinctum conspicitur.

8. **Mollisia personata** (Karst.) Sacc. *Aleuriella personata* Karst. M. F. I, p. 186. — Sparsa, sessilis v. (præsertim siccitate) breviter stipitata, fuscescenti-pallida, disco planiusculo, pallido, 0,5-1 mm. lat., circiter 0,5 mm. alt.; ascis cylindracois, 100-140 \approx 8-10, obturaculo jodo dilute cœrulescente; sporidiis monostichis, ellipsoideis v. oblongato-ellipsoideis, hyalinis, rectis, uniguttulatis, 10-15 \approx 5-7; paraphysibus filiformibus, æqualibus, discretis, 1,5-2 μ . cr. 1410

Hab. supra corticem Betulæ interiorem in Fennia meridionali.

9. **Mollisia perparvula** Karst. M. F. I, p. 191. — Gregaria v. sparsa, substipitata v. subobconica, albida, deorsum fusca, cupula sicca concaviuscula margineque crasso, obtuso, sordide albida, 0,2-0,4 mm. lat.; ascis cylindraco-clavatis, apice attenuatis, 60-70 \approx 6-8, apice jodo non cœrulescente; sporidiis distichis, oblongatis v. fusoideo-oblongatis, rectis v. curvulis vulgo guttulatis, 7-11 \approx 2-2,5; paraphysibus parum notabilibus. 1411

Hab. supra corticem *Tiliæ parvifoliæ* et *Betulæ* in Fennia australi.

80. **Mollisia subcorticalis** (Fuck.) Sacc. *Nip. subcorticalis* Fuck. Symb. mycol. p. 293. — Cupulis gregariis sparsisve, sessilibus, usque ad 2 mm. latis, extus furfuraceis, fuscis, explanatis, margine albido, distincto, disco subconcavo, fusco-rubello; ascis cylindraceutis, stipite crasso, brevissimo, subcurvato, 8-sporis, $30 \approx 5$; sporidiis distichis, oblongo-ovatis, subinæquilateralibus, utrinque uniguttulatis, hyalinis, $6 \approx 2-3$.

Hab. in pariete interiore corticis *Platani*, prope Hattenheim Rhenogoviæ.

81. **Mollisia livido-fusca** (Fr.) Gill. Disc. p. 127, *Niptera livido-fusca* (Fr.) Fuck. Symb. App. II, p. 58, *P. livido-fusca* Fr. Syst. Myc. II, p. 147. — Sessilis, membranaceo-mollis, planiuscula, glabra, subtus fusca, supra livido-pallens; ascis subcylindraceutis, 8-sporis, $60 \approx 6$; sporidiis elongato-distichis, oblique fusiformibus, continuis, hyalinis, $10-12 \approx 4$; paraphysibus filiformibus, simplicibus, multiguttulatis.

Hab. ad cortices et radices arborum e. g. *Carpini*, *Betulæ* in Suecia, Germania. — Gregaria, majuscula, absque subiculo; ceterum *Tap. fuscae* proxima. Junior concava, dein plana, constanter integra, sed margo demum non prominens repandus et quasi lobatus; etiam discus albidus subrimosus, ut in *P. rimosa* Sow. Fung. t. 369, f. 12.

82. **Mollisia udula** Mout. et Sacc. (nov. sp.). — Ascomatibus sparsis, disciformibus, 1 mm. diam., carnosulis, vix marginatis, obscure purpurascentibus siccis nigricantibus; ascis clavatis, octosporis, $95 \approx 8$; sporidiis mono-distichis, ellipsoideis, continuis, 2-guttatis, hyalinis, $10-12 \approx 4-5$.

Hab. in ligno abietino mucido pr. Liege Belgii.

83. **Mollisia? viridi-atra** (Fr.) Sacc. *P. viridi-atra* Fr. Obs. 1, p. 163, Syst. Myc. II, p. 142 nec B. et C. — Sessilis, ceraceo-mollis, glabra, globoso-hemisphærica, disco urceolato concolore.

Hab. rarissime ad ligna putrida pinea locis paludosis dejecta in Suecia. — Affinitas dubia ex ipso auct. (Summa Veg. p. 353). Subcarnosa, majuscula, sed mollis, regularis, integerrima, opaca, sicca nigrescens.

84. **Mollisia paullopuncta** C. et E. Grev. VII, p. 7. — Gregaria; cupulis atro-brunneis, minimis, $\frac{1}{4}$ mm., demum applanatis; disco cinereo; ascis cylindraceutis; sporidiis linearibus, $5 \approx 1$.

Hab. in cortice *Aceris*, New Jersey Amer. bor.

85. **Mollisia glenospora** Ell. et Ever. Torr. Club. 1884, pag. 38. — 1417
Sessilis orbicularis, $\frac{1}{4}$ - $\frac{1}{2}$ mm. diam., sordide alba dein obscurior; ascis clavato-cylindræis, $75-80 \approx 10$; sporidiis ellipsoideis uno apice acutiusculis uninucleatis, $12-15 \approx 7-8$; paraphysibus curvulis clavulatis.
Hab. in trunco putri Magnoliæ, New Field N. J. Amer. bor. — Excipulum grosse cellulose, apice cellulis erectis, teretiusculis, continuis, $8-10 \approx 2$, coronatum.
86. **Mollisia fumigata** Ell. et Everh. Torr. Club. 1884, pag. 41. — 1418
Dense gregaria, minuta, 1,3-1,6 mm. lat., nigricans, disco subplano, vix marginato, minute papilloso; ascis tereti-oblongis, $50 \approx 7$; sporidiis obliquis vel distichis, oblongis, bi- trinucleatis, curvulis, $9-12 \approx 3$, hyalinis; paraphysibus clavulatis.
Hab. in ligno putri Magnoliæ, New Field Amer. bor. — Excipulum prosenchymaticum, cellulis apice exserto conidia subglobosa gerentibus.
- VI. Graminicolæ.
87. **Mollisia Poæ** (Fuck.) Sacc. *Micropeziza Poæ* Fuck. Symb. mycol. 1419
p. 291. — Cupulis subgregariis, subplanis, sessilibus, 1 mm. usque latis, extus margineque crispulo, atro-fusco-rugulosis; disco sordido, demum dilute rubro-fusco; ascis subclavatis, stipitatis, 8-sporis, $54 \approx 8$ sporidiis fartis, cylindræis subcurvatis, multiguttulatis, hyalinis, $12 \approx 2$.
Hab. in foliis vaginisque putridis dealbatis Poæ sudeticæ pr. Œstrich.
88. **Mollisia rufula** Sacc. Mich. I, p. 64 (*Micropez.*). — 1420
Cupulis superficialibus sparsis, patellari-scutellatis, sessilibus, minutissimis, $\frac{1}{4}$ - $\frac{1}{5}$ mm. diam., margine crassiusculo, levibus, glabris, tenacellis, rufis, extus obscurioribus; ascis cylindræis deorsum parum attenuatis, $45 \approx 4$; paraphysibus filiformibus obvallatis octosporis; sporidiis oblique monostichis v. distichis, cylindræis, curvulis, $7-9 \approx 1\frac{1}{2}$, hyalinis.
Hab. in culmis putrescentibus graminum in silva Montello Ital. bor. — Similis *M. Poæ*, a quibus exiguitate et colore cupulæ non collabentis nec margine crispæ dignoscitur.
89. **Mollisia maculans** Rehm Ascom. n. 155 (sub *Riptera*), cfr. Cooke 1421
in Grevillea IV, p. 41, t. 51, f. 247. — Sessilis, sparsa, primitus urceolata, margine vix albidulo, dein humida explanata, subplano-patellaris, disco albido-cinereo, extus fuscidula, parenchymatico-

contexta, sicca irregulariter rugulosa, plicata, fusco-nigra, c. 0,3 mm. diam.; ascis clavatis, apice subincrassatis, 8-sporis, 30-42 = 6-7, jodo apice cœrulescentibus; sporidiis obtuse ellipticis rectis v. subcurvatis, 1-cellularibus, hyalinis, distichis, 9-11 = 2-3; paraphysibus filiformibus, apice haud clavatis nec tinctis.

Hab. ad culmos siccos Nardi strictæ in alpinis editioribus tyrolensibus juxta glaciem æternam. — Culmi, quos incolit, reliquiis v. initiis ascomatum nigro-maculati. An *Pyrenopeziza*?

90. **Mollisia atro-rufa** Sacc. Fung. Alg. Tahit et Gall. n. 17, t. LV, 1422 f. 4. — Ascomatibus sparsis, erumpenti-superficialibus, scutellatis, levibus, $\frac{1}{2}$ mm. diam., atro-rufis, siccis fere nigris, sed contra lucem rubidis; ascis clavatis, longe sensim stipitatis, 50-70 = 7, paraphysatis, obturaculo jodii ope cyaneo, octosporis; sporidiis distichis fusoides, rectis, 12-14 = 2-3, plasmate bipartito et tunc spurie 1-septatis hyalinis.

Hab. in foliis Coix lacrymæ putridis in Arduennis (LIBERT). — Affinis *M. rufulæ* Sacc. sed asci et sporidia multo majora.

91. **Mollisia arenivaga** (Desm.) Phill. Disc. p. 186, *Pez. arenivaga* 1423 Desm. 20 Not. pag. 19, Crypt. II, n. 517. — Foliicola erumpens, minuta, sparsa, ceraceo-mollis, glabra, sessilis, junior globosa, adulta plana, extus fulva, margine clavato tumidiusculo, fulvo, sicco nigro, disco aquoso, subalbido, sicco-brunneo; ascis clavatis subcylindricis 75 μ . long. inter paraphyses simplices erectis; sporidiis octonis, oblongo-ovoideis, hyalinis, utrinque obtusis, 15 = 5-6.

Hab. in foliis Psammæ arenariæ in Gallia et Britannia. — Ascoma $\frac{1}{4}$ - $\frac{1}{2}$ mm. lat.

92. **Mollisia cymbispora** Rostr. Fung. Groenl. pag. 538. — Gregaria, 1424 sessilis, concava, rufo-fusca, sicca nigrescens, 0,3-1 mm. lat.; ascis cylindræo-clavatis, 90-115 = 12-13; sporidiis distichis, fusoides-cymbiformibus spurie 1-septatis, hyalinis, guttulatis, 16-20 = 5-8; paraphysibus filiformibus.

Hab. in foliis emortuis Eriophori Scheuchzeri, E. angustifolii, Caricis pullæ in Groenlandia.

93. **Mollisia arundinacea** (DC.) Phill. Disc. p. 177, *Xyloma* DC. Fl. 1425 Fr. VI, pag. 162, *Eustegia* Fr. Elench. II, p. 112, *Stegia* Fuck. Symb. App. I, pag. 328, *Sphaeria Calami* Nees in Myc. Heft II, pag. 63, *Peziza Kneiffii* Wallr. Fl. Crypt. n. 2552. — Gregaria, erumpenti-sessilis, plana, orbicularis, tenuis, ceracea; disco pallido demum fuligineo, margine angusto, atro; ascis tereti-clavatis; sporidiis anguste fusoides, 10-15 = 2; paraphysibus filiformibus.

Hab. in culmis putrescentibus Phragmitis in Scania, Gallia, Britannia, Belgio, in culmis Phalaridis in Arduennis, ad Acorum Calamum in Batavia. — Ascoma vix $\frac{1}{2}$ mm. lat., sæpius macula atrata insidens. Sec. Phill. l. c., hymenium provectum ab excipulo sponte separatur, operculi instar. — Forma **Typhæ** Fuck. l. c.: ascis lineare-clavatis, stipitatis, 8-sporis, $78 \approx 6$; sporidiis in asci superiori parte distichis, fusiformibus, rectis, 1-2-guttulatis, simplicibus, hyalinis, $8 \approx 2\frac{1}{2}$; paraphysibus copiosis, linearibus, utrinque attenuatis, asci longitudine, 4μ . cr. 3-4-septatis, indivisis. In calamis Typhæ angustifoliæ putridis pr. Budenheim.

94. **Mollisia riparia** Sacc. Mich. II, p. 81, F. ital. f. 1380. — Asco- 1426
matibus gregariis, erumpenti-superficialibus, concavo-scutellatis, sessilibus, siccis compressis $\frac{1}{3}$ - $\frac{1}{2}$ mm. diam. ubique glabris, rufo-brunneis, excepto margine pilosulo albicante; excipuli contextu prosenchymatico, rufo-melleo, cellulis marginalibus liberatis, pili-formibus, asperulis; ascis cylindraneo-fusoideis, subsessilibus, $40 \approx 6$ - $6\frac{1}{2}$; paraphysibus fusoideo-bacillaribus, longioribus, melleis obvallatis, octosporis; sporidiis distichis, fusoideis v. allantoideis, 8 - $9 \approx 1\frac{1}{4}$ - $1\frac{1}{2}$, hyalinis.

Hab. in culmis Phragmitis communis, Sainter Gallie (BRUNAUD). — *Pyrenop. Karstenii* affinis videtur, differt vero paraphysibus fusoideis melleis, ascomatibus paullo majoribus etc.

95. **Mollisia lacustris** Fuck. Symb. Myc. p. 292 (*Niptera*) nec *P. la-* 1427
custris Fries. — Sparsa adnata, glabra, orbicularis, plano-convexa extus nigra, disco nigro; ascis linearibus, 8-sporis, $82 \approx 4$; sporidiis distichis, cylindraceis, rectis, $10 \approx 2$.

Hab. in foliis aqua immersis putrescentibus Typhæ latifoliæ prope Budenheim Rhenogoviæ.

96. **Mollisia hydrophila** Karst. M. F. I, p. 196, *Nipt. cinerea* v. *do-* 1428
nacina Sacc. Mich. I, p. 425. — Gregaria, tota albida v. albido-pallens, interdum sordide albida v. cinerescens, sicca (extus) colore immutata aut fusca v. fuscescens, convexa, sicca concava, circiter 0,7-1 mm. lat.; ascis fusoideo-clavatis, 50 - $70 \approx 5$ - 7 , obturaculo jodo obsolete cœrulescente; sporidiis aciculari-elongatis, guttulatis, rectis, 9 - $12 \approx 1,5$ - $2,5$; paraphysibus gracilescentibus, apicem versus incrassatis.

Hab. ad culmos Phragmitis emortuos in Fennia, Italia, Gallia, Amer. bor.

97. **Mollisia Typhæ** (Cooke) Sacc. *Peziza Typhæ* Cooke in Grev. I, 1429
p. 131, *Mollisia* Phill. Disc. 188. — Gregaria v. sparsa, minuta,

erumpens, sessilis, atra, molliuscula ceracea, mox plana, sicca lateraliter compressa, disco fuligineo, sicco nigricante, minute papillato, plano; ascis cylindraceutis; sporidiis fusoides, hyalinis, continuis, 12-14 \approx 2,5-3.

Hab. in foliis *Typhæ* King's Lynn Britannia (FLOWRIGHT). — *M. epitypha* Karst. vix est diversa, ex ipso Karsten.

98. **Mollisia epitypha** Karst. M. F. I, p. 196. — Gregaria, sessilis, 1430
 primitus sphaeroidea, mox hemisphaerica, demum convexiuscula, primo tota fuliginoso-cinerea, dein cinereo-livida, disco griseo-pallente v. fuliginoso-pallido, sicca concolor v. extus nigricans, 0,6-1 mm. lat.; ascis fusoides-clavatis, 50-60 \approx 5-6, obturaculo minutissimo jodo obsolete caerulecente; sporidiis distichis, rectis, aciculari-elongatis, 10-14 \approx 2; paraphysibus gracilescentibus, apice incrassato.

Hab. ad calamos *Typhæ* latifoliae putrescentes in Mustiala Fennia.

99. **Mollisia palustris** (Rob. et Desm.) Karst. M. F. I, p. 196, *Peziza* 1431
palustris Rob. et Desm. XIV Not. p. 187. — Sparsa v. gregaria, erumpens, primitus sphaeroidea, tandem aperta, plana vel convexiuscula, applanata, albida vel dein griseo-brunnea, disco griseo-pallente, margine sinuoso, integerrimo, 0,4-0,8 mm. lat.; ascis cylindraceuto-clavatis, apice attenuatis, 40-52 \approx 4-5, jodo non caerulecente; sporidiis fusoides- v. aciculari-elongatis, guttulatis, rectis, 6-10 \approx 1-2; paraphysibus gracilibus.

Hab. ad calamos et folia *Junci articulati* etc. putrescentia in Fennia, Gallia, Britannia.

100. **Mollisia melatephra** (Lasch) Karst. M. F. II, p. 197, *Pez. me-* 1432
latephra Lasch in Rab. Herb. myc. n. 825, non *M. melatephra* Sacc. et Phill. (sporidiis multo brevioribus diversa. Cfr. *M. juncina*), *Pez. conformis* Nyl. Obs. p. 63 (ut videtur). — Gregaria, erumpens aut sessilis, sicca concava nigricans, disco pallido, 0,2-0,4 mm. lat.; ascis fusoides-clavatis, 50-60 \approx 7-9, obturaculo minutissimo jodo obsolete caerulecente; sporidiis fusoides-elongatis v. fusoides-filiformibus s. bacillaribus, guttulis refertis, 12-20 \approx 2; paraphysibus gracilescentibus.

Hab. ad *Juncum conglomeratum* in Germania et Belgio. 1433

101. **Mollisia juncina** Rehm Asc. n. 856, an Pers. Myc. Eur. p. 314? (sub *Peziza*), *M. melatephra* Sacc. Mich. II, pag. 81 et F. ital. f. 1384, Phill. Disc. p. 189, non auct. nec *Pezizella juncina* Fuck. Sh. I, p. 296. — Gregaria, sessilis, subceracea, primitus globosa,

dein urceolata, demum patellaris, sicca irregulariter semiglobosa. flavidula, demum fusco-rubidula v. nigro-fuscidula, contextu parenchymatico, fusco, margine subhyalino-pseudoprosenchymatico, disco pallide flavidulo, 0,3-0,5 mm. diam.; ascis clavatis, apice obtuse subacutatis, 8-sporis, 45-60 \approx 6-8; sporidiis cylindraceutis, obtusis, rectis, 1-cellularibus, utroque apice nucleolo parvulo præditis, hyalinis, 9-10 \approx 1,5, distichis; paraphysibus filiformibus teneris apice subramosis et discum dilute flavidulum formantibus.

Hab. ad calamos siccos Junci effusi, Gfällalpe prope Lofer Salisburgiæ, 1300 m. (NIESSL.), Saintes Galliæ (BRUNAUD), in culmis Poæ et Caricum in Gallia et Britannia. — A *M. melatephra* sporidiis multo brevioribus differt.

102. **Mollisia emergens** Karst. M. F. I, pag. 194. — Gregaria, per 1434 peridermium erumpens, demum sublibera, concava, testaceo-pallida, demum umbrino-pallida, margine lacero v. crenulato-inæquali, subalbicante, disco obscuriore, planiusculo, 0,2 mm. lat.; ascis fusoido-clavatis, 35-45 \approx 6 apice jodo non cœrulescente; sporidiis aciculari-elongatis v. aciculari-filiformibus, sæpe obsolete septatis, 10-20 \approx 1,5-2; paraphysibus cohærentibus, (saltem in statu sicco).

Hab. in calamis Junci conglomerati putrescentibus in Mustiala Fenniæ.

103. **Mollisia simillima** Karst. M. F. I, p. 196. — Gregaria, primitus 1435 sphæroidea, dein applanata, plana v. convexiuscula, sicca concava, livescente-albida, sicca fusciscente-livida, disco albido, circiter 0,8 mm. lat.; ascis fusoido-clavatis, 50-60 \approx 5, obturaculo jodo leviter cœrulescente; sporidiis aciculari-elongatis, guttulis vulgo rectis, 9-14 \approx 1-2; paraphysibus 2-3 μ . cr., apice 4 μ . crass.

Hab. ad calamos Junci conglomerati putrescentes in Fennia australi.

104. **Mollisia junciseda** Karst. M. F. I, p. 198. — Gregaria v. sparsa 1436 plana v. convexiuscula, fusciscentes v. pallida, disco pallido-albido, sicca tota nigricans, at tota pallida aut nigricans, disco sordide pallido vel subrufo, circiter 0,4 mm. lat.; ascis fusoido-clavatis (v. uno apice obtusatis), 60-70 \approx 8-10; sporidiis filiformibus seu bacillaribus, utroque apice attenuatis, guttulis majusculis refertis, rectis v. rectiusculis, 20-28 \approx 2-3; paraphysibus apicem versus incrassatis.

Hab. in culmis Phragmitis in Fennia et calamis Junci in Germania. — ***Mollisia juncinella** Karst. M. F. I, p. 198: typo subsimilis, at sporidiis 23-33 \approx 3-3,5. Ad Juncum articulatum prope Mustiala Fenniæ.

105. **Mollisia paulula** (Rob.) Phill. Disc. p. 186, *Peziza paulula* Rob. 1437
et Desm. 19 Not. p. 29. — Erumpens, sparsa aut gregaria sessilis, ceraceo-mollis, glabra, subglobosa, minutissima, extus umbri-
no-olivascens, intus albido-pallens, ore connivente albo integerrimo; ascis brevibus, crassis, subcylindræis, 40-50 \approx 12-15; sporidiis oblongis, obtusis, 12 \approx 4, hyalinis 2-guttulatis.

Hab. ad calamos siccos Junci maritimi in Gallia bor. et Britannia. — Ascoma 150 μ . lat.

106. **Mollisia stictoides** C. et E. Grev. VI, p. 8, t. 96, f. 37. — Sessilis, erumpens, sparsa; cupulis minutis, tectis, demum emergentibus, atro-brunneis; disco pallido; ascis clavatis; sporidiis arcte fusoides, nucleatis, 16 \approx 3. 1438

Hab. in calamis Junci, New Jersey Amer. bor. — Ascoma $\frac{1}{10}$ - $\frac{1}{8}$ mm. diam., marginibus demum longitud. conniventibus.

107. **Mollisia Curreyana** Phill. Disc. pag. 406, *Patellaria palustris* 1439
Curr. Linn. Trans. XXIV, p. 155, t. 25. — Subplana, marginata; disco cyaneo-griseo, subnigricante, circulari vel irregulari, vix 2 mm. lat.; ascis tereti-clavatis, 55 \approx 5; sporidiis clavulato-ellipsoideis, curvulis, 8-10 \approx 2.

Hab. in calamis Juncorum aqua immersis, Paul's Cray Britannia (CURREY).

108. **Mollisia scirpicola** (Fuck.) Sacc. *Micropez. scirpicola* Fuck. 1440
Symb. myc. p. 292. — Gregaria, numerosissima; cupulis sessilibus, minutissimis, punctiformibus, planis excavatisve, extus margineque elevato atro-fuscis, rugulosis, disco fuligineo; ascis sessilibus, oblongis, 8-sporis, 54 \approx 8; sporidiis inordinatis, cylindræis, curvatis, 12-14 \approx 3.

Hab. in foliis putrescentibus Scirpi silvatici pr. Mappen Rhenogoviæ.

109. **Mollisia scirpina** (Peck) Sacc. *Peziza scirpina* Peck 28 Rep. St. 1441
Mus. p. 67. — Minuta, sparsa, erumpens, glabra, extus nigra, intus pallidior v. griseola; ascis oblongis; sporidiis confertis, fusoides, rectis curvulisve, binucleatis, hyalinis 20-25 μ . longis.

Hab. in caulibus emortuis Scirpi cæspitosi, M. Adirondack Amer. bor.

110. **Mollisia silvatica** Karst. Symb. Fenn. XXIII, p. 4. — Sparsa v. 1442
subgregaria, superficialis, mollis, patellata v. subconoidea, glaberri-
ma, fuscescens, sicca nigrescens margineque elevato, disco planiusculo pallido, parenchymatico-contexta, 0,1-0,2 mm. lata; ascis cla-

vatis sessilibus, 45-50 \approx 10 ; sporidiis distichis, elongatis, 2-guttulatis, 15 \approx 3; paraphysibus filiformibus.

Hab. in foliis putridis *Scirpi silvatici* pr. *Mustiala Fenniae*.

111. **Mollisia puccinioidea** (De Not.) Sacc. *Trochila puccinioidea* De 1443
Not. Comm. Critt. I, p. 370. — Hypophylla, discoideo-patellulata, disco fusco-rubiginoso, vix marginato, excipulo tenui, parenchymatico; sporidiis exiguis, oblongatis, hyalinis, continuis.

Hab. in foliis emortuis *Caricis* in Monte Baldo Italiae borealis.

112. **Mollisia luzulina** Karst. M. F. I, p. 194. — Gregaria, per epidermidem stellatim fissam erumpens, concava, margine lacero, umbrino-pallida, 0,3 mm. lat.; ascis cylindraceo-clavatis, 40-48 \approx 4-5; sporidiis distichis, aciculari-elongatis, simplicibus, 8-15 \approx 1,5-2; paraphysibus haud bene discretis (in statu sicco), gracilibus.

Hab. in foliis *Luzulae pilosae* emortuis prope oppidum *Wasa Fenniae*.

VII. In Cryptogamis.

113. **Mollisia epibrya** Karst. M. F. I, p. 190. — Demum planiuscula, 1445
subfuliginosa, sicca concava, subhemisphaerica, obscurior, circiter 0,7 mm. lat.; ascis cylindraceo-clavatis, 56-65 \approx 7-8, obturaculo jodo caerulecente; sporidiis ellipsoideo-oblongatis vel oblongatis guttulas 2 apicales foventibus, 7-10 \approx 3-4; paraphysibus filiformibus 1,5 μ . cr.

Hab. supra muscos prope *Mustiala Fenniae* (H. A. KULLHEM). — A *Mollisia cinerea* colore, sporidiis et ascis crassioribus recedit. Plantula non satis cognita, nam specimina perpauca et sicca tantum visa.

114. **Mollisia pteridina** Karst. M. F. I, p. 194. — Subgregaria, sessilis, concava v. concaviuscula, pallida v. pallido-umbrina, margine subcrenulato inaequali, 0,2-0,4 mm. lat.; ascis cylindraceo-clavatis, 35-45 \approx 4-5, obturaculo minuto jodo obsolete caerulecente; sporidiis elongatis v. aciculari-elongatis, rectis, vulgo guttulatis, 5-10 \approx 1-2.

Hab. ad stipites *Pteridis aquilinæ* vetustos in regione *Aboensi Fenniae*.

115. **Mollisia tenella** C. et E. Grev. VII, pag. 40. — Hypophylla, 1447
sparsa; cupulis tenuibus, hemisphaericis, demum appianatis, 0,15-0,2 mm., pallide corneis, margine albidis; ascis clavatis; sporidiis linearibus, rectis 5 μ . longis.

Hab. in frondibus *Osmundæ*, New Jersey Amer. bor.

116. **Mollisia Lycopodii** Le Bret. et Malbr. Mélang. mycol. p. 5. — 1448

Cupulis sparsis, minutissimis, sessilibus, primo urceolatis, demum undulato-applanatis, ceraceis, micantibus, furfuraceis, fusco-cinereis, basi obscurioribus, margine pallidiore v. omnino albo, leviter fimbriato, disco cinereo-fuscescente, siccis nigricantibus; ascis claviformibus, ad basim attenuatis, apice obtusis etiamque truncatis, subsessilibus, obturaculo minuto jodo dilute cœrulescentibus, 49-58 \approx 4-6; sporidiis distichis interdum parte superiore submonostichis conglobatis, cylindraceutis, vulgo unico apice, acicularibus, rectis curvulisve, hyalinis, 8-9 \approx 1,5-2,5; paraphysibus filiformibus, hyalinis, haud facile conspicuis.

Hab. ad spicas emortuas putrescentesque *Lycopodii* clavati in ericetis nemorosis, Saint-Jacques prope Rouen, Gallia. — Punctiformis, *M. cinereæ* affinis.

117. **Mollisia Collematis** Boud. in Bull. Soc. B. Fr. 1881, p. 96, t. III, 1449

f. 7. — Perexigua sessilis, nigricans, margine albo, 0,3-0,5 mm. diam., expansa marginata, extus fibrillis adpressis, parallelis, nigricantibus obsessa, disco plano v. concaviusculo griseo; ascis tereti-clavatis, 70 \approx 10; sporidiis ovato-oblongis, subpiriformibus vel medio subcoarctatis, 7-8 \approx 3-4; paraphysibus filiformibus, subinde ramulosis, septulatis.

Hab. in *Collematis* specie ad terram nudam Montmorency Gallia.

VIII. In corpore humano et in fimo.

118. **Mollisia auriculæ** (Garov.) Sacc. *Peziza auriculæ* Garov. Arch. 2450

trienn. Lab. critt. I, p. 218, t. XI (nomen). — Ascomatibus plano-scutellatis, sessilibus, crassiuscule marginatis, castaneo-rufis, disco concolori, 0,5-0,7 mm. latis; ascis cylindraceuto-clavatis, stipitatis, 90-100 \approx 8-10; sporidiis oblique monostichis ellipsoideo-oblongis, 8-12 \approx 5,5-6; paraphysibus filiformi-clavulatis.

Hab. in cerumine auriculæ hominis in Italia boreali. — Diagnosin ex icone erui.

119. **Mollisia? coprophila** Speg. Fung. Fueg. n. 340. — 1451

Cupulis sæpius hinc inde densiuscule aggregatis, sessilibus, udis cupulato-explanatis, 0,5-3 mm. diam., siccis contractulis, crassiuscule membranaceis tenacellis rigidulis intus extusque fusco-olivaceis, glaberrimis, margine acutis integris non v. vix repandulis, contextu parenchymatico atro, intus pallidiore; ascis cylindraceutis, antice ob-

tuse rotundatis, postice breviter crasseque attenuato-pedicellatis 140-150 \times 8-10; paraphysibus densis, filiformibus hyalinis, apice coalescentibus olivascentibusque obvallatis, octosporis; sporidiis recte v. oblique monostichis, ellipticis, utrinque obtuse rotundatis, 16 \times 8, hyalinis, continuis, levibus non v. 1-guttulatis.

Hab. in fimo equino et vaccino putrescente vulgata pr. Ushuvaia Fuegiæ. — Jodi ope tunica ascorum apice dilute cœrulescit.

B. Belonopsis Sacc. Ascoma subcirculare, subsuperficiale. Sporidia bacillari-fusoidea, 16-30 μ . long., sæpius simulate septata. — Cfr. genera *Belonium* et *Belonidium*.

120. **Mollisia cyanites** Phill. Disc. p. 176. — Gregaria, minuta, sessilis, 1452
concava, dein plana, atra, margine fimbriato, disco cyaneo-griseo; ascis clavatis; sporidiis tereti-fusoideis, elongatis, 5-7-guttulatis, 25 \times 3; paraphysibus filiformibus.

Hab. in caulibus herbaceis in Scotia (?) — Ascoma $\frac{1}{4}$ - $\frac{1}{2}$ mm. lat.

121. **Mollisia calamicola** Karst. M. F. I. p. 198. — Gregaria, fuscescens, 1453
sicca vulgo nigricans, disco pallido vel albido, planiuscula, margine distincto, circiter 0,3 mm. lat.; ascis fusoideo-clavatis, 65-75 \times 5,5-6,5, obturaculo jodo leviter cœrulescente; sporidiis fusoideo-elongatis vel fusoideo-bacillaribus, guttulis foetis vel spurie tenuiter septatis, 16-24 \times 2-3; paraphysibus gracilescentibus.

Hab. ad calamos Acori Calami semiputres, Runsala Fennia.

122. **Mollisia ventosa** Karst. M. F. I, p. 188. — Gregaria, e sub- 1454
sphæroideo-applanata, demum convexiuscula, primo tota cinerea, dein cinereo-atra, disco ochraceo-pallido v. tota cinereo-nigricans, margine elevato, sæpissime flexuoso, obtuso, 1,5-2 mm. lat.; ascis cylindræo-clavatis aut subcylindræis, 90-120 \times 6, obturaculo jodo leviter cœrulescente; sporidiis fusoideo-elongatis, plerumque curvulis, guttulis 2-4 majusculis præditis v. spurie tenuiter 3-septatis, 10-20 \times 2-3,5; paraphysibus filiformibus 1 μ . cr.

Hab. ad lignum vetustum locis udis in Fennia australi ad radices Pini silvestris in Lapponia, ad Salicem in Scotia (КВИТН) et Waitaki in Nova Zelandia. — Differt a *Mollisia cinerea* mole ascomatum majore, colore et sporidiis majoribus, a *Moll. discolore* cui sporidia vulgo uniseptata, 10-15 \times 2-3, *Moll. fallace* quæ sporidiis simplicibus, 7-9 \times 1,5-2 est instructa.

123. **Mollisia sordidula** Karst. M. F. I, p. 193. — Gregaria, sessilis, 1455
convexa, immarginata, sordide pallida, sicca concaviuscula v. concava, margine elevato, umbrino-pallida v. fuscescens, 0,2-0,3 mm.

lat.; ascis cylindræo-clavatis, apice attenuatis, 65-75 \times 9-11, obturaculo minutissimo jodo cœrulescente; sporidiis distichis, fusoidæo-vel aciculari-elongatis vel bacillaribus, guttulis plerumque 4 majusculis fœtis (vel spurie tenuiter septatis), rectis vel leniter curvulis, 14-30, plerumque 18-25 \times 3-4; paraphysibus flexuosis 1 μ . cr.

Hab. ad lignum ramorum Pini silvestris decorticatorum in Mustiala Fenniæ.

124. **Mollisia graminea** Karst. M. F. I, p. 199. — Gregaria, convexa, 1456
subimmarginata, sessilis, albida v. livescente-albida, basi fuscens, sicca concava, pallescens, circiter 1 mm. lat.; ascis fusoidæo-clavatis, 70-90 \times 8-10, apice jodo non cœrulescente; sporidiis globatis v. subdistichis, bacillaribus, utrinque attenuatis, guttulis majusculis præditis v. (simulate?) 3-septatis, leniter curvulis v. subrectis, 20-30 \times 3-4; paraphysibus 2 μ . cr. apice 4 μ . cr.

Hab. ad culmos Poæ nemoralis, Calamagrostidum et Baldingeræ siccis locis udis dejectos, in Fennia australi. — Ascomata basi fibrillis tenerrimis radiatim serpentibus fuscis cincta. Spermogonia ejus forte sistunt socii obvii pulvinuli gelatinosi, flavescentes (in sicco), minuti, 0,2 mm. lat.; sporulis cylindræeis v. fusoidæo-elongatis, vulgo curvulis, incoloribus, simplicibus, 8-10 \times 1,5. — Var. **caricina** Sacc.: ascis teretiuseculis, paraphysatis, 90-100 \times 7; sporidiis bacillaribus, leniter curvis, 15-21 \times 2-3, pluriguttatis vel spurie septatis hyalinis. In foliis emarcidis Caricis ripariæ in Gallia.

125. **Mollisia atriella** Cooke Hedw. 1875, p. 83, Disc. U. S. I, p. 297. 1457

— Gregaria, sessilis, ceræeo-mollis, minuta, $\frac{1}{5}$ mm., cupula primum hemisphærica, mox applanata, anguste marginata, glabra, atra, disco atrocinereo-nigrescente; ascis clavato-cylindræeis; sporidiis anguste fusiformibus, 30 \times 2,5, multinucleatis; paraphysibus filiformibus.

Hab. ad culmos Andropogonis, New Jersey Amer. bor. (ELLIS).

126. **Mollisia advena** Karst. Fung. Spetsb. n. 24. — Sparsa v. sub- 1458

gregaria, erumpenti-superficialis, hemisphærica, sicca subsphæroidæo-contracta, madefacta fusco-pallida, disco pallescente, sicca fusco-nigricans v. nigricans, margine integro, excipulo cellulis parenchymaticis fuscis contexto, 0,1-0,2 mm. lat.; ascis oblongato-vel elongato-clavatis, 50-70 \times 12-18, apice jodo non cœrulescente; sporidiis globatis, fusoidæo-elongatis v. fusoidæo-bacillaribus, gut-

tulatis v. demum spurie tenuiter septatis, 20-36 \approx 3-4; paraphysibus filiformibus, 1,5 μ . cr., apicem versus leviter incrassatis.

Hab. in foliis Eriophori angustifolii, Luzulæ hyperboreæ et Luzulæ arcuatae β . confusæ putrescentibus ad Adventbay et Nordfjorden Spetsbergiæ.

127. **Mollisia excelsior** Karst. M. F. I, pag. 199, *Belonidium* Phill. 1459

Disc. p. 150. — Gregaria, sessilis, convexa, livido- v. cinereo-albida v. pallida, sicca, concava concolor v. nigricans, disco albido v. pallido, 1-1,2 mm. lat.; ascis fusosideo-clavatis, 120-130 \approx 8-10, obturaculo minutissimo jodo leviter cœrulescente; sporidiis conglobatis, filiformibus, utroque apice attenuatis, guttulis majusculis fœtis v. spurie tenuiter pluriseptatis, 42-50 \approx 3-4; paraphysibus 1,5 μ . cr., apice clavato, 4-6 μ . crasso.

Hab. ad culmos Phragmitis communis et Arundinis vetustos in lacubus in Fennia australi et Scotia. — Sporidia sec. Phill. 50-65 \approx 4-5; cellulæ marginales oblongæ, umbrino-brunnæ. An potius *Belonium* v. *Gorgoniceps*?

C. Hysteropeziza Rabenh. Ascoma erumpens, siccum elongatum, atrum, hysteroideum.

128. **Mollisia petiolaris** (A. S.) Sacc. *Hysterium petiolare* Alb. et 1460

Schw. Consp. p. 59, *Hysteropeziza erumpens* (Grev.) Rab. F. E. n. 1811 c. ic., *Pyrenopeziza* Rehm Asc. n. 354, *Peziza erumpens* Grev. Crypt. f. 99, Gonn. et Rab. t. V, f. 6, *Trochila petiolaris* (A. S.) Rehm Disc. p. 132. — Parallele sparsa, minuta, initio subcutanea dein erumpens, sessilis, flavido-cinerea, concava, subcircularis, glabra, sicca oblonga in corticis rimis atratis immersa, subimmarginata, integra; ascis clavatis, apice tunica incrassatis, 36-45 \approx 6; sporidiis clavulatis, hyalinis, obtusis, rarius curvulis, 7 \approx 1,5-2; paraphysibus filiformi-clavulatis.

Hab. in petiolis Aceris, Æsculi, Ailanthi, in caulibus Epilobii (?), in Britannia, Germania, Belgio. — Sicca hysteriiformis.

129. **Mollisia abdita** Ellis Torr. bot. Cl. 1882, p. 19. — Orbicularis, 1461

pallida, 0,6-0,7 mm. diam., margine angusto denticulato, membranaceo, initio per rimam angustam epidermidis erumpens, demum sicca omnino abdita; ascis sessilibus, tereti-oblongis, 40-45 \approx 4-5; sporidiis distichis, clavato-oblongis, 10 \approx 2-2,5; paraphysibus clavulatis.

Hab. in petiolis dejectis Juglandis regiæ, Newfield N. J.

Amer. bor. — Sicca vix ob rimam angustam epidermidis discernenda.

130. **Mollisia hysteropezizoides** Rehm in Hedw. 1885, pag. 231. — 1462

Ascomatibus sessilibus, primitus orbicularibus, dein lirelliformiter elongatis, medio impressis, atro-fuscis, in statu humido fuscis, labiis tumidis parallele juxtapositis, parenchymatice e cellulis fuscis parvulis contextis, sparsis, disco crasso, flavo; ascis clavatis, apice non incrassatis, 8-sporis, 60-70 \approx 18; sporidiis oblongis, rectis, hyalinis, 1-cellularibus, haud nucleatis, distichis, 15 \approx 7; paraphysibus filiformibus, haud clavatis, septatis, hyalinis, 2,5 μ . cr.

Hab. ad pericarpia putrida eorumque pedunculos *Epilobii Fleischeri* juxta glaciem æternam montis Ortler prope Sulden, Tyrol (REHM).

131. **Mollisia clavigera** E. et E. Journ. Myc. 1888, p. 100. — Uda 1463

protrusa, sicca contracta, hysteroidea, disco cinereo v. livido-albo, oblongo, $\frac{1}{4}$ - $\frac{1}{2}$ mm. lato, $\frac{1}{2}$ -1 mm. longo, margine fimbriato, contextu fibroso donato, fibrarum extremitatibus rugosis; ascis teretibus clavatis, sessilibus, in basin stipitiformem angustatis; sporidiis distichis, oblongis, hyalinis, obtusis, 2-3-guttulatis, 12-15 \approx 4-4,5; paraphysibus clavulatis, rugulosis, septulatis, ascis superantibus.

Hab. in foliis emortuis *Amorphilæ longifoliæ* Sand Coulee Montana Amer. bor. (ANDERSON).

132. **Mollisia stenostoma** B. et C. North Am. Fungi n. 744 et Cooke 1464

Disc. U. S. I, p. 297. — Erumpens, elongata, aterrima, ore angusto; ascis clavatis; sporidiis oblongis, angustis, uniseriatis, binucleatis.

Hab. in culmis *Andropogonis* in Carolina inf. Amer. bor. — Habitus (in siccis) minuti *Hysterii*.

PYRENOPEZIZA Fuck. Symb. p. 293 [1869] (Etym. *pyren* granum et *Peziza*), *Mollisia* Karst., Sacc., Phill. ex p. *Urceola* sect. *b* Quél. Ench. p. 320. — Ascoma duriusculum, minutum, sessile, globosum, demum apertum, extus atrum, verticaliter plicatum v. granulosum. Discus concavus pallidior, dein obscurus. Asci 8-spori. Sporidia oblonga, clavata cylindraceave, continua. Paraphyses filiformes. — Formis mediis in *Mollisiam* abit.

I. Caulicolæ.

1. **Pyrenopeziza atrata** (Pers.) Fuck. Symb. pag. 294, Sacc. F. ital. 1465 t. 1398, *M. atrata* (Pers.) Karst. M. F, I, p. 200, Pat. t. 92, *Pe-*

ziza atrata Pers. Syn. Fung. p. 669, Fr. Syst. Myc. II, p. 148, *Peziza atratula* Nyl. Obs. p. 61. — Gregaria, prominula, e subsphæroideo concava, demum planiuscula, sicca subsphæroideo- (v. difformiter) contracta, cinerea v. fuscescens, sicca nigricans, margine subconnivente albicante, ruguloso, disco albicante v. cinereo-pallido, 0,1-0,5 mm. lat.; ascis fusoideo-clavatis v. fusoideo-elongatis, 25-40 \approx 5-6, rarius -8, apice jodo vix tinctis; sporidiis elongatis, 5-8 \approx 1,5-2, simplicibus; paraphysibus numerosis, filiformibus, gracilentibus.

Hab. ad caules herbarum variarum, præprimis Spirææ ulmariae, Cerefolii silvestris, Asparagi officinalis, Ranunculi acris, Heraclei, Cynanchi, Gei, Gentianæ, Ambrosiæ, Eryngii, Loniceræ, Eupatorii, Solidaginis Sarraceniæ aridos sat frequenter in Fennia, Suecia, Germania, Gallia, Italia, Belgio, Britannia, Am. bor. — Var. **punctiformis**: ascomate vere punctiformi, 80-100 μ . diam., nigricante, subsuperficiali; ascis clavulatis, 25 \approx 8-9, paraphysatis, octosporis; sporidiis botuliformibus vel clavulatis, 8 \approx 1 $\frac{3}{4}$ -2, guttulatis, hyalinis. In caule Tami communis in Gallia. — Var. **Asparagi** Wint. in Phill. Disc. p. 182: sparsa v. gregaria, globoso-hemisphærica, nigricans, scabra, margine albido, connivente; ascis tereti-clavatis; sporidiis oblongo-fusoideis, 8-10 \approx 1; paraphysibus filiformibus. In caule Asparagi in Germania et Britannia. — Var. **Ænanthes** Phill. Disc. p. 182: gregaria, globosa, dein hemisphærica, glabra, levis, cinerea v. nigricans, margine pallidiori; ascis fusoideis vel clavato-fusoideis; sporidiis oblongo-fusoideis, 8 \approx 1; paraphysibus paucis. In caule **Ænanthes crocatæ** in Britannia. Ascoma 0,3 mm. lat.

2. **Pyrenopeziza jugosa** (Phill.) Sacc. *Mollisia jugosa* Phill. et Plow. 1466 Disc. pag. 184. — Conferta, globosa, verticaliter rugosa, scabra, nigra, disco cinereo, ore contracto; ascis clavatis; sporidiis octonis, oblongo-ellipsoideis vel fusoideis, 3-5-guttulatis dein simulate 3-5-septatis, 14-18 \approx 3-5; paraphysibus numerosis subcoalitis.

Hab. in caulibus emortuis King's Lynn Britanniae. — Ascoma 2 mm. lat. *P. atratæ* affinis.

3. **Pyrenopeziza fracta** (B. et C.) Sacc. *Peziza fracta* B. et C. North 1467 Am. Fungi n. 742 et Disc. U. S. I, p. 296. — Minuta, erumpens, nigra, subglobosa, cito expansa fracta; ascis clavatis; sporidiis biseriatis oblongo-clavatis hyalinis.

Hab. in caule Hydrangeæ vulgaris in mont. Virginiae Amer. bor. — Ascoma initio ore punctiformi apertum.

4. **Pyrenopeziza Chailletii** (Pers.) Fuck. Symb. myc. p. 294, *Mollisia* 1468
Gill. Disc. c. ic., *Peziza Chailletii* Pers. Myc. Eur. I, p. 288. —
Sessilis; cupulis urceolatis carnosulis gilvis, margine denticulato
nigrescente; ascis oblongo-clavatis, 8-sporis, $60 \approx 5$; sporidiis di-
stichis, cylindraceis, biguttulatis, hyalinis, c. 8μ . long.
- Hab.* ad caules plantarum Angelicæ silvestris (CHAILLET)
et Chærophylli aurei (MORTHER), Fœniculi forsan et Gen-
tianæ luteæ (MOUGEOT) in Gallia, Helvetia et Italia. — Junio-
res suburceolatae fuscescentes, adultæ magis depressæ subventri-
cosæ, aqua irrigatæ subturgidæ et margine dentibus subtriangula-
ribus erectis distinctius ornatae; in statu sicco concavo-delapsæ,
margine subinflexo. Color subcervinus aut pallido fuscescens. «Cu-
pulæ (in forma italica Fœniculi) erumpentes initio et sicca clau-
sæ, sphærioidæ, tandem et udæ apertæ extus atræ rugosæ, disco
margineque subrenulato pallidioribus; asci clavati, apice acutati,
parce paraphysati, octospori; sporidia cylindracea, subinæquilate-
ralia, $14-18 \approx 3-4$, utrinque 1-guttulata, hyalina. Ab *Heterosphæ-
ria Patella* Fr. et *Heteropatella lacera* Fuck. bene diversa».
5. **Pyrenopeziza Gentianæ** (Pers.) Fuck. Symb. p. 295, *Peziza Gen-* 1469
tianæ Pers. Myc. Eur. I, p. 310, *Mollisia* Pat. Tab. 286. — Erum-
pens, ceracea, concava, umbrino-nigricans, disco submolli griseo-
albido, margine sublacero; ascis oblongis, stipitatis, 8-sporis, $62 \approx 8$;
sporidiis distichis, oblongis, hyalinis, $11 \approx 3$.
- Hab.* ad caules emortuos Gentianæ luteæ in Vogesia, Jura,
Germania, Helvetia. — Solitaria v. aggregata, etiam disco planiu-
sculo lutescente. Sub epidermide caulis crusta quædam nigrescens
observatur, in qua residet hæc species. Sec. Fuck. crusta hæc fun-
gillo cuidam subcutaneo tribuenda videtur.
6. **Pyrenopeziza Galii** Fuck. Symb. myc. p. 295. — Ut *Pyr. Gen-* 1470
tianæ sed ascis elongatis, stipitatis, 8-sporis, $76 \approx 8$; sporidiis ob-
lique monostichis, obovatis, antice obtusis, basi attenuatis, $10 \approx 5$,
hyalinis.
- Hab.* in caulibus siccis Galii Molluginis ad Neuhof in
Rhenogovia.
7. **Pyrenopeziza Galii-veri** (Karst.) Sacc. *Mollisia Galii-veri* Karst. 1471
M. F. I, p. 203, *Pyren. Molluginis* Rehm. Ascom. n. 257, *Pyr.*
Galii Kunze. — Sparsa v. subgregaria, primum sphæroidea, dein
hemisphærica, tandem explanata, concava, cinerea, disco dilutiore,
margine fimbriato, albicante, sicca nigricans varieque contracta,
rugulosa, 0,5 mm. lat.; ascis fusoido-clavatis, $45-50 \approx 6-8$, apice

jodo vix tinctis; sporidiis fusoideo-filiformibus, rectis v. subrectis, guttulatis v. spurie pluriseptatis, 12-23 \times 1-2; paraphysibus sursum leviter incrassatulis.

Hab. ad caules Galii veri siccos Mustiala Fennicæ et Germania. — Ascis sec. Rehm 42 \approx 9; sporidia 16-18 \approx 2,5.

8. **Pyrenopeziza nigritella** (Phill. et Harkn.) Sacc. *Mollisia nigritella* 1472
Phill. et Harkn. Calif. p. 2. — Minuta sparsa, sessilis, nigricans, spherica dein patellaris, margine serrulato; ascis late clavatis; sporidiis ovoideis, medio subconstrictis, binucleatis, 15 \times 6; paraphysibus nullis.

Hab. in caule putri Galii borealis in California. — Habitus *sphærioides*,

9. **Pyrenopeziza Phyteumatis** Fuck. Symb. mycol. App. I, p. 335. — 1473
Cupulis in crusta aterrima ortis, gregariis, sessilibus, 1 mm. latis, primo clausis, demum late apertis explanatisque, extus rugulosis, nigris, margine valde granuloso sublaceratove, concolori, disco carnosio cæsi; ascis elongato-clavatis, sessilibus, 8-sporis, 5? \times 8; sporidiis distichis, cylindræis, utrinque obtusis, parum curvatis, continuis, biguttulatis, hyalinis, 9 \approx 3; paraphysibus filiformibus.

Hab. ad caules putres *Phyteumatis* spicati in Jura Helvetiæ (MORTHER).

10. **Pyrenopeziza Campanulæ** Fuck. Symb. mycol. App. II, p. 59. — 1474
Cupulis dense gregariis, nigris, media magnitudine, sessilibus, extus margineque crasso rugulosis, humidis apertis, siccis margine involuto clausis, disco griseo, concavo; ascis oblongis, stipitatis, 8-sporis, 70 \approx 10; sporidiis in asci superiori parte subcylindræis, continuis, hyalinis, 12 \approx 3; paraphysibus numerosis, filiformibus.

Hab. in caulibus siccis *Campanulæ* *Trachelii*, greges sæpe magnos nigros formans pr. Neuchâtel Helvetiæ (MORTHER). — Sec. cl. Morthier huc spectat *Phyllachora Campanulæ* (DC.) Fuck.

11. **Pyrenopeziza nigrella** Fuck. Symb. mycol. App. III, pag. 30. — 1475
Cupulis in striis longitudinalibus, atris, quandoque totum caulem occupantibus, gregariis, usque ad millimetrum latis, sessilibus, disco humido subplanis, nigro-cinereo, margine crenulato, nigro, extus concoloribus, granulosis, siccis plicato-clausis, atro-olivaceis; ascis oblongis, 8-sporis, 50 \approx 8; sporidiis distichis, ovato-clavatis, continuis, 9 \approx 4.

Hab. in caulibus siccis *Galeopsidis* *Tetrahit* pr. Neuchâtel Helvetiæ (MORTHER).

12. **Pyrenopeziza pusilla** S. et S. Mich. I, p. 423, F. ital. f. 1401. 1476

— Ascomatibus gregariis, initio epidermide subvelatis, sphærioides, dein semierumpentibus, scutellaribus, vix $\frac{1}{4}$ mm. diam., ubique atris, parce hiantibus, contextu excipuli minute parenchymatico, circa marginem parenchymatico olivaceo-fuligineo; ascis subclavatis, brevis stipitatis, $55-65 \approx 7$, obsolete paraphysatis, octosporis; sporidiis oblique monostichis ovato-oblongis, $8-10 \approx 3\frac{1}{2}-4\frac{1}{2}$, guttulatis, hyalinis.

Hab. in caule emortuo *Menthæ*, Conegliano Ital. bor. — Affinis *P. Gentianæ* sed matrix non nigricata etc.

13. **Pyrenopeziza digitalina** (Phill.) Sacc. *Mollisia digitalina* Phill. 1477

Disc. p. 190. — Sparsa v. gregaria, globosa, dein expansa, extus nigra, squamulosa, margine pallido, disco cinereo; ascis clavatis, acutiusculis; sporidiis cylindræis, rectis curvulisve, $5-7 \approx 1,3$; paraphysibus filiformibus.

Hab. in caule *Digitalis purpureæ*, Shrewsbury Britannia. — Ascoma 300-800 μ . diam.

14. **Pyrenopeziza Bongardii** (Weinm.) Sacc. *Pez. Bongardii* Weinm. 1478

Hym. Gaster. p. 476, *P. globosa* Bong. in Ms. (non Fr.). — Sparsa, sessilis, basi subcontracta, ceterum globosa, demum hemisphærica, glabra, disco subexcavato, albido, margine dentato erecto, extus nigrescens.

Hab. ad caulem plantæ aridæ *Melampyri nemorosi* in Russia minore (Dr. BONGARD, in herbario Acad. Imp. scient. Petrop.) — Species pulchella! Ascoma crassiusculum, firmulum satis elevatum, punctiforme, exsiccatum contractum et totum nigrum evadit.

15. **Pyrenopeziza Rhinanthi** (Karst.) Sacc. *Mollisia Rhinanthi* Karst. 1479

M. F. I, p. 200. — Sparsa, erumpens, sessilis, glabra, sicca nigricans et varie contracta, sæpe subtriquetra, rugulosa, humectata planiuscula, fusca, disco albicante vel pallido, margine pallidiore, 1-1,5 mm. lat.; ascis fusoides-clavatis, $70 \approx 6-7$, obturaculo minutissimo jodo obsoletissime cærulescente; sporidiis aciculari-filiformibus, recte v. leniter curvulis, guttulatis interdum spurie uniseptatis, $18-25 \approx 2-2,5$; paraphysibus filiformibus.

Hab. ad caules *Rhinanthi minoris* exsiccatos in Mustiala Fennia.

16. **Pyrenopeziza lugubris** (De Not.) Sacc. *Peziza lugubris* De Not. 1480

Comm. critt. I, p. 368. — Ascomate madore cupulari-hemisphærico, concavo, in siccis coarctato-sphæriæformi, excipulo crasso, cellulis fuscis stratosi contexto; ascis octosporis; sporidiis oblongatis, exiguis, hyalinis, continuis.

Hab. in caulibus siccis Euphrasiæ, Valsesia Italiæ borealis (CARESTIA).

17. **Pyrenopeziza millepunctata** Sacc. F. Ven. Ser. IV, n. 79, F. it. 1481 f. 1397. — Ab affini *P. lugubri* præcipue recedit ascis brevioribus, cylindræo-oblongis, 45-50 \approx 7-8; sporidiis distichis cylindræis v. clavulatis, 6-7 \approx 2½-3; paraphysibus bacillaribus.

Hab. in caulium putrescentium basi Senecionis nemorensis et sarracenicæ in silva montello (Treviso), dense gregaria, et Malmedy (LIBERT). — Ascomata gregaria ex urceolato scutellata, nigricantia, extus rugulosa, vix ½ mm. lat.

18. **Pyrenopeziza aterrima** Rehm Ascom. Ill. n. 512. — Gregaria, 1482 primitus globosa, subclausa, per epidermidem erumpens, dein subglobosa, sicca atra, corrugata, humida patellari-explanata, hemisphærica, margine tenuissimo, irregulariter eroso cincta, disco pallido, fusco-parenchymatico contexta, cellulis marginalibus elongatis, distantibus viridulo-fuscis, circ. 0,3 μ . diam.; ascis clavatis, apice obtuse acuminatis, 8-sporis, 50 \approx 10; sporidiis ellipticis, rectis v. subcurvatis, nucleis 2 apicalibus præditis, hyalinis, 24 \approx 5; paraphysibus filiformibus, hyalinis, haud clavatis.

Hab. ad caules siccos Centauræ Jacæ, Regenstauf prope Ratisbonam (DR. REHM).

19. **Pyrenopeziza Carduorum** Rehm Asc. n. 68, Winter in Flora 1872 1483 p. 526. — Cupulis dense gregariis v. confluentibus, sessilibus, extus glabris, papillatis, opaco nigro-fuscis, basi pilis hyalinis, repentibus cinctis, primo globosis, margine incurvo, papillato-venoso fimbriatove, demum deformibus, apertis planis, fere emarginatis, disco plano, incano-glaucis, 0,5-1,7 mm. latis; ascis cylindræis, sessilibus, 8-sporis, 50-65 \approx 7; paraphysibus simplicibus, filiformibus, hyalinis, rectis vel curvatis, 4-8-nucleatis, 12-19 \approx 1,5-2.

Hab. in caulibus putridis Carduorum in Franconia.

20. **Pyrenopeziza Artemisiæ** (Lasch) Sacc. *Peziza Artemisiæ* Lasch 1484 in Rabenh. Herb. myc. n. 335. — Erumpens, tenuis, turbinata, e sphæroideo hemisphærico-applanata, scabrosella, subolivaceo-cinerea vel cinerea, disco pallidiore, margine primitus albicante, siccitate nigrescens; ascis cylindræis; sporidiis linearibus, minutis, hyalinis.

Hab. in caulibus emortuis Artemisiæ vulgaris in Germania, Britannia, Fennia et Amer. bor. — Sec. Rehm ascom. n. 66: asci clavati 50 \approx 5; sporidia oblonga, obtusula, rectiuscula, 2-guttata, 7-9 \approx 1,5-2.

21. **Pyrenopeziza subatra** (C. et P.) Sacc. *Peziza subatra* C. et P. 1485

in Peck 28 Rep. St. Mus. p. 66. — Gregaria, erumpens, atra, mollis v. ceracea; cupulis initio hemisphæricis dein apertis, levibus v. leniter rugosis, disco fuligineo, margine pallidiori; ascis subcylindraceis; sporidiis cylindræis, rectis curvulisve, 2-3-nucleatis, 15 μ . longis.

Hab. ad caules emortuos herbarum h. e. Solidaginis et Neseæ verticillatæ in America boreali. — *P. atratæ*, *Ebuli* et *sphærioidæ* affinis.

22. **Pyrenopeziza Ebuli** (Fr.) Sacc. *Mollisia Ebuli* Karst. M. F. I, 1486 p. 292, *Pez. depressula* Nyl. Obs. p. 62 (?) — Erumpens, gregaria, primo subsphæroidea, mox urceolata, demum dilatata, siccitate sphæroideo-depressa, cinereo-nigricans, margine albidiore, sicca nigricans, disco cinereo-pallescente, 0,3-0,5 mm. lat.; ascis cylindraceo-clavatis, apice attenuatis, 30-50 \approx 5-7, obturaculo apicali minutissimo jodo leviter cœrulescente; sporidiis clavulatis v. aciculari v. fusoideo-elongatis, guttulatis, 9-12 \approx 1,5-2,5.

Hab. ad caules Sambuci Ebuli et Epilobii in Germania, Fennia et Suecia. — *P. atratæ* affinis, sed cupulis erumpentibus sporidiisque longioribus.

23. **Pyrenopeziza Thalictri** (Peck) Sacc. *Peziza Thalictri* Peck 29 Rep. 1487 St. M. p. 55. — Cupulis numerosis, sessilibus per epidermidem erumpentibus minutis, siccis punctiformibus, extus atris, margine plerumque albido v. cinereo et subfimbriato, disco cinereo; ascis oblongis; sporidiis confertis, elongatis, simplicibus vel multinucleatis, 25-30 \approx 5.

Hab. ad basim caulium emortuorum Thalictri cornuti Center, Amer. bor. — Cupula uda expansa, disco conspicuo, extus scabra.

II. Ramicolæ.

24. **Pyrenopeziza aborigena** Speg. Mich. II, p. 259. — Ascomatibus 1488 minutis, 120-150 μ . diam., sparsis, superficialibus, conico-cupuliformibus, extus atris, disco glaucocinereo subatro; contextu obsolete celluloso, marginem versus prosenchymatico-radiante; ascis cylindræo-clavatis, deorsum in pedicellum brevem attenuatis, apice acutiuscule truncato-rotundatis, crassiuscule tunicatis, octosporis, 40-45 \approx 4-5, apice jodi ope obsolete cœrulescentibus; paraphysibus filiformibus obvallatis; sporidiis distichis, cylindræis, utrinque obtuse acuminatis, non vel 1-2-guttulatis, hyalinis, 5-8 \approx 2-2½.

Hab. in ramis decorticatis putrescentibus Rhamni Frangulæ in montanis prope Pieve di Cadore, Ital. bor.

25. **Pyrenopeziza Rubi** (Fr.) Rehm Ascom. n. 416, *Excipula Rubi* 1489
Fr. Syst. Myc. II, p. 190, Grev. t. 334, *Cenangium Rubi* Duby
C. rugosum Niessl, *Mollisia Rubi* Pat. f. 486. — Ascomatibus erumpentibus, subcoriaceis, sæpius complicatis, cervino-nigricantibus, disco pallidiore, e plano concavo; ascis clavulatis, 45-50 \approx 6-7; sporidiis tereti-clavulatis, hyalinis, 7-8 \approx 1,5-2; paraphysibus filiformibus.

Hab. in sarmentis emortuis Rubi fruticosi, Idæi et cæsii in Germania, Gallia, Britannia, Belgio, Amer. bor. — Var. **tenerior**, *Trochila Rubi* De Not.: ascomatibus subsuperficialibus, tenuioribus, demum totis atris et siccis varie complicatis, excipuli contextu parenchymatico, ad marginem breve prosenchymatico toto fuligineo-atro, cellulis nonnullis prominentibus et saturatoribus; ascis clavato-cylindræis, 40 \approx 7; paraphysibus bacillaribus obvallatis, octosporis; sporidiis distichis oblongo-cylindræis, 8-10 \approx 1½ hyalinis. In sarmentis Rubi in Ital. bor.

26. **Pyrenopeziza lacerata** (C. et P.) Sacc. *Peziza lacerata* C. et P. 1490
in Grevillea I, pag. 6. — Gregaria, globosa, dein expansa, atrobrunnea, margine in dentes subtriangulares, inæquales fisso; disco cinereo, dein nigricante; ascis subcylindræis; sporidiis tereti-clavatis, 12-13 μ . longis.

Hab. in sarmentis Rubi odorati in Mont. Adirondack Americæ borealis.

27. **Pyrenopeziza rimicola** (Karst.) Sacc. *Mollisia rimicola* Karsten 1491
in Rev. Myc. 1885, p. 106. — Subgregaria, superficialis, spheroidæa (saltem siccitate), sublevis, atra, ore integro, rotundo, vix pallidiore, 100-150 μ . lat.; ascis fusoideo-clavatis, 36-40 \approx 5-6; sporidiis elongatis v. fusoideo-elongatis, eguttulatis, hyalinis, 4-5 \approx 1; paraphysibus numerosis.

Hab. in rimis corticis ramorum aridorum Ribis alpini pr. Mustiala Fennicæ.

28. **Pyrenopeziza Vitis** Rehm Ascom. Ill. n. 67 (1871), Wint. in Flora 1492
1872, p. 526, *Peziza ampelina* Pass. (1874) in Rab. F. E. n. 1706.
— Ascomatibus sparsis gregariisve e globoso hemisphæricis, verrucosis, fusco-atris, ⅓ mm. diam., margine crenulato, contextu parenchymatico fusco; sporidiis obtuse conoideis, unicellularibus, hyalinis, 8 \approx 2,5, distichis; ascis clavatis, apice incrassatis, 36-40 \approx 6; paraphysibus hyalinis, filiformibus.

Hab. ad corticem trunci *Vitis viniferæ* in silva Kislakensis prope Kaposvár (LOJKA) et Parma Ital. bor. (PASS.). — Videtur potius forma *Pyr. atrata*, teste ipso auctore.

29. **Pyrenopeziza Tamaricis** (Roum.) Sacc. Mich. II, p. 536, *Peziza* 1493

Tamaricis Roum. F. Gall. n. 263, *Mollisia Myricariæ* Bres. Rev. Mycol. IV, pag. 212 et 221, *Mollisia Tamaricis* (Roum.) Bres. Trid. p. 42, t. 45, f. 2. — Subcæspitosa, hemisphærica, dein expansa, mutua pressione contorta, fuligineo-tabacina, margine prosenchymatico, dein pallidiore, furfuracea, disco griseo-brunneo, subinde flavido-olivaceo tincto, levi 1-2 mm. lato; ascis subfusoides, 40-50 \approx 5-6; sporidiis tereti-fusoides, sæpe curvulis, 6-8 \approx 2-2,5, hyalinis; paraphysibus filiformibus.

Hab. in ramis decorticatis *Myricariæ germanicæ*, *Tamaricis narbonensis*, *Robinia* in agro Tridentino, in Gallia, Germania, Britannia. — Var. **argentina**, cfr. Speg. F. Arg. Pug. IV, n. 228: ascomatibus udis explanatis, undulatis, subpellucidis, glaberrimis, extus olivaceis, disco pallidiore, 0,5-1 mm. diam., siccis contracto-globulosis v. subhysteriiformibus, rugulosis, atris, fragilibus; ascis cylindræo-clavatis, antice obtusiuscule rotundatis, deorsum breve crasseque stipitatis, 35-40 \approx 3,5-5; paraphysibus filiformibus obvallatis; sporidiis oblique monostichis vel distichis, subelliptico-cylindræis, utrinque obtuse rotundatis ac 1-guttulatis, 7-8 \approx 1,5, hyalinis. In cortice duriore trunci adhuc vivi *Tamaricis africanæ* in Argentina. —

30. **Pyrenopeziza rugulosa** Fuck. Symb. mycol. pag. 293. — Cupulis 1494

quandoque in massam granulosa nigram confertis, superficialibus, sessilibus, usque ad 1 mm. diametr., globosis, primo punctiformibus, globosis, perforatis, demum magis apertis, margine connivente, extus granuloso, subverticaliter striato-rugosis, nigris, disco atro-fusco; ascis oblongis, 8-sporis, 28-30 \approx 4-5; sporidiis cylindræis, subrectis, 6 \approx 1,5 \approx 2, hyalinis.

Hab. in ramis decorticatis putridis *Carpini* ad Nefelbach in silva Cëstrich Rhenogoviæ.

III. Follicolæ.

31. **Pyrenopeziza Eryngii** Fuck. Symb. pag. 294. — Cupulis sparsis, 1495

sessilibus, 2 mm. diam., nigris, margine concolore, denticulato, demum clauso, disco vix pallidiore; ascis oblongis, 8-sporis, sessilibus, 70-74 \approx 10-12; paraphysibus asci longitudine, clavatis; spori-

diis distichis, oblongis, parum curvatis, utrinque obtusis, biguttulatis, 15-16 \approx 4,5-5, hyalinis.

Hab. in foliis putridis *Eryngii campestris* in Rhenogovia et Bavaria.

32. **Pyrenopeziza nigrificans** (Wint.) Rehm *Ascom.* n. 862, *Niptera* 1496
nigrificans Winter *F. Eur.* n. 2832. — Cupulis superficialibus, sparsis v. gregariis, humectatis patellæformibus seu fere scutellatis, rarius regulariter orbicularibus, immo plerumque irregulariter angulatis, flexuosis repandisque, difformibus, $\frac{1}{2}$ -2 mm. latis, extus fusco-atris, rivulosis, margine crenato et denticulato, erecto, disco plano v. subconcavo, cinereo; siccis hemisphæricis, margine involuto, fere clausis, contextu parenchymatico; ascis cylindræis, deorsum parum attenuatis, 8-sporis, 50-70 \approx 6-7; paraphysibus filiformibus, sursum plus minus incrassatis, sæpe clavatis, usque 5 μ . crass., hyalinis; sporidiis monostichis vel subdistichis, ellipsoideis seu ellipsoideo-oblongis, continuis, hyalinis, guttulis 2 præditis, 7-8,5 \approx 3,5-4 crassis.

Hab. ad *Adenostylidis alpinæ* petiolos putridos, Rigi pr. Luzern Helvetiæ (G. WINTER). — Mycelium effusum, substratum longe lateque (etiam profunde) penetrans et nigrificans.

33. **Pyrenopeziza Medicaginis** Fuck. *Symb.* p. 295. — Cupulis sessilibus, 1 mm. latis, primo globosis, clausis, dein apertis, hemisphæricis, extus atro-fuscis, rugulosis, margine elevato, crenulato, concolore; disco pallide griseo; ascis oblongo-clavatis, 8-sporis, 80 \approx 10; sporidiis distichis, oblongo-ovatis, utrinque uniguttulatis, 10 \approx 5, hyalinis; paraphysibus linearibus, rectis, asci longitudine.

Hab. ad folia et petiolos *Medicaginis sativæ* pr. Cëstrich Rhenogoviæ.

34. **Pyrenopeziza Agrostemmatidis** Fuck. *Symb. myc.* p. 295, tab. VI, 1498
f. 34. — Cupulis superficialibus, sparsis, sessilibus, $\frac{1}{2}$ mm. latis, extus nigris, rugulosis, primo globosis, demum apertis planisque, margine denticulato, disco pallescente, carnoso; ascis oblongo-clavatis, stipitatis, 8-sporis, 84 \approx 12; paraphysibus elongato-clavatis; sporidiis in asci superiori parte subdistichis, clavatis, curvatis, guttulatis, in parte angustiore obscure (spurie) uniseptatis vel continuis, guttulatis, hyalinis, 20 \approx 5.

Hab. in foliis languidis *Agrostemmatidis Githaginis* pr. Hallgarten Rhenogoviæ. — Stat. conidicus, teste Fuck., est *Marsonia Deslastræi* (De Laer.).

35. **Pyrenopeziza Delavayana** Sacc. *Mollisia nigrella* Pat. *Champ.* 1499

Chine pag. 1 (nec Fuckel). — Globulosa, nigra, 0,5-1 mm. lata, extus glabra, ore sinuoso, disco cinereo; ascis clavatis, longe stipitatis, 53-60 \approx 10-12; sporidiis ovoideis, hyalinis; paraphysibus filiformibus, ramulosis.

Hab. in foliis radicalibus Campanulæ dimorphanthæ Yunnan Sinarum (DELAVAY).

36. **Pyrenopeziza Plantaginis** Fuck. Symb. mycol. p. 294, *Pez. atrata* 15
form. *foliicola* Desm Crypt. n. 1313. — Cupulis plerumque in macula expallescens, sessilibus, gregariis, minutis, punctiformibus, primo clausis, globosis, demum apertis, extus nigro-furfuraceis, margine involuto, disco concavo, pallide fusco; ascis elliptico-oblongis, 8-sporis, 40-55 \approx 7-9; sporidiis distichis, elongato-lanceolatis, rectis, 12-16 \approx 3-4, hyalinis, 2-guttulatis granulosisque.

Hab. in foliis scapisque emortuis Plantaginis lanceolatæ in Germania, Italia, Britannia, Belgio.

37. **Pyrenopeziza nervisequia** (Pers.) Sacc. *Mollisia* Phill. Disc. p. 179, 15
t. VI, f. 33, *P. nervisequia* Pers. M. E. I, p. 308, Fr. Syst. Myc. II, p. 153. — Seriata, nigra, cupulis in subiculo indurato lineari insidentibus, disco concavo, cinereo v. nigro; ascis clavatis; sporidiis oblongo-ellipsoideis vel oblongis, 13 \approx 3; paraphysibus filiformibus.

Hab. in foliis emortuis Plantaginis lanceolatæ in Vogesis (MOUGEOT), Batheaston Britannicæ (BROOME). — In nervis foliorum observantur lineæ pariter nigrae, super quas positæ sunt cupulæ parvæ subcompresso-flexuosæ.

38. **Pyrenopeziza acicola** S. et S. Mich. I, p. 423, F. it. f. 1405. — 15
Ascomatibus sparsis erumpenti-superficialibus, totis atris, duriusculis, $\frac{1}{4}$ mm. diam., concaviusculis, contextu obsolete celluloso, ad marginem radiante ochraceo; ascis cylindricis brevissime stipitatis, paraphysatis, 40-45 \approx 6, octosporis; sporidiis oblique monostichis bacillari-clavulatis, 7-8 $\frac{1}{2}$ \approx 1-1 $\frac{1}{2}$, curvulis, hyalinis.

Hab. in acubus putridis Pini silvestris, Susegana Ital. bor.

39. **Pyrenopeziza protrusa** (B. et C.) Sacc. *Peziza protrusa* B. et 15
C. North Am. Fungi n. 745 et Cooke Disc. U. S. I, pag. 297. — Erumpens, punctiformis, epidermide hic illic circumdata, ore flexuoso, extus granulata castanea, intus concava alba.

Hab. in pag. inf. foliorum emortuorum Magnoliæ glaucæ in Carolina inf. Amer. bor.

40. **Pyrenopeziza sphaeroides** (Pers.) Fuck. Symb. App. I, pag. 335, 15
Excipula sphaeroides (Pers.) Fr. Syst. Myc. II, p. 191, *Xyloma*

Pers. Syn. pag. 106. — Erumpens, initio globosa, nigricans, dein subexpansa, margine erecto dein collapsa crispa, disco aquoso-cinereo, concavo, demum atro; ascis sessilibus, oblongis, 8-sporis, $36 \approx 6$; sporidiis distichis, cylindratis, continuis, hyalinis, $6 \approx 2$; paraphysibus filiformibus.

Hab. in pag. inf. foliorum putrium Salicis capreæ, Æstrich Rhenogoviæ. — Forma **Lychnidis**, cfr. Phill. Disc. p. 187: sporidiis $10-15 \approx 1-1,5$, ascis tereti-fusoideis. In caulibus emortuis *Lychnidis dioicæ* King's Lynn Britannicæ (PLOWRIGHT).

41. **Pyrenopeziza foliicola** (Karst.) Sacc. Mich. I, pag. 65, *Mollisia* 1505
foliicola Karst. Fenn. I, p. 201. *Trochila atrata* * *Tr. foliicola* Karst. Symb. p. 244. — Gregaria, subsphæroidea aut hemisphærica v. concava, pallida v. cinereo-pallida, sicca sphæroideo-contracta, nigricans margineque albo-flocculoso, circiter 0,1-0,2 mm. lat.; ascis $36-40 \approx 5-6$; sporidiis fusoides-elongatis, $6-10 \approx 1,5-2$.

Hab. supra folia Alni putrescentia circa Mustiala Fennicæ. — Var. **quercina** Sacc.: ascis clavato-oblongis, $20-25 \approx 5$, paraphysatis, octosporis; sporidiis fusoides, $7-8 \approx 1\frac{1}{2}-2$, hyalinis. In foliis putrescentibus *Quercus pedunculatæ* in Ital. bor. et Gallia. Verisimiliter huc spectat *Peziza Rabenhorstii* Awd. in Herb. mycol. n. 222, De Not. Prof. Discom. in Comm. critt. ital. I, p. 368. *P. Massoniana* De Not. in Tassi Fl. Sen. p. 61, forte huc spectat, sed specimina authentica non vidi.

42. **Pyrenopeziza Heteromelis** Phill. et Harkn. Grev. XIII, p. 22. — 1506
Gregaria, erumpens, demum sessilis; cupulis 0,2-0,5 mm. lat., sphericis dein expansis, leniter scabrosis, atro-brunneis, margine serrato, disco fuligineo flavescente; ascis cylindratis-clavatis; sporidiis ellipticis, $10 \approx 5$, flavo-tingentibus; paraphysibus filiformibus, ad apicem incrassatis, flavescentibus.

Hab. in pag. inf. foliorum *Heteromelis arbutifoliæ* in California (HARKNESS).

43. **Pyrenopeziza betulicola** Fuck. Symb. myc. pag. 294, *Calloria* 1507
Winteri Kunze F. sel. n. 283. — Cupulis gregariis in macula expallescens, sessilibus, $\frac{1}{2}$ mm. latis, primo globosis, demum apertis, margine conniventi, extus nigris, scabris substriatisve, margine parum lacerato, disco concavo pallidiore fusco flavescenteve; ascis oblongis vel clavatis, antice acuminatis, in stipitem attenuatis, 8-sporis, $56 \approx 8$; sporidiis submonostichis, oblongis, utrinque obtusis, hyalinis, guttulatis, $8-10 \approx 3$.

Hab. ad folia putria *Betulæ albæ* in silva Mittelheim Rhe-

nogoviæ. — Var. **rubicola** Rehm Ascom. n. 572: sporidiis clavulatis, uno apice acutioribus, 8-9 \approx 2-2,5; ascis 36 \approx 6-7. In pag. inf. foliorum Rubi fruticosi in Helvetia (WINTER).

44. **Pyrenopeziza emergens** (Phill. et Harkn.) Sacc. *Mollisia emer-* 150
gens Phill. et Harkn. Calif. p. 2, nec Karst. — Sparsa, erumpens, sicca compressa, nigro-brunnea, margine involuto, striatulo, disco griseo-cyaneo; sporidiis ovoideis, 7-9 \approx 3-4; paraphysibus filiformi-clavulatis.

Hab. in pag. inf. foliorum emortuorum Eucalypti Globuli in California. — Ascoma 0,5 mm. lat.

45. **Pyrenopeziza viburnicola** (B. et Br.) Sacc. *Peziza viburnicola* 150
B. et Br. Ann. N. H. n. 1170 (1866). — Subglobosa, minuta, punctiformis, dein hemisphærica, grisea, extus granulata, margine denticulato, furfuraceo, disco pallidiori; ascis clavatis; sporidiis lanceolatis, 10-12 μ . longis.

Hab. in foliis emortuis Viburni, Shere Surrey Britannia. — Cupula extus cellulis dense fasciculatis, subinde in pilos paucos breves flexuosos productis granulata.

IV. Ligni-corticicolæ.

46. **Pyrenopeziza ligni** (Desm.) Sacc. Mich. II, p. 611, F. it. f. 1399, 15
Moll. ligni (Desm.) Karst. M. F. II, pag. 204, *Cenangium ligni* Desm. Exs. I, n. 2014, Tul. Carp. III, p. 169, t. XX, f. 5-7, *Trochila* De Not. Disc. p. 15. — Ut plurimum cæspitose aggregata, e sphæroideo concava, sessilis v. subsessilis, fusco-cervina, sicca varie contracta et fusco-nigricans, 0,8-1 mm. lat.; ascis cylindræo-clavatis, sessilibus, obtusis, 45-55 \approx 4-5,5; sporidiis fusoideo-elongatis vel fusoideo-oblongatis, distichis, vulgo rectis et eguttulatis, 6-12 \approx 1,5-2,5; paraphysibus filiformibus.

Hab. ad lignum Quercus, Salicis capræ, Coryli, Populi, Castaneæ et Cratægi coccineæ vetustum in Fennia, Germania, Gallia, Italia. — Variat sporidiis et ascis nec non cupulis paullo minoribus. Typus aberrans. Spermogonia modo ascomatibus mixta, nunc ab iis segregata, sphæriiformia, sessilia, subsphæroidea, gregaria, fusco-nigra, circiter 0,3 mm. lat.; sporulæ cylindrææ, rectæ v. leniter curvulæ, simplices, 3-3,5 \approx 1.

47. **Pyrenopeziza lignicola** (Phill.) Sacc. *Mollisia lignicola* Phill. Disc. 151
p. 180. — Gregaria v. sparsa, sessilis, initio globosa dein leniter expansa, extus scabrosa et verticaliter rugulosa, brunnea v. brunneo-nigra, sicca nigra, margine ob cellulas elongatas inæquales

subfimbriato, disco pallido; ascis tereti-clavatis, $35 \approx 4$; sporidiis cylindræis v. fusoidæis, obtusis, rectis curvulisve, $5-8 \approx 1,5-2$; paraphysibus obsoletis.

Hab. in ligno vetusto fabrefacto Bagley Wood Berkshire Britannia. — Ascoma 0,5-1 mm. lat.

18. **Pyrenopeziza cariosa** (Peck) Sacc. *Peziza cariosa* Peck 24 Rep. 1512
of the Bot. 1872, p. 95. — Dense gregaria, sessilis, tenuis, applanata, subconcava, glabra, atra, madore atro-brunneo-rufescens, margine distincto, flexuoso vel in individuis majoribus anguloso; sporidiis oblongis, continuis, hyalinis.

Hab. in lignis putridis in montibus Catskill Amer. bor. — Vix 1 mm. lat.

19. **Pyrenopeziza Stilbum** Fuck. Symb. p. 294. — Cupulis ad basim 1513
fungi conidiophori natis, brevissime stipitatis sessilibusque gregariis, pusillis, 74μ . diam., semper subclausis, atris, vertice (margine) candide ciliatis, ciliis cupulam diametro æquantibus; ascis oblongo-clavatis, 8-sporis, $27 \approx 6$; sporidiis oblongo-cylindræis, hyalinis, utrinque uniguttulatis, continuis, $8 \approx 3$.

Hab. ad lignum putre Carpini Betuli, rarius, Æpfelbach Rhenogoviæ. — Fungus conidiophorus *Stilbum* refert. Hyphis erectis, fertilibus brevioribus, atris, 107μ . altis, apice capitulum brevissime ramosum, conidiophorum, album gerentibus, conidiis cylindræis, subcurvatis, $4 \approx 2$. — An *Cyathicula*?

V. Graminicolæ.

20. **Pyrenopeziza Karstenii** Sacc. Mich. II, p. 329, F. ital. fig. 1402, 1514
Mollisia graminis Karst. Fenn. I, 195, nec Desm. — Gregaria vel sparsa, erumpens, concava, rugulosa, umbrina, disco umbrino-pallido v. griseo-pallente, margine albo-villosulo-fimbriato, circiter 0,4 mm. lat.; ascis cylindræo-clavatis, $40-60 \approx 5-6$, obturaculo minutissimo jodo obsolete cœrulescente; sporidiis aciculari- v. fusoidæo-elongatis, rectis v. leniter curvulis, guttulatis v. spurie tenuiter 1-septatis, $8-12 \approx 1,5-2$; paraphysibus filiformibus, sursum leviter incrassatis.

Hab. ad culmos Poæ cæsia, Agrostidis et Airæ cæspitosæ putrescentes per totam Fenniam et Lapponiam in Gallia, Germania et Groenlandia. — Var. **Caricis** Rehm Ascom. n. 711: erumpens, gregaria, concava, sicca rugulosa, umbrino-fusca, disco pallidiore, $\frac{1}{2}$ mm. diam., contextu fusco parenchymatico, cellulis marginalibus elongatis distantibus, ex hyalino fuscidulis, $15 \approx 5$; ascis

clavulatis, $40 \approx 8$; sporidiis acicularibus, 2-guttulatis, 2-3-stichis, $12 \approx 2$, hyalinis; paraphysibus clavulatis. Ad folia sicca Caricis in Saxonia (KRIEGER).

51. **Pyrenopeziza stictoidea** Sacc. Michel. II, p. 259, F. ital. f. 1403. 1515

— Ascomatibus seriatim gregariis, innatis epidermide diu velatis, tandem semierumpentibus, urceolato-depressis, nigricantibus, $\frac{1}{5}$ - $\frac{1}{4}$ mm. diam., margine involutis, disco exiguo pallidiore; ascis fusoidis vel obclavatis, subsessilibus, $35-38 \approx 6$, sursum acutatis; paraphysibus filiformibus apice curvulis, obvallatis, octosporis; sporidiis distichis tereti-fusoideis, $8-10 \approx 1\frac{1}{2}$ - $1\frac{3}{4}$, rectiusculis, 3-guttulatis, hyalinis.

Hab. in foliis emortuis Hierochloes v. affinis graminis in M. Sol, Bassano Italiæ bor. (A. Rossi). — Fungillis pluribus cognata species, nempe *Stictidi exigua* Desm., *St. obvelata* (Lacr.) De Not., *Trochilæ pusillæ* (Lib.) Speg., quæ revera aptius *Pyrenopezizæ* generi adscribendæ videntur.

52. **Pyrenopeziza fuegiana** Speg. Fung. Fueg. n. 339. — Cupulis su- 1516

perfacialibus sparsis v. hinc inde laxe gregariis, e globoso-hemisphæricis, 250-300 μ . diam., disco applanatis v. vix concavis sordide fusco-fuligineis, extus atris glabris, contextu parenchymatico fuligineo; ascis cylindræis v. subclavatis, antice rotundatis crassiusculeque tunicatis, deorsum breviter attenuato-pedicellatis, $35-40 \approx 10$, octosporis; paraphysibus filiformibus densiusculis; sporidiis oblique monostichis, cylindræo-fusoideis, utrinque acutiusculis, $6-7 \approx 1,5-2$, hyalinis, continuis.

Hab. ad folia viva v. languida Poæ minutæ cujusdam in silvis prope Ushuvaia Fuegiæ.

53. **Pyrenopeziza Arundinariæ** (B. et C.) Sacc. *Peziza Arundinariæ* 1517

Berk. et Cooke Disc. Unit. St. I, p. 297. — Applanata, mox secedens, piceo-nigra, subiculo orbiculari, maculiformi insidens, disco pallido; ascis.....

Hab. in culmis Arundinariæ in Carolina Amer. bor.

54. **Pyrenopeziza denigrata** (Kunze) Rehm Ascom. n. 353, *Niptera de-* 1518

nigrata Kunze F. sel. n. 180 (absque diagnosi). — Ascomatibus gregariis, erumpentibus ex urceolato scutellatis, $\frac{1}{3}$ mm. diam., plumbeo-nigricantibus, glabris; ascis oblongis, $40-50 \approx 14$; sporidiis elongatis, 2-guttulatis, hyalinis, $15-17 \approx 4-5$, distichis; paraphysibus filiformibus.

Hab. ad caules Antherici ramosi in Germania (KUNZE) et culmos Festucæ tenellæ in Amer. bor. (ELLIS).

55. **Pyrenopeziza multipuncta** (Peck) Sacc. *Peziza multipuncta* Peck 1519
33 Rep. pag. 31. — Cupulis numerosis, minutis, 150-250 μ . lat., culmicolis v. raro hypophyllis, brevibus, sessilibus, madore pallide umbrinis, siccis fusco-nigris, ore angusto, hymenio albido; ascis sessilibus, subcylindricis, 40-50 \approx 4-5; sporidiis confertis vel biseriatis, cylindricis, rectis, hyalinis, 12 μ . long.; paraphysibus filiformibus.
- Hab.* in culmis emortuis Caricis stellulatæ, raro in foliorum mortuorum pagina inferiore, Albany Amer. bor. (CH. H. PECK).
56. **Pyrenopeziza cervinula** (Cooke) Sacc. *Peziza cervinula* Cooke 1520
Hedw. 1875, p. 84, Disc. U. S. I, p. 297. — Subgregaria, sessilis, minutissima, $\frac{1}{10}$ - $\frac{1}{5}$ mm., cupula globosa, primum poro aperta dein hemisphærica ad marginem pallidiorem contracta, extus cervinula disco albido; ascis clavatis 40 μ . longis; sporidiis cylindræis, rectis v. curvulis, hyalinis, 12-14 \approx 2.
- Hab.* ad culmos Caricis, New Jersey Amer. bor. (ELLIS).
57. **Pyrenopeziza subconica** (Rehm) Sacc. *Mollisia subconica* Rehm 1521
Ascom. Alp. n. 21. — Gregaria, orbicularis, lata basi sessilis, nigra, sicca collapsa et extus subrugulosa, humida subconica, ore albidulo poriformi subdilacerato, disco et excipulo fuscidulo, parenchymatico-fusco-contexta, c. 0,2 mm. diam.; ascis (inevolutis) clavatis, 8-sporis, 36 \approx 6; sporidiis ellipticis, rectis, 1-cellularibus, hyalinis, distichis, 7 \approx 2; paraphysibus filiformibus, hyalinis, haud clavatis.
- Hab.* ad culmos siccos Junci Hostii Taschach-Gletscher in valle Piz alpium Tyrolens., alt. c. 2000 metr. (DR. REHM).
58. **Pyrenopeziza corcellensis** Sacc. Miscell. mycol. I, pag. 23. — 1522
Ascomatibus laxe gregariis epidermide diu velatis, dein erumpentibus, plano-scutellatis, $\frac{1}{4}$ mm. diam., totis nigricantibus, margine parum elevato, subinæquali; excipuli contextu parenchymatico fusco, ad marginem prosenchymatico subhyalino; ascis fuscoideis, brevissime stipitatis, apice obtuse attenuatis, octosporis; paraphysibus bacillaribus apice anguste clavulatis; sporidiis subtristichis, fusiformibus, rectis, curvulisve, acutiusculis, 30-32 \approx 3,5-4, granulosis hyalinis.
- Hab.* in foliis calamisque Luzulæ albidæ in silvis Corcelles pr. Neuchatel Helvetiæ (MORTIER). — Affinis *Trochilæ diminuenti* Karst., sed sporidia longiora et paraphyses vix apice clavatæ.
59. **Pyrenopeziza fœcunda** (Phill.) Sacc. *Mollisia fœcunda* Phill. 2523
Disc. p. 189. — Sparsa, minuta, initio epidermide tecta dein erum-

pens, concava, uda fuliginea, margine pallidiore, disco fusco-atro; ascis late clavatis; sporidiis fusoides, 3-4-nucleatis, 25-30 \approx 4-5; paraphysibus filiformi-clavulatis.

Hab. in calamis putridis Eleocharidis, Forres Scotiæ (J. KEITH). — Ascoma $\frac{1}{2}$ mm. lat.

VI. In Cryptogamis.

60. **Pyrenopeziza Arenula** (A. et Schw.) Sacc. *Peziza Arenula* A. 1524 et Schw. Consp. p. 341, Fr. Syst. Myc. II, p. 148, *Mollisia Arenula* (A. et S.) Karst. Rev. p. 136. — Sparsa, sessilis, subsphæroidea, semper conniventi-clausa, perpusilla, sicca, nudo oculo fere invisibilis, glabra, fuliginea, intus albida; ascis 28-30 \approx 7-8; sporidiis fusoides-elongatis, simplicibus, hyalinis, 6-8 \approx 1,5.

Hab. in frondibus Pteridis aquilinæ putridis in Mustiala Fennicæ, in Suecia et Germania. — Arenæ granulo similis.

61. **Pyrenopeziza urnicola** Mout. et Sacc. (sp. nov.). — Ascomatibus 1525 ex urceolato scutellatis, superficialibus, minimis, sparsis, atris, extus minute rugulosis; ascis tereti-oblongis, 60 \approx 8, octosporis; sporidiis fusoides, utrinque acutis, continuis, hyalinis, 2-guttulatis, 12 \approx 2-2,5.

Hab. in capsulis siccis Polytrichi prope Liège Belgii. — Ascomata 110-130 μ . lat., sæpe in areolis albicantibus nascentia.

62. **Pyrenopeziza thallophila** (Karst.) Sacc. *Moll. thallophila* Karst. 1526 M. F. I, p. 205. — Sparsa v. gregaria, sessilis, subsphæroidea v. hemisphærica, sicca varie contracta, fusca vel umbrina, subfurfurella, rugulosa, 0,2-0,4 mm. lat.; ascis clavatis, 30-48 \approx 6-7,5, jodo luteolis; sporidiis distichis, subellipsoideis v. oblongato-ellipsoideis, rectis, vulgo guttulis 2 mediocribus præditis, 7-8 \approx 3-3,5; paraphysibus gracilentibus, apicem versus incrassatis.

Hab. supra thallum apotheciarum Lecanoræ subfuscæ, ad corticem Salicis viminalis et Alni incanæ crescentis in Mustiala Fennicæ. — Externa facie *M. atratam* nonnihil refert, partibus vero internis magis cum præcedente et sequente convenit.

63. **Pyrenopeziza kolaensis** (Karst.) Sacc. *Mollisia kolaensis* Karst. 1527 M. F. I, p. 201. — Aggregata, hemisphærica, subflocculoso-furfurella, fusco-nigricans (humectata), margine albido, disco pallido, 0,2-0,3 mm. lat.; ascis subfusoides-elongatis, 25-30 \approx 4-5, apice jodo non cœrulescente; sporidiis elongatis, 5-8 \approx 1,5.

Hab. supra Corticium ad corticem vetustum Salicis crescentis, in regione Kolaensi Fennicæ. — Ab auctore ut subspecies *P. atratæ* habita.

TAPESIA Pers. M. E. I, p. 220, Fuck. Symb. mycol. p. 300 (Etym. *tapes*). — Ascomata subiculo plus minusve tomentoso, sæpe conidiophoro insidentia, minuta, sessilia raro substipitata, ceracea v. duriuscula, urceolato-scutellata, extus glabra furfuracea v. pilosa. Asci elongati plerumque 8-spori, paraphysati. Sporidia oblonga, oblongo-ovata, cylindræave, continua, hyalina.

I. *Eu-Tapesia*. Ascoma glabrum v. granulosum.

A. Fructificatio nota.

1. **Tapesia sanguinea** (Pers.) Fuck. Symb. pag. 303, Pat. Tab. anal. 1528 f. 91, *P. sanguinea* Pers. disp. p. 34, Myc. Eur. pag. 273, Nees Syst. f. 271, Fr. Syst. Myc. II, p. 110. — Cupulis concavis, glabris, nigrescentibus, basi tomento brevi sanguineo cinctis; ascis clavatis, antice obtusis, 8-sporis, $56 \approx 8$; sporidiis distichis, oblongo-ovatis, hyalinis, $8 \approx 3$; paraphysibus ramosissimis.

Hab. ad ligna exsiccata duriora Abietis, Fagi, Piri, Populi in Suecia, Germania, Gallia, Helvetia, Belgio, Britannia, Amer. bor. — Cupulæ pusillæ, plus minus aggregatæ, juniores molles fuscescentes, margine rubello cinctæ, substantia atro-sanguinea, dein induratæ, nigræ, apothecium *Lecideæ* vel *Sphæriam* collapsam referentes. Subiculum proprie non contextum; sed tomentulum basin cupularum cingit et quando hæ valde confertæ, tomentum in subiculum confluit.

2. **Tapesia atro-sanguinea** Fuck. Symb. pag. 303. — Cupulis primo 1529 clausis, demum apertis subplanis concavisve, 2 mm. latis, breviter crasse atre stipitatis, extus ochraceo-pulverulentis, disco fusco, demum nigro, margine distincto, candido, e fibrillis longissimis, repentibus, saturate sanguineis, persistentibus, sæpe in massam gelatinosam conidiophoram, diaphanam confluentibus ortis; conidiis subglobosis, minutissimis; ascis oblongis, substipitatis, 8-sporis, $24 \approx 6$; sporidiis distichis, cylindræeis, curvatis, hyalinis, $4 \approx 2$.

Hab. in ligno putri, molli Betulæ, Fagi, Cerasi pr. Mappen et Frankensteiner Kopf Rhenogoviæ. Prædistincta species.

3. **Tapesia mollisioides** (Schw.) Sacc. Mich. II, p. 140, *Peziza* Schw. 1530 Syn. p. 174. — Ascomatibus perexiguis, $\frac{1}{3}$ - $\frac{1}{7}$ mm. diam., plano-scutellatis levibus sessilibus, fuligineis, disco pallidiore, excipulo parenchymatico fusco, cellulis marginalibus longioribus dilutioribus; ascis clavatis, $50-55 \approx 10$, breve stipitatis apice rotundatis; paraphysibus filiformibus obvallatis, octosporis; sporidiis oblongis vel

subfusoides, 8-9 \approx 3, leniter curvis quandoque plasmate bipartito, hyalinis.

Hab. in ramis decorticatis New England (SPRAGUE), Pennsylvania (SCHW.), Carolina (RAVENEL). — Subiculum atro-fuliginium *Helminthosporium humile* sistens: hyphis filiformibus apice obtusis septulatis, fuliginis; conidiis tereti-oblongis, 15-22 \approx 6, 3-septatis, apice rotundatis, fuliginis, acrogenis.

4. **Tapesia minutissima** Fuck. Symb. App. I, p. 48. — Subiculo late effuso, olivaceo-nigro, strigoso; cupulis gregariis, minutissimis, sessilibus, subcarnosis, primo clausis, extus fusce setulosis, disco concavo, fusco-griseo; ascis stipitatis, oblongo-ovatis, 8-sporis, 48 \approx 10; sporidiis distichis, oblongo-ovatis, utrinque obtusis, biguttulatis, continuis, hyalinis, 8 \approx 4; paraphysibus linearibus, 6-8-guttulatis. 1531

Hab. in disco truncorum Fagi, pr. Æstrich Rhenogoviæ. — Forma **meizospora** Sacc. Mich. II, p. 260, F. ital. f. 1433: ascomatibus punctiformibus, 120-150 μ . diam., nigricantibus, intus pallidioribus, setulis fuscis præcipue basi vestitis; ascis clavulatis, 60-70 \approx 12-14, paraphysatis, octosporis; sporidiis distichis, oblongo-ovatis, utrinque rotundatis, 10-12 \approx 4, 2-guttulatis, hyalinis. In ligno Mali in Italia boreali.

5. **Tapesia Gaillardii** Roum. et Pat. Tab. anal. p. 37, f. 90. — Cupulis subsessilibus, concavis, minutis, $\frac{1}{2}$ - $\frac{3}{4}$ mm. lat., gregariis, subiculo atro-brunneo, demum subevanescente insertis, flavidis, intus pallidioribus, initio subclausis citrinisque; ascis subclavatis, filiformi-paraphysatis, 8-sporis; sporidiis ovoideis, 2-3-guttulatis, hyalinis, 5-6 \approx 2 (ex icone). 1532

Hab. in ligno putri Alençon Galliæ (GAILLARD).

6. **Tapesia Legeriana** (Gill.) Sacc. *Phialea Legeriana* Gill. Disc. p. 111, cum icone. — Subiculo albo, copioso; cupulis sessilibus, subglobosis, dein planis, junioribus orbicularibus, dein sinuosis, extus griseis, 1-2 mm. lat.; disco albido; ascis cylindræis; sporidiis oblongis. 1533

Hab. in ligno nudo subputrido in silvis Galliæ bor.

7. **Tapesia vineta** (C. et P.) Sacc. *Peziza vineta* C. et P. in Grevillea I, pag. 6. — Gregaria, sessilis, ceraceo-mollis, irregularis, initio subglobosa, dein expansa, margine incurvo glabra, saturate atro-brunnea, fere nigra, disco plano cinereo; ascis subcylindræis; sporidiis cylindræis obtusis, rectis curvulisve, 12-13 μ . longis. 1534

Hab. in ligno putri Sandlake N. Y. Amer. bor. — Ascomata

pilis delicatis, brunneis, subiculum arachnoideum formantibus inserta.

8. **Tapesia aureliella** (Nyl.) Karst. Rev. monogr. p. 137, *Peziza aureliella* Nyl. Obs. p. 49, *Mollisia* Karst. M. F. I, p. 206. — Subiculo albido v. albido-flavescente furfurello-subtomentoso; cupulis albidis v. pallido-albidis, siccitate pallido-luteis, gyalectoideis, sessilibus, 0,2-0,4 mm. lat., margine mediocri, tenuiter albo-villosulo-fimbriato aut glabrescente; ascis oblongatis, $40 \approx 6-7$, apice summo solutione jodi cœrulescente; sporidiis oblongatis, continuis, $5-8 \approx 2-2,5$.

Hab. ad lignum putridum Pini prope Helsingfors Fenniae. — Filamenta subiculi satis obsoleta, incoloria, circiter 7 μ . crass. et forsitan aliena; paraphyses vix ullæ v. tandem raræ, graciles; ascوماتа præsertim juvenilia granuliformia. An huc accedit *Peziza aurelia minor* Weinm. in Flora 1832, p. 455?

9. **Tapesia byssina** Fuck. Symb. p. 302, Rehm Ascom. Lojk. n. 33. 1536 — Cupulis sessilibus, explanatis, lobato-plicatis, medio adfixis, 4-6 mm. latis, disco albido, margine elevato, fusco, subtus bysso candida, delicatula sed persistente; ascis linearibus, oblique stipitatis, 8-sporis, $48-50 \approx 5-6$, apice jodo cœrulescente; sporidiis distichis, cylindræis, rectis, $8-11 \approx 2-3$, hyalinis; paraphysibus filiformibus.

Hab. in ligno putrido, udo pr. Æstrich Rhenogoviæ (Fuck.) et Kaposvar Hung. (LOJKA). — Quoad affinitatem cum *Moll. melaleuca* cfr. Rehm l. c.

10. **Tapesia atro-fusca** (B. et C.) Sacc. *Peziza atro-fusca* B. et C. 1537 North Am. Fungi n. 732. — Cupulis atro-fuscis, margine inflexo crenulato granulato nitido e subiculo ochroleuco membranaceo oriundis; sporidiis ellipticis binucleatis, 7-10 μ . long.

Hab. in ligno emortuo, Alabama Amer. bor. (PETERS).

11. **Tapesia epithelephora** (Saut.) Sacc. *Peziza epithelephora* Saut. 1538 Fl. Salz. p. 9, Gonner t. 5, f. 3, Wint. Hedw. 1881, p. 131. — Pusilla; ceracea, sicca, sessilis, concava, cinerea, margine albido, disco nigrescente, subiculo thelephoroideo, gilvo; ascis cylindræis, basim versus parum attenuatis, $35-45 \approx 4-5$; sporidiis oblongo-fusoideis, inordinate stipatis, $6,5-7 \approx 1-1,5$, hyalinis.

Hab. in ligno putri prope Mittersill Salzburg et in Fago S. Giovanni d'Andorno Ital. bor. (CESATI). — Ascoma $\frac{1}{4}$ mm., subiculo flavo griseo, tomentoso insidens.

12. **Tapesia tela** (B. et C.) Sacc. *Peziza tela* B. et C. North Am. 1539 Fungi n. 731. — Subiculo expanso albido contexto, margine byssino; cupulis minutis concavis fuscis.

Hab. in ligno emortuo, in Carolina inf. Amer. bor. (RAVENEL).

— Affinis videtur *T. Bloxami*, sed non confluens.

13. **Tapesia culcitella** (C. et E.) Sacc. *Peziza culcitella* C. et E. 1540

Grev. VI, p. 7. — Gregaria; cupulis in strato brunneo nidulantibus, hemisphæricis, demum applanatis, albidis, glabris; ascis cylindraceis; sporidiis linearibus, $8 \approx 2$.

Hab. in truncis vetustis quercinis New Jersey Amer. bor.

— Ascoma 1 mm. lat., initio lacteum.

14. **Tapesia fusca** (Pers.) Fuck. Symb. pag. 302, *Pez. fusca* Pers. 1541

Obs. II, p. 29 (adulta), *P. Pruni-avium* Pers. Obs. II, p. 82 (junior), *Mollisia fusca* Karst. M. F. I, p. 207, *Nipt. livido-fusca* Fuck.? *Tapesia prunicola* Rehm, Sacc. et veris. etiam Fuck. — Subiculo e filamentis fuscis dense contexto, late effuso, indeterminato, fusco vel fusco-nigro, interdum parum visibili; ascomatibus sparsis vel gregariis, primo urceolatis, nigricantibus ore albido, connivente, dein explanatis, fusco-cinereis aut cinereo-pallescentibus aut subfuscis, disco pallido cinerescente v. albido-pallente, margine tenui albicante v. disco concolore; interdum flexuoso v. sublobato, basi ciliis radiantibus adfixis, glabris, 1 mm. diam.; ascis fuscoideis-clavatis, $55-68 \approx 6-8$, apice ultimo vix vel obsolete jodo cœrulescente; sporidiis fuscoideo-oblongatis vel fuscoideo-elongatis, simplicibus guttulatis, interdum spurie tenuiter uniseptatis $9-14 \approx 2-3$.

Hab. ad ligna et cortices arborum frondosarum et acerosarum e. g. Pini silvestris putrescentium in Fennia, Britannia, Suecia, Germania, Italia, Gallia, Hungaria, Belgio. — Forma **Corni** Rehm Asc. n. 908: cupulis griseis, applanatis, undulatis, disco flavido, margine albido; ascis $60-70 \approx 7-9$; sporidiis $9-10 \approx 2,5-3$, biguttulatis, subiculi hyphis rectangulariter ramosis, septatis, brunneis, 5μ . cr. In ramis Corni in Germania.

15. **Tapesia Rosæ** (Pers.) Fuck. Symb. mycol. pag. 301 et App. I, 1542

p. 48, *Peziza Rosæ* Pers. Obs. II, p. 28, Fr. Syst. Myc. II, p. 109, *Tympanis obtexta* Wallr. var. *pezizæformis* Wallr. Flor. crypt. II, p. 428, *Mollisia Rosæ* Karst. M. F. I, pag. 208. — Subiculo late effuso, indeterminato, tenui, subtomentoso, fusco, hyphis brunneis 4μ . cr.; ascomatibus sparsis v. confertis, subtomentosis aut glabrescentibus, fuscis concavis v. concaviusculis, margine turgido, siccis difformiter contractis, coriaceis, 1 mm. lat.; ascis cylindraceo-clavatis, apice attenuato, $35-45 \approx 6-7$; sporidiis fuscoideo-oblongatis v. fuscoideo-elongatis, $7-9 \approx 2-2,5$; paraphysibus filiformibus.

Hab. ad caules et ramos Rosæ caninæ, alpinæ, tomentosæ, coriifoliæ aridos in Fennia, Lapponia, Suecia, Germania, Gallia, Britannia, Belgio, Amer. bor. — Variat sporidiis paullo longioribus (var. *tenebrosa* Karst. Monogr. Pez. p. 177), in caulibus Rubi odorati.

6. **Tapesia Prunorum** (Fr.) Fuck. Symb. myc. App. I, p. 336, *Peziza Prunorum* Fr. S. v. Sc. p. 352 in nota. — Sessilis, concava, firmula, rufo-brunnea, extus glabra, demum applanata, subiculo strigoso atro, insidens; ascis et sporidiis maturis nondum visis (Fuckel). 1543

Hab. ad cortices Prunorum in Suecia (FRIES) et Helvetia (MORTHIER). — Cupulis calvis a *T. prunicola* differt. «An, observante Frieso, eadem ac *Peziza atriseda* Saut. et *Peziza Pruni-avium* Pers.? Sec. Winter huc spectat *Pez. nitida* Saut. Salz. pag. 8».

7. **Tapesia scariosa** (B. et C.) Sacc. *Peziza scariosa* B. et C. North Am. Fungi n. 733. — Cupulis tenuibus confluentibus collapsis nigris, margine albido, e subiculo nigro oriundis; ascis clavatis; sporidiis lineari-subfusiformibus. 1544

Hab. in ramis emortuis in uliginosis in Amer. boreali. — Affinis *T. fusca*.

8. **Tapesia Torulæ** Fuck. Symb. myc. p. 302. — Cupulis minutis, usque ad 1 mm. latis, sessilibus, concavis, siccis margine albo, squamuloso, connivente, extus atris, disco albescente, fungo conidiophoro insidentibus; ascis oblongis, oblique stipitatis, 8-sporis, 40 \approx 6; sporidiis distichis, oblongis, 8 \approx 2-3. 1545

Hab. in ramis adhuc pendulis, emortuis Salicis capræ in silva Æstrich Rhenogoviæ. — Status conidicus, teste Fuck., est *Torulæ stilbospora* Corda subiculum formans.

9. **Tapesia cinerella** Rehm Ascom. Alp. n. 16. — Plerumque gregaria, primitus subglobosa, sessilis, dein explanata, orbicularis, sicca concaviuscula, diaphano-cinerea vel flavidula, humida dilatata, plana, margine dilutiore, albido, tenui cincta, cinereo-hyalina, 1 mm. diam., contextu parenchymatico, basi subflavido, sessilis in bysso ex hyphis longissimis, simplicibus, septatis, fuscis, glabris, 3-5 μ . crassis composita; ascis clavatis, 8-sporis, 40-45 \approx 9, apice jodo cœrulescente; sporidiis obtuse ellipticis v. oblongis, rectis v. subcurvatis, 1-cellularibus, interdum nucleolis 2 præditis, hyalinis, distichis, 10-12 \approx 3,5; paraphysibus filiformibus, hyalinis, apice sensim 3 μ . incrassatis. 1546

Hab. ad ramulos putridos *Rhododendri ferruginei* in alpibus tyrolensibus, Peischl-See in monte Arlberg c. 1800 m. alt. (BRITZELMAYR) prope Kühtai (Oetz) c. 6200 (DR. REHM).

20. **Tapesia fusco-atra** (Hazsl.) Sacc. *Pyrenopeziza fusco-atra* Hazsl. 1547

Banat. pag. 58, t. II, fig. 10. — Mycelio hypodermio caules ambiente fusco, cupulis gregatim erumpentibus solitariis v. rarius fasciculatis in punctis mycelii densius textis, primum obovatis, demum patellaribus subsessilibus, fusco-nigris, margine crasso, crenulato albido, disco fusco concavo, $\frac{1}{2}$ mm. lato; ascis oblongo-linearibus, 110-125 μ . longis; paraphysibus paucis, apicibus crassioribus lanceolatis; sporidiis octonis, oblongo-linearibus, hyalinis, primum granulosis demum 2-guttatis, 25 \approx 5-7.

Hab. in caulibus *Tordylii maximi* ad Soborzin Hungariæ.

21. **Tapesia apocrypta** Rehm Ascom. n. 861. — Solitaria, dispersa 1548

in maculis fuscis sessilis, primitus globosa, dein urceolata, ceracea, glabra, fusca vel fusco-nigricans, contextu parenchymatico e cellulis parvulis fuscis composito, versus marginem tenuem pseudoprosenchymatico ibique hyphis septatis, fuscis, obtusis, 4 μ . cr., apice subdistantibus, basi sessilibus, in hyphis plurimis longissimisque, intricatis, vix ramosis, septatis, fuscis, 2 μ . cr. insertis; disco subhyalino, 300 μ . diam.; ascis clavatis, apice obtuse acutatis et subincrassatis, 30-36 \approx 4-5, 8-sporis; sporidiis fusiformibus vel oblongo-cuneiformibus, rectis, interdum curvatulis, 1-cellularibus hyalinis, 6-7 \approx 1-1,5, distichis; paraphysibus filiformibus, haud clavatis, 2 μ . cr., hyalinis.

Hab. ad folia sicca farcta *Saxifragarum* juxta glaciem æternam montis Ortler Tyrolis. — Sicca oculo inermi vix visibilis.

22. **Tapesia balsamicola** Peck 34 Rep. p. 51, t. I, f. 14-21. — Su- 1549

biculo tenui adpresso, griseo, 2-4 mm. lato, filamentis dimorphis composito, aliis rugulosis, ramosis, septatis, atro-brunneis, breviramulosis, corpuscula sporomorpha 3-4-lobata, colorata, 15-22 μ . longa lataque gerentibus, aliis delicatis, hyalinis, conidia anguste fusoides, hyalina gerentibus; cupulis minutis, 300-400 μ . lat., sessilibus, glabris, immarginatis, ceraceis, albidis, subpellucidis; ascis sursum dilatatis, apice obtusis, 40-50 μ . longis; sporidiis subfusoides, stipatis, 15-20 \approx 5-7, 3-4-nucleatis; paraphysibus filiformibus.

Hab. in foliis vivis vel languidis *Abietis balsameæ* Stony Clove Catskill Mount. Amer. bor. — Cfr. Peck l. c.

23. **Tapesia aurea** Fuck. Symb. App. II, p. 60. — Cupulis gregariis, 1550

ceraceis, glabris, distincte stipitatis, in subiculo delicatissimo aureo,

hyphis ramosis contexto, conidiophoro ortis, primo cylindraceutis, dein turbinatis, concavis, postremo subplanis, usque ad millimetrum latis, distincte marginatis, margine subrepando, aureis, disco pallidiorè, stipite pro ratione crasso, cupulam dimidiam æquante, basi obscuriore et subtilissime puberulo; ascis cylindraceuto-clavatis, sessilibus, 8-sporis, $32 \approx 4$; sporidiis distichis, cylindraceutis, parum curvatis, continuis, hyalinis, $6 \approx 2$, conidiis cylindraceutis, rectis, endosporis duplo majoribus.

Hab. in acubus putridis Pini silvestris, rarius, pr. Eberbach Rhénogoviæ. — Subiculum serius evanescit, cupulæ nigrescunt.

24. **Tapesia strobilicola** Rehm Ascom. n. 761, ut var. — Sessilis, 1551
 primitus globosa, dein urceolata, denique plana, crasse marginata extus fusca, disco flavo v. flavido-pallido, 1-2 mm. lat.; subiculo late expanso, fusco, hyphis copiosis, longis, ramulosis, septatis, brunneis, 4-5 μ . cr.; ascis clavatis, 8-sporis, $45 \approx 6$; sporidiis distichis oblongo-ellipsoideis, obtusiusculis, rectis curvulisve, hyalinis, 6-8 $\approx 2,5$; paraphysibus filiformibus.

Hab. in strobilis Pinorum in Germania. — Excipulum parenchymaticum, margine cellulis subprosenchymaticis prominulis. Cl. Rehm habet fungillum tamquam varietatem *Pezizæ melaleucæ* Fr., sed hæc subiculo caret et *Mollisia* potius videtur. Cfr. suo loco.

25. **Tapesia earina** Ellis Bull. Torr. 1881, p. 124. — Tenuis, mol- 1552
 liuscula, mycelio laxo, sordide albo, gossypino, orbiculari, 2 mm. lato, fibroso contexto inserta; disco lateritio-rubro (sicco); ascis cylindraceutis, 120-125 ≈ 12 ; sporidiis monostichis, ellipsoideis, hyalinis, sæpius uninucleatis, 15 ≈ 7 ; paraphysibus filiformi-clavulatis, obtusis.

Hab. in culmis foliisque graminum lignoque putri sub nive in « Pleasant Valley » Utah Amer. bor. (HARKNESS).

26. **Tapesia mutabilis** (B. et Br.) Sacc. Phill. Disc. p. 278, *Pez. mu-* 1553
tabilis B. et Br. Ann. N. H. n. 564. — Minuta e macula seu subiculo minuto radiatim fusco-villoso erumpens, primum hemisphærica extus fusca, demum expansa concava, pallide albida glabrescens; sporidiis elongatis curvulis, 13-18 $\approx 2-4$; paraphysibus filiformibus.

Hab. in foliis Airæ cæspitosæ, Derry Hill, Wilts Britanniæ. — Sicca *Pyr. atratam* in mentem revocat. Ascoma 200-300 μ . lat.

27. **Tapesia evilescens** (Karst.) Rev. mon. pag. 137, *Mollisia evile-* 1554

scens Karst. M. F. I, p. 208. — Subiculo tenui, effuso, cupulis planiusculis, fusco-cinereis, margine albicante, disco cinerescente vel pallido, siccis difformiter contractis et obscurioribus 0,5-1 mm. lat.; ascis fusoido-clavatis $45 \approx 5$; sporidiis fusoido-elongatis, guttulatis, $6-10 \approx 1-1,5$.

Hab. ad culmos graminum putrescentes in Fennia australi.

B. Fructificatio adhuc incognita.

28. **Tapesia megaloma** (Schw.) Sacc. *Peziza megaloma* Schw. Syn. 1555 p. 175. — Subiculo late effuso, atro, contexto ex filis crassiusculis; cupulis majusculis, elevatis, subrotundis, ceraceis ex lutescente albidis, margine crasso involuto subrepando, glabris aut subfurfuraceis, disco cinereo.

Hab. in lignis putridis, passim, Bethlehem Amer. bor.

29. **Tapesia adhærens** (Wallr.) Sacc. *Pez. adhærens* Wallr. Fl. crypt. 1556 n. 2544. — Ascomatibus sessilibus sparsis carnosulis glaberrimis luteo-fulvis, e basi inde fila parca arachnoidea emittentibus, primum conniventibus dein urceolatis, margine inflexo concolore cinctis, demum deplanatis immarginatis.

Hab. ad ligna carie exesa salicina in Thuringia rarius.

30. **Tapesia luteola** (Fr.) Sacc. *Pez. luteola* Fr. S. M. II, p. 110. — 1557 Sessilis, sparsa, glabra, concava, luteola, basi tomento brevi albido insidens.

Hab. ad ligna abietina in Suecia et Germania. — *Tap. sanguineâ* multo major et magis ceracea, mollior sed subiculum ejusdem indolis, villus modo cupularum basin cingens. Cupulæ solitariae, regulares, integerrimæ, luteo-flavæ.

31. **Tapesia mortuaria** (Ces.) Sacc. *Peziza mortuaria* Ces. in Kl. 1558 Herb. myc. II, n. 18 et in Bot. Zeit. 1855, pag. 596. — Subiculo tenui, nigro; cupulis minutis, sessilibus aggregatis, junioribus cinereo-virentibus cito nigris, semper glabris.

Hab. ad ligna? pr. Vercelli Italiæ superioris (CESATI).

32. **Tapesia atriseda** Sauter in Flora 1845, p. 133 (*Peziza*). — 1559 Sessilis, cupulis glabris, planis, albidis, subiculo lato atro-tomentoso insidentibus.

Hab. in ligno udo vetusto, quod subinde obtegit, in agro urbis Stiria. — Cupulæ 600 μ . ad 1 mm. latæ.

33. **Tapesia byssiseda** (Fr.) Sacc. *Pez. byssiseda* Fr. Obs. II, p. 309, 1560 Syst. Myc. II, p. 107. — Sessilis, planiuscula, testacea, extus margineque granulosa, subiculo granuloso-villoso argillaceo.

Hab. ad ligna putrida, sæpe humectata, Pini in Suecia. — A reliquis admodum diversa. Subiculum latissime effusum, crustaceum, cohærens, magis a furfure conglomerato, quam e tomento contextum. Cupulæ subiculo fere immersæ, submembranaceæ, persistentes, juniores magis concavæ.

34. **Tapesia lateritia** (Pers.) Sacc. *Pez. lateritia* Pers. M. E. I, p. 1561 273, Fr. Syst. Myc. II, p. 110. — Sessilis, cupulis plano-concavis glabris nigris, subiculo dense lateritio immersis.

Hab. circa Parisios ad ligna rarissime. — Rhacodium refert ob tomentum crassum, cui cupulæ majusculæ sat profunde immersæ observantur. — Forma **Wallrothii**, cfr. Wallr. Crypt. n. 2555: ascomatibus sessilibus carnosius majusculis sparsis, extus fusco-furfuraceis rugulosis, primum hemisphæricis dein deplanatis patellaribus, discum nigrum rugosum planum, margine reclinato conformi cinctum recludentibus stratoque hypostromatico fibroso-membranaceo flavo-lateritio insidentibus. Ad truncos fagineos putredine exesos nemoris roslebiens. (Wallr.).

35. **Tapesia dædalea** (Schw.) Sacc. *Peziza dædalea* Schw. Syn. p. 1562 174. — Crustacea, insidens subiculo pulverulento crustaceo, crassiusculo, secedente, expanso in ligno et cortice, cupulis dense gregariis, majusculis sessilibus dædaleis, i. e. varie tortis et flexuosis, invicem adpressis, cum subiculo concolore, cinereo-pulverulentis; disco fuligineo-cinereo.

Hab. in cortice Lauri æstivalis, rara, Bethlehem Americæ borealis.

36. **Tapesia pruinata** (Schw.) *P. pruinata* Schw. Car. n. 1216, Fr. 1563 Syst. Myc. II, p. 109, *Pez. conspersa* Chaillet, nec DC. — Sessilis, dense aggregata, membranacea, subclausa, cinereo-pulverulenta.

Hab. longe lateque profusa in corticibus emortuis Vitis, Liquidambaris, Corni, Myricæ in Carolina sup. et inf. Amer. bor. et Gallia (?). — Subiculo tenuissimo insident cupulæ complanatae, concavæ, subclausæ, minutæ, nigræ, omnino pulvere farinaceo cinereo tam dense rectæ, ut sphærias credas; madidæ aperiuntur, ore inflexo, disco nigricante. Asci a Berkeleyo nulli inventi; an eadem ac *Arthonia confluens*?

37. **Tapesia conspersa** (Pers.) Sacc. *Thelebotus hirsutus* Dec. fl. fr. 1564 2, p. 272, *P. conspersa* Pers. Myc. Eur. p. 271 (ex syn.), Fr. S. M. II, p. 108. — Crustacea, sessilis, conferta, urceolata, fusco-nigra, pulvere albido oblecta, subiculo concolori.

Hab. ad cortices arborum prope Neufchatel, raro (KUNZE). Ill. Fries in indice S. M. III, p. 129 ad *T. pruinatam* referre videtur. — Primo obtutu Thelephoram frequentissime papillosam (*T. granulosa*) v. potius Lichenem refert subiculo late effuso, indeterminato, furfuraceo. Cupulæ innatæ, confertæ, subglobosæ, ore connivente, nigricantes, sed undique furfure tenui albido obrutæ; humectatæ vero magis apertæ, fuscescentes, orē albido. *Pyrenoteis* habitu proxima, sed vita non perennis neque cupulæ corneæ quare vix Lichen.

38. **Tapesia decipiens** Wallr. Fl. crypt. n. 2487. — Ascomatibus sessilibus glaberrimis sparsis minutissimis rufo-fuscis, primum subglobosis dein planiusculis, margine concolore obtuso cinctis. 1565

Hab. ad caudices Pruni domesticæ, Helminthoporii hyphis in crustam furfuraceo-stygiam congestis insidens simulque stratum hypostromaticum filamentosum tenerrimum mentiens.

39. **Tapesia griseo-pulveracea** (Schw.) Sacc. *Peziza griseo-pulveracea* Schw. Syn. p. 173. — Affinis *T. subiculatæ* sed subiculo araneoso multo tenuiori griseo, cupulis minoribus, extus nigris, margine tumidulo non lobato griseo-pulverulento; disco ochraceo etiam pulverulento. 1566

Hab. in ramis dejectis, Bethlehem Amer. bor.

40. **Tapesia subiculata** (Schw.) Sacc. *Peziza subiculata* Schw. Syn. p. 174. — Subiculo crasso, tomentoso, effuso, cinereo-fusco, densissime intertexto, cupulis glabris, marginatis et fibris quasi radiatibus, albis, sub nudo margine radiatim expansis, subiculo affixis, majusculis, in ambitu mire lobato-undulatis, 6 mm. lat., disco ochraceo. 1567

Hab. passim in ramis dejectis, Bethlehem Amer. bor.

41. **Tapesia chlorotica** (Fr.) Fuck. Symb. p. 303, *P. chlorotica* Fr. Syst. Myc. II, p. 110. — Sessilis; cupulis planiusculis glabris rufescenti-nigris, subiculo tenui villosa viridi; ascis elongato-clavatis, stipitatis, 8-sporis; sporidii s subdistichis, oblongis, hyalinis, 5-6-guttulatis, 9 ≈ 3. 1568

Hab. ad ramos decorticatos dejectos virore obductos in Suecia, in ramis putridis Carpini pr. Æstrich Rhenogoviæ. — Cupulæ minutæ, plane sessiles, gregariæ, præsertim disco rufescentes. Subiculum tenue, villosum, præcipue cupularum basin cingit.

42. **Tapesia? Bloxami** (B. et Br.) Sacc. *Peziza Bloxami* B. et Br. in Ann. Nat. Hist. n. 566. — Dense gregaria, mycelio albo inserta, 1569

concava, pallide cervina, extus farinacea, disco concolore; ascis.... non visis.

Hab. in ramis dejectis pr. Twycross et Barmouth Britanniae et in Carolina superiore Amer. bor. — Sec. Phillips, Disc. p. 408, asci nulli inventi, hinc species dubia.

43. **Tapesia Johnstonii** (Berk.) Phill. Disc p. 282, *Peziza Johnstonii* 1570
Berk. in Ann. Nat. Hist. n. 313. — Sessilis, globosa v. subturbinata, demum aperta v. rufa, sericeo-nitidula, subiculo lato, atrobrunneo, grumoso inserta; ascis.... non visis.

Hab. in ramis dejectis Berwick Britanniae. — Ascoma 1 mm. lat., initio brunneum et pulvereum.

44. **Tapesia Messerschmidii** (Weinm.) Sacc. *Peziza Messerschmidii* 1571
Weinm. Hymen. Gaster p. 453. — Conferta, substipitata, carnosoceracea, extus cum stipite aureo-fulva, granulosa, intus dilutior, margine albida; stipite brevi.

Hab. in acubus Pini silvestris in Rossia. — Minuta sed pulchella et distincta species. Subiculum tenue, araneosum, primo aureo-fulvum, dein pallidius, irregulariter effusum; ascomata regularia, primo subglobosa, mox obconica cum stipite confluentia. Tota primitus aureo-fulvo, deinde margo albescit et discus dilutior evadit; adulta iterum toto anno fulva.

45. **Tapesia herpotricha** (Berk.) Sacc. *Peziza herpotricha* Berk. Dec. 1572
n. 304, Hook. Journ. 1851, p. 16, t. I, fig. 2. — Cupulis convexis, pallido-rufis demum obscurioribus glabris immarginatis, fibris ramosis repentibus insidentibus.

Hab. in foliis viventibus, Caripi Brasiliæ (SPRUCE).

46. **Tapesia epitephra** (Berk.) Sacc. *Peziza epitephra* Berk. Fl. Tasu. 1573
pag. 275. — Minuta, alba, hemisphaerica v. subglobosa, insigniter cava, floccis crispis fuscis intertextis oriunda.

Hab. in pagina inferiore foliorum in Tasmania (ARCHER). — Asci ignoti, an ergo potius Solenia v. Cyphella.

II. *Eriopezia* Sacc. Ascoma pilosum v. puberulum.

A. Fructificatio nota.

47. **Tapesia cæsia** (Pers.) Fuck. Symb. mycol. p. 301, Sacc. F. it. 1574
f. 1431, *P. lichenoides* Pers. ic. et descr. pag. 29, t. 7, f. 1, *P. cæsia* Pers. Syn. pag. 657, Nees Syst. fig. 272, Dittm. in Sturm. Deutschl. fl. III, t. 31. — Sessilis, applanata, villosa, albida, basi pilis longis in subiculum intertextis, disco subtremelloso cæsio; ascis anguste lanceolato-oblongis, stipitatis, 8-sporis, 32-40 \approx 4-5;

sporidiis subdistichis, cylindræis, curvatis, continuis, hyalinis, 3,5-4 \approx 1,5-2; paraphysibus filiformibus.

Hab. ad ligna dejecta quercina faginea etc. in Suecia, Germania, Gallia, Belgio, Britannia, Carolina. — Variat sec. Fuck.: sporidia paullo majora, 8 \approx 3. Cupulæ confertæ, juniores concavæ, dein explanatæ, plures in membranam villosam ob pila basin cingentia intertexta.

48. **Tapesia Chavetiæ** (Lib.) Fuck. Symb. myc. p. 301, *Peziza Chavetiæ* Lib. Exs. p. 26. — Gregaria, sessilis, minuta, membranacea, hemisphærica, concava, albo-tomentosa, basi pilis longis, in subiculum arachnoideum, album abeuntibus; disco subtremelloso, brunneo-atro; ascis oblongo-clavatis, 8-sporis, 24 \approx 4; sporidiis distichis, cylindræis, curvatis, 5 \approx 2. 1575

Hab. ad ligna putrescentia in Germania, Belgio, Gallia et Britannia. — Teste Phillipis Disc. p. 277 non satis differt a *Tapesia cæsia*.

49. **Tapesia erratica** (Fr.) Fuck. Symb. myc. p. 301, *Peziza erratica* Fr. Syst. Myc. II, p. 108. — Sessilis, granuliformis villosa, alba, basi pilis longis liberis cincta, disco ceraceo-atro, initio subpunctiformi dein magis dilatato; ascis et sporidiis ut in *Tapesia Chavetiæ* (teste Fuckel). 1576

Hab. ad truncos dejectos *Quercus* in Suecia et Rhenogovia. — *Tapesiæ cæsiæ* peraffinis, differt subiculo densiore et cupulis magis applanatis sessilibus: siccitate flavescit.

50. **Tapesia fusco-umbrina** (Fr.) Sacc. *Tap. variicolor* v. *fusco-umbrina* Fuck. Symb. p. 302, Sacc. Mich. I, p. 65, F. ital. f. 1432, *P. varicolor* C, Fr. Syst. Myc. II, p. 100. — Cupulis scutellariibus, sessilibus, plerumque tapeto conidiophoro (*Tricholeconii fusci* Corda), insidentibus, extus fusco-griseis villosulis, præsertim ad marginem pilis simplicibus, septatis, fuligineis, 120-130 \approx 3, sursum asperulis, pallidis (hyphis analogis) ornatis; disco flavido; ascis cylindræo-clavatis, 70 \approx 6-6½, p. s. 50 long.; paraphysibus (spuriis?) filiformibus obvallatis, octosporis; sporidiis distichis, fuscoideis, curvulis, 8-10 \approx 1½-2, nucleo medio bipartito ideoque spurie 1-septata, hyalina. 1577

Hab. ad lignum populinum etc. putre in Suecia, Germania, Italia. — Quoad st. conid. cfr. *Michelia* l. c.

51. **Tapesia prolifica** Ellis Torr. Cl. 1881, p. 73. — Gregaria, sessilis, minuta, pilis cinereis, septatis, rugulosis, patulis dense obpressa, disco cupulato, atro, margine integro; ascis clavatis, p. sp. 1578

25 μ . long.; sporidiis distichis, cylindræis, curvulis, obtusis, subhyalinis, 7-8 \approx 2,5.

Hab. in disco ligni quercini sicci, New Jersey Amer. bor. — Pili sub microsc. brunnei, oculo inermi cinerei.

52. **Tapesia Rehmiana** Sacc. Bomm. et Rouss. Contrib. Mycol. Belgique 1579

II. p. 3 et in Rehm Ascom. n. 860. — Sessilis, minima, 175-226 μ . diam., non superans olivacea, margine pilis brevibus, hyalinis, fasciculatis, discum nonnihil superantibus instructa; disco subconcavo, olivaceo-livido; ascis subsessilibus, clavatis, 8-sporis, 30-40 \approx 5-6, filiformi-paraphysatis; sporidiis oblique monostichis, ellipticis, interdum subcurvatis, hyalinis, 2-guttatis, 6-7 \approx 3.

Hab. ad truncos decorticatos, putridos querneos, Britsfort Belgii (BOMMER et ROUSSEAU). — Subiculum, in quo ascomata sparsa vel conferta nidulantur, crassum, filamentis dematioideis erectis, continuis, obtusis, brunneis, 300 \approx 6 formatum.

53. **Tapesia vinacea** (Rabenh.) Sacc. *Peziza vinacea* Rabenh. Hedw. 1580

1878, p. 31. — Siccando fuscescens, cupularis, sessilis, primitus basi bysso candida postea evanida cincta, cupula patelliformis 2-3 mm. lata (rarius supra), extus puberula subnuda, margine recto, sicco plerumque involuto, subtilissime crenulato; ascis cylindrico-tenuioribus, angustis, jodo non tinctis; sporidiis monostichis, ellipticis, hyalinis, 12-15 \approx 8-9, episporio hyalino, tenui; paraphysibus numerosis, crassiusculis, apice vix incrassatis, non coloratis.

Hab. in vinaceis dejectis et putrescentibus in horto bot. Neapolitano (CESATI). — An potius *Pyronema* v. *Lachnea*?

54. **Tapesia prunicola** Fuck. Symb. p. 302, *Tympanis obtexta* Wallr. 1581

Cryp. p. 428 (pr. p.). — Cupulis duplo majoribus quam in *T. Rosæ*, aterrimis et villo magis atro-fusco; ascis oblongis, stipitatis, 8-sporis, 54 \approx 5; sporidiis monostichis, cylindræis, utrinque obtusis, rectis, 10 \approx 2, hyalinis; paraphysibus filiformibus, non clavatis.

Hab. in ramis corticatis Pruni spinosæ pr. Æstrich Rheno-goviæ. — *Tap. prunicola* Rehm, Sacc. (præcipue in Alno) a *T. fusca* distingui nequit; an et typus Fuckelii qui inter villosas enumeratur?

55. **Tapesia eriobasis** (Berk.) Phill. Disc. p. 278, *Peziza eriobasis* 1582

Berk. Ann. Nat. Hist. n. 312. — Gregaria sed plerumque discreta, orbicularis, tomentosa, areola rotunda minuta nivea, gossypina sæpe confluenta inserta, viva alba, disco in sicco flavido; ascis subclavatis v. obtuse fusoideis; sporidiis oblongis, 5-6 μ . longis.

Hab. in pariete interiori levi corticis in Britannia. — A *Tapesia cæsia* et *Chavelicæ* differt cupulis majoribus, disco pallido etc.

56. **Tapesia pileo-crocata** (Cr.) Sacc. *Peziza pileo-crocata* Cr. Fin. 1583
p. 51. — Ascomate mycelio arachnoideo, albo inserto, 1-2 cm. diam., hemisphærico, margine undulato, pilis fasciculatis luteis tecto; disco albescente; ascis clavatis, octosporis; sporidiis oblongis; paraphysibus capillaribus, ascis longioribus.

Hab. in cortice ramuli emortui *Betulæ* atque ad basim caulis *Angelicæ*, Finistère Galliæ.

57. **Tapesia Corni** Fuck. Symb. p. 301. — *T. Rosæ* affinis; cupulis 1584
gregariis, sessilibus, villo olivaceo insidentibus, siccis clausis, globosis, humectatis apertis, 2 mm. latis, extus verticaliter plicatis (ut octogonæ appareant), brevissime olivaceo-pilosis, ore connivente, margine candide ciliato, disco concavo, pallide cinereo; ascis oblique stipitatis, oblongis, 8-sporis, 48×8 ; sporidiis monostichis, oblongo-ovatis, 10×5 , hyalinis.

Hab. ad ramos siccos *Corni albæ*, raro, Reichartshausen Rhenogoviæ.

58. **Tapesia albo-viridis** (Gill.) Sacc. *Lachnea albo-viridis* Gill. Disc. 1585
p. 91. — Ascomate sessili, primo clauso, dein aperto, parum ventricosum, pilis tenuissimis fasciculatis tecto, citrino v. luteo-aureo v. fulvo, 4-5 mm. diam., subiculo tenui albescente, fere membranaceo; ascis cylindraceutis; sporidiis ellipsoideis; paraphysibus filiformibus.

Hab. in foliis delapsis et in pericarpis *Hederæ* et *Quercus* in Gallia.

B. Fructificatio adhuc ignota.

59. **Tapesia discincola** (Schw.) Sacc. *Peziza discincola* Schw. Syn. 1586
p. 174. — Minuta aggregata, in subiculo tenuissimo, albescenti; cupulis turbinatis, substipitatis, laxè stipatis, pallide ferrugineis, extus omnino tectis, pilis albido-cinereis, pulverulentis, primo conniventibus, demum irregulariter expansis; disco pallido.

Hab. in disco cæsi trunci et ad ligna Bethlehem Amer. bor. — Habitus *Solenicæ anomalæ*.

60. **Tapesia arachnoidea** (Schw.) Sacc. *Peziza arachnoidea* Schw. 1587
Syn. p. 174. — Subiculo ex filis arachnoideis longe lateque expansis tenerrimis, intertextis, subcandido-cinereis; cupulis pallido-aquosis, extus villosis-albis, minutissimis, siccitate globoso-contractis, fere imperceptilibus.

Hab. in lignis dejectis udis, Bethlehem Amer. bor.

61. **Tapesia scutelliformis** (Wallr.) Sacc. *Pez. scutelliformis* Wallr. 1588

Fl. crypt. n. 2554. — Ascomatibus sessilibus, submembranaceis tenacellis, sparsis, extus tegmine furfuraceo terso fusco-nigrescente nitidulo vestitis, e basi inde telam arachnoideam exserentibus sensimque in stratum stipato-intertextum membranaceum spadiceum nitidum subrescentibus, primum globosis vertice hiantibus, dein reclinando discum planum stramineo-pallentem, margine inflexo flexuoso cinctum recludentibus, majusculis, adpressis, scutellaribus.

Hab. ad ligna abietina mausolei cujusdam in agro Northusano (WALLR). — Stratum hypostrom. dein membranulæ continuæ instar cubilia undique obducit et siccando integrum secedit. Ascomata *P. melaxantham* s. *xanthomelam* haud male referunt.

62. **Tapesia albo-olivacea** (Gill.) Sacc. *Lachnea albo-olivacea* Gill. 1589

Disc. p. 92. — Ascomate sessili, applanato, extus tomentoso et albicante, 1-1½ mm. diam., margine prominulo albo, primo regulari, dein undulato; disco primo olivaceo, dein brunneo-olivaceo, subiculo albo copioso.

Hab. in fragmentis ligneis, locis humidis Galliæ super.

63. **Tapesia candido-fulva** (Schw.) Sacc. *Peziza candido-fulva* Schw. 1590

Syn. p. 174. — Subiculo araneoso, satis denso, longe lateque effuso, candidissimo, cupulis eo sparse insertis, 2-4 mm. lat., elegantissime fulvis, extus pilis brevibus subfasciculatis fusco-fulvis ornatis.

Hab. rara sed perpulchra in cortice, Bethlehem et Carol. inf. Amer. bor. — Affinitatem cum *T. fulvo-cana* habet sed differt subiculo. Sec. Berk. habitus *Belonidii Aurelicæ*, sed sporidia non visa.

64. **Tapesia stipata** (Fr.) Sacc. *P. stipata* Fr. Syst. Myc. II, p. 106, 1591

Summa p. 352, nec Pers. — Confertissima, confluens, sessilis, villosa, griseo-fusca, margine tenui, disco urceolato nigrescente.

Hab. ad ligna putrida Fagi, Tiliæ in Suecia. — Subiculum fere nullum, sed cupulæ adeo dense aggregatæ, ut primo obtutu *Polypori* speciem omnino referant. Cupulæ oblongæ, leviter ventricosæ, etiam basi villosæ.

65. **Tapesia fibrillosa** (Wallr.) Sacc. *Pez. fibrillosa* Wallr. Fl. Crypt. 1592

n. 2541, *Peziza ferruginea* Pers. Myc. I, 274, tab. 1, f. 7,8 nec Schumach. — Ascomatibus sessilibus, hemisphæricis, vellere furfuraceo tenui ferrugineo vestitis, e basi telam hypostromaticam stygiam teneram exserentibus, demum vertice in discum concavum dilutiorem, marginibus inflexis cinctum reclusis.

Hab. ad ramulos quercinos vallium Hercyniæ infer. udarum.

66. **Tapesia erysiphoides** Rabenh. DC. Fl. p. 357, n. 2752. — Gre. 1593
 garia, sessilis, primo clausa, villosa, subobovata, obtusa, demum
 aperta, depressa, 2-5 mm. lata, profunde cupulata, ex olivaceo-vi-
 ridi brunneola, margine involuto, nigrescente; disco brunneo, demum
 subsulcato; subiculo araneoso molli, albido, radiatim extenso.

Hab. ad lapides arenosas in Helvetia saxonica, sociâ *Schistostegâ osmundacea*.

DESMAZIERELLA Lib. Ann. Sc. nat. 1829, p. 82 c. ic., Phill. Disc. p. 283 (Etym. a mycologo acuto et sollerti J. B. DESMAZIÈRES). — Ascoma sessile v. subsessile, cupulatum, disco paraphysium apicibus emergentibus atris hirtello. Asci cylindranei, octospori. Sporidia ellipsoidea, hyalina.

1. **Desmazierella acicola** Lib. Crypt. Ard. n. 24, Phill. Disc. p. 283, 1594
 t. 8, f. 51. — Sparsa, sessilis, turbinata, dein plana, extus nigra
 et tomento nigro byssoideo obsessa, margine setulis longis, nigris
 ciliato; disco atro-brunneo, paraphysibus exilientibus hirtello; sub-
 stantia pallide cinerea; ascis cylindraneis; sporidiis ellipsoideis, bi-
 guttatis, $15 \approx 8$, paraphysibus in fasciculos coalescentibus, sursum
 discretis, apice acuto nigricante.

Hab. in acubus emortuis Pini silvestris in Arduennis, Germania et Britannia. — Ascoma 5-6 mm. lat., initio chætomiiforme.

PIROTTÆA Sacc. Mich. I, p. 424 [1878] (Etym. a cl. prof. R. PIROTTA, botanico ital.). — Ascomata superficialia v. erumpenti-superficialia, sessilia, scutellata, subcarbonacea, nigra, setulis rigidis plerumque septatis vestita, disco levi. Asci octospori, paraphysati. Sporidia oblongata, continua hyalina. — Habitus *Pyrenopezizæ* sed ascoma setigerum.

A. *Eu-Pirottæa*. Sporidia breviuscula.

1. **Pirottæa veneta** Sacc. et Sp. Mich. I, p. 424, F. it. f. 1395, — Asco. 1595
 matibus subsuperficialibus, scutellatis, sessilibus, $\frac{1}{6}$ - $\frac{1}{5}$ mm. diam.,
 aterrims, in sicco subclausis, setulis cuspidatis, 40-50 \approx 5-7 parce
 septatis, obscure fuligineis (ad marginem crebrioribus) vestitis; ex-
 cipuli contextu distincte parenchymatico, atro, cellulis facile se-
 cedentibus; ascis cylindraneo-clavatis, 40-45 \approx 8, apice obtusiuscu-
 lis, subsessilibus; paraphysibus bacillaribus obvallatis, octosporis,
 apice jodo cœrulescente; sporidiis cylindraneis, utrinque rotunda-
 tis, 14-15 \approx 2-2 $\frac{1}{2}$, 2-guttulatis, hyalinis.

Hab. gregatim in caule, rarius foliis emortuis Hellebori viridis et Adenostylidis, Conegliano Ital. bor., in Tyrol. et Belgio.

2. **Pirottæa gallica** Sacc. Mich. II, p. 82 et 59, F. ital. f. 1394. — 1596

Ascomatibus gregariis, superficialibus, aterrimis, $\frac{1}{5}$ mm. diam., concavo-scutellaribus, sessilibus, siccis semiclausis, ubique setulosis; perithecii contextu parenchymatico, rigidulo, fuligineo, cellulis superficialibus setulisque cuspidatis 2-3-septatis, $30 \approx 5$, obscurioribus facileque secedentibus; ascis cylindraceo-clavatis, $35-45 \approx 5-7$, breve stipitatis jodii ope flavescens; paraphysibus filiformibus obvalvatis, octosporis; sporidiis cylindraceo-clavulatis, $7-9 \approx 1\frac{1}{2}$, minute 2-guttulatis, hyalinis.

Hab. in caulibus emortuis Cichorii Intybi, Aconiti, Adenostylidis, Senecionis in Gallia, Italia, Belgio, Allgau, Tyrol. — A *P. veneta* S. et S. differt præcipue sporidiis dimidio minoribus etc.

3. **Pirottæa Bresadolæ** Sacc. Mich. II, p. 536, F. ital. fig. 1393, *Mol-* 1597

lisia cæsiella Bresad. F. trid. II, p. 25, t. XXX, f. 1 (icon justo pallidior). — Erumpenti-superficialis, fusca, disco expallenti, sed non vere cæsioides; contextu excipuli fuligineo-atro, parenchymatico, setulis marginalibus acicularibus, $50-60 \approx 5$, sæpe 1-septatis fuliginosis, subinde fasciculatis; ascis tereti-clavatis, breve stipitatis, $100 \approx 10-12$, filiformi-paraphysatis, octosporis; sporidiis distichis, tereti-clavulatis, $23-27 \approx 3-3,5$, leniter curvis, 3-4-guttatis, hyalinis.

Hab. in caulibus herbarum majorum e. g. Cirsii palustris in agro tridentino (BRESADOLA). — A *Pir. veneta* differt ascomatibus majoribus, suberumpentibus, ascis sporidiisque multo amplioribus, cellulis excipuli non secedentibus, sed ob contextum fuligineo-atrum setulasque evidentissimas vera *Pirottæa*.

4. **Pirottæa cembricola** Rehm Ascomyc. fasc. XVI, p. 6, n. 763. — 1598

Ascomatibus gregariis, primitus orbicularibus, dein explanatis, patellaribus, sessilibus, 0,5-1,5 mm. diam., siccis difformibus, subglobosis, urceolatis, disco flavidulo, humidis diaphanis, subfimbriatis, contextu parenchymatico fusco, margine (interdum etiam versus basim) fimbriis septatis, fusciculatis, obtusis, $36-40 \approx 5-6$ crebris obsessis; ascis clavatis, basi lata, sessilibus, 8-sporis, $40 \approx 7$; sporidiis distichis, continuis hyalinis, oblongis, obtusis, rectis v. subcurvatis, $8-9 \approx 2,5-3$; paraphysibus filiformibus haud clavatis, obtusis, ascos superantibus, $0,3 \mu$. crassis; hyphis basalibus longis septatis, simplicibus, fuscis 3μ . crassis.

Hab. ad ramos decorticatos putridos Pini Cembræ supra Sulden alpium tyrolensium. — Hyphæ basales longæ, septatæ, simplices, 3 μ . cr. fuscæ.

5. **Pirottæa frondicola** (E. et E.) Sacc. *Lachnella frondicola* E. et 1599
E. Jour. Myc. 1888, p. 99. — Sparsa, sessilis, cupuliformis, nigra, sicca fere clausa, $\frac{1}{4}$ - $\frac{1}{3}$ mm. diam., disco pallido, extus margineque pilis brevibus, brunneis, obtusis, septatis, sursum parum rugosis, 35 \approx 3, tecta; ascis oblongo-lanceolatis, sessilibus, utrinque subacutis, 30-35 \approx 6; paraphysibus filiformibus; sporidiis distichis, clavato-oblongis v. subfusoides, hyalinis, nucleatis, 8-12 \approx 1,5.

Hab. in frondibus delapsis Osmundæ? Newfield Amer. bor.

6. **Pirottæa mimatensis** Pass. et Roum. Rev. Mycol. 1885, p. 172. — 1600
Gregaria, minuta, atra, superficialis, scutellata, concava, sessilis, extus aculeata, aculeis facile secedentibus, simplicibus, fuligineis, 28-45 μ . longis; sporidiis acicularibus hyalinis; paraphysibus filiformibus, ascos paullo superantibus.

Hab. in foliis semivirentibus Pini silvestris in territorio Mimatensi «Fôret de Mercoire» Galliæ (PROST).

7. **Pirottæa venturioides** Sacc. et Rom. n. sp. — Sparsa sessilis v. bre- 1601
vissime stipitata, uda aperta, urceolata v. subsphæroidea, minuta, 150-180 μ . diam., undique nigro-setulosa, setis rectis subulatis fusco-opacis, 50-270 \approx 4-6, primo obtutu ob setulas subfusca, verum albidâ, disco hyalino pallido, margine albo minutissime crenulato, sicca clausa sphæroidea nigra; ascis tereti-oblongis v. subclavatis, 30-42 \approx 5-8; sporidiis acicularibus, hyalinis, continuis, 6-11 \approx 1,5-1,7; paraphysibus filiformibus, 1 μ . cras.

Hab. in foliis putridis dejectis Vaccinii uliginosi in Nericia Sueciæ. — Habitus *Venturicæ Myrtilli*.

8. **Pirottæa uliginosa** Karst. Symb. Myc. Fenn. XXIII, p. 5. — Sparsa, 1602
planuscula, setulis strictis, articulatis, nigris, 100-180 \approx 6, obsessa, minima, contextu minuto, parenchymatico hyalino; ascis cylindraceis, apice leviter attenuatis, 34-42 \approx 5; sporidiis.... non satis evolutis visis; paraphysibus filiformibus, parvis, 1 μ . cr.

Hab. in foliis putrescentibus Calamagrostidis lanceolatæ, Mustiala Fenniæ. — Contextu hyalinio a typo desciscit.

9. **Pirottæa erubescens** Rehm Ascom. n. 412. — Primitus globosa, 1603
dein urceolata, gregaria, sessilis, extus fuscorubra, ore albido, sicca globoso-contracta, extus rugulosa, humida urceolato-explanata, disco concavo, pallide flavidulo, contextu parenchymatico fusco, ad marginem prosenchymatico, cellulis elongatis, fere filiformibus, p.

p. hyalinis et fuscis, distantibus; ascis clavatis, 8-sporis, $75 \approx 8$; sporidiis oblongis, obtusis, nucleolis 2 præditis, rectis, hyalinis, plerumque 1-stichis, $12-15 \approx 4,5$; paraphysibus lanceolatis, acutis ascos superantibus, c. 5. μ . cr.

Hab. ad caules emortuos Eupatorii cannabini prope Augustam Vindelicorum seu Augsburg (BRITZELMAYR).

B. Mancinia Sacc. *) Sporidia prælonga, filiformia.

10. **Pirottæa strigosa** (Karst.) Rev. mon. p. 138, *Lachnum strigosum* Karst. M. F. I. pag. 183. — Sparsa v. subgregaria, sessilis, adnata, sphæroideo-applanata, nigra, strigosa, disco rufescente, 0,5-0,7 mm. lat.; ascis cylindræo-clavatis, $60-74 \approx 8$, jodo non cærulescentibus; sporidiis fusoideo-filiformibus, guttulatis, rectis, $30-42 \approx 1,5$; paraphysibus 1,5-2 μ . cr., sursum 2-3 μ . cr., apice acutiusculo.

Hab. in caulibus Achilleæ Millefolii aridis prope Mustiala Fennia. — Pili nigri (sub microsc. fuscis), 120-250 $\approx 6-8$, apice attenuati. Spermogonia forsân ejus sistit *Dinemaspora strigosum*. Vergit ad Mollisiam. *P. Vectis* proxima.

11. **Pirottæa Vectis** (B. et Br.) Phill. Disc. p. 284, t. 8, f. 52, *Peziza Vectis* Berk. et Br. Ann. Nat. Hist. n. 957. — Minuta, sparsa, sessilis, subglobosa, subdepressa dein hemisphærica, extus obscure brunnea v. subnigra, pilis brevibus brunneis rigidis obsessa, disco concavo pallido; ascis tereti-clavatis; sporidiis e filiformi fusoideis curvulisve vermiformibus, $25-30 \approx 4$, (spuriè) 1-3-septatis; paraphysibus filiformibus.

Hab. in caulibus emortuis Centaureæ nigræ, Ryde in ins. Wight (Vectis) Britannicæ (BLOXAM). — Ascoma 300 μ . lat. Setulæ plerumque marginales, granulis polygoniis brunneis intermixtæ.

C. Species fructificatione ignota.

12. **Pirottæa? aterrima** (Lasch) Sacc. *Peziza aterrima* Lasch in Klotzsch Herb. Myc. n. 336 et in Rabenh. Krypt. Fl. I, p. 359 nec Rehm, nec *Peziza corvina* Fr. Syst. Myc. II, p. 97. — Gregaria, sessilis, globoso-hemisphærica, obtuse marginata, nigra, setulis patulis? extus vestita.

Hab. in acubus Pinorum putridis prope Driesen Germaniæ.

13. **Pirottæa? tentaculata** (Wallr.) Sacc. *Pez. tentaculata* Wallr.

*) Collaboratori optimo, prof. VINC. MANCINI dicatum subgenus.

Fl. crypt. n. 2463. — Ascomatibus sessilibus parvis subrotundis atris carnosio-membranaceis, primum conniventibus, dein marginem obtusum nitidulum inflexum reclinantibus discumque planum opacum concolorem recludentibus, patellaribus, extus margineque setis brevibus stipatis tentaculato-porrectis nigris sparsis parce instructis.

Hab. ad virgas salicinas decorticatas Thuringiæ rarius: — *Lecanid. atrati* habitum exacte reddit, extus tamen setis brevibus stipatis, tentaculorum instar porrectis munita certo dignoscitur.

14. **Pirottæa? corvina** (Pers.) Sacc. *P. corvina* Pers. S. M. I, p. 248, 1608
Fr. Syst. Myc. II, p. 97. — Sessilis, minuta, subdepressa, externe pilosa, utrinque atra.

Hab. ad ligna exsiccata indurata, passim hieme, sed videtur perennis. — Gregaria, subiculo maculæformi nigricante plerumque insidens, e ligno suberumpens, primo punctiformis, dein late aperta. Non cum simili *Cælosphæria exili* commutanda; potius *Excipulæ* species.

15. **Pirottæa? Hydrangeæ** (Schw.) Sacc. *P. Hydrangeæ* Schw. Carol. 1609
n. 1219, Fr. Syst. Myc. II, p. 109. — Sessilis, subglobosa, pilis nigris longis involuta, cupulis coriaceis cinereo-albis, extus nigris pilosis.

Hab. rarior ad truncos emortuos Hydrangeæ in Carolina Amer. bor. — Primum clausæ et involutæ, deinde aperiuntur cupulæ, margine inflexo; etiam interdum clausæ manent, ore tamen conspicuo.

LACHNELLULA Karst. Medd. af Soc. pro Fauna et Fl. Fenn. 11, pag. 138 [1884] (Etym. demin. *Lachnellæ*). — Ascoma sessile vel substipitatum minutum, cupulatum vel scutellare, ceraceum, extus pilosum. Asci cylindranei, octospori, paraphysati. Sporidia minuta globosa, hyalina. — Est *Trichopeziza* v. *Lachnella* sphærospora.

1. **Lachnellula chrysophthalma** (Pers.) Karst. l. c. et Rev. monogr. 1610
p. 132, *Peziza chrysophthalma* Pers. Myc. Eur. I, pag. 259 nec Ger., *Helotium* Karst. M. F. I, p. 155, *Pitya suecica* Fuck. Symb. App. III, p. 32, *P. calycina* β . *Abietis* Fr. Syst. Myc. II, p. 91, pr. p. Karst. Pez. et Asc. p. 16 pr. p. *Pez. pulchella* b. *flavococcinea* Alb. et Schw. Consp. Fung. nisk. p. 323? — Gregaria v. sparsa substipitata, albo-villosa vel tomentosa, explanata, sicca concava, disco aurantiaco-luteo v. aurantiaco, 2-4 mm. lat., excipulo e fibrillis ramosis, laxis, hyalinis composito; pilis asperulis, hyalinis, simplicibus, obtusis, $40 \approx 4$; stipite brevi vel brevissimo,

in cupulam dilatato; ascis subcylindræis, 50-60 \approx 6-7; sporidiis monostichis, sphæroideis, 4-5 μ . diam.; paraphysibus gracilibus.

Hab. ad corticem et lignum Abietis excelsæ, Pini Cembrae, P. pumilionis, Laricis in Fennia, Lapponia rossica, Germania, Hungaria, Helvetia.

2. **Lachnellula calycina** (Vuill.) Sacc. *Trichoscypha calycina* (Schum. 1611 e. p.) Vuillemin Bull. Soc. Bot. Franc: 1888, LXX, *Pez. calycina* Schum. e. p. sec. Vuill. — Ascomatibus sparsis v. cæspitosis, 0,8-2 mm. diam., udis cupulatis, siccis vel in juventute contractis, basi in stipitem brevem (subinde nullum) desinentibus, extus albo-tomentosis, disco plano v. leviter concavo, pallide aurantiaco; ascis elongato-clavatis, 35-40 \approx 3, octosporis; sporidiis sphæroideis, monostichis, 2 μ . diam., levibus; paraphysibus filiformibus septatis.

Hab. in cortice vivo Pini silvestris, P. Strobi, rarius Abietum in Vogesis.

3. **Lachnellula theioidea** (C. et E.) Sacc. *Peziza theioidea* C. et E. 1612 Grev. VII, p. 7. — Sparsa, gilva; cupulis subglobosis, dein hemisphæricis, leniter tomentosis, pulvere sulphureo ubique conspersis; ascis cylindræis; sporidiis globosis, 3 μ . diam.

Hab. in ramis decorticatis Rhois venenatæ, New Jersey Amer. bor. — Matrix subinde granulis sulphureis, a cupulis delapsis, conspersa.

4. **Lachnellula hystorigena** (B. et Br.) *P. hystorigena* B. et Br. 1613 Fung. of Ceyl. n. 947. — E cupuliformi applanata, margine inflexo, extus albida, furfuraceo-tomentosa; hymenio cinereo; ascis clavatis; sporidiis minutis globosis, 3,7-4 μ . diam.

Hab. parasitica in Hysteriis, Central province Ceylon.

5. **Lachnellula cyphelloides** (E. et E.) Sacc. *Peziza cyphelloides* E. 1614 et E. Journ. Mycol. I, p. 151 (1885). — Subsessilis, minuta, $\frac{1}{4}$ - $\frac{1}{3}$ mm. lat., mollis, alba, pubescens, margine incurvo, contextu tenui, celluloso; ascis teretibus, fasciculatis, 24-30 \approx 1,5 p. sporif. 15 μ . long., octosporis; sporidiis globosis 1 μ .; paraphysibus nullis.

Hab. in aculeis Hydni (membranacei?) Newfield N. J. Amer. bor. — Socium adest *Penicillium glaucum*, cujus conidia illa *Lachnellulæ* imitantur. Habitus *Cyphellæ*, sed, teste Ellisio, asci genuini adsunt.

LACHNELLA Fr. Summa p. 365 (1849), Fuck. Symb. p. 280 (Etym. demin. a *Lachnea*) *Peziza* sect. *Dasysc.* et *Fibrina* Fr. e. p. — Ascoma sessile v. brevissime stipitatum, urceolato-scutellare, extus

villosum, ceraceo-coriaceum. Asci elongati, 4-8-spori. Sporidia tereti-oblonga v. ovoidea, continua, hyalina. Paraphyses filiformes. — A *Trichopeziza* præcipue differt ascomate coriacello et paraphysibus sæpius filiformibus.

1. **Lachnella flammea** (A. et S.) Fr. Summa p. 365, *P. flammea* A. 1615 et S. p. 319, t. 11, f. 7, Pers. Myc. Eur. p. 252, Fr. Syst. Myc. II, p. 96, *Helotium* Karst. — Sessilis, subglobosa, firma, strigoso-villosa, unicolor flammeo-rubiginosa, pilis simplicibus, fuscis, obtusis, sublevibus circ. 4-5 μ . crass.; ascis clavatis, 75-80 \approx 9-10, 8-sporis; sporidiis oblongis, obtusis, rectis v. subcurvatis, 1-cellularibus, hyalinis, 10-15 \approx 3-3 $\frac{1}{2}$, distichis; paraphysibus filiformibus, apice haud clavatis.

Hab. ad ramos vetustos induratos nudos Piri Mali, Carpini, Liquidambaris, Salicis in Suecia, Fennia, Germania, Gallia, Britannia, Italia, Hungaria, Amer. bor., Ceylon. — Contextus excipuli prosenchymaticus; pili sæpe ob crystallam minutam rugulosi, 3-4 μ . cr. Matrix circa fungum rufo-brunnea. Proximis utique cognata loco et substantia; etiam caro interna nigra. Primo tota clausa, globosa, subrugosa, dein patens, cupularis, hemisphærica, regularis, 2-3 mm. æquans. Hymenium vivide rubiginosum.

2. **Lachnella barbata** (Kunze) Fr. Summa p. 365, *Peziza* Kunze in 1616 Fr. Syst. Myc. II, p. 99. — Sessilis, globoso-applanata, connivens, firma, rugoso-tomentosa, ferruginea, disco pallido, pilis tereti-clavatis, septatis, fuliginosis, 3,6-5 μ . cr.; ascis cylindratis, 80-90 \approx 5-7, octosporis; sporidiis oblique monostichis, tereti-fusoideis, 8-10 \approx 2-2,5, triguttatis v. spurie biseptatis.

Hab. ad ramos Lonicæræ Xylostei et *L. nigræ*, in Helvetia, Italia, Germania, Suecia, Gallia, Britannia. — Gregaria, adnata, nec e cortice erumpens, persistens, 2 mm. vix lata, sicca rugoso-crispa, connivens, sed humectata quasi rimose dehiscit. Tomentum longum, ferrugineum, sæpius longitudinaliter adpressum, ad marginem barbatum, densum. A simili *L. flammea* differt substantia receptaculi alba, hymenio crassiore. — ***L. pellita** Pers. Myc. Eur. p. 264: cupulis subglobosis, 3 mm. lat., dense tomentosis e griseo dilute gilvis; sporidiis 12-18 \approx 2,5, 3-4-guttatis. In ramulis Lonicæræ Caprifolii in Vogesia et Britannia. — ***L. rhodophæa** Mich. I, p. 66, F. ital. f. 1373: habitu et colore extus *L. barbatae*, at disco non albido sed amœne roseo; ascis cylindratis-clavatis, 90 \approx 5, octosporis; sporidiis cylindratis curvulis, utrinque

obtusiusculis, 12-13 \approx 3, hyalinis. In lignis putrescentibus Ulmi etc. Conegliano, Selva, Ital. bor. Ad *Lachn. flammeam* quoque vergit, sed extus non rufa.

3. **Lachnella Loniceræ** (A. S.) Fuck. Symb. p. 280, *P. Loniceræ* A. 1617
S. p. 328, t. 11, f. 8, Fr. Syst. Myc. II, p. 115, *Lachn. Periclymeni* Fuck. Symb. p. 280. — Sessilis, ceracea, subglobosa, ex albo sensim fusco-nigra, extus subpilosa, ore connivente crenato; ascis linearibus, 8-sporis, 60 \approx 8; sporidiis subdistichis, cylindræis sublanceolatisve, continuis, hyalinis, 8-10 \approx 2.

Hab. ad ramos siccos Loniceræ Periclymeni rarius Corni in Suecia, Germania. — Sparsa, minuta, persistens; sicca 1 mm. lata, triquetra, fusco-nigra, margine albidior; humectata vero explanata, 2 mm. lata cæsiõ-albida. Subiculum deest, sec. Fries et Fuck. adest vero, etsi evanidum, sec. Alb. et Schw. Cupulæ sec. Fuck. gregariæ, seminis *Erucae* magnitudine, strigoso-pilosæ, sordidæ, margine connivente, subclauso, disco sordido.

4. **Lachnella Berberidis** (Pers.) Fuck. Symb. p. 280, *P. Berberidis* 1618
Pers. Syn. p. 649, Fr. Syst. Myc. II, pag. 99. — Sparsa, sessilis, rufo-fuscens, hirta, basi setis strigosis subradiantibus cincta; ascis clavatis, 8-sporis; sporidiis cylindræis, curvatis, continuis, hyalinis, 8 \approx 2 (Fuck.).

Hab. ad ramos siccos Berberidis in Germania, Belgio, Italia. — Cl. Rehm huc ducit dubitanter *L. Periclymeni* Fuck. Substantia sicca. Cupulæ minutæ, basi villis longioribus, subiculum tamen non efficientibus, matrici adnatæ.

5. **Lachnella corticalis** (Pers.) Fr. Summa p. 365, Pat. Tab. fig. 71, 1619
P. corticalis Pers. Obs. I, pag. 28, 112, *P. granulifor.*? Schum. Saell. p. 435, *P. urceolata* Rutstr. diss. pag. 19, *Helot. corticale* Karst. M. F. I, p. 159. — Sessilis, subglobosa, firma, flocculoso-tomentosa, e cinereo rufescens; pilis simplicibus, septatis, glabris, fuscis, c. 3 μ . cr.; ascis clavatis, apice incrassatis, 75 \approx 6, 8-sporis, jodi cpe apice cærulescente; sporidiis ellipticis, subacutis, rectis, hyalinis, distichis, 12-18 \approx 3-4; paraphysibus filiformibus.

Hab. supra cortices duriores siccos arborum adhuc vegetarum Populi, Quercus, Alni etc. in Suecia, Germania, Fennia, Gallia, Italia, Belgio, America bor., Cuba. — Gregaria, persistens, superficialis; humida disco aperto subrufescens et hemisphærica: sicca clausa subdifformis albido-grisea. Species facillime dignoscenda ob amœnitatem colorationis; disco roseo, purpureo v. cin-

- nabarino-aurantiaco; excipulo vivide cæruleo vel cinereo-cæruleo; magn. $\frac{1}{2}$ ad $1\frac{1}{2}$ mm. diam.
6. **Lachnella canescens** Cooke Phill. Disc. p. 259. — Gregaria vel 1620
conferta, sessilis, hemisphærica, firma, extus pilis flexuosis, septatis brunneis obsessa; disco fuligineo-brunneo; ascis clavatis; sporidiis fusoides, denique simulate 1-septatis, $9-12 \approx 2$; paraphysibus filiformibus.
- Hab.* in lignis nudis pr. Hereford Britanniae (RENNY). — Ascoma $\frac{1}{2}$ mm. lat. A *L. corticali* differt sporidiis fusoides, pilis evidentius septatis.
7. **Lachnella tricolor** (Sow.) Sacc. *P. tricolor* Sow. t. 369, f. 6, Fr. 1621
Syst. Myc. II, p. 134, *P. Godroniana* Mont. Cent. III, n. 46, Syll. Crypt. n. 623, *P. episcopalis* L. Duf. in Desmaz. Ann. 2, XIX, p. 367. — Subsessilis vel brevissime stipitata, primum ore clauso breviter turbinata aut clavæformis, tandem aperta, margine inflexo hemisphærica, extus villo amœne violaceo vestita, carne nigrescente; disco ceraceo carneo; stipite obtuso albido; ascis clavatis, $60 \approx 6-7$; sporidiis oblongo-cylindræcis, $12-15 \approx 2-3$, 4-guttulatis.
- Hab.* ad corticem in truncis vivis Quercuum prope Nancy, Bruyères Galliae et in Britannia. — Ascoma 1 mm. lat.
8. **Lachnella papillaris** (Bull.) Phill. Disc. p. 257, *Peziza papillaris* 1622
Bull. Champ. p. 244, t. 467, f. 1, Fr. Syst. Myc. II, p. 102, *Hel. papillare* Karst. M. F. I, p. 160, *P. granuliformis* A. et S. p. 312. — Gregaria, planiuscula, sicca subsphæroideo-contracta, granuliformis, albida, villosa-hirta, margine granulato, 0,8 mm. lat., pilis marginalibus, $50 \approx 2,5$, filiformibus, sursum asperulis, dilute ochraceis; ascis cylindræco-clavatis, $55-65 \approx 6-7$, obturaculo jodo haud vel obsoletissime cærulescente; sporidiis vulgo distichis, fusoides-oblongatis v. fusoides-elongatis, 2-guttulatis, interdum spurie tenuiter uniseptatis, $10-15 \approx 2-3$; paraphysibus gracilibus.
- Hab.* ad lignum putridum pineum, populinum in Fennia meridionali, Lapponia, Germania, Britannia, Belgio. — Forma major cupulis 1,5 mm. lat., supra folia putrida *Populi* et *Juniperi* prope Mustiala lecta (KARST.).
9. **Lachnella spadicea** (Pers.) Phill. Disc. p. 258, *P. spadicea* Pers. 1623
Myc. Eur. p. 250. Fr. Syst. Myc. II, p. 98. — Sessilis, subglobo-so-hemisphærica, demum expansa, tomento denso subcompacto spadiceo vestita, ore connivente, disco pallido; ascis tereti-clavatis octosporis; sporidiis elliptico-fusoides, $8 \approx 2$; paraphysibus filiformibus.
- Hab.* ad ramos *Populi tremulae*, *Tiliae*, *Ulicis* in Gallia,

Britannia, Germania. — Majuscula, sparsa, substantia sicca. Cupulæ juniores orbiculares, nitide badiæ; adultæ expallentes opaca, $\frac{1}{2}$ mm. lat. Pili breves, septati, intus granulosi.

10. **Lachnella Robergei** (Desm.) Sacc. *Peziza Robergei* Desm. 11 Not. 1624 p. 365. — Erumpens, sessilis, exigua, sparsa, villosa-hirta, junior subglobosa, dein magis hemisphærica, unicolor testacea; ascis subclavatis, 40 μ . longis, octosporis; sporidiis ovoideis.

Hab. in ramis Lonicerarum prope Caen Galliæ. — Ascoma 1-2 mm. diam., extus pilis brevibus rufulis, margine albescentibus tectum.

11. **Lachnella cedrina** (Cooke) Sacc. *Peziza cedrina* Cooke et Ger. 1625 in Cooke Disc. Unit. St. II, p. 294, II, p. 22, Hedw. 1875. p. 81. — Sparsa, brunneo-picea, extus fibroso-rugosa; ascomate globoso, cupuliformi, 1 mm. diam.; margine contracto; disco vix pallidiori; ascis cylindræis; sporidiis ovoideis, 20 \approx 10; paraphysibus clavatis, apice leniter curvis.

Hab. in ramis Juniperi virginianæ, New York Amer. bor. (GERARD).

12. **Lachnella macrochæta** Speg. in Thüm Pilz. d. Weinst. pag. 78, 1626 Mich. I, p. 428, F. ital. f. 1374. — Ascomatibus spadiceo-fuscis cupulatis, sessilibus, $\frac{1}{2}$ - $\frac{3}{4}$ mm. lat., setulis filiformibus, flexuosis, 100-200 \approx 3-4, septatis olivaceo-fuliginæis vestitis; ascis cylindræis, 50-55 \approx 4 $\frac{1}{2}$ -5 $\frac{1}{4}$, apice rotundatis, paraphysatis, octosporis; sporidiis fusoidæis, utrinque acutiusculis, 7-10 \approx 1 $\frac{1}{2}$ -2 $\frac{1}{2}$, 2-guttulatis, hyalinis.

Hab. in sarmentis emortuis Vitis viniferæ, Conegliano Italia boreali.

13. **Lachnella? testaceo-rufa** Speg. Fung. Fueg. n. 325. — Cupulis 1627 sparsis v. hinc inde subgregariis, in rimulis fere absconditis, udis explanatis, 1-2 mm. diam., siccis difformi-contractulis, coriacellis, duriusculis, sordide ebscureque testaceis, extus primo parce rufo-puberulis, pilis minutis brevibus continuis flexuosis apice obtusis basi coalescentibus, 20-30 \approx 3 pallide fulvis vestitis, per ætatem glabratis; contextu fulvescenti-ferrugineo parum distincto, subprosenchymatico, disco non vel vix pallidiorè plano, margine acutiusculo, subrepandulo; ascis cylindræo-subclavulatis, apice obtuse rotundatis, deorsum longiuscule attenuatis, 75-80 \approx 5, octosporis; paraphysibus longis, densiusculis, obvallatis; sporidiis recte vel oblique monostichis, elliptico-elongatis vel subnavicularibus, utrinque acutato-obtusatis, 8-10 \approx 3-4, hyalinis.

Hab. vulgata ad rimulas ramulorum emortuorum v. subviventium Chilotrichi amelloidis Fuegiæ in Staten island.

14. **Lachnella fraxinicola** (B. et Br.) Phill. Disc. p. 275, *Peziza fraxinicola* B. et Br. Ann. N. H. n. 1160, t. IV, f. 21. — Sparsa v. aggregata; ascomatibus externe pallide cervinis, furfuraceis, intus brunneis, primo clausis, dein irregulariter apertis, demum orbicularibus; disco vix depresso; ascis clavatis; sporidiis monostichis, ellipsoideis, 10-12 \approx 7-8. 1628

Hab. in ramulis fraxineis Northamptonshire Britanniae. — Ascoma 1 mm. lat. *L. rufo-olivaceæ* affinis et pariter firma.

15. **Lachnella siparia** (B. et Br.) Phill. Disc. p. 276, *Peziza siparia* B. et Br. Ann. N. H. n. 772. — Ascomatibus subsessilibus, extus primo subglobosis, dein cyathiformibus furfuraceis ochraceis, disco primo ochraceo, dein brunneo; sporidiis lineari-oblongis, 10-12 \approx 2-3, sæpe utrinque nucleatis; paraphysibus filiformibus. 1629

Hab. in ramis decorticatis Ulmi Elmhurst in Britannia. — Subinde adest stratum flocculosum. Ascoma 2-3 mm. lat.

16. **Lachnella Campanula** Ellis Bull. Torr. 1881, p. 73. — Pulvinata, sessilis, circiter 2,5 mm. alta et aperta circiter 2,5 mm. lata, pilis tenuibus, niveis, crispis tecta, disco pallide rufo v. carneo, campanulata, sicca contracta atque densa fimbria pilorum ciliata; ascis sessilibus 25 \approx 5; paraphysibus non visis; sporidiis distichis, oblongis, uno apice oblique apiculatis, hyalinis. 1630

Hab. in ramis Fraxini, Utah Amer. bor. (HARKNESS). — Uda *Soleniam* in mentem revocans.

17. **Lachnella rubiginosa** Pass. et Beltr. Fung. Sic. n. 18. — Cupulis sparsis, solitariis, sessilibus in sicco hemisphærico-contractis, villosa-tomentosis, rubiginosis, margine pallidiore; ascis clavatis, basi attenuatis, breviter stipitatis, 8-sporis, 70-75 \approx 7-7½; sporidiis oblongo-fusiformibus, distichis, rectis, continuis, opaco-hyalinis, intus granulosus, 12½ \approx 3-4; paraphysibus filiformibus strictis, ascos subæquantibus v. excedentibus; pilis exterioribus setiformibus longissimis integris. 1631

Hab. in ligno denudato Oleæ europææ, Monostalla Siciliæ.

18. **Lachnella cenangioides** Ellis Bull. Torr. Cl. 1881, pag. 123. — Sessilis, urceolata, dein expansa, 750 mm. diam., extus margineque pilis brunneis, rugulosis, septatis tecta; disco sordide albo; ascis cylindræis, 65 \approx 6, octosporis; paraphysibus crassis, sursum septatis, apice vix inflatis, obtusis; sporidiis fusiformibus, hyalinis, retis v. vix curvis, plerumque uno apice acutis, 15-17 μ . longis. 1632

Hab. in caulibus herbaceis, Utah Amer. bor.

19. **Lachnella Meleagris** Ellis Bull. Torr. Cl. 1881, p. 123. — Ses- 1633
silis inter fibras ligni, brunneo-purpurea, primo sphaerica, dein
expansa, 750 μ . diam, extus margineque pilis purpureis, obsolete
septatis, minute rugosis sursum attenuatis pallidioribus (margina-
libus fere hyalinis) tecta; disco sordide albescente; ascis sessili-
bus, oblongo-cylindraceutis, 5-7 μ . longis; paraphysibus crassis, 2-
3-septatis atque sursum abrupte acuminatis; sporidiis simplicibus,
hyalinis, oblongis, 7 \approx 2,5, in parte superiore asci collectis.

Hab. in ligno senescente, Utah Amer. bor. (HARKNESS).

20. **Lachnella fusco-brunnea** Rehm in Thüm. Pilzfl. Sib. V, p. 17. 1634
— Cupulis sparsis, interdum gregariis, sessilibus, globosis subden-
sis, humiditate vix apertis, strigosis, fusco-brunneis, disco (ut vi-
detur) pallidioribus, contextu prosenchymatico, pilis longis septatis,
filiformibus fusco-purpureis 3 μ . crassis obsessis, circiter 1 mm.
diam.; ascis cylindraceuto-clavatis, octosporis, 90 \approx 6, apice jodo cœ-
rulescente; sporidiis subfusiformibus, unicellularibus, hyalinis, di-
stichis, plerumque rectis, subobtusis, 15 \approx 3; paraphysibus filifor-
mibus, hyalinis.

Hab. in caulibus subputridis Aconiti Lycoctoni, in silvis
alpinis pr. montem Kerlygan Sibiriae. — Ad *Pirottæam* accedit.

21. **Lachnella albido-fusca** Sacc. Misc. myc. I, p. 9. — Ascomatibus 1635
gregariis, sessilibus, scutellatis, coriaceo-duriusculis, $\frac{1}{2}$ - $\frac{3}{4}$ mm.
diam., rufo-atris, breve villosis, setis filiformibus, septatis, fuligi-
neis, levibus, 4 μ . cr.; disco concavo, albido, margine leniter in-
voluto; ascis tereti-clavulatis, deorsum attenuato-stipitatis, 50-55
 \approx 7-8, octosporis; sporidiis anguste fusoides 7-9 \approx 1,5, distichis,
rectis, hyalinis.

Hab. in sarmentis corticatis Rubi idæi, Malmedy (LIBERT).
— *Lach. barbatae* et *L. flammæ* subaffinis.

22. **Lachnella escharoides** (B. et Br.) Sacc. *Peziza escharoides* B. 1636
et Br. Ann. N. H. n. 1322. t. XIX, f. 15. — Ascomatibus sessi-
libus, rugosis, rugis e floccis albescentibus, griseo-olivaceis, forma-
tis, margine pallido, floccis delicatis fimbriato; disco cinereo; spo-
ridiis fusiformibus, sæpe binucleatis, 10 μ . longis.

Hab. in sarmentis Rubi fruticosi in Britannia. — Ascomata
primo clausa, globosa, fere 1 mm. diam., pilis delapsis nigra.

23. **Lachnella lactea** QuéL. in Grev. 1879, p. 117 et 12 Suppl. p. 13, 1637
t. VII, f. 12. — Ascomate ovoideo-sphaerico, 1-2 mm. diam., fir-
mo, pilis granulosis, sericeis, hyalinis vestito; hymenio concavo,

pallide flavescente; sporidiis acicularibus, 15 μ . longis, (spurie?) multiseptatis.

Hab. gregaria in plantis majoribus exsiccatis in collibus Jura.
— Habitus *Cyphellæ villosæ*.

24. **Lachnella velutarioides** Speg. F. Fueg. n. 323. — Hinc inde in 1638
rimulis densiuscule gregaria, sessilis, uda patellari-explanata 1-2 mm. diam. sæpe e mutua pressione angulosa, sicca contractula, margine subinvoluta, extus pulchre fulvo- v. rufescenti-tabacina, villosula, pilis cylindraceis sursum non attenuatis apice tamen acutatis basi non incrassatis sed coalescentibus, 200-250 \approx 4-5 non v. parce subnoduloso-septatis hyalinis substantia sordide fulvescente granuloso-incrustatis vestita; disco pallescenti-carneo; ascis cylindraceis, apice obtuse rotundatis, deorsum breviter attenuato-pedunculatis, 70-80 \approx 7-8, octosporis; paraphysibus filiformibus vix longioribus parce obvallatis; sporidiis oblique monostichis, cylindraceis vel allantoides, utrinque obtuse rotundatis, 11-16 \approx 4, continuis, hyalinis.

Hab. ad ramulos vivos vel emortuos Chiliotrichi ameloidis et Escallonix serratae in Staten island Fuegiæ. — Contextus excipuli carnosulus fere indistinctus sordidus; jodi vis nulla.

25. **Lachnella rufo-olivacea** (A. et S.) Sacc. *P. rufo-olivac.* A. et S. 1639
p. 320, t. XI, f. 4, Fr. Syst. Myc. II, p. 99, *Velutaria rufo-olivacea* Fuck. Symb. pag. 300. — Sessilis, applanata, extus villosopulverulenta sordide rufo-ferruginea, disco virescenti-olivaceo; ascis tereti-fusoideis, 144-150 \approx 10-14; sporidiis ellipsoideis, monostichis, 10-14 \approx 6-7, 1-2-nucleatis, hyalinis; paraphysibus apice clavatis viridi-brunneolis.

Hab. in ramis emortuis humidis Rubi fruticosi, corylifolii, cæsii, idæi, rarius in ramis Rosæ, Eucalypti, Ligustri, Sambuci, Viburni, Aceris in Suecia, Germania, Italia, Gallia, Belgio, Britannia, Amer. bor. — Sparsa, orbicularis, adnata, disco patente plano, primo e viridi-olivaceo, demum nigrescente. Substantia carnosoceracea, molliuscula, sed sat persistens.

26. **Lachnella diplocarpa** (Curr.) Phill. Disc. p. 232, tab. VII, f. 43, 1640
Peziza diplocarpa Curr. Linn. Trans. XXIV, pag. 153, tab. 25, f. 30-33. — Ascomatibus planiusculis, obconico-stipitatis, externe vinoso-brunneis, pilis densis brevibus vestitis, stipite quoque piloso, margine vix inflexo, fimbriato, disco ceraceo, subglauco, griseo-olivaceo; sporidiis utrinque nucleatis, rectis, acutiusculis, 10-

12 = 3; paraphysibus filiformibus apice incrassatis, 2-4-septatis acuminatisque.

Hab. ad terram (?), Joydens Wood, Dartford Britannia. — Affinis *L. rufo-olivaceæ*. Ascoma 3 mm. lat. Pili breves, septati, leves, rufi.

27. **Lachnella æruginosa** Sacc. et Sp. Mich. I, p. 443, F. ital. f. 1439 1641 (*Velutaria*). — Ascomatibus sparsis aggregatisque, scutellaribus subsessilibus, $\frac{1}{2}$ - $\frac{2}{3}$ mm. diam., extus breve ochraceo-puberulis, disco concaviusculo concolore, dein fusco-olivaceo; ascis cylindraceis, mediocriter sensim stipitatis, basi ima nodulosis, apice tunica integra rotundatis, 125-130 = 12; paraphysibus bacillaribus, septulatis, apice clavulâ fusoideâ, 15-22 = 5-8, crasse chlorino-guttatâ terminatis obvallatis, octosporis; sporidiis monostichis, ellipsoideis, 12-14 = 7-8, 2-guttulatis nubilosisque, initio hyalinis tandem fumosis.

Hab. in sarmentis corticatis *Vitis viniferæ*, Belluno Italia borealis.

Species imperfecte cognitæ.

28. **Lachnella incarnescens** (Schw.) Sacc. *Peziza incarnescens* Schw. 1642 Syn. p. 173. — Sessilis, gregaria, 2-5 mm. lata, orbicularis, extus nigro-umbrina, pilosula strigosa, margine dilutiori, subclausa, sicca madefacta, expansa, disco eleganter incarnato.

Hab. ad ligna decorticata varia, Bethlehem Amer. bor.

29. **Lachnella cinnabarina** (Schw.) Sacc. *Peziza cinnabarina* Schw. 1643 Syn. p. 173. — Gregaria vix 4 mm. diam. excedens, sessilis, globosa, strigoso-pulverulenta, unicolor, cinnabarina, basi latiuscula nigrescente, rarius disco aperto tota pulvere cinnabarino copiosius tecta.

Hab. ad lignum *Liquidambaris*, Salem Amer. bor.

30. **Lachnella cinereo-fusca** (Schw.) Sacc. *Pez. cinereo-fusca* Schw. 1644 Car. p. 93, Fr. Syst. Myc. II, p. II, f. 97. — Sessilis, applanata, firma, farinaceo-hirta, cinereo-virens, disco fusco-badio.

Hab. in ramis denudatis *Cercidis*, *Gleditschiæ*, *Vitis vulpinæ* Amer. bor. — Gregaria, minuta, 1 mm. lata. Cupulæ, ut in præcedentibus, margine involuto sæpius clausæ.

31. **Lachnella atro-fuscata** (Schw.) Sacc. *Peziza atro-fuscata* Schw. 1645 Syn. p. 174. — Sparsa, majuscula (pro ratione) diametro 2 mm. æquante, cupula sessili, extus statu sicciori atra, rugosa orbicu-