

bor. — Ascomata sæpe seriata, adest socia *Sphæronæma acerinum*, forte spermogonium sistens.

24. **Scleroderris crypta** (Cooke) Sacc. *Dermatea crypta* Cooke Grev. 2479
XVI, p. 70. — Erumpens, pallide umbrina, glaucescens; cupulis solitariis vel (2-3) cæspitosis, deorsum attenuatis, connatis, hymenio plano vel subconcavo, $\frac{1}{2}$ mm. diam.; ascis breviter clavatis; sporidiis lanceolato-ellipticis, triseptatis, fuscis, $30 \approx 10$; paraphysibus sursum incrassatis, fuscis.

Hab. in ramis *Andromedæ*, *Azaleæ*, New Jersey Amer. bor. (ELLIS).

CRUMENULA De Not. Disc. p. 9 (1864), emend. Rehm Disc. p. 235 (Etym. *crumena*). — Ascomata erumpentia, urceolata, brevissime stipitata, sparsa, ceraceo-membranacea, extus puberula. Asci paraphysati, octospori. Sporidia fusioidea, demum 2-4-cellularia, hyalina. — A *Scleroderride* differt ascomate piloso, a *Godronia* hac nota et sporidiis brevioribus.

1. **Crumenula pinicola** (Rebent. Karst. M. F. pag. 210, *Peziza* Reb. 2480
Neom. p. 385, Fr. Syst. Myc. II, p. 113, *Heterosphæria* Fr. Summa p. 365. — Subsparsa, superficialis, obovata, brevissime stipitata, fusco-nigricans furfuraceo-subhirta, demum nudata rugosa, margine inflexo fimbriato; disco sordide pallente 1 mm. lat.; ascis clavatis 60-70 \approx 12-14; sporidiis conglobatis, fusioideo-elongatis, acutis, curvulis, subinde 2-guttulatis, hyalinis, 18-30 \approx 3-4; paraphysibus filiformibus clavulatis 2 μ . cr.

Hab. ad corticem *Pini silvestris* in Germania, Suecia, Fennia. — Ascoma ceraceo-coriaceum; filamenta ascomatis fusca 4 μ . cr. Sec. Hazsl. sporidia demum 2-3-cellularia.

2. **Crumenula sororia** Karst. M. F. I, p. 211. — Ascomatibus ut in 2481
præcedente; ascis clavatis, 80-110 \approx 10-12 octosporis; sporidiis distichis, fusioideo-oblongatis, simplicibus vel spurie tenuiter 1-3-septatis, 18-20 \approx 3,5-5; paraphysibus confertis, filiformibus, 1,5 μ . cr., sursum leviter incrassatis.

Hab. in cortice et resina ramorum exsiccatorum *Pini silvestris* in parœcia Tammela prov. Tavastland Fennicæ. — Priori extus simillima, partibus vero internis ita dissimilis, ut pro diversa specie sit habenda.

3. **Crumenula nardincola** Rehm Ascom. ill. n. 268, *Heterosphæria* 2482
Rehm Exs. n. 268. — Sessilis, globosa, dein applanata, concava, primitus integra, dein vertice umbilicato stellatim 3-fido-dehiscens,

nigro-fusca, disco flavescente, extus rugulosa, ex hyphis fuscidulis c. 3 μ . cr. vario modo intertextis composita et similibus hyphis circumdata, sparsa, 0,5 μ . diam.; ascis clavatis, apice parum incrassatis 50 \approx 14, 8-sporis; sporidiis distichis oblongis, interdum subellipticis, obtusis, 4-cellularibus, ad septa plus minusve constrictis hyalinis, 17 \approx 4,5; paraphysibus filiformibus, teneris, ascos superantibus.

Hab. ad apicem foliorum siccorum Nardi strictæ in alpinis editissimis tyrolensibus. — Species in Rehmii Disc. Germ. ommissa (saltim in gen. *Crumenula* et *Heterosphaeria*).

Sect. 5. Scolecosporæ Sacc.

GODRONIA Moug. Consid. génér. veg. Vosg. 1845 (Etym. a cl. D. A. GODRON botanico gallico), *Crumenula* De Not. Profl. Disc. p. 9. — Ascomata erumpentia, urceolata, calyciformia, brevissime stipitata v. sessilia, subcoriacea, glabra, margine sæpius hymenium excedente. Asci elongato-cylindracei, paraphysati, octospori. Sporidia typice filiformia, ascum subæquantia, septata vel continua, subhyalina, rarius fuscoidea, breviora.

1. Genuinæ, sporidiis filiformibus.

1. **Godronia Urceolus** (A. et S.) Sacc. F. ital. p. 40, *Peziza* A. et S. 2483 Lus. p. 332, t. III, f. 4, *Cenangium* Fr. S. M. II, p. 182, *Tympanis* Wallr. Crypt. n. 2344, *Crumenula* De Not. *Peziza globularis* Pers. M. E. I, p. 326, *Cenangium* Fr. Summa p. 364, *Cenang. alneum* Fuck. *Pez. Cyathus* Nees. — Solitaria, subglobosa, ventricosa, nuda striato-rugulosa, fusco-atra, ore connivente; ascis cylindraceis, apice rotundatis, 8-sporis, 90-100 \approx 6-7; sporidiis filiformibus pluriseptatis, 50-75 \approx 1,5 parallelis, hyalinis; paraphysibus filiformibus, 2 μ . cr. hyalinis.

Hab. in ramis Betulæ, Symphoricarpi, Ericæ, Ribis, Clethræ, Alni in Germania, Gallia, Italia, Amer. bor. — Magnitudo seminis cannabini; stipes brevissimus, crassus, in cortice delitescens; cupula opaca, rugulosa, clausa, centro depressa, demum leviter aperta, intus cava, albida, 0,5-1 mm. lat.

2. **Godronia Ericæ** (Fr.) Rehm Disc. p. 240, *Cenang. Ericæ* Fr. S. 2484 M. II, p. 188, *Crumenula* Phill. Disc. p. 357. — Solitaria initio sessilis, dein 1,5 mm. alt., crassa breve stipitata, coriaceo-membranacea, nigra, brunnea, extus rugulosa, ore compresso connivente, disco pallido; ascis teretibus, apice rotundis, 90-100 \approx 6-7,

octosporis; sporidiis filiformibus $90 \approx 1,5$, hyalinis; paraphysibus hyalinis, $1,5 \mu$. cr.

Hab. ad ramulos et folia *Ericæ* (*Calluna*) vulgaris locis paludosis in Suecia, Germania, Britannia. — Teste Fuck., adest st. pycnidicus stylosporibus cylindræis, curvulis, $10 \approx 2$ hyalinis, continuis.

3. **Godronia callunigena** Karst. Rev. p. 144, *Crumenula* Karst. M. F. 2485 I, p. 212. — Cupulis sparsis, subsphæroideis, sessilibus, fusco-nigricantibus, nudis striatulis, ore conniventi 0,6 mm. lat.; ascis e basi tenuatis cylindræis, $90-100 \approx 9-10$, apice jodo non cœrulescentibus; sporidiis conglobatis, filiformibus, sæpissime utroque apice attenuatis, rectis, incoloribus, simplicibus vel tenuiter 3-septatis, $40-60 \approx 2,5$; paraphysibus sat confertis, circiter 1,5 mm. apice leniter et inæqualiter incrassatulo.

Hab. in ramulis *Callunæ* vulgaris siccis in Mustiala Fennia et in Britannia. — Subiculo brunneo sæpe inserta.

4. **Godronia urceoliformis** Karst. Rev. pag. 144, *Cr. urceoliformis* 2486 Karst. M. F. I, p. 213, Phill. Disc. p. 356, t. XI, f. 68. — Cupulis sparsis, vulgo solitariis, erumpentibus, sessilibus vel subsessilibus, subsphæroideis, nigricantibus, fusco-furfuræis, demum concentricè sulcatis et nudis primo clausis, dein ore connivente apertis, disco cinereo-pallido, circiter 0,8 mm. lat.; ascis e basi tenuata cylindræis, $80 \approx 8$; sporidiis conglobatis, filiformibus, septatis $30-40 \approx 1-1,5$; paraphysibus filiformibus, gracilibus, confertis.

Hab. ad caules *Vaccinii* uliginosi et *V. Vitis* idææ aridos in Fennia, Lapponia orientali et Britannia. — In forma britannica sporidia $65 \approx 2$.

5. **Godronia rhabdospora** (B. et C.) Sacc. *Tympanis rhabdospora* 2487 B. et C. North Am. Fung. n. 762. — Fasciculata; cupulis elevatis, flexuosis, acute marginatis; sporidiis filiformibus, rectiusculis.

Hab. ad ramos *Aceris*, New England Amer. bor. (SPRAGUE).

6. **Godronia Cassandræ** Peck 39 Rep. St. Mus. p. 50. — Ascomatibus minutis $500-750 \mu$. diam. sessilibus vel subsessilibus, depressis, urceolatis, brunneis, disco albescente vel udo livido sicco obscuriori, margine acuto, integro vel vix dentato-lacerato, in sicco fere clauso; ascis cylindræis $110-130 \approx 8-12$; sporidiis filiformibus subrectis, $50-75 \mu$. longis; paraphysibus filiformibus numerosis.

Hab. in ramis emortuis *Cassandræ calyculatæ*, Karner Amer. bor.

7. **Godronia Nemopanthis** (Peck) Sacc. *Tympanis Nemopanthis* Peck 2489
35 Rep. p. 142. — Ascomatibus minutis, dense cæspitulosis, substipitatis, atris, primo sphaeriæformibus et sinu angusto apertis, dein discum ostendentibus, tenuiter marginatis, disco concavo vel plano; ascis cylindræis vel oblongo-clavatis, 75-110 \approx 8; sporidiis filiformibus, varie curvatis, subinde multinucleatis, 40-75 μ . longis.

Hab. in caulibus et ramis *Nemopanthis canadensis* Grafton, Reusselaer county Amer. bor.

8. **Godronia Viburni** (Fuck.) Rehm Disc. p. 239, *Cenangium* Fuck. 2490
Symb. p. 272, nec Schw. — Cupulis erumpentibus, primo sphaeriæformibus, dein apertis, suburceolatis, ore contracto, integro, perfecte orbiculari, albo-marginato, atris, striatis, 1 mm. alt., 0,5-0,7 mm. cr., disco griseo; ascis stipitatis, cylindræis, 8-sporis, 130 \approx 8; sporidiis filiformibus, asci longitudine, continuis, parallelis; paraphysibus filiformibus.

Hab. in ramis siccis corticatis *Viburni Opuli* in Rhenogavia. — Teste Fuck. stat. pycnid. est *Cornicularia Viburni* Sacc.

9. **Godronia belonospora** (Karst.) Sacc. Mich. II, p. 329, *Cr. belonospora* Karst. M. F. I, p. 211, nec *Odont. belon.* Nyl. — Cupulis sparsis vel gregariis superficialibus, obovoideis, sessilibus vel substipitatis, siccis fusco-nigricantibus, margine clauso concentricè striatulo, 1 mm. vel paullo ultra lat.; ascis subclavato-cylindræis, 105-115 \approx 8, octosporis, obturaculo jodo vix vel obsoletissime cœrulescente; sporidiis conglobatis, filiformibus, tenuiter spurie 3-septatis, 75-100 \approx 2-2,5; paraphysibus confertis, filiformibus, 1-1,5 μ . cr.

Hab. ad lignum *Betulae* vetustum in Fennia, Lapponia orientali meridionali et in ligno ignoto in Arduennis. — In forma arduennensi asci prælongi, 180-200 \approx 8-9; sporidia filiformia 150 \approx 2, hyalina; paraphyses clavulatæ; excipuli contextus parenchymaticus, fuliginæus, cellulæ prope ascomatis marginem relaxatæ.

10. **Godronia Mühlenbeckii** Moug. Consid. Veg. Vosg. (1845), Rich. in 2492
Bull. Soc. bot. Fr. XXIX, (1882), p. 242, t. IV, *Godr. angulata* Lév. (1846). Cfr. Rev. Mycol. 1880, p. 39, t. V, f. A. — Erumpens, gregaria, urceoliformis, dein turbinata, ore rotundo minuto dehiscens, extus nigricans sulcato-angulata, carnosocoriacea, disco concavo; ascis clavatis, obtusis, 8-sporis; sporidiis bacillaribus, curvulis, parallelis, 12-ocularibus, hyalinis, ascum subæquantibus, bacillaribus, hyalinis.

Hab. in culmis putridis *Phragmitis communis* in Gallia et Germania.

11. **Godronia graminum** (Preuss) Sacc. *Cenangium graminum* Preuss 2493
 Hoyersw. n. 54. — Solitaria, subsessilis, elliptica, atra; cupula primum globosa, dein elliptica explanata; margine tenui e cellulis longis formato, tum striato hymenioque pallido; ascis clavatis, hyalinis, albis; sporidiis longis baculiformibus, albis.

Hab. in foliis graminum majorum, Hoyerswerda.

II. Recedentes, sporidiis brevioribus.

12. **Godronia pusiola** Karst. Rev. p. 144, *Crumenula pusiola* Karst. 2494
 M. F. I, p. 214. — Sparsa v. gregaria, superficialis, nuda, obovoidea v. subspheroidea; ore orbiculari coarctato, rugosa, nigra v. (uda) umbrino-nigra; disco umbrino pallido, 0,3-0,5 mm. lat.; ascis subcylindricis 35-52 \approx 5-6; sporidiis elongatis, guttulatis 6-10 \approx 2; paraphysibus filiformibus 1 μ . crass.

Hab. in foliis *Elymi arenarii*, *Poæ flexuosæ* et *striatæ* in insula maris Albi, pr. Abo Fenniae et in Spetsbergia.

13. **Godronia rhamniella** Karst. Rev. p. 144, *Cr. rhamniella* Karst. 2495
 M. F. I, p. 213. — Cupulis solitariis, sparsis, erumpentibus, sessilibus vel subsessilibus, subsphæroideis, siccis, hemisphærico-collapsis, nigricantibus, fusco- vel subferrugineo-furfuraceis, ore conivente, 1-1,5 mm. lat.; ascis e basi tenuata cylindræis, 85-95 \approx 5-7, obturaculo jodo leviter cærulescente; sporidiis conglobatis, filiformibus, utroque apice attenuatis, rectis vel leniter curvulis, plerumque 3-septatis, 16-26 \approx 2; paraphysibus filiformibus, gracilibus.

Hab. ad ramulos *Rhamni Frangulæ* siccos prope pagum Näsä in Lapponia orientali.

14. **Godronia Myricæ** Karst. Fragm. mycol. VII, p. 5. — Ascomatibus subgregariis, superficialibus, sessilibus obovoideis vel subsphæroideis, vertice depresso vel subcupulato-collapsis clausis, demum ore lato apertis, opacis levibus ex hyphis exserentibus subtiliter fusco-furfuraceis, atris 0,3 mm. diam.; ascis fasciculatis, e basi tenuata fusoideo-cylindræis 27-30 \approx 5 vix paraphysatis; sporidiis 8-nis, elongatis, utrinque attenuatis, subrectis, simplicibus, hyalinis 6-7 \approx 2.

Hab. in ramis *Myricæ Gales* emortuis prope Wasam, oppidum Fenniae.

15. **Godronia Ledi** (A. et S.) Karst. Rev. p. 144, *Crumenula* (A. 2497

et S.) Karst. M. F. I, p. 214, *Peziza* A. et S. Lus. p. 343, t. X, f. 7, Fr. S. M. II, p. 114, *Cenangium* Fr. Summa p. 364. — Cupulis sparsis, superficialibus, sessilibus, primitus clausis et subsphæroideis, dein vertice depressis, tandem hemisphærico-collapsis oreque sat lato apertis, rugulosis, nigris virescenti-furfuraceis, 0,6 mm. lat., disco fuligineo; ascis subcylindræis, 70-85 = 7-8; sporiidiis rite evolutis non visis; paraphysibus copiosissimis, filiformibus 1,5-2 μ . cr.

Hab. in ramulis, foliisque exsiccatis Ledi palustris in Germania, Suecia, Fennia, Lapponia et in Arbuto Uva-Ursi in Britannia. — An *Crumenula*?

16. **Godronia Linnææ** Karst. Rev. p. 144, *Crumenula Linnææ* Karst. 2498 M. F. I, pag. 214. — Sparsa, superficialis nuda, sessilis primitus subsphæroidea et clausa dein ore orbiculari integro aperta et sphæroideo-depressa, tandem subhemisphærica, rugulosa umbrino-nigricans 0,2-0,4 mm. lat., disco umbrino pallente; ascis

Hab. in pagina infer. Linnææ borealis in paroec. Tammela Fenniæ.

17. **Godronia Thapsi** (Saut.) Sacc. *Cenang. Thapsi* Saut. Pilz. Salz. 2499 pag. 12. — Gregaria, sessilis, nigricans, rugulosa, ascomate subgloboso ore aperto.

Hab. in caulibus senescentibus Verbasci Thapsi, Salzburg. — G. Urceolo propinqua. Griseo-atra, ore late aperto, intus nigrescens.

18. **Godronia luteola** (Saut.) Sacc. *Cenangium luteolum* Saut. Pilz. 2500 Salz. p. 12. — Gregaria, pusilla, sessilis, globosa, pallide lutea, disco aperto.

Hab. in ligno putri prope Mittersill. — Affinis *G. Urceolo*.

POCILLUM De Not. Prof. Disc. p. 361 (1864) [Etym. *poculum*, *pocillum*]. — Ascomata clavato-turbinata, exigua, excipulo fibroso nigricante, disco immarginato, truncato. Asci elongati, paraphysati, octospori. Sporidia filiformia, subhyalina, continua, rarius septata.

1. **Pocillum Cesatii** (Mont.) De Not. Prof. Disc. p. 361, *Helotium* 2501 *Cesatii* Mont. Syll. Crypt. p. 187. — Hypophyllum, erumpens; cupula sessili elongato-obconica, extus adnato-fibrillosa atrofuliginosa; disco tandem applanato, livido; ascis longe tereti-clavatis 150-170 = 7-8, apice truncatis; paraphysibus apice pistillifor-

mibus viridulis obvallatis, octosporis; sporidiis bacillaribus, 130-140 \approx 1, hyalinis, continuis.

Hab. ad folia quercina delapsa in Italia bor. et Gallia, sat frequens. — Cupula initio clavata, *Sphinctrinam* referens, ore primitus clauso, mox aperto obconica. Discus marginem æquans, corneo-lividus, planus, $\frac{1}{4}$ ad $\frac{2}{5}$ mm. diam. æquans; stipes brevissimus cum cupula vix semimillim. metitur.

2. **Pocillum Boltonii** Phill. in Grev. XVI, p. 94. — Minutum, sparsum, 2502
cylindraceutum dein fere turbinatum truncatum, glabrum, nitidum, cornicolor, molliusculum, siccum contractum, disco plano vel subdepresso; ascis late clavatis 8-sporis; sporidiis elongatis cylindraceis, utrinque obtusis, hyalinis, 40-50 \approx 3-4; paraphysibus filiformibus apice incrassatis.

Hab. in caulibus Equiseti aqua immersis prope Birmingham Britannia (T. BOLTON). — Ascoma 100-200 μ . crass., 300-400 μ . alt. Sporidia plasmate interrupto foeta.

3. **Pocillum americanum** Cooke Grev. VII, p. 47. — Hypophyllum, 2503
sparsum; cupulis cyathiformibus, infra in stipitem brevem attenuatis, fuliginis; margine pallidioris; ascis clavatis; sporidiis cylindrico-clavatis, triseptatis, leniter curvulis, 38-45 \approx 4; paraphysibus filiformibus.

Hab. in foliis Quercus virentis, Darien Georgia.

4. **Pocillum hypophyllum** (B. et C.) Sacc. *Pez. hypophylla*, B. et C. 2504
Cub. Fungi n. 696. — Hypophyllum, stipite brevissimo, extus rufum, hymenio livido pallide corneo; cupula crateriformi marginata sinuata; sporidiis filiformibus.

Hab. in pag. inf. foliorum quorundam, inter tomentum brunneum velutinum, in ins. Cuba.

5. **Pocillum alneum** (Fr.?) Gill. Disc. p. 200, *Tympanis* Fr. S. M. II, 2505
p. 174? — Substipitatum, opacum, umbrino-nigrum; cupulis subflexuosis vix marginatis; ascis oblongis octosporis; sporidiis filiformibus, continuis, asci longitudine.

Hab. in ramulis siccis Alni incanae in Suecia et Gallia. — *Tympanis alnea* Phill. et Rehm omnino differt; an praesens diversum a *Godronia Urceolo*?

CRINULA Fr. S. M. I, p. 493 (1821) et Hymen. Eur. p. 681 [Etym. *crino* obolino], *Ditiola* Schulz. Beitr. 1860, p. 322, nec Fr. — Ascomata stipitata, initio clavata conidiophora, dein apice discifera et ascophora; stipite subcorneo, hymenio submucoso. Asci clavati,

paraphysati, octospori. Sporidia filiformia, hyalina. — Unica species Schulzeriana (*C. mucida*) bene nota, ceteræ dubiæ v. lichenoideæ (*Cr. paraphysifera* Preuss, *Cr. nigra* Bon. omnes phæosporæ).

1. **Crinula mucida** (Schulz.) Sacc. *Ditiola mucida* Schulz. Beitr. 1860, 2506 p. 322, t. I, f. 2. — Cæspitosa, radicata; stipite obscure fusco-nigricante, juventute subconico dein oblongo furfuraceo-asperulo, capitulo albido spisse mucoso, cavo, initio conico minuto, sporulas ovoideas hyalinas minutissimas fovente, demum disciformi ascophoro; ascis clavatis breve stipitatis, 8-sporis, $50 \approx 5$; sporidiis bacillaribus utrinque rotundatis, granulosis, hyalinis, $40 \approx 2$ (ex icone), curvulis; paraphysibus clavatis.

Hab. in cortice Populi albæ putrescente in Slavonia. — Ascomata 9-4 mm. long., cupula matura 10-12 mm. lat. Videretur *Coryne* scolecospora.

2. **Crinula caliciiformis** Fr. S. M. I. p. 493. — Gregaria, inter cortices emortuos eximie radicata, nigricans, cornea, tenax, glaberrima, 4-10 mm. longa, stipite sursum attenuato tereti, levi, 2 mm. vix cr., firmo, opaco, aterrimo intus cavo, floccis cinereis laxis farcto, clavula minuta, ovata, obtusa 2 mm. vix alt., levi, molli, olivacea, dein Jove pluvio gelatinosa, alba, deliquescente.

Hab. in cortice dejecto Tiliæ rarissime in Suecia ad Femsjö et Suderm, nec non Petropoli Rossicæ (WEINMANN).

3. **Crinula Gayana** M. Fl. Chil. VII, p. 388, t. 8, f. 1. — Longissima, 2508 crinalis; capitulo globoso minuto, pallido; stipite procero 4 ad 6 cm. long., corneo, fistuloso, badio, basi subbulboso villo radiante obducto, nucleo e filamentis biformibus formato; sporidiis (?) globulosis perexiguis.

Hab. ad ramos dejectos circa Valdiviam Chiles (CL. GAY).

4. **Crinula epiphylla** (Schw.) Sacc. *Ditiola epiphylla* Schw. in Berk. 2509 et Curt. Exot. Fungi p. 283. — Aggregato-fasciculata, alba, diaphana, capitulis cupulæformibus.

Hab. in foliis Palm arum in Surinam. — Cæspituli 2 mm. long., 4 mm. crass., ex ascomatibus subquinis *Phialeam cyathoideam* imitantibus compositis.

Fam. 6. **Bulgaricæ** Fr. Summa p. 345.

Ascomata erumpentia vel superficialia, cupulata, disciformia, turbinata vel clavata, disco concavo, plano vel convexo, majuscula vel exigua, gelatinosa vel ceraceo-gelatinosa, sicca cornea vel subcar-

tilaginea. Asci 4-8-16-spori, rarissime myriospori, typice paraphysati. Sporidia varia.

Clavis analytica generum

Sect. 1. Hyalosporæ Sacc. Sporidia globosa, ellipsoidea, oblonga, continua, hyalina.

A. Ascomata longe stipitata apice capitato-pileata, majuscula.

Leotia. Ascomata gelatinoso-viscida, margine involuto. Sporidia fusoido-oblonga.

B. Ascomata sessilia v. brevi-stipitata, turbinata s. subclavata vel scutellata, mediocria vel minuta.

Pulparia. Ascomata ceraceo-subgelatinosa, obconico-substipitata majuscula. Sporidia globosa.

Ombrophila. Ascomata gelatinosa, obconica vel subclavata, substipitata vel sessilia. Sporidia ellipsoidea vel oblonga.

Stamnaria. Ascomata subcornea, globoso-urceolata, brevi-stipitata, ore scarioso. Sporidia oblonga.

Orbilina. Ascomata subgelatinosa, mox applanata, subsessilia, exigua. Sporidia elongato-bacillaria vel subgloboso-ovoidea, continua, octona (rarissime innumera).

Ahlesia. Ascomata (lichenicola) sessilia, diaphana, concava, exigua. Sporidia oblonga sexdena.

Hæmatomyces. Ascomata tremelliformi-gyrosa, gelatinosa. Sporidia ellipsoidea.

Agyrium. Ascomata subgelatinosa, convexo-disciformia, excipulo subnullo. Sporidia 8-16 ellipsoidea.

Sect. 2. Phæosporæ Sacc. Sporidia ellipsoideo-oblonga continua fusca.

Bulgaria. Ascomata turbinato-substipitata, primitus clausa, majuscula. Asci 4-8-spori.

Bulgariella. Ascomata disciformia, sessilia, primitus aperta. Asci 8-spori.

Sect. 3. Didymosporæ Sacc. Sporidia oblongo-fusoidea, typice 1-septata, hyalina.

Calloria. Ascomata subgelatinosa, mox applanata, subsessilia, læte colorata, exigua.

Sect. 4. Phragmosporæ Sacc. Sporidia elongata, genuine vel spurie 2-pluriseptata, hyalina.

Coryne. Ascomata turbinato-subclavata vel subglobosa vel protea, gelatinoso-tenacia, rarius subceracea (Est *Ombrophila* phragmospora).

Sect. 5. Scolecosporæ Sacc. Sporidia tereti-vermicularia, pluriguttulata.

Holwaya. Ascomata *Bulgaricæ*, sed sporidiis subfiliformibus.

Sect. 6. Dictyosporæ Sacc. Sporidia oblonga, septato-muriformia (fusca).

Hæmatomyxa. Ascomata sinuato-gyrosa, uda tremelloidea, exigua.

Sect. 1. **Hyalosporæ** Sacc.

LEOTIA Hill. Hist. Plant. p. 49 (1751), Fr. Syst. Myc. II, pag. 29 (Etym. *leiotēs* glabrities, levitas). — Ascoma subtremellosum, pileatum, stipite centrali suffultum, orbiculare, limbo revolutum, supra margineque hymenio persistente, unguinoso æqualiter obductum. Asci elongati, paraphysati, octospori. Sporidia elliptico-oblonga, rarius cylindræa, continua, hyalina.

1. **Leotia lubrica** (Scop.) Pers. Syn. p. 613, Fr. Syst. Myc. II, p. 29, 2510 Wallr. Crypt. n. 2788, Cooke Myc. f. 172, Berk. Outl. t. 22, f. 1, *Fungus gelatinus flavus* Vaill. par. p. 201, t. 11, f. 7-9, Mich. gen. t. 82, f. 2, *Elv. lubrica* Scop. Carn. II, p. 477, *Leot. gelatinosa* Hill. loc. cit. n. 3, 4, *H. lutea* Berg. phyt. I, t. 151, *H. gelatinosa* Bull. Champ. p. 296, t. 473, f. 2, Sowerb. t. 70. — Tremellosa; pileo tumido repando, flavo-viridi, stipite cavo subæquali flavo; ascis clavatis, tenui-tunicatis, $90 \approx 12$, octosporis; sporidiis ellipsoideo-navicularibus, hyalinis, subinde 2-4-nucleatis, $18-24 \approx 5$; paraphysibus filiformibus, apice clavulatis, viridulis, 5μ . cr.

Hab. in silvis mixtis nudis humidis, etiam paludosis turfosis Europæ, Americæ borealis, Australiæ, Tasmaniæ, Novæ Zelandiæ frequens. — Gregaria, subcæspitosa, ceteris mollior, odore grato. Stipes 3-6 cm. longus, squamulis minutis innatis granulosis, intus cavus et gelatina fluxili refertus; substantia corticali demum in nervos, membrana exteriori junctos, longitudinaliter fissa; pileus lubricus, repandus, 3 cm. haud attingens, margine inflexo tumido connato. Maxime variat, ut ignoscendi, qui ex iconibus plures statuerunt species. Ex ætate diversa et loco plus minus umbroso variat pileo convexo et depresso, fusco-rufo, flavo et viridi; stipite brevi deorsum et longo sursum attenuato. — Var. α . **lacunosa** Wallr. loc. cit. *Helvella flavo-virens* Nees syst. p. 176, f. 162, Mart. erl. p. 402: pileo tenui deflexo plano-lacunoso. — β . **umbonata** Wallr. loc. cit. Pers. myc. t. 9, f. 4-7, *Merulius lubricus* Schum.: pileo plano-convexo subumbonato undulato-tuberculoso. — γ . **levis** Wallr. loc. cit. *Phallus lubricus* Flor. dan. tab. 719: pileo subrotundo, levi. — δ . **revoluta** Wallr. loc. cit., *Hygromitra tremula* Nees Syst. f. 144 B, *Clavaria tremula* Holmsk. *Peziza Cornucopiæ* Hoffm. veg. cr. II, p. 21, t. 6, f. 1, *Helvella revoluta* Afzel.: pileo depresso, levi.

2. **Leotia chlorocephala** Schw. Syn. fung. car. p. 88, Fr. Syst. Myc. 2511 II, p. 30, Phill. Disc. p. 23. — Ascomate globoso glaberrimo sub-

pellucido e viridi æruginoso, stipite longissimo torto pulverigero; sporidiis oblongis, utrinque acutiusculis, minute 3-guttulatis, 20-22 \approx 5; paraphysibus filiformibus.

Hab. ad terram in Carolina infer. et super. et Pennsylvania Amer. bor. nec non in Hampshire Britannicæ (BROADWOOD), — Color ascomatis subinde fere niger. Major, cæspitosa, habitu *L. lubricæ*. Pilei color ex intense viridi æruginosus. Stipes ad 10 cm. longus, ætate tegitur pulvere æruginoso, in statu sicciori detergibili. —

***L. Stevensoni** B. et Br. Ann. N. H. n. 1827: brevis, dense cæspitosa, ascomate stipiteque virentibus. Ad terram, Glamis Britannicæ.

3. **Leotia atro-virens** Pers. Myc. Eur. p. 202, t. 9, f. 1-3, Fr. Syst. 2512
Myc. II, p. 30. — Pusilla, subcarnosa, atro-virens; pileo planiusculo stipiteque sursum incrassato levibus; sporidiis submonostichis, elliptico-fusiformibus, parum curvatis, hyalinis, continuis, 3-4-guttulatis, 18 \approx 6.

Hab. in Vogesiæ silvis ad vias locis humidis (MOUGEOT), in silva Æstrich Rhen. (FUCKEL). — Conferenda cum *Mitrula viridi*. Gregaria, vix ultra 12 mm. alta, vix gelatinosa. Stipes dilutior, in pileum fere abit. Pileus 4-6 mm. tantum latus.

4. **Leotia platypoda** (DC.) Fr. Syst. Myc. II, p. 28, Pat. Tab. anal. 2513
f. 477, *Helv. platypoda* DC. Fl. fr. 6, p. 29, Pers. Eur. I. p. 202. — Pusilla; pileo subreflexo plicato-undulato fusco, stipite compresso sordide albo; ascis clavatis octosporis; sporidiis tereti-clavulatis, rectis 3-4-guttatis, hyalinis, 20-24 μ . long. (ex icone); paraphysibus filiformibus ramosis.

Hab. ad terram circa Grasse in Provence Gallicæ et pr. Bruxelles (BOMMER et ROUSSEAU). — Inter minimas in genere, 12 mm. tantum alta. Pileus parvus, irregulariter plicatus et undulatus. Substantia gelatinosa aut parum coriacea.

5. **Leotia viscosa** Fr. Syst. Myc. II, p. 30, *Tremella stipitata* Bosc 2514
in Berl. Mag. naturf. 1811, p. 89, t. 6, f. 14, *Hygrom. stipitata* Nees Syst. f. 144. — Pileo convexo, undulato, viscoso, atro-viridi, stipite cavo, sulcato, sursum incrassato, luteo; sporidiis curvatis, 25 μ . longis (Berk.).

Hab. subcæspitosa in arenosis Carolinæ australis Amer. bor. (BOSC, RAVENEL). — Magna, 7-10 cm. alta. Stipes clavatus, compressus, irregulariter sulcatus, superne 2,5 cm. crassus, in pileum dilatatus. Pileus valde irregularis et viscosus, repandus, tuberculatus, quasi e pluribus compositus, 5 cm. latus. Substantia fibrosa, elastica, cavitate interna gelatina repleta.

6. **Leotia ochroleuca** C. et Hook. Grev. 1880, p. 8. — Sparsa, tre- 2515
 mellosa; pileo carnosio, convexo, undulato, ochroleuco; margine
 involuto; stipite albo, gracili, flexuoso 2-3 cm. longo; ascis cla-
 vatis; sporidiis cylindricis, curvulis, nucleatis, $25 \approx 2$; paraphysi-
 bus quandoque curvatis, hinc illinc furcatis.

Hab. ad terram udam in California. — A *Cud. circinante* dif-
 fert præ ceteris sporidiis dimidio brevioribus; an ex hoc genere?

7. **Leotia elegantula** Kalchbr. Grev. X, p. 144. — Subsolitaria; disco 2516
 convexo, margine involuto, nitidulo, atro-brunneo, subpurpurascen-
 te, subtus rugoso, fere lamelloso, alutaceo-ochraceo; stipite cylin-
 drico, æquali, basi dilatato, pulverulento, æque alutaceo-ochraceo;
 sporidiis breviter ovatis, $9 \approx 6$, diaphanis, fuscidulis.

Hab. ad Somerset East Africæ austr. (MAC-OWAN). — Ascoma
 pisi magnitudine; stipes 2-3 cm. long., 3 mm. cr.

8. **Leotia rufa** Rostr. Fung. Groenl. pag. 536. — Ascomate repando; 2517
 margine revoluto, 1-2 mm. lat., rufo; stipite inæqualiter tereti,
 rufo-ferrugineo, 5-6 mm. alto; ascis tereti-clavatis, pedicellatis,
 $60-70 \approx 2$; sporidiis..... (non descriptis).

Hab. inter muscos Agdluitsok Groenlandiæ.

9. **Leotia atra** Weinm. Syll. p. 109, Fr. Elench. II, p. 3. — Minima, 2518
 subcarnosa, nigricans; pileo hemisphærico, pubescente; stipite sub-
 æquali.

Hab. in terra arenosa ad fossarum latera Petropoli Rossicæ
 (WEINMANN). — Species perquam distincta, gregaria, tota 4-6 mm.
 alta; ascoma hemisphæricum, subtomentosum, sub lente minute fo-
 veolatum; caro atra; stipes fere filiformis, levis, fuliginosus.

10. **Leotia infundibuliformis** (Schäff.) Fr. Obs. II, pag. 299, *Helvella* 2519
 Schäff. Fung. t. 277, sec. Sow. t. 153. — Pileo depresso cinereo-
 livido utrinque levi, stipite farcto glabro.

Hab. ad terram in Anglia. — Stipes 5-7 cm. longus, 1-2 cm.
 et ultra crassus, teres, subæqualis, levis, cinereus, intus albus; va-
 riat sursum incrassatus; pileus subregularis, junior convexus, dein
 depressus, 4-5 cm. latus, levis, glaber, subfuliginosus, margine in-
 flexo, subtus albido-fuscenscens; an carnosus?

11. **Leotia brunneola** B. et Br. Cub. Fung. n. 918. — Fasciculata; 2520
 stipitibus crassis cylindricis; ascomate breviter digitaliformi, de-
 mum lobato.

Hab. ad terram in ins. Cuba. — Stipes 2-2,5 cm. alt., 8-12
 mm. cr.; ascoma 1-2,5 cm. lat., 6 mm. alt., brunneo-olivaceum.
 Ascii non examinati.

12. **Leotia amara** (Lour.) Fr. Syst. Myc. II, pag. 27, *Helv. amara* 2521
Lour. Coch. ed. Willd. 2, p. 695. — Pileo subumbonato utrinque
levi albido, subtus luteo-fusco, stipite levi albo.

Hab. in Cochinchina plerumque in arbore *Melaleuca*. — Ad hoc pertinere genus non dubitat Fries, et a reliquis abunde diversa. «Fungus mediocris, nudus, integer, pileo orbiculato, subcoriaceo crassiusculo (carnoso-lento) utrinque levi, ad centrum tumido. Esculenta et salutaris, nativa amaritie per iteratam coctionem deposita».

13. **Leotia nana** (With.) Fr. Syst. Myc. II, p. 28, Phill. Disc. p. 26, 2522
Helv. nana With. arr. 4, p. 338. — Pusilla; pileo rugoso albo, subtus levi brunneo, stipite farcto, cylindrico, albo.

Hab. in Anglia, Cornwall, sub arboribus, post With. non reperta. — Stipes levis, 6 mm. longus, crassitie pennæ corvinæ. Ascoma lentum (vix coriaceum), varie deflexum, 2 cm. latum, adeoque optime nana dicitur cum ascoma ratione stipitis sat magnum. Quoad characteres distincta species.

14. **Leotia unctuosa** (Batsch) Fr. Syst. Myc. II, p. 31, *Elv. unctuo-* 2523
sa Batsch El. Cent. I, p. 193, f. 134. — Pusilla, lutea, levis, margine revoluto.

Hab. fungus memorabilis, lignatilis in Germania.

PULPARIA Karst. M. F. I, p. 9 (1871), [Etym. *pulpa*]. — Ascomata, obconico-substipitata, disco plano-concaviusculo, ceraceo-subgelatinosa. Asci cylindranei, 8-spori, paraphysati. Sporidia monosticha, sphæroidea, hyalina.

1. **Pulparia arctica** Karst. M. F. I, p. 84. — Cæspitosa aggregata, 2524
cæsia, planiuscula vel concaviuscula cum stipite brevi crassa obconica, circiter 1,5 mm. lat.; ascis cylindraneis, 180 = 11-13 (parte sporif. 80-84 μ . longa); sporidiis monostichis globosis, hyalinis; paraphysibus gracilibus, flexuosis, circiter 1 μ . cr.

Hab. ad lignum putridum salicinum in saliceto uliginoso prope oppid. Kola versus flumen Tuloma Fennice. — Sporidiorum diam. non indicatur, sed verisimiliter (ex asci latit.) 9-10 μ .

2. **Pulparia spongiosa** (Peck) Sacc. *Bulg. spongiosa* Peck in Bot. 2525
Gaz. VI, p. 240. — Ascomatibus amplis, 2,5-3 cm. latis, concavis vel infundibuliformibus, demum subplanis, molliusculis, subgelatinosis, extus nigricantibus, disco nigricanti-brunneo, sæpe senio poroso, stipite 1-2 cm. long., tenui, nigro, longitrorsum rugoso; ascis cylindraneis; sporidiis monostichis globosis, levibus, granuloso-l-

nucleatis, 12-13 μ . diam.; paraphysibus filiformibus, coloratis apice circinatis vel uncinatis.

Hab. in ramis semiinfossis sub Pinibus in Amer. bor.

OMBROPHILA Fr. Summa p. 357 (1849) [Etym. *ombros* pluvia et *philos* amicus]. — Ascomata sessilia vel breviter stipitata, sæpius plana v. convexa, rarius concava, epiphytica, gelatinosa. Asci anguste clavati, octospori. Sporidia ellipsoidea vel oblongata continua, hyalina, guttulata. Paraphyses filiformes. — Status secundarii in multis noti.

1. **Ombrophila violacea** (Hedw.) Fr. Summa p. 357, Karst. M. F. I, 2526 p. 87, *Octospora* Hedw. II, p. 27, t. VIII, f. A, *Peziza janthina* Fr. S. M. II, pag. 130. — Gregaria v. sparsa, initio subobconica dein distincte stipitata, violacea v. violaceo-pallida, plano-convexa dein convexa pileiformis sicca, concava 2 mm., -1 cm. alt.; stipite obconico brevi; ascis clavatis 95-105 \approx 9-13, confertis, 8-sporis; sporidiis mono- v. distichis fusoideo-oblongis v. subellipsoideis, sæpe 2-guttatis, hyalinis, 10-16 \approx 4-6; paraphysibus gracilescentibus.

Hab. ad truncos, ramos, folia, sæpe intra aquam in Germania, Fennia. — Var. **australis** Cooke Grev.: stipite longiore flexuoso subcinereo; fructificatione eadem. Ad ramos udos, Melbourne Australiæ.

2. **Ombrophila janthina** Karst. mon. Pez. p. 150, *O. violacea* var. 2527 Karsten myc. fenn. I, p. 88. — Differt ab *O. violacea* ascis minoribus, tereti-clavatis, 45 \approx 6, octosporis; sporidiis ellipsoideis, minoribus, 6-8 \approx 3-4, sæpe 1-guttatis, hyalinis.

Hab. ad ramulos Betulæ in Fennia, in strobilis putridis Abietis excelsæ pr. Augsburg. (BRITZELMAYR).

3. **Ombrophila limosella** (Karst.) Rehm Ascom. n. 508, Karst. M. F. I, 2528 p. 88 (ut var. *violaceæ*). — Sparsa subsessilis, brunneo-purpurea, planiuscula, 1,5-2 mm. lat., excipulo intus rufo-maculato; ascis clavatis apice obtusis 70 \approx 9, octosporis; sporidiis ellipsoideis, 10 \approx 5, obtusis, monostichis; paraphysibus filiformibus, 1,5 μ . cr. hyalinis.

Hab. in udis umbrosis in Fennia et Germania.

4. **Ombrophila lilacina** (Wulf.) Karst. M. F. I, p. 90, *Elv. lilacina*, 2529 Wulf. in Jacqu. Coll. p. 347, *Peziza* Fr. S. M. II, p. 140. — Sessilis, ceraceo-subviscida, glabra, plano-concava, lilacina, margine elevato tumidiusculo; ascis tereti-clavatis, confertis, 8-sporis 80-100 \approx 7-9; sporidiis mono- v. distichis fusoideo-ellipsoideis v. subovoideis 2-guttatis, 7-11 \approx 4-5; paraphysibus gracilibus.

Hab. ad truncos arborum resectarum putrescentes ad Klagen-

furt et in Fennia. — Ascomata 1-1,5 mm. lat., cæspitose aggregata, orbicularia, subtus plana, supra concava, margine integerimo. Substantia crassiuscula, ceracea, subviscida, exsiccata coriacea. — β . **O. carnea** Pers. Eur. p. 301 (*Pez.*): sessilis, carnosotremellosa, hemisphærica carneo-rufa, disco subdepresso margine tumido. Majuscula, nunc aggregata, nunc sparsa scutelliformibus; juniores subrotundæ. Ad ligna in Gallia.

5. **Ombrophila lilacea** (Quél.) Sacc. *Phialea lilacea* Quél. in Grev. 2530
1879 et 12 Suppl. p. 12, tab. VII, fig. 8. — Ascomate cyathiformi, obconico, 1-2 mm. diam., tenero, pellucido, glabro, lilacino; hymenio cavo, lilacino, dein glauco; sporidiis ellipsoideis 8 μ . longis, lanceolatis, binucleatis.

Hab. fasciculatim in ramis immersis in silvarum paludosis Alsace. — Ab *O. Clavo* differt cupula cava, colore violaceo, sporidiis brevioribus.

6. **Ombrophila Clavus** (A. et S.) Cooke Grev. 1880, p. 84, Phill. Disc. 2531
p. 324, t. X, f. 62, *Peziza* A. et S. Lus. p. 306, t. XI, f. 5, *Bulgaria* Wallr. Crypt. n. 2669, *Helotium* Gill. Champ. p. 153. — Sparsa v. congesta, carnosogelatinosa, firmula, pallida v. purpurascens, fere obconica v. stipitata; disco plano v. convexo; stipite crassiusculo v. tenui; ascis tereti-clavatis octosporis; sporidiis oblongo-ellipsoideis, utrinque obtusis v. acutiusculis, 2-guttulatis, 10-15 \approx 4-5; paraphysibus filiformibus.

Hab. ad folia et ramos pùtrida, madida, subinde aqua immersa altero anno frequens, altero rarior in Germania, Britannia, Belgio, Gallia, Amer. bor. — Discus 4-12 mm. lat. — Var. **violascens** Pat. t. 290: obconica purpureo-violacea; sporidiis ovoideis. In trunco Cerasi, Poligny Gallie, sociis spermogoniis.

7. **Ombrophila radicata** Phillips. Grev. XVI, p. 93. — Solitaria vel 2532
cæspitosa; cupulis stipitatis, subgelatinosis 4-10 mm., hymenio depresso, rugoso, hepatico; margine tenui, integro, sursum glabro, rugoso, incarnato; stipite elongato, deorsum attenuato, 6-12 mm. long. radicato; ascis cylindraceo-clavatis, 8-sporis; sporidiis ellipticis, biguttulatis, hyalinis 6-10 \approx 4-5; paraphysibus ramosis, clavatis 4-7 μ . cr., ad apices fusco-umbrinis.

Hab. ad Stoney Range Melbourne Australie (Domina WEHL). — Affinis *O. rudi*, a qua differt sporidiis, paraphysibus et stipite radicato.

8. **Ombrophila similis** (B. et C.) Sacc. *Bulgaria similis* B. et C. 2533
Cub. Fungi n. 708. — Cupula convexa, purpurea, extus pallidiore;

ascis clavatis; sporidiis biseriatis, oblongis, 10-12 \approx 5-6; paraphysibus furcatis.

Hab. in ligno putri in ins. Cuba. — A *Coryne sarcoide* differt sporidiis multo minoribus etc.

9. **Ombrophila aurea** (Fuck.) Sacc. *Coryne* Fuck. Symb. p. 285. — 2534

Cupulis gregariis, lata basi adnatis, superficialibus, usque ad 2 mm. latis, orbicularibus flexuosisve, basi annulo prominulo cinctis, disco gelatinoso, plano convexove, pallide flavo-fusco, margine distincto, crasso, concolore, sed extus atro-fusco, hymenio intus niveo, demum liberato, persistente; ascis elongatis, 8-sporis, 50 \approx 7; sporidiis distichis, anguste elongato-clavatis, antice otusis, basi acuminatis, hyalinis, 10 \approx 3.

Hab. in culmis putridis, udis *Phragmitis communis* in Grünau prope Hattenheim Rhenogoviæ. — Stat. conidioph., sec. Fuck.: stipite distincto, 2 mm. alto, erecto, crasso, cylindraco ventricosove, rubro-fusco; capitulo globoso irregularive, acus capituli magnitudine, aureo, diaphano; conidiis cylindracois, minutissimis, medio subconstrictis.

10. **Ombrophila verna** Boud. Bull. Soc. Myc. IV, p. 77 t. 16, f. 2. — 2535

Stipitata, 4-8 mm. alta, 4-5 lata, ochraceo-fulva, extus sæpe pallidior, stipite ad basim brunneo, ascomate applanato lentiformi, ochraceo, minutissime fibrilloso, margine integro aut paullulum crenulato non aut vix prominulo, stipite puberulo aut fibrilloso et ad basim atro-brunneo, hymenio plano aut parum convexo, ochraceo aut ochraceo-fusco; paraphysibus simplicibus et continuis aut vix septatis, hyalinis, intus granulosis, ad apicem obtusis et paullulum incrassatis, 4-5 μ . crassis; ascis octosporis, cylindrico-clavatis, ad basim subattenuatis, 90-95 \approx 18; sporidiis levibus, hyalinis, oblongo-ellipticis, sæpe inæquilateralibus vix fusoides, continuis, sæpius granulo oleoso minutissimo utraque extremitate posito, et rarius granulis nebulosis intus donatis, vulgo 10 \approx 4 sed etiam 9-15 \approx 4-5.

Hab. ad ramulos putridos in paludosis Montmorency Gallia.

11. **Ombrophila rugipes** Cooke Grev. VIII, p. 58. — Minima; stipite 2536

rugoso-sulcato, pallido; capite ochraceo, depresso-globoso, levi, glabro; sporis (sporidiis?) minutis, linearibus.

Hab. in ligno putri Waitaki Novæ Zelandiæ. — Ascoma 6-7 mm. alt.; asci non descripti, hinc forte status tantum conidiophorus.

12. **Ombrophila rudis** (Berk.) Phill. Disc. p. 322, *Peziza* Berk Ann. 2537

N. H. n. 574, t. VI, f. 13. — Fasciculata, turbinata-stipitata v.

stipitata, subgelatinosa; disco plano hinc illinc depresso, rugoso, flavo-brunneo, subvinoso, extus tenuiter fibrilloso-striato; stipite sæpe elongato lacunoso v. striato; ascis clavatis basi tenuatis, 8-sporis; sporidiis ellipsoideis $7-10 \approx 3-4$; paraphysibus filiformibus.

Hab. in sabulosis et turfosis Berwick Britanniae. — Habitus *Corynes sarcoidis*.

13. **Ombrophila decolorans** (B. et C.) Sacc. *Bulgaria decolorans* B. 2538 et C. North Ann. Fungi n. 771. — Alba, demum cornei-color, concava, extus cum stipite venosa; ascis elongatis; sporidiis uniseriatis oblongo-cymbæformibus, $32-34 \approx 6$.

Hab. in ligno dejecto putri quercino, Alabama Amer. bor. (PETERS).

14. **Ombrophila umbonata** (Pers?) Karst. M. F. I, p. 89, *Peziza umbonata* Karst. Monogr. Pez. p. 151, Pers. Icon. et descr. Fung. p. 35, t. 91, f. 5, et Syn. Fung. p. 669? Fr. Syst. Myc. II, p. 145? — Gregaria vel subsparsa, ab initio cylindræo-clavata vel obconica, dein distinctius stipitata, expansa et cupulata, fuscescenti-vel violascenti-albida, disco albido-livido vel subcæsiõ, 3-4 mm. lat.; ascis anguste clavatis, sat parcis, $90 \approx 7-9$; sporidiis oblique mono-vel distichis, ellipsoideis, vulgo eguttulatis, simplicibus, hyalinis, $7-12 \approx 3-5$; paraphysibus copiosissimis, filiformibus gracilibus, conglutinatis.

Hab. supra folia et virgulta putrida in Fennia et Germania. — Excipulum peculiariter gelatinosum, e filamentis curvatis seu spiraliter flexuosis, mucò involutis, contextum.

15. **Ombrophila obstricta** Karst. M. F. I, pag. 89, *Peziza obstricta* 2540 Karst. Monogr. Pez. p. 151. — Sessilis vel substipitata, fuscescenti-pallida; cupula planiuscula, repanda, disco pallido, circiter 4 mm. lat.; ascis copiosis, anguste clavatis, confertis, $110 \approx 8-11$, apice jodo non cœrulescentibus; sporidiis fusoideo-oblongatis, guttulis plerumque 2 apicalibus præditis, $12-23 \approx 4-6$; paraphysibus sat parcis, gracilescentibus, conglutinatis.

Hab. supra folia *Populi tremulæ* putrescentia locis udis dejecta prope Mustiala Fenniae.

16. **Ombrophila nanella** Karst. M. F. I, p. 90. — Gregaria, stipitata, 2541 gelatinosa, pallida v. cæsiõ-pallida, planiuscula, 1 mm. lat., stipite mediocri sensim in cupulam abeunte; ascis clavatis $74-80 \approx 7-8$ 8-sporis; sporidiis mono- v. distichis oblongis v. ellipsoideo-oblongis utrinque acutatis, sæpe guttulatis, $8-15 \approx 3,5-4,5$; paraphysibus filiformibus $1,5 \mu$. cr.

Hab. in acubus *Abietis excelsæ putridis*, Tammela Fenniæ.

— *Ombroph. umbonata* affinis.

17. **Ombrophila squalida** Karst. M. F. I, p. 95. — Gregaria, sessilis 2542
immarginata subinde inciso-repanda, convexa sicca, varie contracta
et concaviuscula, sordide alba v. sublilacina, 0,4 mm. lat.; ascis
tereti-clavatis, pedicellatis, 80-100 \approx 7-8, obturaculo jodo leviter
cœrulescente; sporidiis distichis, fusoideo-elongatis, rectis curvu-
lisve 4-guttatis, chlorino-hyalinis, 10-14 \approx 2-2,5; paraphysibus fili-
formibus.

Hab. ad lignum sectum *Alni incanæ*, Tammela Fenniæ.

18. **Ombrophila quisquiliaris** Karst. M. F. I, p. 91, *Peziza quisqui-* 2543
liaris Karst. Monogr. Pez. p. 153. — Gregaria vel conferta, ses-
silis, concaviuscula, albida, glabra, circiter 2-3 mm. lat.; ascis
anguste clavatis, confertis, 7-8 μ . cr., jodo non tinctis, octosporis;
sporidiis distichis oblongatis vel oblongato-ellipsoideis, guttulis ple-
rumque 2 præditis, 7-10 \approx 3-4; paraphysibus filiformibus, gracilibus.

Hab. supra folia, virgulta corporaque varia putrida prope Mu-
stiala et pagum Tammela Fenniæ. — Affinis *O. ciliiferæ*.

19. **Ombrophila helotioides** Phill. Grev. XVI, p. 94. — Stipitata, solita 2544
taria v. cæspitosa, capitulata, pallida, glabra, subgelatinosa; hyme-
nio convexo, margine tenui, undulato; stipite cylindræo, subfle-
xoso; ascis tereti-clavatis, 8-sporis; sporidiis anguste fusoideis,
rectis curvulisve, 5-guttulatis 20-26 \approx 2-3,5; paraphysibus filifor-
mibus vix clavulatis.

Hab. ad caules emortuos immersos *Equiseti* pr. Aberdeen
Britanniæ (PLOWRIGHT). — Ascoma 2-4 mm. lat., 4-8 mm. alt. cum
stipite, stipes 0,5 mm. cr.

20. **Ombrophila ciliifera** Karst. M. F. I, p. 91. — Subgregaria, ses- 2545
silis, albida vel pallida, margine pilis brevibus pallidis patentibus
rariusculis obsessa, 1-4 mm. lat.; ascis anguste clavatis, apice
jodo non tinctis, 8-10 μ . cr., 8-sporis; sporidiis oblique mono- vel
distichis ellipsoideo-oblongatis, rectis aut quadantenus incurvatis
vel inæquilateralibus, guttulis paucis minutis præditis, 9-20 \approx 4-6,5;
paraphysibus sat numerosis filiformibus, 1 μ . cr.

Hab. supra folia putrida et ad terram in uliginosis udis sil-
varum Coniferarum in Fennia saltem australi et media. — Pili
seu setæ cupulæ basi incrassati, fibrosi, absque ullis articulis, longit.
0,2-0,4 mm., crassit. (basi) 0,1-0,15 mm. — Var. **merimaskuensis**
Karst. l. c.: sporidiis minoribus 7-10 \approx 3-4. In sacellania Merima-
sku prope oppid. Abo Fenniæ.

21. **Ombrophila collemoides** (Rehm) Sacc. *Coryne collemoides* Rehm 2546
 Ascom. Alp. n. 30. — Gregaria, primitus habitu *Cor. sarcoidis* collematoidea, fuscidula, gelatinosa, urceolata, dein patellaris, stipitata, c. 5 mm. alt., disci 3-4 mm. diam., sicca complicata, intus flavescens, parenchymatica, viridi-fusco-contexta; ascis clavatis, 8-sporis, $30 \approx 5$; sporidiis ellipticis, rectis vel subcurvatis 1-cellularibus, hyalinis, distichis, $5 \approx 1,5$; paraphysibus filiformibus, teneris.
Hab. ad ramum decorticatum *Aceris platanoidis* in monte Hochgrad alpium Allgoviæ (BRITZELMAYR).
22. **Ombrophila subspadicea** (Nyl.) Karst. M. F. I, p. 95, *Peziza* 2547
subspadicea Nyl. Obs. p. 44, Karst. Monogr. Pez. p. 135. — Gregaria, fere omnino sessilis (vel saltem junior stipite brevi crassulo), subspadicea, sicca fusca vel fusco-nigricans, plana, glabra, 1-2 mm. lat.; ascis cylindraneo-clavatis, 100-110 \approx 9-10, octosporis, obturaculo jodo leviter cœrulescente; sporidiis distichis fusoideo-elongatis vel fusoideo-suboblongatis, rectis guttulatis, 13-18 \approx 3-4; paraphysibus filiformibus, gracilibus, sursum vix incrassatis, eguttulatis.
Hab. ad corticem et ramulos *Pini* putrescentes in parœc. Nerpes prov. Cœsterbotten Fenniæ.
23. **Ombrophila Bäumléri** Rehm in Hedwigia 1885, p. 228. — Asco- 2548
 matibus sparsis, globosis vel subobconicis, dein urceolatis, cyathoidis, denique fere patellaribus et complicatis, distincte plus minusve crasse stipitatis, stipite demum striato, 2-4 mm. longo, disco livido vel obscure fuscidulo, 1-4 mm. diam., fuscidulis, primitus albo-pruinosis, hypothecio crasso, prosenchymatico, fuscidulo-contextis; ascis cylindraneo-clavatis, 8-sporis, 50-60 \approx 7; sporidiis oblongis, obtusis, rectis, 1-cellularibus, primitus nucleolis 2 apicalibus instructis, hyalinis, 8 \approx 4, monostichis; paraphysibus filiformibus, hyalinis, haud clavatis.
Hab. ad fructus putridos *Alni* prope Pressburg in Hungaria (BÆUMLER).
24. **Ombrophila Morthieriana** Rehm in Myc. un. n. 1312. — Tota 2549
 fusca; cupulis applanatis, glabris, pedicellatis magnitudine varia, pedicello sublongo, sursum dilatato; ascis 8-sporis, cylindrico-clavatis, hyalinis; sporidiis ellipticis, unicellularibus, monostichis, plerumque binucleatis, hyalinis, 15 \approx 5-6; paraphysibus filiformibus, sursum sensim in clavam, 3 μ . subfuscam dilatatis.
Hab. ad folia decidua *Laricis europææ* pr. Neuchâtel Helvetiæ (DR. MORTHER).

25. **Ombrophila patellarioides** Karst. Hedw. 1889, p. 193. — Ascoma. 2550
 tibis sessilibus vel subsessilibus, convexis, siccitate-cupulato contractis, ceraceo-subgelatinosis, olivaceis, siccis nigricantibus, contextu prosenchymatico, circiter 0,3 mm. latis; ascis cylindraceo-clavatis, 150-160 \approx 15-18, octosporis; sporidiis monostichis, sphæroideo-ellipsoideis, hyalinis, 15-18 \approx 10-11; paraphysibus filiformibus, ramosis, 1-1,5 μ . cr.

Hab. supra terram in Minas, Sitio Brasiliæ.

26. **Ombrophila brunnea** Phill. Disc. p. 323. — Congesta, sessilis v. 2551
 substipitata, subhemisphærica, dein expansa, demum flexuosa, gelatinosa, flavido-brunnea, glabra; disco quam margine obscuriore; ascis cylindraceis, 8-sporis; sporidiis oblongo-ellipsoideis, 2-guttulatis, intus graaulosis, hyalinis 16-20 \approx 5-8; paraphysibus filiformibus, clavulatis, cohærentibus.

Hab. in caulibus herbaceis emortuis in humidis, Forres N. B. Britanniaë (KEITH).

27. **Ombrophila chilensis** (Mont.) Sacc. *Bulgaria chilensis* Mont. Fl. 2552
 Chil., VII, p. 412, Syll. Crypt. n. 634. — Fusco-atra, cupulæformis, sessilis, mox explanata, margine revoluta, subtus venuloso-reticulata, villosula, supra (an exsiccatione?) rimosula; ascis cylindricis 8-sporis; sporidiis hyalinis, granulosis, monostichis, 30 \approx 10; paraphysibus filiformibus.

Hab. ad cortices arborum prope Valdiviam Chiles (CL. GAY.)

28. **Ombrophila terrestris** Phillips Grev. XVI, p. 75. — Orbicularis, 2553
 sessilis, gelatinosa, concava vel applanata, margine integro, erecto, hymenio umbrino-fusco, extus pallidiore, glabro; ascis cylindraceo-clavatis; sporidiis elliptico-fusiformibus, glabris, uniguttulatis, 18-20 \approx 7-10; paraphysibus, filiformibus, supra leniter incrassatis.

Hab. ad terram pr. Melbourne Australiæ (READER). — Ascoma 6-12 mm. lat.

29. **Ombrophila enterochroma** (Peck) Sacc. *Peziza* Peck 32 Rep. 2554
 p. 47. — Sparsa v. gregaria, cylindraceo-clavata dein expansa plana 2 mm. cr., subtremelloidea, vix marginata, brevi-stipitata, flavida dein subcastanea; ascis cylindraceis; sporidiis fusoides, flavidis, 20-25 \approx 6-7; paraphysibus filiformi-clavulatis.

Hab. in ramis dejectis Thujæ occidentalis in montibus Adirondack Amer. bor.

30. **Ombrophila subaurea** Cooke Disc. U. S. I, p. 300. — Turbinata 2555
 v. obconica, pallida dein pallide aurea, subtremelloidea, disco plano, 2 mm. lat., margine crenulato-undulato; ascis teretibus;

sporidiis fusoides, granulosi, $30 \approx 5$; paraphysibus filiformibus simplicibus ramosisve.

Hab. in ramis dejectis Cupressi? (*Cedar*) in paludosis, New Jersey Amer. bor. (ELLIS). — An satis diversa ab *O. enterochroma*?

31. **Ombrophila albo-fusca** Ellis Bull. Torr. 1882, p. 73. — Orbicularis, 0,5-1 mm. lat., sordide alba, sicca fuscescens, margine tenui acuto; ascis tereti-clavatis, $75-85 \approx 7-10$; paraphysibus filiformibus; sporidiis oblongis v. oblongo-fusoides, hyalinis, 2-nucleatis, $8-12 \approx 3,5-4,5$. 2556

Hab. in cortice Magnoliæ glaucæ, New Jersey Amer. bor.

32. **Ombrophila succinea** Bres. et Rehm F. Trid. pag. 93, t. 102, f. 2-4. — E turbinato subcyathiformis, breve stipitata, glabra, gelatinosa, tota lucida succinea, 5-7 mm. lat.; stipite 1-2 mm. long. et cr.; ascis tereti-clavatis, 8-sporis, apice jodo cœrulescentibus, $70-100 \approx 10-12$; sporidiis ellipsoideo-navicularibus, luteolis, $12-13 \approx 5-6$; paraphysibus filiformi-clavulatis, ramosis. 2557

Hab. ad acus Laricum, Sopramonte Trento (Domina bar. TURCO-LAZZARI).

33. **Ombrophila paradoxa** (Hedw.) Sacc. *Octospora paradoxa* Hedw. fil. Obs. bot. p. 13, t. VIII, *Ditiola paradoxa* Fr. et Sacc. Syll. VI, p. 814. — Ascomatibus e basi communi cæspitosis turbinatis, ex ochraceo lateritiis, disco applanato, marginato; ascis (ex icone Hedwigii!) clavatis, stipitatis, apice rotundatis, 8-sporis; sporidiis distichis, ovoideis, ex hyalino flavidis. 2558

Hab. in truncis fagineis in silva Rosenthal Germaniæ.

STAMNARIA Fuck. Symb. p. 309 [1869] (Etym. *stamnarion* urna, urceus). — Ascomata minuta, raro sparsa, distincte stipitata, cornea, diaphana, glabra, nitida, globoso-urceolata, cava, ore angustato, truncato, scarioso, discolore. Asci ampli, 8-spori. Sporidia disticha, oblonga, minute guttulata, continua, hyalina.

1. **Stamnaria Equiseti** (Hoffm.) Sacc. *St. Persoonii* (Moug.) Fuck. Symb. pag. 309, *Peziza Persoonii* Moug. in Pers. Myc. eur. I, p. 288, c. ic. Fr. Syst. Myc. II, pag. 121, *P. Equiseti* Fr., Gonn. M. E. t. V, f. 5, *Lycoperdon Equiseti* Hoffm. Crypt. t. V, f. 1 (1790) *Habrostictis Persoonii* Rehm Asc. n. 615. — Ascomatibus exiguis, primum hypophlœodeis subglobosis, dein subcæspitosis emergentibus urceolatis hyalinis aurantiacis, stipite brevissimo roseo suffultis, calvis, vertice primum clausis, mox osculo, marginis limbo 2559

albido scarioso-lacero cincto hiantibus illudque siccando occludentibus; ascis amplis, substipitatis, $110 \approx 14$, 8-sporis; sporidiis subdistichis, oblongis, multiguttulatis, $16 \approx 6$, hyalinis.

Hab. in caulibus siccis Equiseti arvensis, hiemalis, palustris, limosi, in Germania, Britannia, Suecia, Fennia, Italia, Belgio, Lusitania, Helvetia, Sibiria, Amer. bor. — Ascoma 0,5-0,7 mm. lat., subinde subsessile. *Hymenu/a Equiseti* videtur stat. conid.

2. **Stamnaria hyalopus** Karst. Hedw. 1887 p. 125. — Sparsa, stipitata, glabra, cupula obconoidea, disco concavo, margine membranaceo, lacero, aureo, vix 1 mm. lata, stipite æquali, hyalino, diametrum cupulæ æquante; ascis clavatis, apice leviter attenuatis, $105-120 \approx 15$, octosporis; sporidiis distichis, oblongatis, sæpe inæquilateralibus, continuis, subchlorino- v. sublutescenti-hyalinis, $20-24 \approx 7$; paraphysibus filiformibus 2μ . cr.; contextu excipuli pro-senchymatico. 2560

Hab. in foliis Caricis vesicariæ putrescentibus in regione Mustialensi Fenniæ.

ORBILIA Fr. Summa Veg. p. 357, Karst. M. F. I, p. 11 (Etym. *orbis*) *Calloriæ* spec. Fuck. et auct. — Ascomata subgelatinosa, initio subsphærica, dein planiuscula v. concava, sessilia, superficialia, rarissime substipitata, typice glaberrima, sicca subcornea, fere pellucida, plerumque rubra, flava v. albida. Asci elongati, paraphysati, 8-spori, rarissime myriospori. Sporidia elongato-bacillaria v. subgloboso-ovoidea, continua. — Cfr. species plures *Pezizelle*.

1. *Eu-Orbilia*. Sporidia fusioidea v. breve bacillaria.

1. **Orbilia rubella** (Pers.) Karst. M. F. I, p. 102, *Pez. rubella* Pers. 2561
syn. p. 635, *Pezizella* Fuck. Symb. p. 299. — Sessilis, ceraceo-mollis, planiuscula, glabra, incarnato-rubra, margine sublacinato; ascis anguste linearibus, oblique stipitatis, 8-sporis, $40 \approx 4$; sporidiis cylindræis, parum curvatis, $6 \approx 2$.

Hab. ad ligna et cortices putridos Juglandis, Fraxini, Ulmi, Acaciæ, Liquidambaris in Suecia, Germania, Belgio, Britannia. — Gregaria, minuta, semipellucida, 2-4 mm. lata, subtus planiuscula, supra convexa, dein applanata subflexuosa. Margo minute, veluti pilis, laciniatus. — Var. **minor** Rehm Asc. n. 461: ascomatibus grosse luteo-parenchymaticis; ascis $40-45 \approx 5$; sporidiis $7-8 \approx 1$. In Germania. — Var. **rufula** Schw. Cfr. Grev. V,

p. 91: ascis brevioribus, 25 μ . long. ascomatibus rubris immutabilibus. In ramis quercinis in Amer. bor. Cfr. supra n. 1177.

2. **Orbilia vinosa** (A. et S.) Karst. M. F. I, p. 101. — Minuta, sessilis, subtremellosa, planiuscula, glabra, integerrima, incarnato-rubella; ascis cylindraceis 35 \approx 5; paraphysibus filiformibus sursum lenissime incrassatis obvallatis, octosporis; sporidiis acicularibus, sæpe curvulis, 13-14 \approx 0,7-1,5, hyalinis. 2562

Hab. ad ramos dejectos decorticatos, apprime quercinos, acerinos, Rosæ, Menispermii, Ulmi, Liriodendri, Ailanthi, Broussonetiæ, Pini, Rubi, Vitis, Mori, in Suecia, Fennia, Germania, Britannia, Italia, Gallia, Amer. bor., Ceylon, Brasilia, Cuba. — Orbicularis, integerrima, subimmarginata, 1-2 mm. lata, gelatinosa, sicca contrahitur et obscurior evadit, irrigata vero intumescit dilutiusque tum incarnata. — β . **O. vinosella** Pers. Myc. Eur. p. 303 (*Pez.*): planiuscula immarginata, fulvo-carnea v. subrosea. Ad caules plantarum, Urticæ etc. in Gallia et Germania. Tenuis, nitida, $\frac{1}{2}$ - $\frac{3}{4}$ mm. lata. Videtur a priore diversa.

3. **Orbilia rubicunda** S. et S. Mich. I, p. 429, F. it. f. 1292 (*Call.*) 2563
— Ascomatibus gregariis, subsuperficialibus, patellato-disciformibus, $\frac{1}{3}$ - $\frac{1}{2}$ mm. diam. ceraceo-mollibus, disco convexiusculo, minute marginatis, ambitu circulari v. subundulato, amœne et vivide rubicundis, udis nonnihil expallentibus; contextu excipuli tenui laxoque parenchymatico, roseo; ascis cylindraceo-clavatis, breve crasseque stipitatis, 38 \approx 7, apice rotundatis; paraphysibus bacillaribus obvallatis, octosporis; sporidiis distichis v. inordinatis, oblongo-cylindraceis, 7-10 \approx 1 $\frac{1}{2}$ -2, subclavulatis, interdum minute 2-guttulatis, hyalinis.

Hab. in pagina inferiore foliorum putrescentium Hellebori viridis, Conegliano Ital. bor. — Habitatione peculiari et colore vivido species prædistincta.

4. **Orbilia rubro-coccinea** (Rehm) Sacc. *Calloria* Rehm Hedw. 1883, 2564
n. 5. — Sparsa v. gregaria, sessilis, patellariformis, rubro-coccinea, sicca urceolata varioque modo plicata, humida explanata, 1-3 mm. diam.; ascis clavatis, apice incrassatis, 8-sporis, 40-45 \approx 5; sporidiis clavatis, hyalinis, unicellularibus, submonostichis, 12-15 \approx 3; paraphysibus superne sensim 3 μ . cr., hyalinis, filiformibus.

Hab. ad corticem Gleditschiæ Triacanthi, Kentucky Amer. bor. (DR. KELLERMAN). — Hymenium dilute rubro-coccineum, in lamellis tenuissimis fere hyalinum.

5. **Orbilia rubicola** (C. et Phill.) Sacc. *Calloria* C. et Phill. Disc. 2565

p. 331. — Gregaria, sessilis, applanata, rubro-carnea, glabra, margine prominulo, obtusulo; ascis clavatis 8-sporis; sporidiis fusoides, 9-11 \approx 1; paraphysibus filiformibus.

Hab. in sarmentis Rubi cæsii, King's Cliffe Britanniae (BERKELEY). — Ascoma 0,5-1,5 mm. lat. Habitus *O. vinosæ* sed sporidia diversa.

6. **Orbilia occulta** (Rehm) Sacc. *Calloria occulta* Rehm Ascom. Ill. 2566 n. 770. — Plerumque gregaria, subgelatinosa, concaviuscula, integra; sicca margine spurio crasso, sæpe subpruinoso cincta, carneo-vel sanguineo-rubra, 0,3-7 mm. diam., globoso-orbicularis, sessilis, contextu parenchymatico, dilute roseolo, fere hyalino, æque ac hymenio; ascis clavatis, apice subincrassatis, 30-45 \approx 5-6, 8-sporis; sporidiis ex ovali basi longe filiformiter protractis, 1-cellularibus, hyalinis, 2-stichis, 15 \approx 3; paraphysibus filiformibus, clava articulata, piriformi, 3 μ . crassa, hyalina instructis.

Hab. in cortice vivo Vitis, N. Jersey Amer. bor. (ELLIS).

7. **Orbilia Rozei** Quéf. X, Suppl. p. 14, t. IX, f. 15. — Ascomatibus 2567 plano-convexis punctiformibus, orbiculari-lobulatis, 300 μ . diam., tenuiter granulosis, mollibus, glabris, primo carneo-aurantiacis dein roseis, per filamenta tenuissima, radiata, sericea, alba adfixis; sporidiis ellipsoideo-elongatis, dein fusiformibus, 5 μ . longis, guttulis.

Hab. in caulibus Hellebori foetidi Jura Galliae. — Cfr. Grevill. 1879, p. 38. Iterata sub *Pezizella* n. 1173.

8. **Orbilia decipiens** (Phill.) Sacc. *Calloria decipiens* Phillips. Grev. 2568 XVI, p. 5. — Gregaria v. sparsa, sessilis, sicca subimmersa, hymenio plano v. concaviusculo, pallide incarnato, aurantio-rubro v. pallide brunneo, extus concolori, granuloso; margine suberecto, subinde denticulato; ascis cylindræo-clavatis, octosporis; sporidiis fusiformibus, continuis, hyalinis, 5-7 \approx 1-2; paraphysibus filiformibus, sursum abrupte incrassatis.

Hab. in chorda vetusta, Brisbane Australiæ (BAILEY). — Ascoma 1-2 mm. lat. Habitus quasi *O. lasiæ*.

9. **Orbilia rosella** (Rehm) Sacc. *Calloria rosella* Rehm Ascom. Ill. 2569 et Exs. n. 720, Pat. Tab. anal. f. 492. — Gregaria, sessilis, plana, rotundata, uda dilute rosella, sicca concavula, roseo-rubra, 0,5-0,8 mm. lat., margine tenuissimo dilutiore; ascis clavatis, 8-sporis, 30 \approx 4; sporidiis fusoides, subacutis, continuis, 5-6 \approx 1-1,5, subdistichis; paraphysibus apice clava rotunda 5 μ . cr. terminatis.

Hab. in caulibus Atropæ Belladonnæ pr. Nossen Saxoniae.

Sacc. Fung. gall. n. 1897: ascis 30-36 \approx 4-6; sporidiis 5-6 \approx 1-1,5.
In lignis putrescentibus, Fontainebleau (THERRY).

14. **Orbilia lasia** (B. et Br.) *Calloria lasia* (B. et Br.) Phill. Disc. 2574
pag. 327, *Peziza* B. et Br. Ann. N. H. n. 1391, tab. VIII, f. 10,
Grevill. II, t. XXII, f. 2. — Ascomatibus globosis, erumpentibus,
aurantiis, demum ore denticulato apertis, extus gummosis; ascis
elongatis; sporidiis fusiformibus 12-14 \approx 2-3; paraphysibus sursum
subcapitatis subinde uniseptatis, floccis brevibus immixtis.

Hab. in trunco Ulmi, Langridge Britannia.

15. **Orbilia auricolor** (Blox.) Sacc. *Peziza* Blox. in B. et Br. Ann. 2575
N. H. n. 1068, *Calloria* Phill. Disc. p. 334. — Gregaria, mollis,
subgelatinosa, aurantiaca, marginata, e strato tenui radiante hy-
pharum hyalinarum oriunda; sporidiis octonis angustis.

Hab. in pag. inf. foliorum dejectorum, Gopsal Britannia (BLO-
XAM). — *Orb. vinosæ* subaffinis dicitur.

16. **Orbilia succinea** (Fr.) Sacc. *Calloria* Fr. Summa p. 359 (stat. 2576
imperfect.) *Peziza electrina* Phill. et Plow. in Grev. VIII, p. 155
(stat. perfect.). — Gregaria, minuta, uda subgelatinosa, glabra, suc-
cinea, disco concavo, marginato; stipite brevissimo, firmulo, basi
obscuriore; ascis anguste clavatis, apice acutatis, octosporis; spo-
ridiis fusoides, 5 \approx 1.

Hab. in foliis dejectis Pini silvestris, Forres N. B. Bri-
tannia et in Germania. — Socius adest *Dacryomyces succineus*
Fr., cujus species praesens est status ascophorus. Cfr. Grev. l. c.

17. **Orbilia tenuissima** Speg. F. Guaran. II, p. 57 (1888), nec Pat. — 2577
Laxe caespitosa, orbicularis, 0,5-1 mm. lat, sessilis, tenuissima, ad-
nato-applanata, glabra levis, pallide succinea, subdiaphana; ascis
subclavatis, apice rotundato-truncatis, 30 \approx 3-4, octosporis; spori-
diis oblique distichis tereti-fusoides, obtusiusculis 8-11 \approx 0,5-1,
curvulis, hyalinis; paraphysibus nullis.

Hab. ad petiolos *Pothi pinnatifidæ* in silvis Guarapi (BA-
LANSA).

18. **Orbilia succinella** Sacc. Mich. I, p. 62, F. ital. f. 1293 (*Call.*) 2578
— Cupulis sparsis, superficialibus applanato-patellatis, margine vix
prominulo, minutissimis, $\frac{1}{6}$ - $\frac{1}{8}$ mm. d., ex hyalino dilutissime suc-
cineis; ascis cylindraceo-clavatis, apice subtruncatis, 45-50 \approx 6,
basi brevissime noduloso-stipitatis; paraphysibus filiformibus sursum
vix incrassatis obvallatis, octosporis; sporidiis laxè distichis, cylin-
draceis, rarius subclavulatis, 6 \approx 2, utrinque 1-guttulatis, hyalinis.

Hab. in culmis putrescentibus *Zoæ* *Maydis*, Pianzano Ital.

10. **Orbilia gelatinosa** (Ell. et Mart.) Sacc. *Mollisia gelatinosa* Ell. 2570
et Mart. Amer. nat. 1883, p. 1283. — Sessilis gelatinosa hyalina, roseo-tincta, $\frac{1}{4}$ mm. diam., convexa, immarginata; ascis obovatis, 35-40 \approx 15-20; sporidiis bi-triseriatis, fusoides, subhyalinis, 12-16 \approx 3-3,5, plasmate tripartito; paraphysibus curvulis apice capitatis.

Hab. in foliis vivis *Perseæ palustris* in mycelio sterili cujusdam *Meliolæ*, in America bor.

11. **Orbilia Sarraziniana** Boud. in Rev. Myc. 1885, p. 221. — Au- 2571
rantiaca, pellucida, primitus aperta, subcupulata, margine obsolete integro; ascis apice truncatis, octosporis; sporidiis acicularibus, 8-8,5 \approx 1,5-2; paraphysibus ramulosis apice capitatis.

Hab. in fragmentis ligneis dejectis, Forêt d'Hallate, Oise Galliæ (F. SARRAZIN).

12. **Orbilia chrysocoma** (Bull.) Sacc. *Calloria chrysocoma* (Bull.) Fr. 2572
Summa p. 359, Pat. Tab. an. fig. 293. — Ascomatibus gregariis, superficialibus, initio subglobosis, mox applanatis subtremelloideis, vix $\frac{1}{2}$ mm. diam. aureis siccis subcorneis flexuosis; ascis cylindraceis, sessilibus, 40-45 \approx 5, apice obtusiusculis; paraphysibus brevibus bacillaribus, sursum clavulatis obvallatis, octosporis; sporidiis bacillaribus, curvulis, 14-15 \approx $\frac{3}{4}$ -1, hyalinis.

Hab. ad ligna Mori, Pini, Salicis, Fagi, Fraxini, Quercus in Suecia, Germania, Italia, Gallia, Belgio. — Affinis *O. luteo-rubellæ*. — Var. **microspora** Sacc. Mich. II, p. 571: ascis tetriusculis sessilibus apice truncatis, 29-26 \approx 5; sporidiis cylindraceis, curvulis, 5-6 \approx 0,5, hyalinis. Ascomatibus membranaceo-tenacellis, aureis. In lignis et corticibus, Newfield N. J. (ELLIS).

13. **Orbilia luteo-rubella** (Nyl.) Karst. M. F. I, pag. 101, Sacc. F. it. 2573
f. 1291, *Peziza* Nyl. Obs. p. 15, *Helotium Karstenii* Roum. — Cupulis sparsis vel subgregariis, subtremelloideis, planiusculis, siccis sæpius medio depresso-collabentibus, pallidis, mox pallide luteo-rubellis vel luteo-fuscescentibus, 0,5-1,5 mm. lat.; ascis cylindraceo-clavatis, 30-40 \approx 4-4,5; sporidiis fusoides-filiformibus vel fusoides-elongatis, 6-12 \approx 1-1,5; paraphysibus gracilescentibus, circiter 1,5 μ . crass., apice clava subsphæroidea, 2-2,5 μ . crass.

Hab. ad lignum putridum arborum frondosarum Populi, Alni, Salicis etc. inque tela putri et supra Fomitum igniarium putrescentem in Mustiala et prope pagum Pihtikoski par. Tammela Fenniæ et in Gallia, Britannia, Amer. austral. — f. **microspora**

bor. (SPEGAZZINI). — Inter *C. fusarioidem* (Berk.) Tul. et *C. diaphanam* fere media.

19. **Orbilia racheophila** S. et S. Mich. I, p. 430 (ut subsp. *O. succinellæ*). — Ascomatibus gregariis sessilibus patellari-applanatis, vix $\frac{1}{2}$ mm. diam., udis subtremellosis, roseo-miniatis, glabris; contextu excipuli laxe et tenui parenchymatico roseo; ascis cylindraceo-clavatis, 45-50 \approx 5-5 $\frac{1}{2}$, apice rotundatis, breve stipitatis; paraphysibus filiformi-clavulatis obvallatis, octosporis; sporidiis cylindræis, curvulis rectisve, utrinque obtusiusculis, 10-12 \approx 1 $\frac{3}{4}$ -2, hyalinis. 2579

Hab. in rachide spicæ putrescentis *Zœæ* Maydis, Conegliano Ital. bor. — Ab *O. succinella* ascomatibus majoribus rubellis, sporidiis longioribus differt; ab *O. luteo-rubella* differt ascomatibus carneo-miniatis, paraphysibus non capitatis, habitatione aliena etc.

20. **Orbilia epipora** Karst. Myc. Fenn. I, p. 100. — Gregaria, planiuscula, tenuis, sicca cupuliformis, membranacea, albido-hyalina, 0,3-0,6 mm. lat.; ascis clavatis, 16-20 \approx 2-2,5; sporidiis cylindræis, 3-4 \approx 0,5; paraphysibus gracilibus apice clava truncata terminatis. 2580

Hab. in ligno mucido arborum frondosarum et Polyporos putres in Fennia, ad hymenium Polyp. squamosi in Ital. bor. — Asci (in exempl. italicis) clavulati 20-25 \approx 3; sporidia disticha, cylindræa, 7 \approx $\frac{3}{4}$, hyalina. — ***major** Speg. F. Arg. Pug. III, n. 225: ascomate udo patellari-applanato, orbiculari 0,8-1,5 mm. diam. albo v. melleo-hyalino, sicco cupulato-contracto, crispulato, dilute fusco-succineo, glaberrimo tenui; ascis cylindræo-clavatis, sursum truncato-rotundatis, deorsum brevissime et crasse stipitatis, 20-25 \approx 5, octosporis; paraphysibus filiformibus granulosis, apice minute ramulosis immixtis; sporidiis inordinate distichis, cylindræis, curvulis, utrinque rotundato-truncatis et 1-guttulatis, minutis 4-5 \approx 0,5-0,8, hyalinis; contextu excipuli grosse celluloso-parenchymatico, cellulis 50-60 \approx 20, subhyalinis. In trunco carioso-putrescente Populi italicæ in uliginosis, San Benito de Palermo, Argentinæ. Forma inter *O. epiporam* et *O. inflatulam*. intermedia. Iodi ops nulla.

21. **Orbilia oculifuga** Quél. X Suppl. p. 14, t. IX, fig. 16. — Ascomatibus lenticularibus, plano-convexis, 200-300 μ . diam., tenuibus, glabris, ceraceis, diaphanis, albo-amethysteis; sporidiis fusiformibus, 12 μ . longis, 3-4 guttulatis. 2581

Hab. gregarie in culmis Glyceriæ in Normandia (A. LE BRE.

- TON). — Var. **microspora**. Cfr. Le Bret. et Malbr. Excurs. crypt. p. 15. Ascis oblongo-clavatis, 25-28 \approx 5-6,5; sporidiis subdistichis, fusoido-elongatis 2-4-guttulatis, hyalinis, 8-10 \approx 1,5-1,7; paraphysibus. In culmis foliisque Eriophori et Junci in Normandia.
22. **Orbilia? hyalinula** (Nyl.) Karst. M. F. I, p. 99, *Peziza hyalinula* 2582
Nyl. Obs. p. 57. — Gregaria, albido-hyalina, plana, immarginata, glabra, minutissima, 0,2-0,3 mm. lat.; ascis clavatis, 35-40 \approx 4-5; sporidiis oblongatis, simplicibus, interdum obsolete curvulis, 5-7 \approx 1,5-2; paraphysibus gracilibus, apice clava obovoidea.
Hab. ad latus interdum corticis (Aceris?) in horto botanico Helsingfors Fenniae.
23. **Orbilia inflatula** Karst. Mycol. Fenn. I, p. 100, Sacc. F. it. f. 1290. 2583
— Ascomate patellato-applanato, subtremelloideo, 1-1,5 mm. diam., hyalino albido, sicco inflato-globuloso, angulato-contracto, sordide lutescente, tenui-cartilagineo; ascis cylindraceutis, subsessilibus, 18-24 \approx 2-3, apice obtusis, paraphysibus nullis visis, octosporis; sporidiis cylindraceutis, curvulis, 5-8 \approx 0,5-0,7, hyalinis.
Hab. in ligno et cortice putrescentibus arborum frondosarum e. g. Populi in Fennia, Italia, Britannia.
24. **Orbilia Antenorea** Sacc. Mich. I, pag. 64 (*Calloria*). — Cupulis 2584
sparsis, superficialibus, sessilibus, plano-scutellaribus, minutis, $\frac{1}{5}$ - $\frac{1}{8}$ mm. diam., margine depresso obtusiusculo, pallide flavis, subdiaphanis; ascis cylindraceutis, deorsum attenuatis, apice rotundatis, 50-60 \approx 8; paraphysibus filiformibus obvallatis, octosporis; sporidiis distichis cylindraceutis, utrinque rotundatis, curvulis, 10-11 \approx 2-3, minute 2-3-guttulatis, hyalinis.
Hab. in ligno v. cortice interiore Laurocerasi, Padova Ital. bor. (Bizzozero). — Ab *Orbilia xanthostigmatē* ascis sporidiisque diversa.
25. **Orbilia curvatispora** Boud. Bull. Soc. Myc. IV, p. 80, t. 16, f. 6. 2585
— Minutissima 0,6 mm. usque ad 1 mm. lata, sessilis, hyalino-albida sublutescens, carnosā, levis, lenticularis hyalina, alba vix lutescens, margine integro aut vix subcrenulato; hymenio convexo, rarius centro depresso aut undulato; paraphysibus simplicibus aut divisis, gracilibus, ad summam basim uniseptatis, ad apicem rotundatim clavatis, clava 4-5 μ . lata; ascis pro more minutissimis, truncatis et sæpe ad basim calcaratis, octosporis, cylindraceutis, 40-45 \approx 3-3,5; sporidiis filiformibus, bene curvatis, 10-15 \approx 1.
Hab. ad cortices putres Quercus pr. Montmorency Galliae.

11. *Orbiculina* Sacc. Sporidia subglobosa vel ellipsoidea.

26. **Orbilia coccinella** (Somm.) Karst. M. F. I, p. 98, *Peziza* Somm. 2586

Lapp. p. 226, *Calloria coccinella* (Somm.) Fr. Summa p. 357, Sacc. F. it. f. 1289, Pat. Tab. an. fig. 384, *Pez. dispersa* Wallr. Crypt. n. 2503. — Ascomatibus sessilibus, patellulatis, tremelloideis, $\frac{1}{4}$ mm., vix marginatis, sanguineis, siccis pellucido-coccineis, contextu laxo cellulari, carneo; ascis cylindricis, 35-40 \approx 4-5, breve stipitatis; paraphysibus, filiformibus simplicibus furcatisve apice capitatis obvallatis, octosporis; sporidiis ovato-oblongis, 4-5 \approx 2 $\frac{1}{2}$, 2-guttulatis, hyalinis.

Hab. in ligno et cortice carioso Salicis, Populi, Betulæ, ad Polyporos putres, in Diatrype Stigmate in Suecia, Germania, Fennia, Italia, Galicia. — ***C. delicatula** Karst. Myc. Fenn. p. 98: ascomatibus typo similibus sed paullo majoribus coccineo-subaureis; ascis et paraphysibus quoque similibus; sporidiis brevius ovatis, 4-5 \approx 3, crassiuscule 2-guttulatis, hyalinis. In ligno putri carioso Mustiala Fennicæ et in silva Cansiglio Ital. bor.

27. **Orbilia rubinella** (Nyl.) Karst. M. F. I, p. 97, *Peziza rubinella* 2587

Nyl. Obs. p. 56, *Peziza coccinella* Karst. *Pez. et Asc.* pag. 36 (pr. p.). — Sparsa, adnata, subgelatinosa, obtuse marginata, carneo-rubra aut subcoccinea, circiter 0,5 mm. lat.; ascis clavatis v. attenuato-piriformibus, 8-12-sporis, 39-46 \approx 8-11; sporidiis conglobatis, subsphæroideis, circiter 2-3 μ . diam.; paraphysibus irregularibus, 1 μ . cr., apice incrassatulo, 1,5 μ . cr.

Hab. ad lignum *Quercus* vetustum in regione aboensi Fennicæ. — Arcte accedit ad *Orb. coccinellam*, a qua præcipue forma ascorum et paraphysum distinguitur.

28. **Orbilia circinella** Pat. Champ. Chine p. 1. — Perexigua, vix 1 2588

mm. lat. sessili, planiuscula, diaphana, e flavido rosea, tenui-marginata, integra; ascis clavatis, 46-50 \approx 7-10, octosporis; sporidiis ovoideis, hyalinis, 6-7 \approx 3, distichis; paraphysibus filiformi-clavulatis, apice hamatis.

Hab. in caulibus emortuis *Cypripedii*, Junnan Sinarum (AB. DELAVAY).

29. **Orbilia Eucalypti** Phill. et Harkn. Calif. p. 3. — Minuta, spar- 2589

sa, patellata, e rubro carnea, margine pallidiore, glabra; ascis teretibus; sporidiis ovato-ellipsoideis, 7 \approx 3,5; paraphysibus filiformibus apice piriformi.

Hab. in ligno decorticato *Eucalypti Globuli* in California.

30. **Orbilia minutissima** Rostr. Fung. Groenl. pag. 537. — Gregaria, 2590
rotundata, concaviuscula, læte aureo-rubens, 0,1-0,2 mm. lat.; ascis
anguste clavatis, 70 \approx 9-11, octosporis; sporidiis oblique monosti-
chis, oblongis 11-14 \approx 4-5, continuis.

Hab. in caulibus exsiccatis Archangelicæ, Kobbefjord Groen-
landiæ.

31. **Orbilia leucostigma** Fr. Summ. Veg. Scand. pag. 357, Karst. M. 2591
F. I, p. 99, *Peziza leucostigma* Fr. Obs. I, p. 165 et Syst. Myc.
II, pag. 146. — Gregaria, planiuscula, tenuis, albido-hyalina, sic-
ca collabens, concava, submembranacea, lutescens vel aurea, 0,5-1
mm. lat.; ascis cylindraceo-clavatis, 30-35 \approx 3-3,5; sporidiis elli-
psoideis vel oblongatis, 3-4 \approx 1-1,5; paraphysibus 1 μ . cr., apice
clava subsphæroidea, 2-2,5 μ . cr.

Hab. ad ligna cariosa passim in tota Fennia, in Suecia, Bri-
tannia et Amer. bor.

32. **Orbilia xanthostigma** Fr. Summa pag. 357, *Peziza* Fr. Obs. I, 2592
p. 166, *Calloria* Phill. Disc. p. 329. — Sessilis, minuta, submem-
branacea, glabra, excavata, orbicularis, aurea, sicca carneo-cocci-
nea, sicca collapsa; ascis cylindraceis vel tereti-clavatis, 8-sporis;
sporidiis monostichis, globoso-ellipsoideis 3 \approx 1-1,5; paraphysibus
filiformibus tenuissimis, apice globosis.

Hab. in ligno abiegnio et putrido in Suecia, Lapponia, Fen-
nia, Belgio, Britannia. — Sec. Karst. ab *O. leucostigmate* differt
tantum cupulis aureis, siccis carneo-coccineis. Gregaria, minima,
punctiformis. Cupulæ membranaceo-molles, tamen sat tenaces.

33. **Orbilia Gaillardii** Sacc. *Orbilia tenuissima* Pat. et Gaill. in Bull. 2593
Soc. Myc. Fr. IV, p. 99 (1889) nec Speg. — Orbicularis, sessilis,
expansa vel cupulata, 0,5-1 mm. diam., tenuissima, pellucida, viva
flavo-aurantia, sicca rufescens, margine integro plerumque undu-
lato; ascis clavatis, 30 \approx 1-3, octosporis; sporidiis monostichis, sub-
globulosis, 0,3-0,5 μ . diam., hyalinis; paraphysibus hyalinis, fili-
formibus, appendicula globosa, nitente terminatis.

Hab. gregatim ad lignum emortum, Puerto Zamuro Venezuela
Amer. austr. (GAILLARD). — Cupulæ proximæ inter se sæpius ad-
hærentes et greges elongatos ad ligni superficiem efformantes.

34. **Orbilia assimilis** (C. et P.) Sacc. *Peziza* C. et P. Grev. I, p. 5, 2594
t. I, f. 6. — Gregaria, erumpens, subtremellosa, minuta, sordide
aurantia, concaviuscula, margine leniter elevato, connivente et in
siccio contracto; ascis subcylindraceis; sporidiis anguste ellipsoi-
deis, 9 \approx 3.

Hab. in caulibus *Asteris puniceæ*, West Albany Americæ borealis (PECK).

35. **Orbilia ulcerata** (Phill. et Plowr.) Sacc. *Calloria* Phill. et Plowr. 2595
Disc. p. 330, *Mollisia ulcerata* Phill. in Grevillea IV, pag. 122, t. 62, f. 5, *Peziza Tripolii* Berk. et Br. Ann. Nat. Hist. n. 1623.
— Sparsa, erumpens, stictæformis, dein patellata, margine fimbriato, disco sordide aurantiaco; ascis clavatis, tetrasporis; sporidiis ovatis, intus granulosus, $15 \approx 8$; paraphysibus filiformibus, simplicibus vel furcatis, apice clavulatis, sæpe contortis.

Hab. in caule emortuo *Asteris Tripolii*, Kings Lynn Britannicæ.

36. **Orbilia Primulæ** (Rehm) Sacc. *Calloria Primulæ* Rehm Ascom. 2596
n. 264. — Minutissima, punctiformis, sessilis, carneo-rubra, semiglobosa, orbicularis, sicca concaviuscula, marginata, sparsa in superficie foliorum; ascis clavatis, 6-8-sporis, $50-60 \approx 18$; sporidiis oblongo-ellipticis, 1-cellularibus, hyalinis, distichis (non extra ascos visis), $20-24 \approx 5$; paraphysibus filiformibus ascos superantibus, apice sensim in clavam hyalinam circ. 3μ . cr. ampliatis, massæ gelatinosæ immersis.

Hab. ad folia emortua *Primulæ glutinosæ* in alpibus editissimis tyrolensibus.

37. **Orbilia retrusa** (Phill.) Sacc. *Calloria* Phill. Disc. p. 408, *Mollisia retrusa* Phill. in Grevillea IV, p. 122, t. 62, f. 6. — Minuta, sparsa, initio epidermide velata, dein erumpens, sessilis, hemisphærica vel oblonga, straminea, levis; ascis clavatis; sporidiis distichis, oblongo-ellipsoideis, $17-19 \approx 5$, paraphysibus..... non visis. 2597

Hab. in foliis *Laricis*, North Wales Britannicæ. — Sicca, vix conspicua «An *Pezizella?*»

38. **Orbilia? pusilla** Speg. Mich. I, p. 473 (*Call.*) — Ascomatibus 2598
sparsis, epiphyllis, primo epidermide tectis, dein erumpentibus, eaque fissâ cinctis, subsuperficialibus, minutissimis, $120-150 \mu$. diam., pallide roseo-aurantiacis, siccis cupulato-concavis, humidis subhemisphæricis, prominulis; contextu excipuli parenchymatico, irregulariter polyhedrico, tenui-membranaceo, fuscidulo; ascis cylindraceo-clavatis, apice rotundatis atque tunica crassa donatis, $60 \approx 8$, octosporis; paraphysibus filiformibus apice leniter incrassatis ac uncinato-curvatis obvallatis; sporidiis distichis vel oblique monostichis, ellipticis, $10 \approx 4$, hyalinis.

Hab. in foliis dejectis putrescentibus *Corni sanguinæ*, Cone-

gliano Ital. bor. — Sæpius ascomata in maculis latis, vagis non circumscriptis insidentia.

39. **Orbilia Peltigeræ** (Fuck.) Sacc. *Calloria* Fuck. Symb. p. 283. — 2599

Cupulis superficialibus, gregariis conglomeratisve, punctiformibus, nudo oculo vix conspicuis, applanatis, parum convexis umbonatisque, margine destituto, orbicularibus, diaphanis, dilute violaceo-vinosi; ascis clavatis, 8-sporis, $68 \approx 12$ (in clavula); sporidiis ovato-clavatis, biguttulatis, $10 \approx 4$, hyalinis.

Hab. in thallo adhuc vivo *Peltigeræ* caninæ et horizontalis pr. Hattenheim et Sauerthal Rhenogoviæ.

40. **Orbilia Leightoni** (Phill.) Sacc. *Calloria* Phill. Disc. p. 329. — 2600

Sparsa, minuta, sessilis, hemisphærica, dein concaviuscula, extus glabra, pallide flavida; margine incurvato; disco concolore; ascis clavatis, octosporis; sporidiis oblongo-ellipsoideis, $8 \approx 3$; paraphysibus filiformibus.

Hab. in Polyporis putrescentibus pr. Shrewsbury Britannicæ (W. A. LEIGHTON). — Ascoma 1-2 mm. lat., subdiaphanum; sporidiis multo majoribus ab *O. epipora* recedit.

41. **Orbilia brasiliensis** (Speg.) Sacc. *Calloria brasiliensis* Speg. Fung. 2601

Puigg. I, pag. 209. — Ascomatibus orbiculari-effusis; mediocribus 2-5 mm. diam., rubro-aurantiis, tenuiter submembranaceis, glaberrimis, levissimis, siccitate vix contractis; ascis cylindraceo-clavulatis, octosporis, $45-50 \approx 4$; paraphysibus parcissimis, filiformibus; sporidiis oblique monostichis, elliptico-fusoideis, $5 \approx 1-1,5$, utrinque acutis, sæpeque 1-guttulatis, continuis, hyalinis.

Hab. in tela dejecta putrescente in hortis prope Apiahy Brasilicæ (PUIGGARI).

III. *Myriella* Sacc. Ascis myriospori.

42. **Orbilia myriospora** (Phill. et Harkn.) Sacc. *Calloria myriospora* 2602

Phill. et Harkn. Calif. p. 3. — Minuta, sparsa, erumpens, convexa, immarginata, pallide rosea; ascis clavatis; sporidiis innumeris, perexiguis; paraphysibus tenuibus, copiosis.

Hab. in caule emortuo *Psoraleæ macrostachyæ* in California.

IV. Species ignota fructificatione.

43. **Orbilia coccostigma** (Wallr.) Sacc. *Peziza* Wallr. Crypt. n. 2486. 2603

— Ascomatibus dein emersis sessilibus sparsis planis tenuiter conformiterque marginatis patellaribus, punctiformibus rubro-coccineis.

Hab. ad ligna abietina cortice destituta humi jacentia in Hercyn. superior. rarius.

44. **Orbilia? miniata** (Batsch) Sacc. Mich. I, p. 63, *Peziza* Batsch 2604
Elench. II, p. 207, fig. 144. — Cupulis obconicis vel brevissime stipitatis, rubris dein pallide succineis, subcartilagineis, margine pelucido-plicatis, nucleo sterili.

Hab. in ligno fagineo putri Cadore (VENZO) et Conegliano in Italia bor. (SPEGAZZINI). — An huc quoque *P. hæmatites* Wallr.?

45. **Orbilia hæmatites** (Wallr.) Sacc. *Pez. hæmatites* Wallr. Crypt. 2605
n. 2512. — Ascomatibus glabris sparsis minutis corneis coccineo-sanguineis, primum e basi attracta obconicis turbinatisve, dein vertice in discum planiusculum saturatiorem, margine tenui dilutiore cinctum reclusis, obovatis.

Hab. ad Rubi Idæi caules siccos in Thuring. semel (WALLR). — *Nectriam epispæriam* primo intuitu fere refert.

46. **Orbilia erythrostigma** (Mont. Sacc. *Peziza* Mont. Cent. III, n. 47, 2606
Syll. Crypt. n. 511. — Sessilis, gregaria, minutissima, punctiformis, ovoidea, rubra; cupulis carnosio-tremellosis clausis e basi angustiore ovatis, extus subvillosulis.

Hab. in *Frullania dilatata* ad pagum Chennevières-sur-Marne Gallie. — Videtur diversa a *Dasysc. erythrostigmatæ* (B. et Br.).

47. **Orbilia agyrioides** (Desm.) Sacc. *Peziza agyrioides* Desm. Not. 2607
Crypt. 1837 p. 5, tab. II, fig. 5. — Minuta, sessilis, glabra, globosa, crassa, ceraceo-mollis, subhyalina, fulva, exsiccata rufo-brunnea, ore connivente subcrenato; subiculo tenui, villosulo, albo; ascis clavatis 8-sporis; sporidiis ovoideis, hyalinis.

Hab. ad caules plantarum aridos Haute-Vienne in Gallia. — «An *Nectriella?*»

48. **Orbilia crocina** (Mont. et Fr.) Sacc. *Peziza* M. et Fries, in Mont. 2608
Notice etc., in Ann., 2, V, p. 289. — Sparsa, sessilis, tremellosa, primo punctiformis, purpurea demum applanata, irregularis, crocea, centro dilutiore vix depresso.

Hab. ad ramos emortuos denudatos nec non ad schidias in silvis prope Sedan Gallie et ad Singapore (BECCARI).

49. **Orbilia calamaria** (Ces.) Sacc. *Peziza calamaria* Ces. in Klotzsch 2609
Herb. myc. 1926 et in Flora 1855 p. 267. — Microscopica, solitaria, sessilis, erumpens, ceracella, carneo-miniata, cupularis, margine obtuso, disco planiusculo.

Hab. ad folia et culmos exsic. Festuæ vel Calamagro-

stididis cujusdam ad Biella Italiæ borealis (CESATI). — Fructificatio nondum clara; fere *Calloriæ* (?).

50. **Orbillia diaphana** (Sow.) Sacc. *Calloria* Phill. Disc. p. 335, *Peziza* 2610

Sow. t. 389, f. 7. — Sparsa, ex urceolato-applanata, albido-hyalina.

Hab. ad ligna putrida in Britannia, Gallia et in charta putri in Belgio. — Sec. Kickx cupulæ demum planæ, incarnatæ v. subfulvæ. An eadem species? Media dicitur inter *Pezizellam vulgarem* et *Mollisiam cineream*, sed hac multo tenuior, subdiaphana: a nonnullis cum *Pez. cinerea* commutari videtur, teste Fries.

AHLESIA Fuck. Symb. p. 281 (1869) [Etym. a cl. Doct. AHLES germanico]. — Ascomata omnino superficialia plerumque sparsa, sessilia minuta concava diaphana, glabra, immarginata. Asci oblique stipitati, oblongi, tunica crassa, primo corpusculis minutis, globosis, sulphureis repletis, dein 16-spori. Sporidia farcta, ovato-clavata, biguttulata, continua, hyalina. Paraphyses filiformes.

1. **Ahlesia lichenicola** Fuckel Symb. p. 281, t. IV, f. 37. — Cupulis 2611

sparsis cæspitosisve, sessilibus, 0,3 mm. latis, concavis, pellucidis, immarginatis, pulcherrime immutabileque sulphureis; ascis breviter stipitatis, oblongis, tunica crassa, 76 = 14, primo corpusculis minutissime globosis, sulphureis repletis, dein 16-sporis; sporidiis farctis, ovato-clavatis, biguttulatis, hyalinis; paraphysibus filiformibus; ascis longioribus.

Hab. in thallo *Bæomyces rufi* pr. Heidelberg Germaniæ.

HÆMATOMYCES B. et Br. Fung. of Ceyl. n. 963 (Ety. *hæma* sanguis et *myces*). — Ascomata tremelloidea, sinuato-lobata, gyrosa, subcerebrina, immarginata. Asci vesiculares. Sporidia elliptica, hyalina.

1. **Hæmatomyces spadiceus** B. et Br. l. c. — Ascomatibus tremelli- 2612

formibus, siccis nigris; ascis amplis obovatis; sporidiis ellipsoideis, proportione minutis, 6-7 μ . long.

Hab. in lignis putridis in ins. Ceylon. — A *Bulgaria* fructificatione omnino differt.

2. **Hæmatomyces orbicularis** Peck 31 Rep. pag. 47. — Sessilis, pul- 2613

vinatus, orbicularis, subtremellosus, gyroso-convolutus, nigricanti-brunneus, particulis minutis rufis punctatus; ascis anguste clavatis, apice subacutis; sporidiis oblongo-fusoideis, continuis, 15-18 = 3-4; paraphysibus numerosis, filiformibus.

Hab. in ligno dejecto Castaneæ, Mechanicville Amer. bor.

AGYRIUM Fr. Syst. Myc. II. p. 231 ex pag. (Etym. *A* priv. et *gyros* gyrus). — Ascomata pulvinato-disciformia erumpenti-sessilia, immarginata humecta gelatinosa, siccando ceraceo-coacta, levia undique glabra, excipulo fere nullo. Asci clavati 8-16-spori, obsolete paraphysati. Sporidia ellipsoidea, rarius globosa, continua, hyalina. — Genus ab auctoribus pluribus inter Lichenes enumeratum, a Karstenio inter Sticteas. *A. atro-virens* Fr. Syst. Myc. II, pag. 232 ex ipso auct. pertinet ad *Stictid. Pupulam*.

I. *Eu-Agyrium*. Asci 8-spori.

1. **Agyrium cæsius** Fr. Syst. Myc. II, p. 232, Corda Ic. II, pag. 37, ²⁶¹⁴ f. 127. — Gregarium, subliberum, convexum, albido-cæsius; ascis cylindraceo-clavatis, octosporis; sporidiis ovato-oblongis, hyalinis.

Hab. ad ligna vetusta decorticata pinea, Juniperi etc. in Suecia, Bohemia et Germania. — Macula nulla; punctiforme, sed 0,5 mm. latum, humidum molle, pellucidum, siccum valde induratum, interdum parum difforme et margine repandum, intus album.

2. **Agyrium rufum** (Pers.) Fr. Syst. Myc. II, p. 232, Elench. II, p. 37, ²⁶¹⁵ Grev. Scot. t. 232, Corda Icon. II, f. 128, *Stictis rufa* Pers. Obs. 2, p. 74, t. 6, f. 6, *Tr. Stictis* Pers. Syn. p. 628, *Lichen hyloicus* Ach. Prodr. p. 16. — Gregarium, sphæricum, compactum, humidum incarnatum, siccum rufo-fuscum, hypothecio hyalino; ascis clavato-ovoideis, 8-sporis; sporidiis ovatis, 1-nucleatis, hyalinis 11-14 = 7-8, distichis; paraphysibus sursum fuscidulis conglutinatis.

Hab. ad ligna vetusta, aeri exposita, præcipue *Pinum* in Suecia, Germania, Britannia, Gallia, Italia, Fennia, Amer. bor. — Punctiforme, leve, basi applanatum innatum, 0,5 mm. diam., macula albicante plerumque cinctum. — β . **pallens** Fr. loc. cit.: convexum, humidum pallens, siccum luteolum. Ad ligna decorticata *Populi tremulæ* in Suecia. Pulchra varietas, etiam maculæ albicanti insidens.

3. **Agyrium densum** Fuck. Symb. App. I, p. 329. — Ascomatibus ²⁶¹⁶ plerumque in fungi conidiophori consortio, in greges lineares dispositis, minutis, punctiformibus, hemisphæricis, atris, siccis planis, plicatis; ascis elongato-subclavatis, sessilibus, octosporis, 54 = 8; sporidiis distichis, fusiforme-clavatis, 3-guttulatis, continuis, hyalinis, 8-10 = 4; paraphysibus copiosis, filiformibus copiosis, filiformibus, ramosis, apice glomerulatis, olivaceis.

Hab. in ligno indurato *Carpini Betuli* pr. *Æstrich* Rheno-

govia. — Socius adest st. conid. *Thyrsidium densum*. Sec. Rehm idem est ac *Coryne prasinula*.

4. **Agyrium Tuckermanii** B. et Br. North Am. Fungi n. 773. — Pun- 2617
ctiforme, convexum, rufum; ascis brevibus clavatis; sporidiis breviter subfusiformibus, 7-8 μ . long.

Hab. in ligno dealbato, White Mount., New Hampshire Amer. bor. (TUCKERMAN).

5. **Agyrium brunneolum** B. et C. North Am. Fung. n. 774. — Con- 2618
vexum, brunneolum; ascis oblongis; sporidiis minoribus breviter fusiformibus.

Hab. in radicibus Pini, Alabama Amer. bor. (BEAUMONT). — Matrix non dealbatur. Ab *Ag. Tuckermani* differt ascomate multo majore, ascis angustioribus, sporidiis minoribus.

6. **Agyrium Pteridis** Karst. Rev. Mon. p. 168. — Innato-erumpens, 2619
planum vel convexum, interdum concaviusculum, rotundatum vel oblongatum, rugulosum, læte rufum, 0,1 mm. lat.; ascis clavatis, 50-70 = 10-13, 8-sporis; sporidiis distichis, ovoideis v. ovoideo-oblongis, continuis, 10-11 = 3-4, 2-guttulatis, hyalinis; paraphysibus nullis.

Hab. in latere int. corticis stipitis *Pteridis aquilinæ* pr. Aboa Fennia.

7. **Agyrium herbarum** Fr. Syst. Myc. II, pag. 233, *Tremella Stictis* 2620
A. S. Lus. p. 304 (ut videtur). — Gregarium, planiusculum, leve, rufo-fuscum, siccum nigrum.

Hab. ad caules plantarum majorum, rarius, in Germania, Hungaria, Suecia; in caule *Pteridis aquilinæ* in Amer. bor. — Sec. Hazsl. Einig. Disc. pag. 11, species præbet sporidia ovoidea, continua, brunneola. Valde *Ag. rufo* affine, sed minus, irregulare, obscure coloratum, intus vero album; etiam loco et fugacitate differt.

8. **Agyrium flavum** Fr. Syst. Myc. II, p. 233. — Globulare, demum 2621
liberum, pallide flavum.

Hab. in ligno denudato Mali in Suecia. — Macula nulla; substantia mollis, superficie levissima. Cum *A. rufi* varietate non commutandum. — **A. gilvum** Fr. Summa pag. 360: aggregatum, punctiforme, gilvo-ferrugineum. In Suecia.

9. **Agyrium guttatum** Wallr. Crypt. n. 2678 (sub *Myxomphalo*). — 2622
Ascomatibus sparsis punctiformibus, e basi depressa subrotundo-effusa convexiusculis, umbonatis, mammillaribus, livido-nigris, guttulam coactam veluti mentientibus.

Hab. ad ligna quercina decorticata v. c. in Hercynia inferiore passim.

10. **Agyrium Solidaginis** (Ces.) De Not. Comm. Critt. I. pag. 365, 2623
Cryptodiscus Ces. Erb. cr. it. n. 872.... — Sporidiis ellipsoideis, hyalinis, continuis, 10 μ . long.

Hab. in caulibus siccis *Solidaginis Virgaureæ*, Biella Ital. bor.

II. *Agyrina* Sacc. Gen. Disc. p. 10. Asci 16-spori.

11. **Agyrium sexdecimsporum** Fuck. Symb. p. 283, t. IV, f. 34. — 2624
 Cupulis punctiformibus, sparsis, hemisphæricis, fuscis, subtilissime punctulatis, siccis atris, etiam hemisphæricis; ascis sessilibus, fasciculatis, oblongis, antice obtusis, 16-sporis, commixtis ascis numerosis sterilibus, asci forma magnitudineque, fuscis (præcipue in apice), 60 \approx 12; paraphysibus filiformibus; sporidiis perfecte globosis, subdistichis, hyalinis, 6 μ . diam.

Hab. in ligno putri *Salicis triandræ* pr. Æstrich Rhénogoviæ et in ligno putri *Nyssæ* in Amer. bor.

Sect. 2. **Phæosporæ** Sacc.

BULGARIA Fr. Syst. Myc. II, p. 166 ex p. (1822) [Etym. *bulga* sacculum]. — Ascomata primum clausa, obconica vel subglobosa, extus rugosa, intus glutinoso-pulposa veluti elastica, mox vertice rupto in discum planum reclusa. Asci cylindraceo-clavati, paraphysati, 4-8-spori. Sporidia ellipsoideo-oblonga, fusca.

1. **Bulgaria inquinans** (Pers.) Fr. Syst. Myc. II, p. 167, *Peziza in-* 2625
quinans Pers. Syn. Fung. p. 631, *Pez. nigra* Bull. Champ. p. 238, t. 460, f. 1, *Bulgaria inquinans* Berk. Outl. p. 375, t. 22, f. 7, Tul. in Ann. Sc. nat. ser. III, pag. 160-164, t. 15, f. 1-7 et Sel. Fung. Carp. III, t. 17, f. 9-10, *Pez. polymorpha* Witth. Sow. t. 428, Fl. Dan. t. 464, *P. brunnea* Batsch El. f. 50. — Cæspitosa, substipitata, primitus obovoidea et clausa, dein aperta dilatato-turbinata orbicularis fereque immarginata, rugulosa, furfuracea, umbrina vel fusca, disco planiusculo, nigro nitido, 1,5-2,5 cm. lat.; ascis anguste clavatis, longe pedicellatis, tetrasporis vel octosporis 40-46 \approx 9-10 (p. sporif.) vel cum stipite 90-130 μ . long., obturaculo jodo cœrulescente; sporidiis monostichis, ellipsoideis vel suboblongatis, inæquilateralibus, fuscis, 10-14 \approx 5-6; paraphysibus filiformibus, 1 μ . cr. sursum brunneolis, curvulis.

Hab. ad truncos *Quercus* et *Fagi* emortuos in Suecia, Fennia, Gallia, Belgio, Italia, Germania, Britannia, Amer. bor. — Substantia gelatinosa, sed firma, intus paullo dilutior venosoque marmorata. Hymenium fulvescens. Stat. conidicus, sec. Fuck., est *Tremella foliacea* Pers.

2. **Bulgaria pura** (Pers.) Fr. Syst. Myc. II, p. 168, *Peziza pura* Pers. 2626
Obs. I, p. 40. — Turbinata, mollissima, levis, carneo-pallida.

Hab. ad truncos abiegnos in Hercynia, ad fagineos in Suecia. — Sec. ipsum Fries in Elencho forma *B. inquinantis*. Junior obconica, disco concaviusculo levi, omnino pezizoidea, dein vero magis expansa, tenuior, repando-irregularis, margine revoluto. In hoc statu ascis destituta. Pro *Tremella* facile sumitur. Utrunque leviuscula, subtus admodum pallida, nulla membranula tecta.

3. **Bulgaria pellucens** (Schum.) Fr. Syst. Myc. II, p. 168, *Pez. pel- lucens* Schum. Saell. II, p. 413. — Turbinata, substipitata, mollis, 2627
extus scabra, nigro-fuliginea, disco planiusculo nigricante.

Hab. ad truncos vetustos *Betulæ* in Saellandia. — Gregaria, vix 2-3 cm. alta et lata, *B. inquinanti* mollior, non tamen subfluxilis ut præcedens, stipite 2-4 mm. longo, adscendente. Margo elevatus tumidus. Substantia aquosa gelatinosa, dilute fuliginea. *Octospora tremelloides* Hedw. fil. Obs. pag. 12, t. 8, fig. 71, ad hanc, nisi *B. inquinantis* varietas, proxime accedit.

4. **Bulgaria fusco-badia** (Rab.) Fr. Syst. Myc. II, p. 169, *Peziza fu- sco-badia* Rebent. Neom. p. 383. — Ascomatibus carnosio-tremel- 2628
losis fusco-badiis cæspitosis, disco varie impresso.

Hab. ad ramos fagineos putres Neomarchiæ (REBENTISCH), et in Juncis Finistère Galliæ. — Sec. Crouan ascis cylindræci 8-spori; sporidia ovoideo 2-guttulata, colorata; paraphyses simplices clavulatæ; excipulum celluloso-filamentosum. Verisimiliter species gallica diversa.

5. **Bulgaria globosa** (Schmied.) Fr. Syst. Myc. II, p. 168, *Lycoper- don truncatum* Linn. Syst. Veg. pag. 824, *Burcardia globosa* 2629
Schmied. p. 261, t. 69, *Pez. Burcardia* Pers. Myc. Eur. I, p. 632. — Globosa, ventricosa, umbrina, subtus rugosa, disco plano.

Hab. in pinetis humidis locis argillaceis in Suecia media et pr. Erlangam. — Fungus varietatis magnitudinis, a Pruni ad pugni, globosus, subinde ovatus, arrhizus, sed fibrillis raris hinc inde affixus, extus longitudinaliter plicatus, transverse rugosus, sericeo-mollis, oculo armato granulosis vel minutissime papulosus, superficie villo implicato quasi contexta, intus humore limpido gelatinoso dis-

tentus et subcellulosus. Discus primo connivens, concavus, dein magis explanatus planiusculus.

6. **Bulgaria rufa** Schwein. Syn. Am. bor. n. 964. — Subturbinata, 2630
clausa, mox dilatata, cupulata, gelatinoso-lenta sicca subcornea, 5-6 cm. diam., margine undulato repando, disco eleganter rufo, extus umbrino-fusca venoso-rugulosa, strigoso-pilosa, pilis brevibus; ascis cylindricis; sporidiis ellipsoideis, monostichis.

Hab. in ramis dejectis inter folia in Pennsylvania, New England Amer. bor.

7. **Bulgaria arenaria** (Pers.) Lév. Champ. Mus. n. 280, *Lycoperdon* 2631
arenarium Pers. in Freyc. t. V, f. 1. (Non vidi). — Ascomate tremelloideo-coriaceo, elastico, lycoperdoideo; ascis minutis; sporidiis simplicibus.

Hab. (locus mihi ignotus).

BULGARIELLA Karst. Rev. monogr. p. 139 (1885) [Etym. demin. a *Bulgaria*]. — Ascomata subgelatinosa, sessilia, disciformia, primitus aperta, disco demum convexo, atra, glabra. Asci cylindranei, octospori, paraphysati. Sporidia ellipsoidea, fusca.

1. **Bulgariella pulla** (Fr.) Karst. Rev. p. 142, *Bulgaria* Fr. Summa 2632
p. 358, *Patellaria* Fr. Syst. Myc. II, p. 160. — Subgelatinosa, sessilis, glabra, junior plana integerrima olivaceo-atra, dein convexa aterrima, disco pruinoso-pulverulento; ascis cylindraneis vel anguste clavatis, 115-150 \approx 9-10, p. sp. 90 μ . long., 8-sporis; sporidiis monostichis ellipsoideis, fuscis, 10-16 \approx 7,5-8-5; paraphysibus filiformibus, apice clavatis, cohærentibus, brunneolis.

Hab. ad lignum dejectum fabrefactum mucidum Pini silvestris in Suecia, Fennia, Britannia. — Gregaria, carnosogelatinosa, sublenta, crassiuscula, etiam intus atra. Junior 1-2 mm. lata, marginata, dein 6-8 mm. usque et sæpe in series biunciales confluit, e mutua pressione irregularis et undulata. — β . **B. nigro-olivacea** Fr. loc. cit.: sessilis, cupula planissima, margine subcrenulato, subiculo e filis radiatis nigris insidens. Itidem.

2. **Bulgariella nigrita** Fr. Elench. II, pag. 16. — Sessilis, scutellato- 2633
explanata, subgelatinosa, atra, subtus umbrino-puberula.

Hab. ad truncos abiegnos in Rutheniæ silvis (WEINMANN). — Recens carnosogelatinosa, orbicularis, tota nigra, intus nitida, sicca inflexo-repanda, intus opaca, atra, extus puberula umbrina, circa marginem striatula. A *Bulgaria* eximie differt cupula ses-

sili, late expansa, tenuiori; nec facile cum ulla *Peziza* comparanda. Hymenium *B. inquinantis*, teste Fries.

Sect. 3. **Didymosporæ** Sacc.

CALLORIA Fr. Summa Veg. p. 359 (1849), Karst. M. F. I, p. 10 (Etym. *callos* pulchritudo). — Ascomata subgelatinosa, sicca subcornea et fere pellucida, subglobulosa mox planiuscula, sessilia, superficialia v. erumpenti-superficialia, læte colorata. Asci elongati, paraphysati, octospori. Sporidia oblongo-fusoidea, typice 1-septata, hyalina.

1. **Calloria fusarioides** (Berk.) Fr. Summa Veg. p. 359, *Peziza* Berk. 2634
Mag. Zool. et Bot. n. 12, t. II, f. 4, *Pez. neglecta* Lib. Exs. n. 29.
— Sparsa v. gregaria, globulosa mox expansa concaviuscula, erumpens, crassiuscula, tremelloidea, margine subflexuosa, orbicularis v. oblonga, sæpe confluens, læte aurantiaca; ascis teretiusculis, breve-stipitatis, 70-75 \approx 8-9, filiformi-paraphysatis, octosporis; sporidiis distichis cylindraceis utrinque rotundatis, curvulis, 12-16 \approx 3,5-4, demum 1-septatis spurieque 3-septatis, hyalinis.

Hab. in caulibus emortuis *Urticæ* dioicæ in Britannia, Fennia, Gallia, Helvetia, Italia, Hungaria, Belgio. — Status conidicus est *Cylindrocolla Urticæ*.

2. **Calloria vinosula** Rehm F. Lojk. n. 50. — Vix conspicua, minutissima, gregaria, sessilis, humida subconvexa, sicca concavula, flavidula, parenchymatice contexta; ascis ovato-ellipticis, apice incrassatis, 8-sporis, 30 \approx 6-8; sporidiis distichis, ellipticis, obtusis, 1-cellularibus cum nucleis 2-4, dein 1-septatis, hyalinis, 6-8 \approx 2; paraphysibus superne trifidis, articulatis, in clavam ellipticam, hyalinam, 3 μ . cr., apice ampliatis ascosque superantibus.

Hab. ad ramum decorticatam *Sambuci* *Ebuli* et caulem siccum *Daturæ Stramonii*, Kaposvar Hungariæ (LOJKA).

3. **Calloria oleosa** (Ell.) Sacc. *Peziza oleosa* Ell. Bull. Torr. 1883, 2636
p. 52. — Sparsa v. gregaria, minuta, initio subglobosa, dein orbicularis, concava, margine crassiusculo, obtuso, oleoso-gelatinosa, læte aurantio-rubra; ascis sessilibus, subfusoideis, 75-90 \approx 10-12; sporidiis distichis fusoideo-navicularibus, 1-septatis, 18-22 \approx 3-3,5; paraphysibus nullis visis.

Hab. in caulibus herbaceis, Utah Amer. bor. (HARKNESS).

4. **Calloria conicola** Cook. et Phill. Disc. p. 333. — Gregaria v. 2637
congesta, hemisphærica dein expansa, concava, carnea, margine

involuta; disco lætius rubro; ascis clavatis, 8-sporis; sporidiis anguste fusoides, demum 1-septatis, $13 \approx 2$; paraphysibus filiformibus.

Hab. in caulibus emortuis *Conii maculati*, King's Cliffe Britanniae (BERKELEY). — Ascoma 0,3-0,5 mm. lat.

5. **Calloria Galii** Fuck. Symb. p. 283, t. IV, f. 33. — Cupulis punctiformibus, superficialibus, sparsis, carnosis, diaphanis, substipitatis, miniatis, disco convexo, emarginato, siccis irregulariter globosis, granuliformibus; ascis oblongo-ovatis, mox evanidis; sporidiis oblongo-ovatis, didymis, medio vix constrictis, pallide fuscis, $14 \approx 7$. 2638

Hab. in caulibus siccis *Galii Aparines* pr. Hattenheim Rhénogoviæ.

6. **Calloria cornea** (B. et Br.) Phill. Disc. p. 332, *Peziza* B. et Br. Ann. N. H. n. 578. — Minuta, gregaria, sessilis, initio globosa, e flavo cornicolor, dein breviter obconica v. turbinata, aurantio-brunnea; ascis clavatis, apice acutatis, 8-sporis; sporidiis fusoides, leniter curvulis 2-guttatis, dein (spurie?) 1-septatis $15 \approx 2$; paraphysibus filiformibus. 2639

Hab. in calamis emortuis *Caricis paniculatæ*, Batheaston Britanniae (BROOME). — Ascoma 0,3-0,5 mm. lat. subinde concavusculum, sæpius vero planum, margine undulato.

7. **Calloria straminea** QuéL. II Suppl. p. 22, tab. XII, fig. 14. — Lenticularis, 4-5 mm. diam., dein marginata, spissa, gelatinosa, translucida, glabra, pallide lutescente; hymenio convexo dein plano, concolore; sporidiis ellipsoideo-oblongis, 22μ . longis, (spurie?) septatis, dein binucleatis, albo-citrinis. 2640

Hab. gregaria in cortice sicco *Abietis* in silvis montuosis Juræ. — Verisimiliter ut var. *Peziculæ saccharinæ* habenda, hinc vix præsentis generis.

8. **Calloria aurea** (Ellis) Sacc. *Ombrophila aurea* Ellis Bull. Torr. Cl. 1881, pag. 74. — Obconica, supra concava, denique plano-convexula, margine subundulato, 1-3 mm. lat., aureo-flava, mollis; ascis teretibus, basi tenuatis, $100 \approx 10$; sporidiis monostichis, acute ellipsoideis 2-nucleatis, denique 1-septatis, $12-14 \approx 4$; paraphysibus linearibus, flavidis. 2641

Hab. in fragmentis ligneis *Cupressi* partim aqua immersis inque foliis et tela putridis, New Jersey Amer. bor.

9. **Calloria sibirica** (Thüm.) Sacc. *Ombrophila sibirica* Thüm. Pilzfl. Sibir. V, p. 17. — Dense gregaria, sæpe influens, sessilis e lenticulari hemisphærica, sicca concava marginata, flammaea, glabra; ascis tereti-clavatis $50-54 \approx 6$, subsessilibus, 8-sporis; sporidiis 2642

monostichis ellipsoideis, didymis, 2-nucleatis, hyalinis, 10 \approx 5; paraphysibus filiformibus.

Hab. in disco truncorum putridorum Populi laurifoliæ in insulis fluvii Jenissei Sibirie.

10. **Calloria extumescens** Karst. M. F. I, p. 97, *Ombrophila* Karst. 2643

Rev. p. 141. — Gregaria, passim confluens, concaviuscula, e lutescente aureo-pallida, sicca concava, aureo-rubens, 0,3-0,5 mm. lat.; ascis anguste clavatis, 50-60 \approx 6-8, apicæ vix vel obsolete cœrulescentibus, 8-sporis; sporidiis distichis, oblongatis vel elongatis, interdum fusoides-elongatis, plerumque guttulis 2 præditis, rectis, raro curvulis, 8-12 \approx 2,5-3, demum 1-septatis.

Hab. supra lignum vetustum prope Mustiala Fennie.

11. **Calloria Winteri** J. Kunz. Exsicc. n. 283 (absque diagnosi). 2644

Hab. in foliis putridis Betulæ albæ prope Eisleben Borussiae.

Sect. 4. **Phragmosporæ** Sacc.

CORYNE Tul. Carp. III, p. 190 (1865), em. Sacc. Consp. Gen. Disc. pag. 10 (Etym. *coryne* clava). — Ascomata gelatinosa, sessilia vel breviter stipitata, globoso-turbinata, disco plerumque plano v. convexo. Asci clavati, paraphysati, octospori. Sporidia elongata, hyalina, tandem 2-pluri-septata, saltem pseudo-septata. Status secundarii in variis notis. (Sectio II *Chlorospleniella* comparanda est cum *Chlorosplenio* et *Velutaria*, supra pag. 315 et 488).

1. *Eu-Coryne*. Ascomata vere gelatinosa, glabra.

a) *Genuine*, sporidiis cognitis.

1. **Coryne atro-virens** (Pers.) Sacc. *Peziza atro-virens* Pers. syn. 2645

p. 635, Fr. Syst. Myc. II, p. 141, *Calloria* Fr. Summa pag. 359, *Chlorosplenium* De Not. Disc. p. 23, *Coryne virescens* Tul. Carp. III, p. 193, t. XVIII, f. 12-15. — Sessilis, subtremellosa, junior globosa, viridis, adulta hemisphærica, disco plano, subcarneo; ascis tereti-clavatis, obtusis, 110-130 \approx 11, 8-sporis; sporidiis distichis vel oblique monostichis, elongatis utrinque obtusis, curvulis, spurie 3-7-septatis, 16-23 \approx 3-5; paraphysibus filiformibus.

Hab. in lignis pluribus siccisve carie exesis in Suecia, Germania, Gallia, Belgio, Britannia, Amer. bor. — Sicca apparet atra, humectata intumescit pellucensque virorem suum ostendit. Mox unicolor, mox disco pallente subcarneo instructa. Forma et magnitudo scutelli *Collematis*. Status conid. *Dacryomyces virescens* Fr. dicitur. Subinde, teste Fuck., asci corpusculis innumeris cylin-

draceis repleti. — β . **C. seriata** Pers. Myc. Eur. p. 305 (*Pez.*): cupulis subseriatis subconcavis, recentibus dilute viridibus, exsiccatis nigris, disco fusco. In ramis quercinis, cortice denudatis. — β . **viridis** (Chaill.) Pat. Tab. anal. f. 174: griseo-virens, 1-2 mm. lat.; ascis clavatis; sporidiis ovoideis 4-6-guttatis. In ligno quercino, Jura Galliæ.

2. **Coryne prasinula** Karst. Rev. pag. 140, *Ombrophila prasinula* 2646
Karst. M. F. I, p. 93. — Cupulis lucidis vel lucido-viridibus, demum vel siccitate olivaceis vel atro-viribus, 0,3-0,8 mm. lat.; ascis tereti-clavatis, 75-100 \approx 8-10; sporidiis ut plurimum distichis, oblongatis, rectis vel leniter curvulis, 4-guttulatis, demum 3-septatis, 8-14 \approx 3-4; paraphysibus filiformibus, ramosis.

Hab. in ligno putri betulino in Fennia et Germania. — Sec. Rehm Asc. n. 620; asci 90 \approx 7; sporidia 9-10 \approx 2,5.

3. **Coryne sarcoides** (Jacq.) Tul. Carp. III, p. 190, t. XVII, f. 1-10, 2647
Peziza gelatinosa, coccinea etc. Hall. helv. n. 2221, *Elv. purpurea* Schaeff. fung. t. 323, 324, *Octospor. carnea* Hedw. Musc. fr. 2, p. 26, t. 7, f. B, *Pez. porphyria* Batsch El. f. 53, *Lich. sarcoides* Jacq. Misc. 2, t. 20, *P. tremelloidea* Bull. Ch. p. 240, t. 410, f. 1, *Helv. sarcoides* Bolt. fung. t. 101, f. 2, *P. sarcoides* Pers. syn. p. 633. — Cæspitosa, polymorpha, firmula incarnato-rubra, extus subvenosa, disco excavato; ascis cylindræis apice plus minusve rotundatis vel acutatis, deorsum longiuscule attenuato-pedicellatis, 100-135 \approx 7-8, octosporis; iodi ope tunica non vel dilute, obturaculo intensius cœrulescentibus; sporidiis ellipticis vel elliptico-elongatis, utrinque plus minusve attenuato-rotundatis, 10-18 \approx 4-6, primo continuis, 2-4 guttulatis, dein 2-4-pseudoseptatis, hyalinis; paraphysibus filiformibus copiosis, simplicibus.

Hab. ad truncos dejectos vetustos *Quercus*, *Fagi*, *Betulae*, *Pruni*, *Alni* in Suecia, Germania, Gallia, Italia, Belgio, Fennia, Britannia, Australia, Tasmania, Fuegia, Amer bor. — Status conid. est *Tremella sarcoides* Fr. Forma et magnitudine maxime variat, sed colore plus minus rubro et substantia dignoscitur. Specimina maxima 2-10 mm. plus minus repanda et difformia, extus submentosa, demum et intus rugosa, minora turbinata, substipitata, 4-6 mm. lata, leviuscula, margine nunc integro, nunc denticulato. — Variat: **C. carnosa** Fl. Dan. t. 1017, f. 1. (*Pez.*) — **C. turbinata** Fl. Dan. t. 1017, f. 2 (*Pez.*), Pers. syn. p. 634. — **C. cellaris** Pers. loc. cit. (*Pez.*): parva, obconica, substipitata.

4. **Coryne urnalis** (Nyl.) Sacc. Fung. Ven. Ser. IV, n. 69, *Ombro-* 2548

phila urnalis Nyl. Karst. M. F. p. I, 87, *Bulgaria* Nyl. Obs. p. 73, *Coryne purpurea* Fuck. Symb. p. 284. — Ascomatibus *C. sarcoidi* similibus sed majusculis 5-25 mm. diam., primo margine involuto, dein applanato; ascis cylindraceo-clavatis, sursum truncato-rotundatis, deorsum longe attenuato-pedicellatis, 160-190 \approx 10-15, octosporis; paraphysibus filiformibus apice vix incrassato-clavulatis obvallatis; sporidiis distichis elongato-fusoideis, 24-30 \approx 6-7, utrinque acutiuscule attenuato-rotundatis, dense granuloso-farctis vel spurie tenuiter 1-9-septatis hyalinis; obturaculo tantum ascorum jodi ope cœrulescente.

Hab. in trunco putri carioso Erythrinæ, Populi, Betulæ, Salicis, Fagi in Germania, Britannia, Fennia, Italia, America bor. et merid., Sibiria.

5. **Coryne Cylichnium** (Tul.) Sacc. *Peziza Cylichnium* Tul. in Ann. Scienc. Nat. 1853, pag. 174. — Tota glabra, extus nempe oculo etiam armato vix furfuracea, lucida et violacea, disco saturatiore, quasi cereo, fragilis nec elastica licet crassa et carnosula, primitus turbinata seu obconica, postea cyathoidea demumque late expansa, subplana et quidem repens v. corrugata, basi semper centrica breviter attenuata angustaque aut in stipitis sortem sulcato-rugati crassique elongata, suffulcro hærens, quandoque etiam subsessilis, gregaria, cæspitosa aut solitaria, senescendo furcata; ascis linearibus 150 \approx 10, octosporis; paraphysibus perquam exilibus, apice extremo incrassatis obtusissimisque, simplicibus aut rarius bifurcis; sporidiis oblongis, hyalinis, utrinque obtusis, curvulis, 22-26 \approx 5-6, levibus, primo continuis, demum 3-5-septulatis.

Hab. in trunco carpineo prope Paris Galliæ. — Colore, forma et amplitudine (cupula centimetrum et quod excedit lata) *Corynem sarcoidem* quodammodo æmulatur sed crassior et propter sporidia certe diversa.

6. **Coryne striata** (E. et E.) Sacc. *Bulgaria striata* E. et E. Journ. Mycol. 1885, pag. 90. — Subobconica, 1 mm. alt., 2-3 mm. lat., purpureo-hepatica vel subcarnea, coriaceo-gelatinosa, margine obtusa, sicca subincurva et striata; ascis cylindraceis, 150 \approx 7, basi longe tenuatis; sporidiis distichis in parte sup. asci, fusoideo-oblongis, curvulis, 12-14 \approx 3-3,5, plasmate bipartito ac tandem 1-septatis.

Hab. in ligno putri in Amer. bor. — A *Cor. sarcoide* differt margine striato et forma magis regulari.

7. **Coryne Hirneolus** (Fr.) Sacc. *Peziza Hirneolus* Fr. in Weinm. Hym. 2651

Gast. p. 423, Borsz. F. Ingr. p. 60, t. III, f. 2. — Conferta, violaceo-rufescens, carnosus, cyathiformi-campanulata expansa, margine integerrimo, extus furfuraceo-granulata; stipite brevissimo, basi attenuato; ascis cylindricis, filiformi-paraphysatis; sporidiis subfusoides, 15-16 \approx 5-6, levibus, hyalinis, nubilosus, demum (spurie?) 3-septatis.

Hab. ad ligna pinea carie consumpta perrara in Rossia. — Ascoma 2-4 mm. latum et altum, extus dilute violaceo-rufescens, intus obscurius, margine intumescente. Stipes fere obconicus. An genuina *Coryne*?

8. **Coryne corticalis** Fuck. Symb. App. I, pag. 333. — Fungillus 2652
conid. (*Calocera corticalis* Fr.) e basi carbonacea nigra lacerato-erumpens, in ramos plerumque simplices, teretes divisus, 2-4 mm. altus, carnosus, basi fuscus, albus seu carneus; conidiis e ramorum tota superficie ortis, oblongis subcylindraceutis, basi minutissime apiculatis, continuis, hyalinis, 8-10 \approx 4; discis ascigeris aut in fugilli conid. ramorum latere aut in stipite proprio, 4-6 mm. alt., plerumque ramoso ortis, 1-2 mm. latis, fuscis, marginatis, carnosus, planis vel convexulis; ascis oblongis, substipitatis, 8-sporis, 42 \approx 6; sporidiis distichis, lanceolato-oblongis, rectis, obscure triseptatis, hyalinis, 8-10 \approx 3; paraphysibus copiosis, filiformibus, abrupte capitatis, capitulis ovatis, 8 \approx 6.

Hab. in ramulis putridis arborum frondosarum sub foliis in silvaticis prope Reichartshausen et Æstrich Rhenogoviæ.

b) *Dubiæ*, ignota fructificatione.

9. **Coryne vinosa** B. et C. Cub. Fung. n. 488. — Vinosa, fusiformis, 2653
compressa, rugosa, capitulo parvo concolori.

Hab. in lignis putridis in silvis Cubæ. — Ascomata 4 mm. alta, singula vel fasciculata. Conidia minuta copiosiora.

10. **Coryne gyrocephala** B. et C. North Am. Fungi n. 319. — Sti- 2654
pite cylindrico rufo demum sulcato, capite fusco gyroso.

Hab. in lignis putridis in paludibus in Carolina infer. Amer. bor. — Ascoma 6 mm. alt., helvelloideum.

11. **Coryne Ellisii** B. North Am. Fung. n. 320. — Fusca, stipite cy- 2655
lindrico sulcato, capitulo ovato.

Hab. in lignis putridis Potsdam New Jersey Amer. bor. — Ascoma 6 mm. alt. Affinis præcedenti.

II. *Chlorosplenella* Karst. Rev. p. 141. Ascomata subceracea, extus furfurilla, virentia v. sulphurea.

12. **Coryne fennica** Karst. M. F. I, pag. 94, *Peziza fennica* Karst. 2656
Monogr. Pez. p. 154. — Gregaria vel sparsa, sessilis, plano-convexa, flavo-virescens, basin versus fuscescens, circiter 1 mm. lat.; ascis cylindræo-clavatis, 50-80 \approx 4,5, 8-sporis; sporidiis distichis vel oblique monostichis, simplicibus, fusoidæo-filiformibus vel cylindræis, hyalino-chlorinis, rectis vel subrectis, 7-12 \approx 1-2; paraphysibus filiformibus, gracilibus, conglutinatis.

Hab. supra acus Pini silvestris putrescentes in sacellania Merimasku prope oppid. Nädendal Fenniae.

13. **Coryne Starbäckii** Karst. Rev. Myc. 1887, p. 159 et Symb. XXX, 2657
p. 4. — Cupulis subgregariis, sessilibus, glabris, nudis convexis v. planis, immarginatis, repandis, lividis subinde in sulphureum levissime vergentibus, vetustioris siccitate nigrescentibus, 0,1-0,2 mm. latis; ascis clavatis, sessilibus, curvatis, 48-60 \approx 9-11; sporidiis distichis, oblongatis, curvulis, utrinque obtusis, 2-guttatis, rarius 1-4-guttatis, hyalinis; paraphysibus obsoletis.

Hab. in cortice vetusto Betulae prope Mustiala Fenniae (K. STARBAECK). — *O. fennicae* affinis.

14. **Coryne virella** Karst. M. F. I, pag. 94, *Peziza virella* Karst. 2658
Monogr. Pez. p. 188. — Gregaria, sessilis, concaviuscula, margine conunivente, sicca subsphaeroideo-contracta, furfurello-puberula, deinde glabrescens, virescens, disco subolivaceo-pallido, circiter 0,5 mm. lat.; ascis subfusoidæo-clavatis, sessilibus, numerosis, 60-75 \approx 8-11, apice jodo non tinctis; sporidiis vulgo distichis, rarius mono- vel subtristichis, fusoidæo-elongatis, rectis vel curvulis, chlorino-hyalinis, guttulis 2-4 majusculis praeditis vel spurie uni-triseptatis, 13-19 \approx 4-5; paraphysibus mollibus, filiformibus, subflexuosis, gracillimis, vix 1 μ . cr.

Hab. ad lignum mucidum alneum locis humidis prope Mustiala et Myllypaeka in par. Tammela Fenniae.

15. **Coryne stemmata** Karst. M. F. I, p. 94, *Peziza stemmata* Karst. 2659
Monogr. Pez. p. 154. — Subsparsa, sessilis, e sphaeroideo hemisphaerica, mox plano-convexa, sicca concaviuscula saepeque flexuosa, lurida, flavo-virescenti- vel subsulphureo-farinosa, disco olivascente, 0,3-0,4 mm. lat., glabra; ascis cylindræo-clavatis, 50 \approx 5, apice jodo non tinctis; sporidiis oblongatis, guttulatis vel spurie

tenuiter 1-3-septatis, vulgo rectis, 4-8 \approx 1,5-2,5; paraphysibus filiformibus, gracilibus.

Hab. ad lignum betulinum ad prædium Lill-Heikkilä, haud procul ab oppido Abo Fennicæ.

Sect. 5. Scolecosporæ Sacc.

HOLWAYA Sacc. (Etym. a cl. mycol. E. W. HOLWAY americano). — Ascomata obconico-infundibuliformia, intus gelatinosa, nigricantia, obtuse marginata. Asci cylindranei, octospori, paraphysati. Sporidia tereti-vermicularia, multi-nucleata, hyalina. — Habitus *Bulgariæ* sed fructificatio omnino diversa. Ascoma constat e tribus stratis, quorum medium gelatinosum.

1. **Holwaya Ophiobolus** (Ellis) Sacc. *Bulgaria* Ellis Amer. Nat. 1883 2650
p. 193. — Cæspitosa, obconica, subinfundibuliformis, 0,5-0,7 cm. lat. et alt., extus pruinosa, atro-olivacea intus gelatinosa, disco nigricante, margine integro, obtuso; ascis cylindraneis 150 \approx 10-12; sporidiis tereti-vermicularibus, multinucleatis, curvis, uno apice acutioribus, 40-75 \approx 3-4; paraphysibus filiformibus.

Hab. in lignis putridis, Jowa Amer. bor. (HOLWAY). — Habitus omnino *Bulg. inquinantis*.

Sect. 6. Dictyosporæ Sacc.

HÆMATOMYXA Sacc. Consp. gen. Disc. p. 11 (1884) [Etym. *hæma* cruor et *myxa* mucus), *Hæmatomyces* spec. Cooke Grev. IV, p. 179. — Ascomata sinuato-gyrosa, cerebrina, immarginata, uda subtremelloidea. Asci late clavati. Sporidia oblonga, septato-muriformia, fusca. — Habitus *Hæmatomyces* sed sporidia omnino diversa.

1. **Hæmatomyxa vinosa** (C. et E.) Sacc. Consp. gen. Disc. p. 11, *Hæ-* 2661
matomyces vinosus C. et E. in Grev. IV, p. 179, t. 68, f. 10. — Sparsa, subglobosa, demum depressa, sinuato-gyrosa, subcerebrina, immarginata, atro-vinosa; ascis late clavatis; sporidiis biseriatis, elongato-ellipticis, multiseptatis, muriformibus, fuscis, 45-50 \approx 18.

Hab. in ligno putrescente quercino, New Jersey Amer. bor. (ELLIS). — Ascoma vix 2 mm. lat. siccum *Patellariam rugosam* simulans.

Fam. 7. Stictææ Fr. Pl. hom. p. 86.

Ascomata minuta vel minutissima, ex urceolato expansa, matrice subimmutatâ immersa sed ab ea mox non vel vix tecta, ceracea, typice læticoloria (numquam vel rarissime atra). Asci 1-4-8-polyspori, sæpissime 8-spori, paraphysati. Sporidia varia. — Ascomate vel matrice non atratis et disco mox denudato a *Phacidieis* dignoscuntur.

Clavis analytica generum.

Sect. 1. Hyalosporæ Sacc. Sporidia ellipsoidea, oblonga, fusoidea, continua, hyalina.

Propolis. Ascomata ambitu subirregularia, plana, ceracea; asci octospori. p. 648

Propolina. Ascomata *Propoleos*; asci polyspori. .. 654

Ocellaria. Ascomata ambitu subrotunda ibique cum peridermio stellatim fissis connata, ceracea. .. 658

Nævia. Ascomata circulari-oblonga, plana, epidermide laciniata vel valvata cineta, tenuissima (herbicolæ). .. 663

Briardia. Ascomata elongata, hysteroideo-dehiscencia, disco tenui læticolori. .. 664

Xylographa. Ascomata elongata, late dehiscencia, disco crassiusculo fuscello. .. 666

Sect. 2. Didymosporæ Sacc. Sporidia ovata vel oblonga, 1-septata, hyalina v. rarius colorata.

Diplonævia. Ascomata circulari-oblonga, plana, epidermide laciniata vel valvata cineta, tenuissima (herbicolæ). .. 667

Propolidium. Ascomata circulari-inæqualia, plana, ceracea, crassiuscula. .. 674

Sect. 3. Phragmosporæ Sacc. Sporidia oblonga, 2-pluriseptata, hyalina, rarius fusella.

Cryptodiscus. Ascomata circulari-inæqualia, subplana, ceracea. .. 676

Phragmonævia. Ascomata circulari-oblonga, plana, epidermide laciniata vel valvata cineta, tenuissima (herbicolæ). .. 677

Eupropolis. Ascomata subcircularia, plana, ceracea, ambitu membranacea; sporidia fuscidula. .. 678

Phaneromyces. Ascomata circularia, innato-exerta, ceraceo-cornea, discolori-marginata. .. 679

Xylogramma. Ascomata elongata, latiuscule hysteroideo-dehiscencia; disco ceraceo. .. 681

Odontotrema. Ascomata subglobosa, ore minuto sæpe denticulato dehiscencia; disco ceraceo-firmo.

Sect. 4. Scolcosporæ Sacc. Sporidia bacillaria v. filiformia, continua v. septata, subinde in articulos dilabentia.

Stictis. Ascomata subcircularia, margine excedente, pallidiori, sæpe laciniato, glabro. .. 681

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" 696
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Lasiostictis. Ascomata *Sticteos*, margine excedente, pallidiori, non laciniato, sed distincte piloso.

Lichenopsis. Ascomata operculo deciduo tecta, disco demum circumscisso secedente.

Schizoxylon. Ascomata sphæroidea, vertice plano atro rotundo dehiscentia. Sporidia in articulos secedentia.

Nemacyclus. Ascomata planiuscula, aperta, immarginata, sæpe ovato-oblonga, ceracea, tenuia.

Karstenia. Ascomata ambitu subrotundo, cum peridermio stellatim fisso subconnata, ceracea, crassiuscula.

Sect. 5. Dictyosporæ Sacc. Sporidia oblonga, pluri-septato-muriformia, hyalina vel fuscilla.

Platysticta. Ascomata urceolata, orbicularia, marginata; disco dein subsecedente.

Pleiostictis. Ascomata subplana breve marginata, subhysterioideo-aperta; asci monospori.

Melittosporium. Ascomata subplana, breve marginata, oblonga, subhysterioidea; asci octospori.

Sect. 1. Hyalosporæ Sacc.

PROPOLIS Fr. Summa p. 372 (1849) [Etym. *propolis* cera]. — Ascomata immersa, supra mox libera, ambitu subdifformia, planiuscula, læticoloria, immarginata. Asci octospori, paraphysati, elongati. Sporidia elongata vel oblonga, continua hyalina. — Status secundarii in nonnullis noti.

1. **Propolis faginea** (Schrad.) Karst. M. F. I, p. 244, Sacc. Fung. it. 2662 f. 1406, *Hysterium fagineum* Schrad. Journ. Bot. II, p. 68 (1799) teste Fr. Pers. Syn. Fung. p. 28, *Tremella saligna* Alb. et Schw. Consp. Fung. n. p. 303, t. 9, f. 7, *Stictis saligna* Pers. Myc. eur. I, p. 337, *Stictis versicolor* Fr. Syst. Myc. II, p. 198 pr. p. Pat. Tab. p. 70, *Stictis farinosa* Fr. Syst. Myc. loc. cit. sec. Tul., *Xylogramma versicolor* Wallr. Flor. crypt. Germ. II, pag. 510, *Propolis versicolor* De Not. Disc. p. 9, *Stictis cinerescens* Pers. Myc. eur. I, p. 339, Tul. Sel. Fung. Carp. III, p. 125, t. 16, f. 4-8 (forte pr. p. tantum), *Stictis alba* Fr. El. II, pag. 27. — Gregaria aut subsparsa, immersa, primitus matrice tecta, deinde lignum vel corticem superpositum varie rumpens frustulisque ejus colore fuscescente vel nigrescente tinctis aut subimmutatis lateribus cincta, angulato-subrotundata vel sæpius suboblongata, planiuscula, disco albo v. flavido v. rubello vel cyaneo-albo, sicco lutescente, albo-farinaceo, tandem subnudato, circiter 3 mm. long.;

ascis elongato-clavatis, 100-115 \approx 13-16, jodo non cœrulescentibus, 8-sporis; sporidiis distichis, oblongatis, ut plurimum curvulis, 1-2-guttulatis vel spurie tenuiter uniseptatis, subchlorino-hyalinis vel luteolis, 19-28 \approx 6-8; paraphysibus numerosis, filiformibus, apice interdum furcellatis et conglutinatis, 1 μ . cr.

Hab. ad ligna sicca duriora *Quercus*, *Fagi*, *Corni*, *Betulæ*, *Salicis*, *Tiliæ*, *Piri*, *Liquidambaris*, *Populi*, *Eucalypti* etc. in tota Europa, Amer. bor. — Species maxime polymorpha. Teste Rehm 5 species seq. Fuckelianæ ab hac non differunt, licet auctor status secund. singulæ speciei peculiare tribuat. Ascomata excipulo indistincto instructa. Hymenium demum, putredine consumtum, nigrescit.

2. **Propolis parallela** Fuck. Symb. p. 149. — Hymenio conidiophoro 2663
latissime, tenuissime effuso, opaco-cæsi, tuberculis sparsis, conicis, nigris obsito; conidiis cylindræis, irregulariter curvatis, 2-3-guttulatis, 12-16 \approx 6, hyalinis; discis ascophoris subparallelis, erumpentibus, planis, elliptico-oblongis, albis, demum decoloratis; ascis sessilibus, cylindræis, 8-sporis, 88 \approx 14; sporidiis distichis, cylindræis, curvatis, utrinque obtusis, biguttulatis, hyalinis, 24-28 \approx 6.

Hab. in ramis decorticatis putridis *Carpini Betuli* in silva Æstrich Rhenogoviæ.

3. **Propolis rubella** Fuck. Symb. p. 254. — Disco erumpente, subcon- 2664
vexo, rubello, minuto, orbiculari; ascis cylindræis, sessilibus, 96 \approx 14; sporidiis distichis, cylindræis, parum curvatis, utrinque rotundato-obtusis, uniguttulatis, hyalinis, 22 \approx 5.

Hab. in ramis corticatis siccis *Salicis caprææ* in silva Æstrich Rhenogoviæ. — Sec. Fuck. *Exidia recisa* est status conid.

4. **Propolis Rosæ** Fuck. Symb. p. 254. — Disco erumpente, subcon- 2665
vexo, candido, magnitudine et forma varia; ascis cylindræis, stipitatis, 8-sporis, 118 \approx 12; sporidiis distichis, cylindræis, curvatis, utrinque rotundato-obtusis, biguttulatis, hyalinis, 24-26 \approx 7-8; paraphysibus filiformibus, asci longitudine.

Hab. in ramis putridis *Rosæ caninæ* in Germania, Britannia. — Sec. Fuck. st. conid. est *Exidia saccharina* Fr. Sec. Phill. Disc. p. 37, sporidia demum spurie 2-septata.

5. **Propolis transversalis** Fuck. Symb. p. 254. — Disco per corticis 2666
rimas transversales erumpente, plerumque elliptico, niveo, subplano; ascis substipitatis, elongatis, 8-sporis, 120 mm. long.; sporidiis cylindræis, utrinque obtusis, parum curvatis, 2-guttulatis, hyalinis, 24 \approx 8; paraphysibus ut in antecedentibus.

Hab. in ramis Pruni spinosæ prope Æstrich Renogoviæ. — Teste Fuck. st. conid. est *Exidia glandulosa* Fr.

6. **Propolis Epilobii** Fr. Symb. p. 254. — Hymenio conid. *Exidiam* 2667 juvenilem exhibente, effuso, conidiis superficialibus, pedicellatis, forma magnitudineque ut ascosporæ; discis ascophoris erum pentibus, oblongis rotundatisve, convexis, constanter niveis, opacis; ascis stipitatis, oblongis, 8-sporis, $144 \approx 12$, oblique monostichis, oblongis, rectis curvatisve, utrinque obtuse rotundatis, 1-2-guttulatis, hyalinis, $23 \approx 8$.

Hab. in caulibus Epilobii angustifolii in silva Æstrich Rhenogoviæ.

7. **Propolis Betulæ** Fuck. Symb. App. I, pag. 327. — Discis sparsis, 2668 minutis, plerumque orbicularibus, ligno semiimmersis, convexis, pallidis; ascis amplis, elongatis, sessilibus, 8-sporis, $162 \approx 20$; sporidiis distichis, cylindræis, curvatis, hyalinis, multiguttulatis, continuis, $34-36 \approx 10$; paraphysibus filiformibus.

Hab. in ramis siccis decorticatis Betulæ albæ pr. Æstrich Rhenogoviæ. — Sec. Fuck. loc. cit. stat. conid. est *Exidia repanda* Fr. promiscue crescens.

8. **Propolis cylindrocarpa** (Peck) Sacc. *Stictis* Peck 30 Rep. p. 63. 2669 — Immersa minuta, erumpens, epidermide rupta cincta; margine lacinulato, albido; disco plano, viridulo-olivaceo; sporidiis subcylindræis, rectis curvulisve, obtusis, hyalinis, $17-20 \approx 3,5-4$, subinde spurie 2-3-septatis.

Hab. in cortice Salicis, Maryland Amer. bor. — A *P. faginea* minutie differt.

9. **Propolis fulva** (Peck) Sacc. *Stictis fulva* Peck Bot. Gaz. 1881, 2670 p. 36. — Erumpens, tenuiter marginata, exigua, orbicularis v. oblongo-elliptica, 2 mm. long., pallide fulva v. subochracea; ascis subcylindræis; sporidiis subhyalinis, oblongo-ellipsoideis, $15-20 \approx 6-7$, sæpe 1-2-guttatis; paraphysibus filiformibus.

Hab. in ligno putri Vermont Amer. bor. (C. G. PRINGLE). — *P. fagineæ* affinis.

10. **Propolis lobata** C. et E. Grev. V, pag. 91. — Immersa, orbicularis, convexo-plana; disco melleo; margine prominente, lobato sicco connivente; ascis clavatis, stipitatis; sporidiis ellipticis, $20 \approx 8$.

Hab. ad truncum Aceris dejectum, New Jersey Amer. bor. — Ascoma 1 mm. lat.

11. **Propolis rufa** Berk. et Cooke Disc. U. S. II, p. 27. — Inæqua- 2672

lis, erumpens, margine prominulo, disco rufo; sporidiis oblongis curvulis, obtusis, limbo pellucido cinctis, 33-37 μ . long.

Hab. in ramis emortuis, Massachussets et New England Americæ borealis.

12. **Propolis circularis** Farlow Flora Withe-Mount. pag. 245. — 2673

Ascomatibus numerosis, aggregatis, circularibus, centro perforatis, disco concaviusculo, flavido-brunneo; ascis oblongis vel subcylindraceis, 60-80 \approx 7,6-11,5, octosporis; sporidiis monostichis, navicularibus, subinde curvulis, 19-21 \approx 3,8-5,5, hyalinis.

Hab. in ramis Bald Cap Shlelbourne Amer. bor.

13. **Propolis Leonis** (Tul.) Rehm Asc. n. 360, *Stictis* Tul. Carp. III, 2674

pag. 127, *Propolis leucaspis* Ellis N. A. F. n. 74. — Immersa, subrotunda, plana, alba, margine corticali spurio fatiscente; disco demum farinaceo, senio tuberculoso et secedendo foveolam relinquente, cæsio-cinereo; ascis tereti-clavatis, 120 \approx 21, octosporis; sporidiis monostichis, ellipsoideo-oblongis, obtusis, subhyalinis, 25-27 \approx 12; paraphysibus ramulosis, epithecium virens formantibus; hypothecio subhyalino.

Hab. in cortice Pini rigidæ etc. Newfield N. J. Amer. bor. (ELLIS) et in Gallia (L. DUFOUR).

14. **Propolis tumidula** Karst. Symb. Myc. Fenn. IV, p. 186. — Sparsa, 2675

primitus tecta, dein epidermidem superpositam in lacinias plerumque 4 triangulares rumpens eisdemque cincta, angulato-rotundata, convexa, sicca planiuscula, disco pallido vel fuscescente pallido, nudato, circiter 1 mm. lat.; ascis cylindraceutis, jodo haud tinctis, 100-110 \approx 12, 8-sporis; sporidiis distichis, elongatis, vulgo curvulis, eguttulatis, simplicibus, hyalinis, 23-28 \approx 5,5-6; paraphysibus filiformibus, numerosis, ramosis, 1,5 μ . cr.

Hab. in ramulis Salicis prope Mustiala Fennicæ.

15. **Propolis rhodoleuca** (Somm.) Phill. Disc. p. 375, *Stictis* Somm. 2676

Lapp. p. 198 *Stict. versic. v. strobilina* Desm. Ann. Sc. nat. 1842, p. 52. — Immersa, dein erumpens, ovata, plana, roseo-alba, pruinosa, intus flavida, margine spurio cincta; ascis late clavatis, 90-100 \approx 9-10, 8-sporis; sporidiis oblongis v. ellipsoideo-oblongis, sæpe inæquilateralibus, 2-guttatis, distichis, hyalinis, 10-15 \approx 5-6 (Rehm), 17-20 \approx 7-10 (Phill.); paraphysibus filiformibus, ramulosis.

Hab. in truncis decorticatis Populi et in strobilis Pini silvestris in Lapponia, Britannia, Gallia, Germania, Italia. — Formam lignicolam sic describit Fries in Elench. II, p. 26: Junior ligno prorsus innata, mox vero huc lineari plaga rumpit marginem formans et

demum discus prominet convexo-planus, 2-4 mm. longus. Præcipuam differentiam offert color roseus apparens e substrato flavo, per pruina albam translucente.

16. **Propolis strobilina** (Cooke) Sacc. *Stictis strobilina* Cooke in Rav. 2677

Fungi Amer. n. 636, an Desm.? — Sparsa, pallida, in strobilos immersa; cupulis 1-3 mm. long., sublanceolatis, primitus marginatis, ochraceo-pallidis, siccitate cinereis; ascis cylindrico-clavatis; sporidiis arcte ellipticis, 8-13 \approx 4-5, continuis, nucleatis, hyalinis.

Hab. in squamis strobilorum Pini australis in Amer. bor. — Forte non diversa ab homonyma Desm. seu *P. rhodoleuca*.

17. **Propolis lugubris** Speg. F. Fueg. n. 349. — Cupulis sparsis vel 2678

gregariis, subseriatis, elliptico-elongatis, immersis, erumpentibus, marginulatis 1-1,5 mm. long., 0,5-0,8 mm. lat., sordide obscureque fusco-olivaceis, glabris; ascis cylindræis, octosporis, paraphysatis, mox diffluentibus; sporidiis cylindræo-ellipticis, utrinque rotundatis, 22-26 \approx 5-8, inæquilateralibus v. curvulis, minute 2-guttulatis, hyalinis; jodi ope nulla.

Hab. in ramis dejectis putrescentibus *Pernettiæ mucronatæ* in Schyring island Fuegiæ.

18. **Propolis pulchella** Speg. F. Fueg. n. 350. — Densiuscule sparsa, 2679

matrice infuscata impressa, margine frustulis matricis sublevatis cincta, elliptica v. elongata 1-3 mm. long. applanata, disco rosea v. pallide cinerescenti-carnea; ascis cylindræis v. clavulato-saccatis, 65-95 \approx 10-16, octosporis, antice obtusis, postice brevissime crasseque stipitatis, paraphysibus densis filiformibus apice sæpe subuncinatis v. ramulosis obvallatis; jodi ope tunica ascorum vix cærulescente; sporidiis ellipticis v. ovoideis, utrinque obtusis, 15-20 \approx 7-8, rectis v. vix inæquilateralibus, non v. grosse 2-guttulatis, hyalinis.

Hab. in trunco fagineo emortuo indurato prope Sloggetbay Fuegiæ. — Species *Pr. fagineæ* Karst. peraffinis, satis tamen distincta.

19. **Propolis Hederæ** (Cr.) Sacc. *Stictis Hederæ* Cr. Finist. pag. 41. 2680

— Innata, dein erumpens et lignum elevans et in 5-6 dentes obtusos vel acutos diffindens; disco albo; ascis subclavatis octosporis; sporidiis fuscoideis intus granulosis; paraphysibus capillaribus.

Hab. in ramis emortuis et denudatis *Hederæ*, Finistère Galliæ. — Ascoma 2-3 mm. diam.

20. **Propolis Ulmi** (Cr.) Sacc. *Stictis Ulmi* Cr. Finist. p. 42. — Gla- 2681

bra, sphaerica, dein hemisphaerica, 1-2 mm. lat., intense flavo-

ochracea, margine in 4 vel 6 dentes triangulos diviso; hymenio concavo, albido; ascis octosporis dehiscentibus; sporidiis fusiformibus, 13-guttulatis; paraphysibus capillaribus.

Hab. in ligno nutri ramorum Ulmi Finistère Galliae. — An genuina *Propolis*?

21. **Propolis prominula** (Schwein.) Thüm. Weinst. p. 78, *Stictis pro-* 2682
minula Schwein. Syn. Ann. p. 180, n. 997. — Majuscula, valde prominens, primum immersa, demum fere libera aut superficialis; disco ime excavato, albido-pallido, limbo valde dilatato, vix lacero sed sæpe irregulari, pluribus quasi in unum confluentibus.

Hab. in libro sarmentorum Vitis Labruscæ, Pennsylvania Amer. bor.

22. **Propolis decidua** (Ell. et Ev.) Sacc. *Stictis decidua* Ell. et Ev. 2683
Torr. Bot. Cl. 1883, p. 76. — Sparsa, membranacea, cupuliformis, elliptica, 300–500 μ . lata, 600 μ . longa, rufescenti-brunnea, primitus margine incurvo subclausa, dein aperta et demum deciduo libera; ascis oblongis, 35–40 \approx 6–7; paraphysibus ramosis (?), apice conidia globosa minuta gerentibus; sporidiis distichis, fusoideis, 6–10 \approx 1–1,5 nucleolatis, subrectis, hyalinis.

Hab. in ramulis decorticatis dejectisque humi jacentibus Pini Newfield N. J. Amer. bor. — *Propolidio foveolari* Rehm affinis dicitur.

23. **Propolis parasitica** (E. et E.) Sacc. *Stictis* E. et E. Journ. Myc. 2684
88, p. 54. — Erumpens, minuta, denique expansa, 0,2 mm. circ. diam., margine sordide albo, fimbriato-dentato; ascis clavato-cylindraceutis, substipitatis 25–30 \approx 5–6; copiose paraphysatis; sporidiis distichis, oblongo-ellipsoideis, continuis, 6–8 \approx 2,5, hyalinis.

Hab. in Diatrype tremellophora vetusta, Newfield N. J. Amer. bor.

24. **Propolis Psychotriæ** Mont. Syll. n. 665, *Stictis* Mont. Cent. III, 2685
n. 48. — Hypophylla, gregaria, immersa, punctiformis, orbicularis, epidermide lacerata reflexa albo-marginata; disco plano atro; ascis (immaturis).

Hab. ad folia Psychotriæ cujusdam, Surinam (SPLITGERBER). — An vera *Stictis*? Ascoma 1 mm. lat.

25. **Propolis microsticta** Mont. Guy. n. 465. — Erumpens, minutis. 2686
sima, punctiformis, tandem irregulariter orbiculata; disco tremellino cæsio-pruinoso, ore stellatim dentato reflexo albo-cinto; ascis cylindraceutis 50 μ . long. paraphysatis; sporidiis linearibus minimis, hyalinis, subinconspicue 5-nucleolatis, 10 μ . long.

Hab. ad cortices in Guyana (LEPRIEUR). — Hypophlœa, erumpens, $\frac{1}{4}$ mm. vix æquans; discus planus, madore convexus, tremellosus, omni ætate cæcio-pruinosis, ore stellatim dentato reflexo cinctus. An *Ocellaria*?

26. **Propolis Urticæ** (Cr.) *Stictis Urticæ* Cr. Finist. p. 42. — Sub-2687
hemisphærica, alba, 1-2 mm. lat., margine in 5-6 dentes triangulos virentes divisa; disco albo; ascis oblongis, octosporis; sporidiis subfusoideis, intus granulosus; paraphysibus filiformibus.

Hab. in caulibus emortuis *Urticæ dioicæ*, Finistère Galliæ.

27. **Propolis gilva** (Fr.) Summa p. 372, De Not. Prof. p. 364, *Stictis* 2688
Fr. Sclerom. n. 436 (non vidi).

Hab. in Suecia et Norvegia.

PROPOLINA Sacc. Consp. gen. Disc. p. 11 (1884) [Etym. a *Propolis*] *Propoleos* Spec. Tul. Carp. III, p. 125. — Ascumata immersa, immarginata, ceracea, ambitu subirregularia, plana. Asci cylindræci, polyspori. Sporidia tereti-curva, hyalina, continua.

1. **Propolina cervina** Sacc. Consp. gen. Disc. p. 11, *Propolis cine-* 2689
rescens f. *myriospora* Tul. Carp. III, p. 126, t. XVI, f. 4 et 7. — Immersa, oblonga, inæqualis, plano-convexula, castaneo-cervina, furfuracea, 1-3 mm. long., ambitu demum sublacera; ascis crasse cylindræcis, apice rotundatis, breve stipitatis, $160-180 \approx 16$, myriosporis; sporidiis allantoideis, curvis, hyalinis, 2-3-guttatis, $16-19 \approx 3,5$; paraphysibus filiformibus, apice ramulosis, flexuosis.

Hab. in ligno nudo putrescente *Quercus*, *Castaneæ*, *Coryli Populi*, socia *P. faginea*, pr. Paris Galliæ.

OCELLARIA Tul. Carp. III, pag. 129 (1865) [Etym. *ocellus*], *Stictis* et *Propolis* Auct. *Habrostictis* Fuck. Symb. p. 249. — Ascumata disciformia, subimmarginata, ceracea, per peridermium stellatim fissum et cum eo margine connata erumpentia. Asci tereti-clavati, paraphysati, 4-8-spori. Sporidia ovoidea vel oblonga, continua, hyalina.

1. **Ocellaria aurea** Tul. Carp. III, p. 129, *Stictis ocellata* (Pers.) Fr. 2690
Syst. Myc. II, p. 193, *Peziza* Pers. Syn. p. 667. *Pez. Lecanora* Schm. et Kunz. Exs. n. 174, *Propolis Populi* De Not., *Phacidium Populi* Lasch. — Erumpens, orbicularis, depressa, rufescens, subtus pallidior, margine prominente subinvoluta; ascis tereti-clavatis, crassis, $150-160 \approx 25$; paraphysibus bacillari-clavulatis obval-latis, breve stipitatis, octosporis; sporidiis oblique monostichis el-

lipsoideo-oblongis, utrinque obtusiusculis, 30-34 \approx 15, intus granulosis; hyalinis.

Hab. in corticibus ramorum Populi, Salicis et Hippophæas in Suecia, Fennia, Britannia, Germania, Gallia, Italia. — Sparsa; cupulæ majusculæ 1-3 mm. lat. glabræ, applanatæ, subnitidæ. Pycnidia nota sec. Tul. loc. cit.

2. **Ocellaria parvula** Speg. in Mich. II, p. 165. — Ascomatibus laxe 2691
gregariis, per peridermium stellatim fissum erumpentibus, poculiformibus $\frac{1}{2}$ -1 mm. diam., margine æquali revoluto vel lacero-fimbriato, albido, disco aureo-fusco vel cinereo, carnosulo; ascis cylindræis, 90-100 \approx 25, antice obtuse rotundatis, postice in stipitem brevissimum et nodosum desinentibus; paraphysibus filiformibus, longioribus, guttulatis, obvallatis, octosporis; sporidiis distichis, ellipsoideis, 24 \approx 12-14, granuloso-farctis, hyalinis.

Hab. ad ramulos languidos vel emortuos Salicis fragilis ad ripas fl. Piave Belluno Ital. bor. (SPEGAZZINI). — Verisimiliter non satis diversa ab *O. aurea*.

3. **Ocellaria chrysophæa** (Pers.) Quél. Ench. p. 332, *Peziza chrysophæa* Pers. syn. p. 674, Ic. pict. p. 17, t. 8, f. 1, 2, *Stictis* Pers. Myc. Eur. p. 335, Fr. Summa p. 363. — Erumpens, orbicularis, disco excavato rubro, limbo crassiusculo aureo; ascis tereti-clavatis, 8-sporis; sporidiis fusoideis 9-11 \approx 2 (Phill.), oblongo-ellipsoideis (Quél.). 2692

Hab. ad ramos siccos decorticatos abiegnos in Germania, Suecia, Belgio, Gallia, ad ramos Ulmi in Britannia. — Habitus *Sphæroboli*, cujus vesicula ejecta est. Sparsa, minuta, urceolata, sed limbus erectus subrepandus, etiam pallide ligneus.

4. **Ocellaria æcidioides** Speg. F. Fueg. n. 251. — Sparsa vel laxe 2693
gregaria, primo globosa, tecta dein erumpens non vel vix exsertula, ore rotunda 450-600 μ . diam. margine latiusculo albo fimbriatulo cineta; disco impresso cinereo-glaucopiano; ascis obovatis, antice late obtuseque rotundatis, crassissime tunicatis, postice brevissime crasseque pedicellatis, octosporis, paraphysibus densis filiformibus apice coalescentibus olivascentibusque obvallatis; jodi ope ascis et paraphysibus, apice præcipue, intense cœrulescentibus; sporidiis ellipticis utrinque obtusiusculis, 15-17 \approx 9, crasse tunicatis, hyalinis.

Hab. ad palos fagineos decorticatos in tuguriis incolarum pr. Ushuvaia Fuegiæ. — Species pulchella *Æcidiis* habitu simillima, sporidiorum fabrica lichenina, thallo gonidiisque tamen non visis.

5. **Ocellaria succinea** Sacc. Mich. II, p. 333 (*Prop.*). — Ascomatibus 2694
innato-erumpentibus, disciformibus, epidermide lacerata cinctis, gregariis, $\frac{1}{2}$ mm. diam., succineis, levibus; excipuli contextu parenchymatico flavicante; ascis clavatis, breve stipitatis, 90-100 \approx 16; paraphysibus bacillaribus obvallatis, apice rotundatis, octosporis; sporidiis distichis, ovato-oblongis, sæpe inæquilateralibus, 18-20 \approx 7, intus granulosus, hyalinis.

Hab. in ramis Genistæ tinctoriæ emortuis, Lyon Galliæ (THERRY). — Hic *Orbilicæ*, hinc *Phacidio* subaffinis.

6. **Ocellaria aurantiaca** Rehm Disc. pag. 135, *Habrostictis* Rehm 2695
Ascom. n. 266. — Gregaria, per epidermidem fissam irregulariter erumpens laciniisque ejus laxè cincta, primitus sphæroideo-depressa et clausa, dein aperta, irregulariter stellatimque patelliformis, plana, disco viridulo, margine crasso irregulari aurantiaco cincta et denique superficiem epidermidis superans, 0,7-1 mm. diam.; ascis clavatis, 6-8-sporis, 90-100 \approx 15, apice jodo violascente; sporidiis oblongis, obtusis, interdum subcurvatis, 1-cellularibus, nucleo 1 magno plerumque præditis, hyalinis, 20-24 \approx 9; paraphysibus filiformibus, superne dichotome furcatis et clava flavescenti, 4-5 μ . crassa, articulata, subglobosa præditis itaque epithecium ascos superans formantibus; epi- et hypothecio flavo.

Hab. ad corticem ramorum emortuorum Alni viridis in alpidibus editioribus tyrolensibus. — Var. **Cratægi** (Lasch) Rhem loc. cit., *Tympanis* Lasch in F. E. n. 353: ascomatibus epidermidem rimose vel laciniatim findentibus, disco viridulo aurantio-limbato. In ramis *Cratægi*, Neumark Germaniæ.

7. **Ocellaria rubra** (Fuck.) Sacc. *Habrostictis rubra* Fuck. Symb. 2696
p. 250. — Cupulis sparsis gregariisve, sub epidermide nidulantibus, demum erumpentibus liberisque, $\frac{1}{2}$ mm. latis, carnosodiaphanis, rubris, primo clausis, demum excavatis, glabris, margine lacerato-fimbriato, pallidiori; ascis stipitatis, anguste subclavato-elongatis, 8-sporis, 80 \approx 6; sporidiis subdistichis, lanceolato-cylindræis, subcurvatis, continuis, hyalinis, 12 \approx 2,5; paraphysibus linearibus, simplicibus, apice capitatis, capitulo ovato.

Hab. in cortice ramorum Ulmi campestris in Rhenogovia et Italia. — In exempl. ital.: asci 60-70 \approx 5; sporidia 14-16 \approx 2,5.

8. **Ocellaria Betuli** (A. et S.) Rehm Disc. p. 136, *Pez. Betuli* A. et S. 2697
p. 309, t. XII, f. 3, *Stictis* Fr. Syst. Myc. II, p. 193. — Carnoso-ceracea, mollis, erumpens, planiuscula, difformis, subimmarginata, alba, demum pallens.

Hab. in ramis siccis *Carpini*, varietas nigrescens in *Tilia*, in Suecia, Germania, Britannia. — Gregaria, majuscula, 3 mm. lata, subrotunda vel oblonga, angulato-lobata, convexo-plana, subinde margine proprio accessorio cincta. Substantia mollis, sed vix tremellosa; stroma sub disco albidum. Abnormis in naturali genere. — Var. **immutabilis** Rab. Pilz. p. 334: cupulis constanter albis. In ramis *Aceris* et *Platani*, Dresden «An *Propolis faginea?*».

9. **Ocellaria nigrella** (Somm.) Rehm Disc. pag. 136, *Stictis nigrella* 2698 Sommerf. Lapp. p. 303. — Erumpens, orbicularis, ceraceo-mollis, patellæformis, disco nigro convexiusculo, margine tenui farinoso albicante; sporidiis fusoides (Quél.).

Hab. inter membranas epidermidis *Salicis phylicæfoliæ Nordlandia Lapponica* (SOMMERFELT.), in *Populo* in Gallia et Helvetia (CHAILLET). — Similis priori; differt vero colore, disco plano-convexo, ex ascis prominulis punctato.

10. **Ocellaria coccinea** (Fr.) Rehm Disc. p. 136, *Stictis coccinea* Fr. 2699 Elench. II, p. 24. — Erumpens, ceracea, primo coccinea, tuberculariæformis, demum urceolata, margine proprio obtuso.

Hab. in ramis emortuis *Mori albæ* in Helvetia (CHAILLET). — Splendidus fungus, admodum versiformis. Junior *Fusidium*, adultior *Tuberculariam*, perfectus *Pezizam* refert. Colore nitido optime dignoscitur. Cortici innatus, per epidermidem erumpens, sæpius non prominens, passim vero emergens. Forma nulla constans; passim linearis, valde elongata, *Hysterium* referens; sæpius orbicularis in speciminibus magis prominulis. Margo interdum fere nullus, sed in speciminibus primitus *tubercularioides* discus primo porosus, dein dilatatus, margine crasso obtuso. Rarius plura tubercula, *Nectriæ coccineæ* facie. conglomerata.

11. **Ocellaria punctiformis** (Pers.) Sacc. *Stictis* Pers. Syn. p. 674, 2700 Phill. Disc. p. 386. — Gregaria, minuta, immersa, urceolata, suborbicularis, disco rufo-brunneo vel fuligineo, ore connivente, margine concolore cincto; ascis cylindræo-clavatis, 8-sporis; sporidiis fusoides, continuis; paraphysibus filiformibus, apice globoso.

Hab. in ligno salicino in Germania et Britannia, in ligno nudo, Waitaki Novæ Zelandiæ. — Ascoma 100-500 μ . diam.

12. **Ocellaria quercicola** (Hazl.) Sacc. *Habrostictis quercicola* Hazl. 2701 Einig. Discom. pag. 1 et Mag. szab. Disc. t. XII, f. 1. — Erumpens et prominens, flava, minuta; ascis clavatis 4-7-sporis; sporidiis ovoideis, 20-26 = 8-12, continuis, rarius 2-4-ocularibus; paraphysibus sursum incrassatis, ramulosis, flavidis.

Hab. in ramis quercinis pr. Eperies Hungariæ.

13. **Ocellaria carneo-pallida** (Karst.) Sacc. *Habrostictis carneo-pallida* Karst. Fragm. mycol. XIII, p. 4. — Gregaria vel subsparsa, per epidermidem stellatim fissam erumpens, patellata, margine inæquali, vel albido-denticulata; disco carneo-pallido, 1 mm. lato; ascis oblongo-clavatis, subsessilibus, 108-145 \approx 27-29, octosporis; sporidiis distichis, ellipsoideis, basi subacutatis, curvulis chlorino-hyalinis, 27-34 \approx 14-15, episporio crasso; paraphysibus filiformibus, 2 μ . cr.

Hab. in cortice Alni incanæ in Lapponia Inarensi et parœcia Hollola (WAINIO).

NÆVIA Fries S. v. Sc. p. 373 (Etym. *nævus* ob formam et colorem). — Ascomata innata, dein epidermide valvatim vel laciniatim secedente, aperta, minuta, tenuissima, discoidea, subimmarginata, circularia v. oblonga, læticoloria. Asci elongati, paraphysati, 4-8-spori. Sporidia ovoidea vel oblonga, continua, hyalina.

1. **Nævia diaphana** Rehm Disc. p. 140, *Habrostictis diaphana* Rehm 2703
Ascom. Lojk. n. 45. — Aurantiaca, primitus immersa, dein sessilis, plane ut in *Calloria fusarioide*, contextu parenchymatico, dilute flavidula, hyphis teneris, hyalinis, brevibus insidens; ascis clavatis, apice incrassatis, 50-70 \approx 9-12, 4-8-sporis; sporidiis obtuse oblongis, 2-guttatis, hyalinis, 10-12 \approx 4-5, transverse subdistichis; paraphysibus filiformibus, superne clavula elliptica, hyalina, circ. 3 μ . crassa instructis, jodi ope apice ascorum violascente.

Hab. ad caules siccos Angelicæ prope lacum Zenoga infra alpem Retyezát Transylvaniæ alt. 2000 m. et ad caules putres Cirsii spinosissimi prope glacies æternas alpium editissimarum Tyrolis (LOJKA).

2. **Nævia callorioides** Sacc. et Br. *Habrostictis* Sacc. et Briard in 2704
Rev. Myc. 1885, p. 210. — Cupulis sparsis, erumpentibus, irregularibus, epidermide rupta cinctis, 0,5 mm. lat., flavo-citrinis; ascis clavatis, sessilibus, apice attenuatis, 52 \approx 6, octosporis; sporidiis distichis, oblongo-fusoideis utrinque attenuatis, hyalinis, 8 \approx 2,5-3; paraphysibus filiformibus sæpe apice uncinatis.

Hab. in caulibus siccis Chærophylli temuli, Troyes Gallicæ (BRIARD).

3. **Nævia exigua** Mout. et Sacc. (sp. nov.). — Ascomatibus epidermi- 2705
de fissa tectis, discoideis, luteolis, carnosulis, immarginatis, $\frac{1}{8}$ - $\frac{1}{2}$ mm. diam.; ascis oblongis, subsessilibus, octosporis, 50-70 \approx 13-15;

sporidiis distichis, ovoideis, inæquilateralibus, continuis vel plasmate bipartito, 14-17 \approx 6-8; paraphysibus septatis, apice capitulatis.

Hab. in caulibus *Hyperici quadranguli* pr. Liege Belgii.

4. **Nævia tithymalina** (Kunze) Rehm Disc. pag. 139, *Calloria* Kunze 2706 Hedw. 1876, p. 105, *Habrostictis* Rehm olim. — Gregaria, innata, mox erumpens et epidermide 4-plurifida cincta, disco subrotundo plano-patellato, rubello vel carneo, 0,3-1 mm. lat.; ascis clavatis, obtusis 120-140 \approx 12-18, octosporis; sporidiis ovoideis, 9-12 \approx 5-7, intus granulosus, distichis; paraphysibus filiformibus apice subclavatis, 9 μ . cr.

Hab. in caulibus siccis *Euphorbiæ Gerardianæ* et *Cyparissiæ* in Germania media.

5. **Nævia Adonis** Fuck. Symb. p. 249. — Cupulis sparsis, prominulis, punctiformibus, convexis, demum planis, subumbilicatis, dilute carneis; ascis clavatis, stipitatis, 8-sporis, 58-60 \approx 15-17; sporidiis farctis, oblongis, distichis, biguttulatis, hyalinis, 12 \approx 5-6; paraphysibus filiformibus, numerosis, apice curvulis.

Hab. in caulibus siccis *Adonidis vernalis* prope Budenheim Germaniæ.

6. **Nævia minutula** (Sacc. et Malbr.) Rehm Disc. pag. 146, *Propolis* 2708 *minutula* Sacc. et Malbr. Fung. Gall. ser. V, n. 2172 (1883), *Trochila substictica* Rehm Hedw. 1884, p. 55. — Ascomatibus innatis, hemisphærico-discoideis 250 μ . diam., disco tandem suberumpente, applanato, flavo-rubello vel dilute succineo, excipuli contextu fuligineo, parum distincto; ascis teretiusculis, breve stipitatis, 68 \approx 10, parce paraphysatis, tetrasporis; sporidiis monostichis ellipsoideis utrinque obtusiusculis, 14 \approx 6, biguttulatis, hyalinis.

Hab. in caulibus emortuis *Solidaginis* in Gallia et Germania. — An eadem ac *Agyrium Solidaginis*?

7. **Nævia Bresadolæ** Rehm Disc. p. 141. — Cæspitulosa, matrice dealbata immersa, dein epidermidem sæpius rimose findens et prominens, disco subrotundo vel oblongo, tenui-marginato, plano, flavido-carneo, extus carnea, 0,3-0,5 mm. lat.; ascis clavatis, sessilibus, 36-40 \approx 6-8, octosporis; sporidiis cylindræis, obtusis, rectiusculis, continuis, hyalinis, 9-10 \approx 2, distichis; paraphysibus filiformibus 1,5 μ . cr.; obturaculo ascorum jodo cœrulescente.

Hab. in caulibus siccis *Urticæ dioicæ* in montibus tridentinis (BRESADOLA).

8. **Nævia jenensis** (J. Kunze) Rehm Disc. p. 140, *Calloria* J. Kunze 2710 F. Select. n. 284. — Gregaria, matrice leniter dealbata immersa,

dein per epidermidem 4-pluri-laciniatam erumpens denique subsessilis, 0,3-0,5 mm. lat., plano-patellata, disco succineo, tenui, inæqualiter marginato; ascis clavatis, apice incrassatis, 60-75 \approx 9-12, octosporis; sporidiis clavato-ovoideis, hyalinis, continuis, 12-15 \approx 5-6, distichis; paraphysibus septatis, sursum sæpius furcatis, 3-5 μ . cr.; obturaculo jodi ope cœrulescente.

Hab. in foliis putridis *Laserpitii latifolii* prope Jena Germaniæ (KUNZE).

9. **Nævia Epilobii** Karst. Rev. p. 168, *Trochila* Karst. M. F. I, p. 250, 271

— Gregaria, sæpe confluens, epidermide connata atque parenchymate fungino infarcita tecta, applanata vel sphæroideo-depressa, dein in lacinias 4 triangulas vertice fatiscens, rufescente-vel flavotestacea 0,3-0,5 mm. lat.; ascis clavatis obtusis, sessilibus, 75-95 \approx 17-20, octosporis, apice jodo non tinctis; sporidiis distichis sphæroideo-ellipsoideis, continuis, eguttulatis, 15-17 \approx 8; paraphysibus filiformibus flexuosis apice incrassatis.

Hab. ad caules *Epilobii angustifolii* aridos in Lapponia rossica.

10. **Nævia carneo-pallida** Rehm Disc. p. 137. — Gregaria, areis de 271

albatis innata, dein per epidermidem laciniatam emergens; disco rotundo marginulato, flavo-rubente, plano-scutellato, 0,2-0,3 mm. lat.; ascis clavatis, 70-75 \approx 8-9, 8-sporis; sporidiis ellipsoideis, hyalinis, 10-12 \approx 4-4,5, distichis; paraphysibus filiformibus, curvulis, hyalinis.

Hab. in foliis putridis *Corni sanguineæ* prope Augsburg Germaniæ. — Cfr. *Pezizella carneo-pallida* (n. 1185), ad quam dubitanter refert cl. Rehm.

11. **Nævia pallida** (Fuck.) Rehm Disc. p. 138, *Pseudopeziza* Fuck. 271

Symb. p. 291. — Cupulis sparsis, hypophyllis, erumpentibus, convexis, ochraceis, $\frac{1}{2}$ mm. latis, epidermidis laciniis circumdatis; ascis oblongo-clavatis, 8-sporis, 56 \approx 6; sporidiis cylindraceis, rectis, continuis, hyalinis, 10 \approx 2; paraphysibus ramosis, crassiusculis.

Hab. in pag. infer. foliorum languidorum *Buxi* sempervirentis, Æstrich Rhenogoviæ.

12. **Nævia rosella** Rehm Disc. p. 146, *Pseudopeziza rosella* Rehm 271

Ascom. Lojk. n. 43. — Peritheciis sessilibus, gregariis, minutissimis, in maculis epidermidis flavidulis plerumque insidentibus, orbicularibus, planis, margine fuscidulo cinctis, disco rosello, basi parenchymatice flavidulo-contexta, circ. 0,2 mm. diam.; ascis clavatis, apice incrassatis, 8-sporis, 45 \approx 9; sporidiis obtusis, oblongis, 1-cellulari-

bus, hyalinis, distichis, $9 \approx 2,5-3$; paraphysibus superne dichotomis et subincurvatis, haud incrassatis, laxis, hyalinis; jodi ope apex ascorum violascit.

Hab. ad caules putrescentes Aconiti Napelli, Arágyes infra alpem Retyezát, Hunyad Transsylvaniæ (LOJKA).

3. **Nævia rubella** (Wint.) Rehm Disc. pag. 139, *Trochila rubella* 2715
Winter F. E. n. 2831, *Mollisia Trollii* Wettst. Verhandl. Ak. Wiss. XCIV, pag. 75, t. II, f. 16-19. — Sparsa, innato-erumpens, primo subhemisphærica, concava, margine connivente, matura explanata, patellæformis, orbicularis vel subellipsoidea, extus pallide fusca, disco plano, rubello, margine tenui, sublacero, $\frac{1}{2}-1$ mm. lat.; ascis clavatis, deorsum in stipitem brevem attenuatis, 8-sporis, $85-120 \approx 14-17$; jodi ope ascorum poro intense cærulescente; paraphysibus filiformibus, sursum parum incrassatis, hyalinis, apice $3,5 \mu$. cr.; sporidiis distichis, oblongis inæquilateralibus, utrinque parum attenuatis, unicellularibus, plerumque crasse 2-guttatis, hyalinis, $21 \approx 5-5,5$.

Hab. ad Trollii europæi petiolos aridos, Rigi prope Luzern Helvetiæ (G. WINTER).

4. **Nævia Tofieldiæ** Rehm Disc. pag. 141. — Gregaria, matrice subdealbata immersa, dein per epidermidem circulatim vel rimose fissam erumpens, denique sessilis, extus brunneola, $0,2-0,3$ mm. lat., disco tenui flavo-brunneolo, subplano, inæqualiter marginato; ascis clavatis vel obtuse acutatis, $40-45 \approx 5-6$, octosporis; sporidiis oblongo-fusoideis, obtusulis, rectis curvulisve, continuis, 2-4-guttatis, $10-12 \approx 2$, distichis; paraphysibus filiformibus, hyalinis, 2μ . cr.; obturaculo jodo cærulescente.

Hab. in foliis siccis Tofieldiæ calyculatæ in Carniolia. — An sporidia tandem 1-septata? Tunc esset *Diplonævia*.

5. **Nævia circinata** (Lib.) Rehm Disc. p. 144, *Stictis* Lib. Exs. n. 232. — Circinatim gregaria, exigua, immersa, orbicularis, epidermide laciniata cincta, disco inæqualiter marginato, flavo-rufescente, plano, $0,2-0,3$ mm. lat.; ascis clavatis, supra obtuse acutatis, $45-50 \approx 9-10$, sæpius 4-sporis; sporidiis distichis oblongo-clavatis, rectis, continuis, 2-guttatis, hyalinis, $9-12 \approx 4$; paraphysibus filiformi-clavulatis, hyalinis.

Hab. in culmis emortuis Junci acutiflori in Belgio et Arduennis.

6. **Nævia atro-sanguinea** (Rost.) Sacc. *Trochila atro-sanguinea* 2718
Rostrup Island svamp. in Bot. Tidask. 1885. — Ascomatibus den-

se gregariis seriatim dispositis, atro-sanguineis, primitus clausis, mox apertis, concavis, margine integro, albicante; ascis clavatis, 45-48 \approx 7-8; sporidiis subdistichis, 7-8 \approx 2-3; paraphysibus filiformibus, apice incrassatis.

Hab. in foliis Caricis rigidæ et *C. vulgaris* in Islandia.

17. **Nævia paradoxoidea** Rehm Disc. p. 143, *Trochila paradoxa* Rehm 2719
f. *Luzulæ* Rehm Ascom. n. 769. — Ascomatibus gregariis, immersis dein per epidermidem 3-4-laciniatam rarius rimosam erumpentibus, brunneolis, 0,2-0,5 mm. lat., disco plano, pallide brunneo, tenui, inæqualiter marginato; ascis clavatis obtuse acutatis, 50-65 \approx 9-10; sporidiis oblongis obtusis, rectis, 2-guttatis, hyalinis, 10-12 \approx 5, distichis; paraphysibus furcatis septatis filiformibus, apice ellipsoideo-clavatis, 5 μ . cr. brunneis.

Hab. in foliis siccis *Luzulæ glabratae* in alpinis tyrolensibus.

18. **Nævia pusilla** (Lib.) Rehm Disc. p. 143, *Stictis* Lib. Exsicc. *Mollisia aberrans* Rehm Ascom. n. 608. — Primitus immersa, dein per epidermidem subelevatam erumpens, denique sessilis, gregaria, orbicularis, concava, extus fusca, margine subinvoluta, scabra, albidula, 0,2-0,4 mm. diam., sicca minima, humida, disco pallide cereo, parenchymatice fuscidulo-contexta; ascis clavatis, obtuse acutatis, 36-40 \approx 9-12, octosporis, subsessilibus; sporidiis cuneatis, obtusis, rectis, 1-cellularibus cum nucleis magnis plerumque 2, hyalinis, 10 \approx 4, 2-3-stichis; paraphysibus teneris, filiformibus, apice subincrassatis, hyalinis; jodi ope apice ascorum violascente.

Hab. ad calamos putridos *Junci* in Arduennis et pr. Haidhof in Palatinatu sup. bavarico (REHM).

19. **Nævia Junci** Rehm Ascom. Alp. n. 34. — Minutissima, concavula, immarginata, sessilis vel epidermidi impressa, fuscidula, parenchymatico-contexta, carneo-rufa, sparsa; ascis clavatis, teneris, 8-sporis, 40-45 \approx 8; sporidiis oblongis, obtusis, 1-cellularibus, magnis nucleis 2 præditis, hyalinis, plerumque 2-stichis, 7-8 \approx 3; paraphysibus filiformibus, superne 3-4 μ . cr.; jodii ope apice ascorum cœrulescente.

Hab. ad calamos siccos *Junci Hostii* prope Kühtai (Oetz) alpinum tyrolensium, alt. c. 2000 m. (REHM).

20. **Nævia Lamyi** (Mont.) Rehm Disc. p. 145, *Stictis* Mont. Cfr. Rabenh. in Bot. Zeit. 1851, p. 454. — Gregaria, areis expallentibus immersa, dein per epidermidem 4-fidam erumpens, suburceolata, 0,2-0,3 mm. lat., disco tenui flavo-brunneolo pallidius marginato;

ascis fusoideo-clavatis, 50-55 \approx 10-12, octosporis; sporidiis clavatis, obtusis, continuis, 9-10 \approx 4-5, distichis; paraphysibus filiformibus hyalinis, 2 μ . cr.; obturaculo jodo cærulescente.

Hab. in calamis Junci articulati ad lacum Genevæ. — *N. circinata* affinis.

21. **Nævia seriata** (Lib.) Fuck. Symb. p. 249, *Stictis* Lib. Exs. p. 233, 2723

Peziza obvelata De Lacr. — Cupulis innatis, punctiformibus, orbicularibus, planis vel parum excavatis, in series approximatas dispositis, rubro-flavidis epidermide demum subquadrifida cinctis, 0,3-0,4 mm. diam.; ascis lineari-clavatis 36-45 \approx 6-9, 4-8-sporis; sporidiis ovato-oblongis, rectis, 7-8 \approx 3, subdistichis, hyalinis demum 1-septatis; paraphysibus filiformibus, hyaliuis.

Hab. in pag. infer. foliorum exsiccorum Caricis hirtæ in Belgio, Germania. — Species britannica a Phill. Disc. p. 385 descripta, ascis longissimis, videtur diversa.

22. **Nævia valvata** Mont. Syll. n. 672, *Stictis* Mont. Ann. 2, VI, 2724

p. 337. — Innata, elliptico-oblonga, tecta, demum epidermide circumscissa elapsa nuda; hymenio (disco) submarginato nigro-brunneo, margine leniter elevato, subundulato pallidiore; ascis filiformibus 50 μ . long.; sporidiis uniseriatis oblongis 5 μ . long.

Hab. ad culmos Calamagrostidis arenariæ, Royan Galliæ occid. (LAMY) et in Belgio. — Epidermidis valvula supra discum sæpe permanet. An *Pseudopeziza*?

BRIARDIA Sacc. in Rev. mycol. 1885 p. 159, Rehm Disc. p. 151 [Ætym. a præclaro mycol. M. BRIARD.] — Ascomata erumpenti-superficialia, initio rotundata, mox elongato-contracta, hysteroideo-dehiscentia, subceracea, margine inæquali v. minuto fimbriato; disco tenui læticolore; excipuli contextu minute parallele parenchymatico. Asci cylindranei, paraphysati, octospori. Sporidia oblonga, continua, hyalina. — A *Nævia* habitu hysteroideo mox distinctum genus. Quoad *Briard. hysteropezizoidem* Rehm Disc. p. 152, cfr. *Mollisia* (n. 1462).

1. **Briardia compta** Sacc. l. c. t. LV, f. 9. — Parallele seriata, mox 2725

lineari-oblonga, 0,5-1 mm. long., 0,2 mm. lat. e succineo-rufo demum fusca, levis, latiuscule hysteroideo-hians, margine pallidiore involuto, exquisite fimbriato; disco roseo subplano; ascis teretiusculis breve stipitatis, octosporis, 40-48 \approx 7-8; sporidiis monostichis oblongis, utrinque obtusiusculis, 10-11 \approx 5, continuis hyalinis; paraphysibus bacillari-clavulatis asco paullo longioribus.

Hab. in caule emortuo Galii, Troyes Galliæ (BRIARD).

2. **Briardia purpurascens** Rehm Disc. p. 152 cum icone. — Gre. 2726
 garia, matrice expallente parallele seriatim immersa, dein per epidermidem lineatim fissam erumpens, primo suborbicularis dein elongata, subhysteriodes, disco purpureo tenui-marginato v. denticulato plano, 0,3-3 mm. long., 0,3-0,5 mm. lat.; ascis clavatis 45-55 = 5-6, 4-8-sporis; sporidiis elongatis, obtusis, rectis vel curvulis, continuis, hyalinis, 6-10 = 3, submonostichis; paraphysibus filiformibus apice clavulatis, 3 μ . cr.

Hab. in caulibus emortuis Chenopodii albi pr. Berlin Germaniæ.

XYLOGRAPHA Fr. S. M. II, p. 197 (1822) [Etym *xylon* lignum et *grapho* scribo]. — Ascomata elongata v. sublinearia, subimmarginata, ceracea (in sicco compacta), late lanceolato-dehiscentia, disco crassiusculo fuscello. Asci tereti-clavati, paraphysati, octospori. Sporidia ovato-oblonga, continua, hyalina. — Genus ab auctoribus nonnullis inter Lichenes enumeratum. Species magis funginæ hic describuntur, ceteræ in operibus lichenogicis quærendæ.

1. **Xylographa parallela** (Ach.) Fr. Summa p. 372, *Lichen parallelus* 2727
 Ach. Prod. Lich. p. 23, *Opegrapha* Ach. Lich. univ., *Hyst. parall.* Wahl. Lapp. 523, p. 91, *H. abietinum* Pers. Obs. 1, p. 31. — Erumpens, striæformis, primo clausa, dein aperta, disco marginem oblitterante rufescente, in siccis nigro; ascis clavatis, 8-sporis, 60-70 = 15-18; sporidiis plus minusve ovatis v. ellipticis, 1-cellularibus, nucleo 1 magno centrali, rarius nucleis 2 præditis, hyalinis 12-15 = 6, distichis; paraphysibus filiformibus, articulatis et in clavam fuscam c. 5 μ . cr. exeuntibus; hypotecio hyalino, epithecio fusco.

Hab. in omni ligno decorticato vetusto, præcipue pineo, fagineo, salicino, in tota Europa, Amer. bor. et merid. — Strias sistit longitudinales, in statu sicco nigras subparallelas; humectatas vero tumentes rufescentes vel incarnato-pallidas; excipulum tenuissimum, membranaceum, nigricans, primo clausum mox apertum, demum totum oblitteratum; inferne, ubi fungus innatus, omnino deficiens; discus apertus subrotundus vel ellipticus vel uno apice attenuatus, altero obtusus, demum confluens.

2. **Xylographa spilomatica** (Anzi) Th. Fr. lich. scand. p. 639, Rehm 2728
 Disc. p. 154 *Agyrium* Anzi Symb. pag. 20, *X. minutula* Körb. par. lich. p. 276, *X. coruscans* Norm. bot. not. 1872, p. 34. —

Ascomatibus matrice exalbata innatis, gregariis, subinde confluentibus, hysteroideo-erumpentibus 0,3-1 mm. long., 0,2-0,5 mm. lat.; disco elliptico, rarius curvato, flavo-brunneo, plano; ascis clavatis, apice incrassatis, 8-sporis, 65-70 \approx 15-17; sporidiis subovatis vel oblongis, obtusis, nucleo 1 magno centrali præditis, 1-cellularibus hyalinis, 9-12 \approx 5-6, distichis; paraphysibus filiformibus, superne crassioribus et fuscidulis, conglutinatis; hypothecio hyalino; jodi ope hymenio cœrulescente.

Hab. in truncis putridis Abietis, Laricis, Pini Strobi in Italia, Germania, Transylvania.

3. **Xylographa linearis** Sacc. Mich. II, p. 141, F. ital. f. 1440 nec *Stictis* 2729
linearis C. et E. — Ascomatibus anguste lanceolatis, vix erumpentibus, atris; ascis cylindræis brevissime stipitatis, 45 \approx 8, apice rotundatis; paraphysibus bacillaribus, quandoque ramulosis obvalatis, octosporis; sporidiis distichis, tereti-oblongatis, curvulis, obtusiusculis, 15-16 \approx 3, plerumque 2-guttatis, hyalinis.

Hab. in ramis decorticatis induratis, Newfield Amer. bor. (ELLIS).

4. **Xylographa laricicola** Nyl. Flora 1875 p. 13. — Ascomatibus in 2730
matrice griseo-dealbata subsuperficialibus, oblongis v. subflexuosis, inæqualiter sparsis, denique subexplanatis, margine evanescente, brunneo nigris, intus albidis; ascis octosporis; sporidiis ellipsoideis, continuis, hyalinis, 12-15 \approx 7-8; paraphysibus obsolete; disco jodo vinoso.

Hab. in cortice Laricis adhuc vivæ, Ben Lawers Scotia Britannicæ (CROMBIE).

5. **Xylographa arctica** Fuck. in Zweite deutsch. Nordpolarf. p. 95, 2731
tab. I, fig. 11. — Ascomatibus in macula grisea nigra, quandoque ligni durissimi totam superficiem occupanti, parum elevata, dense gregariis, parallele dispositis, erumpentibus, minutis, atris, primo clausis, sphaeriæformibus, demum apertis, rotundatis seu ellipticis, rima longitudinali dehiscentibus, margine integro, disco fusciscentibus; ascis nondum inventis; sporidiis ovatis oblongo-ovatisve, nucleatis, fuscis, 10-12 \approx 8.

Hab. in ligno decorticato indurato Salicis arcticæ, Kaiser-Franz-Josephs Fjord in Groenlandia.

6. **Xylographa Felsmanni** Stein Flechten. Schles. p. 262, n. 476. — 2732
Ascomatibus perexiguis, sessilibus, orbicularibus vel subellipticis, disco plano, atro-brunneo, margine tenui, prominulo, brunneo-nigro; ascis saccatis, octosporis, sporidiis oblongo-ellipsoideis, subinde medio angustatis, 4-7 \approx 2.

Hab. in truncis cæsis Pinnum pr. Rybnik Silesiæ. — Hymenium 40-50 μ . alt. Adest thallus (proprius?) albido-virescens.

7. **Xylographa scaphoidea** Stirt. Grev. III, p. 35. — Thallo macula 2731
alba vel obsoleta indicato; ascomatibus prominulis, fuscis, oblongis, rotundatis flexuosisve, parvis, epithecio riniformi, margine prominulo, crasso; ascis octosporis; sporidiis ellipsoideis, continuis, 12-16 \simeq 6-8, hyalinis; paraphysibus irregularibus indistinctis, apicibus fuscis conglutinatis.

Hab. ad lignum Alni decorticatum Dalwhinnie et Grantown Britanniæ. — Hypothecium incolor. Gelatina hymenialis jodo obsolete cœrulescens, dein fulvescens. Gonidia (propria?) inter ligni fibras interspersa, 12-18 μ . diam., viridia.

Sect. 2. **Didymosporæ** Sacc.

DIPLONÆVIA Sacc. (Etym. *diploos* duplex et *Nævia*), *Nævia*, *Phragmonævia* et *Cryptomyces* Auct. ex p. — Ascomata minuta, tenuissima, innato-erumpentia, epidermide valvata vel laciniata cincta, ceracea, plana, subimmarginata. Asci elongati, paraphysati, 8-spori. Sporidia ovoideo-oblonga, 1-septata, hyalina. — Fungilli graminilichenicolæ.

1. **Diplonævia Caricum** (Auersw.) Sacc. *Nævia Caricum* (Auersw.) 2734
Fuck. Symb. p. 249, *Stictis* Auersw. in schedis. — Gregaria, innato-erumpens, epidermide quadrifida cincta, disco subrotundo, flavido 0,3-0,4 mm. lat., extus flavo-brunneolo; ascis oblongis, 8-sporis, 42 \simeq 6-8; sporidiis distichis, oblongis, 6-8 \simeq 2,5, 1-septatis, hyalinis; paraphysibus filiformi-clavatis, 2 μ . cr.

Hab. in pag. inf. foliorum Caricis montanæ pr. Vollrads Rhenogoviæ.

2. **Diplonævia paradoxa** (Rehm) Sacc. *Nævia paradoxa* Rehm Ascom. 2735
n. 419, *Phragmonævia* Rehm Disc. p. 165. — Minutissima, discoideo-concavula, immarginata, atra, sub epidermide laciniata nidulans, sparsa, disco brunneo-rubescens; ascis clavatis, apice incrassatis, 8-sporis, 50 \simeq 9; sporidiis oblongis, obtusis, 1-cellularibus, binucleatis dein 1-septatis, rectis, hyalinis, 10-12 \simeq 3-4; paraphysibus filiformibus, apice dichotomis, clava piriformi, articulata, 4-6 μ . crassa, fuscidula terminatis, ascos superantibus; hypothecio flavescens.

Hab. ad calamos siccos Junci Hostii in alpibus edit. tyrolensibus juxta glaciem æternam.

3. **Diplonævia phragmitina** (Karst.) Sacc. *Nævia phragmitina* Karst. 2736
Symb. Myc. XXIII, p. 4. — Sparsa, per epidermidem stellatim fissam emergens, concaviuscula, subimmarginata, testaceo-pallida, 0,3 mm. lat.; ascis clavatis, stipitatis, 95 \approx 12, octosporis; sporidiis distichis, fusoideo-elongatis, 18-21 \approx 3-5, continuis 2-guttatis dein (spurie?) 1-septatis; paraphysibus cohærentibus.

Hab. in foliis Phragmitis communis, Mustiala Fennicæ.

4. **Diplonævia glacialis** (Rehm) Sacc. *Pseudopeziza glacialis* Rehm 2737
in Hedwigia 1885, p. 232, *Phragmonævia* Rehm Disc. p. 164. — Ascomatibus primitus innatis, punctiformibus dein, epidermide plerumque longitudinaliter fissa, in statu humido erumpentibus, orbicularibus, patellaribus, siccis subatris, disco hyalino, sicco 0,15 humido 2 mm. diam., excipulo fuscidulo vel flavidulo, parenchymatice et versus marginem pseudo-parenchymatice contexto; ascis cylindraceo-clavatis, apice obtuse acutatis, 36-45 \approx 6-7, 8-sporis; sporidiis distichis, clavatis, nucleolis parvis præditis, hyalinis, 10-14 \approx 1,5, demum 1-septatis; paraphysibus filiformibus vix perspicue clavatis, hyalinis.

Hab. ad folia sicca Junci, Via jugi Stelvii prope Franzenshöhe in Tyroli (Dr. REHM).

5. **Diplonævia sphærelloides** (Ell.) Sacc. *Propolis sphærelloides* Ellis 2738
Bull. Torr. 1881, p. 124. — Erumpens, orbicularis, vix prominula, sed uda tuberculiformi-inflata, 200-300 μ . lat., disco pallide carneo, margine subfimbriato, atro-brunneo; ascis tereti-clavatis, 45-55 \approx 7-10; sporidiis distichis, oblongis vel clavato-oblongis, 2-4-nucleatis, tandem uniseptatis, 12-13 \approx 3-4; paraphysibus clavulatis.

Hab. in calamis emortuis Junci, sæpe annulatim seriata, Utah Amer. bor. (HARKNESS).

6. **Diplonævia Peltigeræ** (Fuck.) Sacc. *Cryptomyces Peltigeræ* Fuck. 2739
Symb. p. 253, *Phragmonævia Fuckelii* Rehm Disc. p. 166. — Cupulis gregariis, erumpentibus, ceraceo-carnosis, subdiaphanis, $\frac{1}{2}$ mm. diam., convexis, demum concavis, epidermide fissa circumdatis, orbicularibus elongatisve, sordide flavo-cerinis; ascis oblongo-ovatis, sessilibus, 8-sporis, 55 μ . long.; sporidiis distichis, elongato-clavatis, inæqualiter uniseptatis, loculo superiore subrotundo, brevioris, loculo inferiore elongato, hyalinis, 14 \approx 5.

Hab. in thallo Peltigeræ caninæ in Rhenogovia et Transylvania.

PROPOLIDIUM Sacc. Consp. gen. Disc. p. 11 (1884), *Stictidis* et *Pro-*

poleos spec. Auct. — Ascomata subimmarginata, ambitu sæpe irregulari, plana, ceracea. Asci tereti-clavati, paraphysati, octospori. Sporidia oblonga, 1-septata, hyalina v. colorata. — Fuungi trunci-lignicolæ. Est *Propolis* didymospora.

1. **Propolidium foveolare** (Rehm) Sacc. *Stictis foveolaris* Rehm Ascom. 2740 n. 121, *Cryptodiscus* Rehm Disc. p. 158, *Stictis pallida* Speg. et Phill. p. p. — Ascomatibus in ligni decorticati supremo strato immersis lignique superficiem flavescentibus vel dealbantibus, gregariis, plerumque seriatis, urceolatis pallidis vel rubescentibus, orbicularibus v. ellipsoideis, ligni annulo cinctis, c. 0,3-5 mm. diam.; ascis clavatis, 36 = 6, 8-sporis; sporidiis distichis, oblongis obtusis, interdum subcurvatis, hyalinis, 2-cellularibus, 6-8 = 2-2,5; paraphysibus hyalinis, filiformibus, apice clavula rotunda, 3 μ . crassa præditis, hypothecio hyalino; jodi ope hymenio dilute cœrulescente mox rubescente.

Hab. ad ramulos querneos siccos decorticatos in silvis Franconiæ mediæ, Italiæ bor. et Britanniæ.

2. **Propolidium glaucum** (Ell.) Sacc. Consp. gen. Disc. p. 11, *Propolis* 2741 *glaucæ* Ellis, Bull. Torr. 1881, p. 65, Ellis n. am. f. 454. — *Propoli fagineæ* habitu, sed disco constanter glauco-cinereo; ascis late cylindræis, sessilibus, 78 = 16-18; sporidiis monostichis, obliquis, late ellipsoideis, hyalinis, 2-nucleatis, medio subconstrictis, 1-septatis, 17-18 = 12-14; paraphysibus filiformibus, apice flexuosis, ramosis; hypothecio hyalino.

Hab. in cortice sicco ramorum *Quercus coccineæ*, New Jersey in America boreali.

3. **Propolidium Tsugæ** (Farl.) Sacc. *Stictis Tsugæ* Farl. Flora Withe 2742 Mount. p. 245. — Hypophyllpm, sparsum, disco minuto, circulari, atro-brunneo, per epidermidem reflexam erumpens; ascis oblongis, 55-65 = 11-12, octosporis; sporidiis ovoideis, uniseptatis, hyalinis, ad septum constrictis, 13-15 = 5-7,5, articulo sup. crassiore; paraphysibus filiformi-clavulatis, apice brunneis et 3 μ . cr.

Hab. in foliis *Abietis canadensis*, Shelbourne Withe Mount. Amer. bor.

4. **Propolidium Mezerei** (Hazsl.) Sacc. *Propolis Mezerei* Hazsl. Einig. 2743 Discom. p. 2, t. III, f. 6. — Subcutaneo-erumpens, non prominula; disco flavo-rubro, rotundo, vel elongato, irregulari; ascis elongatis v. elongato-teretibus stipitatis, subinde clavatis sessilibus;

sporidiis brunneis, ovato-elongatis, 1-septatis, constrictis, loculo sup. 6 μ . cr., loculo inf. 4 μ . cr.; paraphysibus coalescentibus.

Hab. in ramis *Daphnes Mezerei*, Marmaros Hungariæ (LOJKA). — Inter ascos adsunt basidia conidiophora, conidiis cylindraceis, apice rotundatis, continuis, hyalinis, 40-50 μ . long.

Sect. 3. Phragmosporæ Sacc.

CRYPTODISCUS Corda Ic. fung. II, p. 37 (1838) [Etym. *cryptos* absconditus et *discus*], *Stictis* et *Propolis* Karst. ex p. — Ascomata immersa v. dein emergentia, planiuscula, crassiuscula, circulari-inæqualia, subimmarginata, ceracea; excipulo indistincto. Asci teretis-clavati, 8-spori, paraphysati. Sporidia oblonga v. fusoides, 2-pluriseptata, hyalina.

I. Species typicæ.

1. **Cryptodiscus major** Sacc. Mich. I, p. 62, F. ital. f. 120. — Cupulis 2744 sparsis, discoideis, $\frac{1}{3}$ mm. diam., initio epidermide velatis, dein erumpenti-superficialibus, carnosulis, roseis, disco convexiusculo immarginatis; ascis clavatis, breve stipitatis, 100 \approx 16-18; paraphysibus filiformibus obvallatis, octosporis; sporidiis subdistichis fusoides, inæquilateralibus, 22-28 \approx 7-8, utrinque obtusiusculis, 4-cuboideo-nucleatis dein spurie 3-septatis, medio constrictis, hyalinis.

Hab. in ramulis emortuis *Punicae Granati*, Conegliano Ital. bor. (SPEGAZZINI). — A *Cr. Cesatii* differt cupulis conspicue majoribus, ascis sporidiisque quoque paullo majoribus.

2. **Cryptodiscus Cesatii** Mont. in Hedw. I, p. 102, t. XIV, f. 1. — 2745 Minutissimus, erumpens, aurantiacus, siccus vix conspicuus, madidus gelatinosus, tumens, vividius coloratus, disco immarginato, mucilagineo; ascis clavatis, octosporis, 60-80 \approx 10; sporidiis fusoides, curvis, triseptatis, hyalinis, 17-20 \approx 6,5.

Hab. in culmis putrescentibus *Zeæ* in Italia boreali.

3. **Cryptodiscus pallidus** (Pers.) Corda Ic. II, p. 37, t. XV, f. 129, 2746 Pat. Tab. anal. f. 490, *Stictis pallida* Pers. Obs. 2, p. 74. t. 6, f. 7, *Pez. punctif.* Pers. Syn. p. 674? — Gregarius, immersus, punctiformis, pallidus, ore connivente subelliptico dehiscente; ascis clavatis 50-60 \approx 10-12, octosporis; sporidiis oblongo-fusoides, hyalinis, 10-15 \approx 4-6, distichis, dein 3-septatis; paraphysibus filiformibus, sursum ramulosis, clavulatis, hyalinis.

Hab. in lignis arborum, frondosarum vetustis in Suecia, Germania, Gallia, Fennia, Italia, Belgio, Britannia. — In ligno

passim determinate expallente sparsa observantur puncta pallida, macula oblonga albidiore cincta. Sub lente observatur hymenium urceolatum gilvo-pallidum, ore elliptico v. rotundo hians absque proprio receptaculo, sed ligno parum prominente cincto. Discus urceolatus, variat albidus, incarnatus, luteolus.

4. **Cryptodiscus atro-virens** (Fr.) Corda Icon. fung. II, p. 37 f. 130, 2747
Sacc. F. ital. f. 1301, *Stictis* Fr. Sci. n. 278, *Propolidium* Rehm Disc. p. 168. — Gregarius, immersus, dein erumpens, orbicularis v. ellipticus, planiusculus, griseo-virens demum atro-virens, pallidius marginatus, circ. 1-1,5 mm. long.; ascis cylindraneo-clavatis, breve stipitatis, 65-75 \approx 14-16, apice rotundatis; paraphysibus filiformibus apice ramulosis et materie viridescente obductis obvallatis, octo-sporis; sporidiis botuliformibus, curvulis, utrinque obtusiusculis, 15-22 \approx 5-6, 3-septatis, non constrictis, hyalinis.

Hab. in ligno indurato, virenti- dein pallido-maculato Paulowniæ imperialis, Vittorio Italiæ borealis; in ramis variis in Bohemia et Suecia.

5. **Cryptodiscus atro-cyaneus** (Fr.) Sacc. *Stictis atro-cyanea* Fr. S. 274
M. II, p. 199, *Xylographa* Fuck. Symb. App. II, p. 48, t. I, f. 14, *Propolidium* Rehm Disc. p. 168. — Oblongus, immersus, atro-cyaneus, rima lineari dehiscens; ascis oblongo-clavatis, substipitatis, 8-sporis, 75-84 \approx 10-15; sporidiis subdistichis fusiformibus, sæpe vermicularibus, 3-5-septatis, loculis guttulatis, hyalinis, 20-24 \approx 5; paraphysibus filiformibus, ramosis.

Hab. in ramis dejectis putrescentibus Populi Tremulæ etc. in Suecia, Germania. — Admodum pusillus, gregarius, ramis virore tinctis sæpius innatus; ligno prominente non cingitur, sed margine proprio tenuissimo; demum totus dehiscens absque margine; junior et humectatus virescit, ceterum nigrer.

6. **Cryptodiscus niveo-purpureus** E. et E. Jour. Myc. 1888 p. 101. — 274
Gregarius, 0,5-1 mm. lat., disco plano v. convexulo, lilacino-purpureo, margine candido, pruinoso, subdenticulato; contextu laxo subfriabili, udo recurvo-patente, sicco clauso, vix conspicuo; ascis cylindracois, 75 \approx 12; sporidiis distichis, ovato-oblongis, hyalinis, 3-septatis, 12-16 \approx 5-6, denique ad septa subconstrictis; paraphysibus apice obtusis, flexuosis.

Hab. in ligno dejecto Quercus albæ, Newfield New Jersey Americæ borealis.

7. **Cryptodiscus sordidulus** Speg. Fung. Argent. II, n. 105. — Discretus 275
vel parce gregarius, primo globosus, tectus, dein erumpenti-

superficialis, ore lacero, subrevoluto-pallescente, disco subceraceo; sordide et dilute olivaceo-lutescente; ascis tereti-clavatis, breve pedicellatis, 60-70 \approx 15; sporidiis distichis, elliptico-elongatis vel clavulato-fusoideis, sæpe curvulis, utrinque acute rotundatis, demum triseptatis, non constrictis, hyalinis, 25-30 \approx 5-6.

Hab. in ramulis dejectis Erythrinæ Cristæ-Galli secus Rio de la Plata cerca de la Recoleta in Republ. Argent.

8. **Cryptodiscus phacidioides** Desm. 11 Not. p. 369. — Sparsus im- 2751
mersus epidermide, dein in lacinias irregulares rupta tectus, erumpens et denudatus, submembranaceus, angulato-orbicularis, rufescenti-pallidus, siccus clausus, humidus convexus, margine proprio subdentato, brunneo; disco tremelloso; ascis inflatis, subfusiformibus, 40 μ . longis; sporidiis rectis, oblongis, triseptatis, 12-13 μ . long.

Hab. in ramulis exsiccatis Aceris Negundinis in Gallia.

9. **Cryptodiscus Rubi** (Cr.) Sacc. *Stictis Rubi* Cr. Finist. p. 42. — 2752
Subhemisphæricus, flavidus, 1 mm. lat., contextu parenchymatico-reticulato; disco albido; ascis subclavatis, 8-sporis; sporidiis clavatis, 5-septatis, hyalinis.

Hab. in ligno sarmentorum Rubi, Finistère Galliæ.

10. **Cryptodiscus? carneus** (Cr.) Sacc. *Patellaria carnea* Cr. Finist. 2753
p. 46, tab. ult. f. 10 (*Helotium*). — Sessilis, carneus, disciformis, 1 mm. lat.; ascis subclavatis, 8-sporis; sporidiis oblongis, subcoloratis, 3-septatis; paraphysibus filiformibus sursum subincrassatis.

Hab. in ramis emortuis Coryli Avellanæ, Finistère. — An *Dermatella?*

11. **Cryptodiscus rhopaloides** Sacc. Mich. II, p. 379, F. it. f. 1302. — 2754
Ascomatibus laxe gregariis, cortice infossis et initio tectis, disciformibus, $\frac{1}{3}$ - $\frac{1}{2}$ mm. diam., plano-concaviusculis, subimmarginatis, carnosulis, totis aquose ochraceis, denique cortice erupto cinctis, sed numquam emergentibus, excipuli contextu tenui, prosenchymatico, subochraceo; ascis tereti-clavatis brevissime stipitatis, 80 \approx 14-15, apice obtusiusculis; paraphysibus copiosissimis filiformibus, sæpe ramosis arcte obvallatis, octosporis; sporidiis distichis elongato-clavatis, 30-35 \approx 5, deorsum sensim attenuatis, rectis curvulisve, 6-8-septatis nucleatisque, hyalinis.

Hab. in sarmentis corticatis Vitis viniferæ emortuis, Padova Ital. bor. (BIZZOZERO). — Præcipue ob sporidiorum formam perfecte clavatam mox distinguenda species.

12. **Cryptodiscus Moutonianus** Sacc. (sp. nov.) — Ascomatibus subepi- 2755

dermicis, 1 mm. diam. rufulis erumpentibus, cuticulâ obscuratâ cinctis; ascis cylindræis breve stipitatis, octosporis, $110 \approx 16$; sporidiis distichis, oblongis, 3-5-septatis, hyalinis, $30 \approx 9$; paraphysibus filiformibus, sæpe furcatis.

Hab. in caulibus emortuis *Senecionis Fuchsii* pr. Liege Belgii. — A *Cr. majori* et *Cesatiano* ascomate sporidiisque majoribus sat diversus.

13. **Cryptodiscus lacer** (Mont.) Sacc. *Stictis* Mont. IX Cent. n. 17. 2756

— Immersus, erumpens, cupulatus, cinerescens, limbatus, limbo cum epidermide lacerata concretis; ascis clavatis, 80 μ . longis; paraphysatis, octosporis; sporidiis fusoides, triseptatis, $20 \approx 5$.

Hab. in caule *Labiatae* cujusdam ad Roche Cardon pr. Lyon Galliae. — Ascoma 0,6-0,7 mm. lat.

14. **Cryptodiscus angulosus** Karst. Rev. p. 166, *Pez. angulosa* Karst. 2757

M. F. I, p. 244. — Gregarius, parenchymati corticis immersus et innatus, primitus tectus dein epidermidem superpositam, primum colore subcærulescente tinctam, in lacinias plerumque 4 obtusas triangulares rumpens eisdemque cinctus, angulatus vel rarius angulato-subrotundatus, planus, disco æruginascente-cinereo, farinoso, circiter 1,5 mm. lat.; ascis elongato-clavatis, 50-60 \approx 10-12, jodo non cærulescentibus, 8-sporis; sporidiis distichis elongatis, curvulis, subchlorino-hyalinis, 3-septatis, 16-23 \approx 3-4; paraphysibus haud bene discretis.

Hab. in ramis *Salicis caprææ* siccis prope oppida Jakobstad et Wasa Fenniae. — Excipulum indistinctum. Hymenium tenuissimum.

15. **Cryptodiscus microstomus** (Carm.) Sacc. *Stictis* Carm. in Berk. Outl. 2758

p. 375, Phill. Disc. p. 383. — Exiguus, sparsus punctiformis, prominens, albidus dein olivaceo-nigricans, orificio minuto rotundo v. elliptico dehiscens; ascis tereti-clavatis, 8-sporis; sporidiis oblongo-ellipsoideis, 3-septatis, hyalinis, granulosis, 13-15 \approx 3; paraphysibus ramosis.

Hab. in ligno emortuo, Appin Britanniae (CARMICHEL).

16. **Cryptodiscus Leprieurii** (Mont.) Sacc. *Stictis* Mont. Guy. n. 463. 2759

— Immersus, gregarius, confluentis, demum majusculus, disco rufo nudo, ore primitus albo-velato tandem revoluto, repando flexuoso; ascis clavatis 100 μ . long., filiformi-paraphysatis, 8-sporis; sporidiis ellipticis 4-nucleatis, hyalinis.

Hab. ad cortices Guyanae (LEPRIEUR). — Cupulae erumpentes, punctiformes, agglomerato-confluentes, velo albo tectae; discus mi-

nutus, mox confluentia plurium latior, 2 mm. diametro metiens, rufus castaneusve, planus, nudus, ore prius connivente albo-farinoso stellatim dentato revoluto cinctus, flexuoso-repandus.

7. **Cryptodiscus Patellea** (Cooke) Sacc. *Stictis Patellea* Cooke Grev. 2760
VII, p. 14. — Sparsus, orbicularis, concavus, immersus; disco cervino; ascis clavatis; sporidiis lanceolatis, 3-septatis, hyalinis 20-5.

Hab. in ligno denudato, New York Amer. bor.

8. **Cryptodiscus Libertianus** Sacc. et Roum. Misc. mycol. I, p. 10, 2761
Phragmonœvia Libertiana (S. et Br.) Rehm Disc. p. 160. — Ascomatibus gregariis, disciformibus, convexulis, $\frac{1}{2}$ mm. d., epidermide velatis dein, eâ rimose v. varie fissâ, erumpentibus, roseis, carnosulis; ascis tereti-clavatis breve crasse stipitatis, 120-130 \simeq 20-24, apice rotundatis, paraphysibus simplicibus, ramulosisque obvallatis, octosporis; sporidiis distichis, clavato-fusoideis, 28-30 \simeq 8, 5-(raro 3)-septatis, non constrictis, hyalinis.

Hab. in ramis corticatis salicinis (ut videtur), Malmedy in Arduennis (LIBERT). — Affinis *Cryptodisco majori*, sed sporidia crassiora, recta, 5-septata, non constricta.

II. Species desciscentes.

19. **Cryptodiscus pruinosus** Rabehn. in Bot. Zeit. 1851, p. 454. — 2762
Perexiguus, punctiformis, brunneus, pruina grisea tectus, disco subrotundo, ceraceo, brunneolo, margine subelevato, levi cincto; sporidiis ellipsoideis, 3-septatis, senis vel octonis.

Hab. in ramis siccis Oleæ in Italia meridionali.

20. **Cryptodiscus Breutelii** Rabenh. in Bot. Zeit. 1851, pag. 453. — 2763
Erumpens, permagnus, ceraceo-coriaceus, polymorphus, orbicularis, oblongus, ellipticus (3-4-angularis etc.) brunneus; margine involuto, rugoso-sulcato; disco aurantiaco, demum fuscescente; ascis permagnis subclavatis; sporidiis uniseriatis olivaceo-fuscis vel subaureis oblongo-ellipticis utrinque obtusis, triseptatis, 8 μ . longis.

Hab. in ramis tenuibus ligni exotici in India occid. (BREUTEL).

21. **Cryptodiscus subreticulatus** (B. et Br.) Sacc. *Platygrapha subreticulata* B. et Br. Fung. of Ceyl. p. 109. — 2764
Cupulis aggregatis, quandoque maculas reticulatas formantibus, margine crenato niveo tomentoso; ascis subclavatis; sporidiis oblongis, hyalinis 3-septatis, 12-14 \simeq 6, intus chlorino-brunneolis.

Hab. ad cortices in silvis australioribus ins. Ceylon. — Hæc species nec non tres sequentes, teste Berk., inter *Stictidem* (seu *Cryptodiscum*), *Platygrapham* et *Arthoniam* nutant.

22. **Cryptodiscus albo-rufus** (B. et Br.) Sacc. *Platygrapha albo-rufa* 2765
 B. et Br. Fung. of Ceyl. pag. 110. — Hymenio lato rufo, margine albo crenato; sporidiis subfusiformibus 5-septatis; ascis clavatis.
Hab. ad cortices, Peradenya Ceylon.
23. **Cryptodiscus astroideus** (B. et Br.) Sacc. *Platygrapha astroidea* 2766
 B. et Br. Fung. of Ceyl. p. 109. — Minutus; hymenio glauco, margine stellato-fracto; sporidiis clavato-fusiformibus, 5-septatis.
Hab. ad cortices in silvis australioribus ins. Ceylon. — Fructificatione cum *C. bivelo* congruit, sed habitus diversus.
24. **Cryptodiscus bivelus** (B. et Br.) Sacc. *Platygrapha bivela* B. et 2767
 Br. Fung. of Ceyl. p. 109. — Hymenio griseo, velo marginali corticeque substellato cincto; ascis clavatis; sporidiis obovatis, deorsum attenuatis, 5-7-septatis, 15-20 = 7, chlorino-brunneolis.
Hab. ad cortices in insula Ceylon.
25. **Cryptodiscus vibrisseoides** (Cr.) Sacc. *Patellaria vibrisseoides* 2768
 Cr. Finist. p. 46. — Sessilis, disciformis, 1-2 mm. latus, brunneolus, glaber, disco flavo-ochraceo v. griseo-cyaneo; ascis late cylindraceis, 8-sporis; sporidiis oblongis, fusoideis, 10-12 septatis hyalinis; paraphysibus filiformibus, simplicibus vel furcatis, apice piriformia.
Hab. in culmis emortuis putridis Phragmitis communis, Finistère Galliæ. — An *Belonidium*?
26. **Cryptodiscus Pelvicula** (Pers.) Rabenh. Pilze p. 332, *Stictis* Pers. 2769
 M. Eur. I, p. 337. — Orbicularis, majusculus, profunde excavatus, levis, rufescenti-pallidus; ascis clavatis; sporidiis fusoideis, septatis.
Hab. in ramis siccis Sarcis pr. Neufchatel Helvetiæ (CHAILLET) et Germania. — Primo sub epidermide bullas sistit, dein erumpens *Tuberculariæ pallidæ* facie, demum dilatatus, excipulo oblitterato; tamen hymenium marginatum, ex ascis punctulatum tandemque elabens foveolam tantum relinquens, 2-4 mm. lat., exacte orbicularis, subnitidus.

PHRAGMONÆVIA Rehm Disc. p. 160 ex p. (1888) [Etym. *phragma* septum et *Nævia*], *Næviæ* et *Stictis* spec. Auct. — Ascomata innata, dein per epidermidem valvatim vel laciniatim fissam erumpens, subimmarginata, circularis vel oblonga, minuta, tenuissima, discoidea, læticoloria. Asci elongati, paraphysati, 2-4-8-spori. Sporidia oblonga vel fusoidea, 2-pluriseptata, hyalina.

1. **Phragmonævia exigua** (Desm.) Rehm Disc. p. 163, *Stictis* Desm. 2770
 Ann. Sc. nat. III, 8, p. 183. Cfr. Hedw. 1883, p. 12. — Sparsa,

perexigua, immersa, epidermide mox rima elliptica fissâ cincta, concava, uda orbicularis, sicca ovalis, margine nigricante, prominulo; disco fulvo-pallido; ascis clavatis, 60-65 \approx 9-10, octosporis; sporidiis oblongo-clavatis, rectis, continuis, mox 1-septatis, demum 3-septatis, 15-18 \approx 3-4, distichis; paraphysibus furcatis apice globulosis, 5 μ . cr., hyalinis.

Hab. in culmis Junci articulati aridis in Vogesis, Gallia bor., Germania et Belgio.

2. **Phragmonævia hysterioides** (Desm.) Rehm Disc. p. 162, *Prop. hysterioides* (Desm.) Fuck. Symb. p. 255, *Stictis* Desm. Ann. Sc. Nat. 1843, XIX, p. 364. — Immersa, dein erumpendo prominula, ovato-oblonga vel suborbicularis, dein hysterioideo-aperta, margine brunneo-nigricante, subgranulato; disco ceraceo, cervino vel rufo; ascis oblongis, rectis, basi attenuatis, obtusis, antice acuminatis, 8-sporis, 65-75 \approx 8-10; sporidiis fusiformibus, curvatis, utrinque obtusiusculis, 4-guttulatis, hyalinis, 26 \approx 4-5, demum 3-septatis.

Hab. in foliis siccis Caricis paludosæ etc. in Gallia, Germania, Britannia. — A cl. Fuckel ad *Nemacyclum* refertur: certe accedit.

3. **Phragmonævia macrospora** (Karst.) Rehm Disc. p. 162, *Phacidium* Karst. Symb. p. 256, *Trochila* Karst. M. F. I, p. 247. — Gregaria, innato-erumpens, clausa, demum in lacinias 3-5, cum epidermide connatas, v. irregulariter dehiscens, concava, disco flavo-brunneo vel umbrino-pallido, 0,3-0,5 mm. lat.; ascis clavatis, 72-86 \approx 12, sæpius bisporis; sporidiis fusioideo-elongatis, vulgo curvulis, guttulis 2 majusculis præditis, 35-38 \approx 6-7, demum 3-septatis; paraphysibus filiformibus.

Hab. ad folia Caricis vesicariæ emortua prope Mustiala Fennicæ et in Engadina Helvetiæ.

4. **Phragmonævia hypopyrrha** Rehm Disc. p. 161. — Gregaria, sæpe seriata, innata, dein rimose, rarius laciniatim erumpens, 0,2-0,5 mm. long., tota pallide carnea, disco oblongo raro orbiculari; ascis clavatis, 60-65 \approx 8-9, octosporis; sporidiis oblongo-clavatis vel fusioideis rectis curvulisve, continuis, 2-guttatis, dein 1-3-septatis, hyalinis, 21-24 \approx 4-5, distichis; paraphysibus ramulosis septatis, 2-3 μ . cr.; obturaculo jodo cœrulescente.

Hab. in foliis siccis Calamagrostidis prope Königstein Saxonicæ.

5. **Phragmonævia lætissima** (Ces.) Rehm Disc. p. 167, *Peziza* Ces. in Rab. H. M. I, n. 1024, *Nævia* Fuck. Symb. p. 249. — Exigua,

innata, epidermide laciniatâ cincta erumpens, disco subrotundo cinabarinò, patellari; ascis tereti-clavatis, breve stipitatis $80 \approx 8$; sporidiis ovato-piriformibus, continuis dein 2-septatis, hyalinis $21 \approx 5$; paraphysibus filiformibus, flavido-guttulatis.

Hab. in caulibus siccis Equiseti arvensis et palustris in Italia boreali et Germania.

6. **Phragmonævia Hyperici** (West.) Sacc. *Phacidium* West. Bull. Soc. 2775 bot. Belg. V, n. 1 (1866). — Ovata, perexigua, sparsa, atro-nitidula, laciniis inæqualibus pluribus dehiscens; disco convexo, udo flavo-brunneolo, sicco saturatiore; ascis clavatis, latis, 8-sporis, filiformi-paraphysatis; sporidiis oblongo-ovoideis, hyalinis, dein chlorinis, 3-ocularibus, loculo medio magis inflato.

Hab. in caulibus emortuis Hyperici perforati prope Virton Belgii.

7. **Phragmonævia caulicola** (Schw.) Sacc. *Stictis caulicola* Schw 2776 Syn. Am. bor. p. 179. — Minuta, erumpens, atra et circumcirca nigrificans, exacte orbiculata aut urceolata, ore rotundo, margine spurio, cinerescens; sporidiis fusiformibus, 20μ . longis, demum 3-septatis (Berk.).

Hab. sub epidermidem caulium majorum, dein erumpens, Bethlehem Amer. bor. — An *Ephelina*?

8. **Phragmonævia Convallariæ** (M. et C.) Sacc. *Stictis Convallariæ* 2777 M. et Ces. Syll. Crypt. n. 669. — Sparsa, minuta, punctiformis, atra; disco elliptico primitus epidermide tecto, centro depresso, mox epidermide secedente nudo obscure rufo, atro-marginato; ascis tereti-oblongis, in stipitem brevem attenuatis, 8-sporis paraphysibusque stipatis, $70 \approx 7-8$; sporidiis lineari-oblongis, hyalinis guttulas senas globosas uniseriatis foventibus, $15 \approx 1,5-2$.

Hab. in caulibus siccis Convallariæ latifoliæ, in viciniis Brixiae Longobardiæ (CESATI). — Puncta gregaria, oblongo-elliptica, $\frac{1}{4}-\frac{1}{3}$ mm. longa, $\frac{1}{5}-\frac{1}{4}$ mm. lata, initio atra, medio subcupulari-depressa, mox epidermide atrata secedente disciformia, nuda, disco rufa, atro-marginata.

EUPROPOLIS De Not. Comm. Critt. I, p. 364 (1864) [Etym. *ev* bene et *Propolis*]. — Ascomata orbicularia, plana ceracea, excipulo margine pallido membranaceo cincto. Asci 8-spori, paraphysati. Sporidia oblonga, 3-septata, fuscidula.

1. **Eupropolis Guthnickiana** De Not. Comm. Critt. I, p. 364, *Stictis* 2778 Guthnick Herb. — Orbicularis, plana, 1 mm. lat.; disco plumbeo;

ascis parvis octosporis; sporidiis oblongatis, 3-septatis, nucleis leniter hyalio-fuscescentibus; paraphysibus cohærentibus.

Hab. ad truncos, Portorico (GUTHNICK).

PHANEROMYCES Speg. et Hariot Rev. mycol. 1889, pag. 93 (Etym. *phaneros* manifestus et *myces*). — Ascomata marginata, subscutellata, erumpenti-superficialia, ceraceo-subcornea. Asci octospori, tereti-clavati, paraphysati. Sporidia elongato-ellipsoidea pluri-(5)-septata, hyalina. — Natura fere lichenina, sed gonidia nulla et jodi reactio nulla. Habitus *Stictidis* exertæ.

1. **Phaneromyces macrosporus** (Boud.) Speg. l. c., ? *Niptera* Boud. 2779
Fung. C. Horn. n. 76. — Cupulis minutulis, erumpenti-superficialibus, 0,5-1 mm. lat., albo-marginatis, extus furfuraceis; disco levi fusco-olivaceo; ascis tereti-clavatis, subinde torulosis, brevissime stipitatis, 150-160 \approx 20-22, octosporis; sporidiis distichis, elongato-ellipsoideis, utrinque obtusis, 30-35 \approx 9-10, subcurvulis tenuiter v. spurie 6-septatis, non constrictis e chlorino hyalinis.

Hab. ad lignum putrescens denudatum in silvis, Hermite Island Cap. Horn (HARIOT).

XYLOGRAMMA Wallr. Crypt. p. 509 (1833), Rehm Disc. p. 169 (Etym. *xylon* lignum et *gramme* linea). — Ascomata innata, dein matricem tegentem hysterioideo-findentia, nigricantia, disco ceraceo pallidiore. Asci clavati, 8-spori, paraphysati. Sporidia ovato-oblonga 2-pluriseptata, hyalina. — A *Cryptodisco* et *Phragmonævia* differt habitu hysterioideo, a *Briardia* et *Xylographa* sporidiis septatis.

1. **Xylogramma sticticum** (Fr.) Wallr. Crypt. n. 2645, *Xylographa* 2780
Fr. Syst. Myc. II, pag. 197, *Hyst. sticticum* Fries Obs. Myc. I, p. 194. — Immersum, punctiforme, oblongum, nigrum; disco tenuissimo, humectato fuscescente; ascis oblongis, plerumque curvatis, sessilibus, 8-sporis, 66 \approx 8-11; sporidiis oblique monostichis, oblongo-cylindræis, parum curvatis, utrinque obtusis, 3-septatis, ad septa vix constrictis, hyalinis, 12-18 \approx 4-5; paraphysibus septatis, ramulosis, clavulatis.

Hab. in ligno vetusto canescente Populi Tremulæ, Coryli, Rosæ, Juniperi in Suecia, Germania, Italia. — Teste Rehm, huc spectat *Gloniella minima* Sacc. Syll. II, p. 767. Priori affinis, sed multo minor, labiis subdistinctis convexis.

2. **Xylogramma hysterinum** (Fr.) Rehm Disc. p. 171, *Stictis hysterina* 2781

Fr. Syst. Myc. II, p. 199 ex p., Pat. Tab. an. f. 49. — Disco lanceolato, nigro, leviter concavo, ligno colliculoso-prominente cincto; sporidiis ellipsoideis vel oblongo-ellipsoideis 4-septatis, 12-14 μ . long. (Berk.).

Hab. in ligno *Quercus*, *Fagi*, *Liriodendri*, *Pini* in Suecia, Germania, Gallia, Amer. bor. — In ligno duro exsiccato observantur maculæ elongatæ albæ, in quibus leviter prominent colliculi oblongi a ligno formati, sed sæpe nigricantes. Discus oblongus, plus minus angustatus, utrinque acutus, in omni ætate ater, in ligno profunde penetrans. *Hysterium Taxi* Pers. syn. p. 99 (ascomatibus immersis sparsis utrinque attenuatis subcinereis ligno prominente cinctis, dein osculo subrotundo hiantibus) non multum obstat, forsitan mera varietas, teste Fr.

3. **Xylogramma lineare** (C. et E.) Sacc. *Stictis linearis* C. et E. *Grevillea* VII, pag. 7. — Lirellæforme, sparsum, brunneum, disco testaceo; ascis clavatis; sporidiis fusoides, triseptatis, hyalinis, 15 \approx 6. 2782

Hab. in ligno decorticato *Quercus* et *Vaccinii*, New Jersey Amer. bor.

4. **Xylogramma longum** (Pers.) Rehm *Disc.* p. 171, *Hysterium* Pers. *Syn.* p. 99, *Stictis* Fr. *Syst. Myc. Ind.* p. 105. — Sparsum, innatum, 3 mm. long., atro-nitidulum, parallele seriatum, subinde curvulum, sæpe confluens, utrinque acutum, longitudinaliter dehiscens; disco brunneo-griseo. 2783

Hab. in ligno fagineo emortuo in Germania et Britannia. — Sec. Capron (in Cooke *Handb.* n. 2229) species hæc v. huic affinis præbet sporidia oblongo-ellipsoidea, 3-septata, 15-18 μ . long., recta vel curvula et paraphyses furcatas.

5. **Xylogramma caulincolum** (Fuck.) Rehm *Disc.* p. 170, *Xylographa* Fuck. *Symb. App.* II, p. 48. — Cupulis laxè gregariis sparsisve, plerumque in macula æruginosa seu decolorata, indeterminata erumpentibus, primo in caulis decorticati fissuris impressis, ellipticis, concavis, demum magis liberis, ellipticis suborbicularibusve, 1 mm. latis, planis sed siccitate longitudinaliter plicatis, disco primo sordido, carnosio, demum fusco, margine distincto, obscuriori, subtiliter crenulato; ascis clavatis, in stipitem deorsum attenuatis, 8-sporis, 120 \approx 16; sporidiis plerumque in asci superiori parte conglobatis, fusiformibus, rectis parumve curvulis, utrinque obtusiusculis 3(-4?) obscure septatis, loculis uniguttulatis, hyalinis, 22-24 \approx 6-7; paraphysibus filiformibus, antice parum incrassatis. 2784

Hab. in caulibus emortuis decorticatis *Valerianæ* officinalis prope *Æstrich* Rhenogoviæ.

3. **Xylogramma filicinum** (Niessl) Rehm Disc. p. 169, *Stictis filicina* 2785
Niessl in Just Jahresber. 1874, p. 284. — Innatum, mox per epidermidem demum atratam et rimose fissam erumpens, 0,5–1,5 mm. long., 0,3–0,4 mm. lat., disco initio suborbiculari dein elliptico-lanceolato, subimmarginato, flavo-brunneo, plano; ascis elongatis, 50–60 \approx 13, octosporis; sporidiis ovoideis vel oblongo-fusoideis, curvulis, 1–3-septatis, medio constrictis, 17–23 \approx 6–7.

Hab. in stipitibus siccis *Pteridis aquilinæ* in Stiria. — Habitus fere *Lophodermii*.

ODONTOTREMA Nyl. Lich. Scand. p. 249 (1861), Karst. Rev. p. 145 (Etym. *ous*, *odontos* dens et *trema* orificium). — Asc omata innato-erumpentia, discreta, initio clausa, dein margine proprio denticulato-rupto vel subintegro minute dehiscentia, nuda, atra, parva. Asci tereti-clavati, 8-spori, paraphysati. Sporidia oblonga v. elongata, pluriseptata, hyalina. — Genus inter mycetes et lichenes anceps. *Belonium raphidosporum* (n.2046) nuper ab ipso auctore Rehm (Disc. p. 207) ad *Odontotrema* refertur. *Cenang. (Encœl.) inculcatum* Karst. (n. 2339) nunc ab ipso Karst. inter *Odontotremata* enumeratur (Rev. p. 146).

1. **Odontotrema hemisphæricum** (Fr.) Rehm Disc. p. 205, *Stictis* Fr. 2786
Syst. Myc. II, p. 196, *Xylographa* Fuck. Symb. App. III, p. 27. — Prominens, hemisphæricum, punctiforme, nigrum, ore subconnivente rotundo, intus pallidum; ascis cylindræis, sessilibus, rectis, 8-sporis, 50–72 \approx 8–9; sporidiis mono-distichis, oblongo-ovatis, continuis, biguttulatis, hyalinis, 8–12 \approx 4–5, demum 2–3-septatis, ad septa constrictis; paraphysibus filiformibus, simplicibus, asci longitudine.

Hab. in ramis siccis induratis *Pini Cembrae*, *Abietis*, *Juniperi* in Suecia, Helvetia et Tyroli. — Facies fere *Sphæricæ*. Lignum supra singulum individuum nigrescit. Ascoma primo clausum, dein hiat, ore rotundo, disco tenuissimo pallido, demum subrufescit. Interdum hymenium deliquescit, et globulum album refert.

2. **Odontotrema majusculum** Rehm Ascom. Alp. n. 31. — Primitus 2787
globosum, supremo ligni strato immersum, dein emergens et fibris ligni undique sparsis inquinatum usque ad 1 mm. diam., fusco-atrum, parenchymatice contextum, umbilicatum, dein urceolatum, disco plus minusve conspicuo, dilute fusco; ascis clavatis, 8-sporis,

60-70 \approx 8-9; sporidiis obtusis, oblongis, plerumque subcurvatis, 2-4-cellularibus, hyalinis, distichis, 12-15 \approx 3-3,5; paraphysibus filiformibus epi- et hypothecio viridulo fusco; jodi ope hymenio cærulescente.

Hab. ad lignum pineum in valle Griesberg alpium tyrolensium (DR. ARNOLD).

3. **Odontotrema subintegrum** Nyl. in Flora 1867, p. 372, Karst. Rev. 2785 p. 146, *Od. majus* Leight. Lichenfl. p. 390, *Od. firmatum* Nyl. in Fl. 1881, p. 188. — Ascomatibus margine subintegro, ore minuto, 0,4-0,6 mm. lat.; ascis tereti-clavatis, 8-sporis; sporidiis fuscoideis obtusiusculis, 2-3-septatis, 16-22 \approx 5-6, hyalinis; paraphysibus laxè cohærentibus, parvis; gelatina hymeniali jodo lutescente.

Hab. ad lignum exsiccatum Pini et Betulæ in Fennia, Britannia. — Var. **macrosporum** Wainio in Karst. Rev. p. 146: sporidiis crassioribus, 3-septatis, 22-26 \approx 8-10. In trunco Pini in par. Nurmes Kareliæ bor. (WAINIO).

4. **Odontotrema minus** Nyl. lich. scand. pag. 249, *Patellaria minor* 2785 Karsten Myc. fenn. I, pag. 233. — Subparsum, innato-erumpens, concavum, nigricans, macula effusa albida vel albido-cinerecente insidens, disco cæsiopallido, 0,5 mm. lat. margine denticulato; ascis elongato-clavatis, 60-70 \approx 12, octosporis; sporidiis ellipsoideis guttulatis, 3-septatis, 10-16 \approx 5-7; paraphysibus gracilibus.

Hab. in ligno abietino et laricino vetusto in Fennia et Germania. — Sec. Rehm Disc. p. 206: asci 40-50 \approx 10-12; sporidia 10-12 \approx 4-5, ad septa leniter constricta; discus griseo-flavidus.

5. **Odontotrema belonosporum** Nyl. in Flora 1869, p. 412. — Asco- 2790 matibus margine denticulato dehiscentibus, 1 mm. diam.; ascis 8-sporis clavatis; sporidiis elongato-vermicularibus, bis flexis 1-3-septatis, hyalinis, 30-36 μ . long.

Hab. ad ramos exsiccatos Pini in Fennia. — Var. **simplicius** Wainio in Karst. Rev. p. 146: sporidiis vulgo bis flexis et fere S-formibus, 24-40 \approx 2-3, hyalinis. Ad ramos truncosque Pini in Lapponia et Fennia.

6. **Odontotrema inclusum** (Pers.) Karst. Rev. p. 146, *Patellaria* Karst. 2791 M. F. I, p. 236, *Peziza* Pers. M. E. I, p. 307? — Subgregarium, innato-erumpens, sphæroideo-applanatum, orbiculare vel ellipsoideum, fuliginosum, siccum collapsum, nigrum, primitus densum, mox ore integro v. lacero dehiscens, disco pallente, 0,3 mm. lat.; ascis tereti-clavatis, obtusis, 55-70 \approx 10-14; sporidiis subdistichis ovoideo-oblongatis 1-3-septatis, rectis, subchlorino-hyalinis, 17-20

≈ 6-7; paraphysibus filiformibus flexuosis, haud bene discretis, 1,5-2 mm. cr.

Hab. in ligno duro canescente Salicis capræ, Mustiala Fennicæ et in Vogesis.

7. **Odontotrema longius** Nyl. in Leight. Lichenfl. pag. 389. — Sparsum, minutum, nigricans, rotundatum v. oblongum, margine tenui flexuoso v. inæquali, subinde evanescente; hypothecio tenui nigro-fusco; ascis octosporis, paraphysatis; sporidiis elliptico-fusoideis, utrinque obtusis, 3-septatis, 19-21 ≈ 5-7. 2792

Hab. in ligno vetusto in Britannia frequens.

8. **Odontotrema plantagineum** Karst. Rev. p. 147, *Trochila* Karst. 2793
M. F. I, p. 247. — Gregarium vel confertum, primitus clausum et tectum, dein per epidermidem erumpens et lacero-dehiscens, orbiculare, margine tenui, atrum, disco convexo, sordido-pallente, siccum totum atrum, 0,2-0,3 mm. lat.; ascis oblongatis, interdum e basi ampliata paullulum attenuatis, sessilibus, 42-50 ≈ 12-16, 6-sporis; sporidiis conglobatis, elongatis, hyalinis, curvulis vel subrectis, 1-3-septatis, 18-25 ≈ 4-4,5; paraphysibus filiformibus, 2 μ. cr., apice clavulato.

Hab. in pedunculis Plantaginis majoris vetustis in Mustiala Fennicæ.

9. **Odontotrema diffindens** Rehm Ascom. Ill. n. 256, *Pyrenopeziza* 2794
Rehm Exs. n. 256. — Sparsum, ex foliorum parenchymate late dealbato erumpens, sæpe fibris circumdatum, demum sessile, globosum, integrum, seminis papaveris magnitudine, fusco-nigrum, subscabrum, primitus apice fere papillatum, poro minutissimo pertusum, demum urceolato-umbilicatum, ore irregulariter eroso et ruguloso, disco haud conspicuo, circ. 0,7 mm. diam., parenchymatico-fusco-contextum; ascis cylindræo-clavatis, crassis, apice incrassatis, 8-sporis, jodo cœrulescentibus, 60 ≈ 7; sporidiis ellipticis vel elongato-ovoideis, obtusis, plerumque rectis, 4-cellularibus, interdum ad septa subconstrictis, hyalinis, subdistichis, 12-15 ≈ 4-5; paraphysibus filiformibus, ascos paullulum superantibus, hyalinis, apice haud clavatis.

Hab. ad folia emortua Nardi strictæ in alpibus edit. tyrolensibus.

Sect. 4. **Scolecosporæ** Sacc.

STICTIS Persoon Obs. 2, p. 73, pr. p. (1796) Fuck. Symb. pag. 250
[Etym. *stictos punctatus*] *Schmitzomia* Fr. Summa pag. 363, —

Ascomata immersa, ceracea, subcupulata vel planiuscula excipulo tenui excedente, sæpe reflexo integro v. laciniato pallidiore. Asci elongati, octospori, paraphysati. Sporidia filiformia, septulata, in articulos non secedentia, hyalina ¹⁾).

I. *Genuinæ*, sporidiis cognitis.

1. **Stictis radiata** (Linn.) Pers. Obs. et syn. 674 1131 Sacc. F. it. f. 1131, 2795
Pez. acidiodides Nees, *Pez. marginata* Relh., *Lichen excavatus* Hoffm., *Sphærobolus rosaceus* Tod., *Lycoperdon radiatum* Linn.
 — Ascomatibus carneis v. luteolis, profunde immersis, convexis, limbo elevato, 4-6-radiato candido furfuraceo cinctis; ascis anguste cylindraceis, substipitatis, dense fasciculatis, 180-200 \approx 7-10, octosporis; sporidiis acicularibus tenuibus, rectis vel apice arcuatis, hyalinis, 20-30-guttulatis, 120-220 \approx 1-1,5; paraphysibus tenuissimis, apice quandoque ramulosis.

Hab. in ligno et ramis emortuis Fraxini, Quercus, Salicis, Rhamni, Eucalypti, Andromedæ, Piri, Carpini, Citri Decumanæ in Suecia, Germania, Italia, Gallia, Belgio, Britannia, Amer. bor. et Austral., Tasmania, Africa australi. — ***intermedia** Speg. F. Arg. Pug. III, n. 231: poculiformis, matrice immersa, ore candido exserto, margine subreflexo integro vel plus minus denticulato-lacero, disco roseo-fulvo, 0,3-0,6 mm. diam.; ascis cylindraceis apice truncato-rotundatis, deorsum attenuato-pedicellatis, 160-170 \approx 8-10; paraphysibus filiformibus hyalinis, pluriguttulatis, obvallatis; sporidiis filiformibus, sursum sæpius leniter incrassatis, utrinque acutiusculis, ascorum longitudine, multi-septulatis et constrictulis, oculis superis minoribus, 4-6 \approx 3, inferis majoribus 9-12 \approx 1-1,5; jodi ope nulla. Forma inter *Stictidem radiatam* et *S. stellatam* vere intermedia. In caulibus dejectis putrescentibus Conii maculati, Banado de San José de Flores, Argent. — Formæ in ramis emortuis Senecionis, Chilitrichi, Mayteni in Fuegia lectæ, ita distinguendæ sunt sec. Speg. F. Fueg. n. 352: a) Crassiuscule marginata, fimbriata alba, disco glaucescente; ascis cylindraceis, apice rotundatis subcrasse tunicatis non foveolatis, 200 \approx 12 densiuscule paraphysatis; sporidiis cylindraceis, utrinque obtusis, dense septulatis, 180 \approx 3-4, hyalinis. — b) crassiuscule marginata subfimbriata alba, disco cinere-

1) *Leptosporium tremellinum* Bon. in Bot. Zeit. 1857, non ad *Stictim*, ut opinabar, sed potius ad *Gorgonicipitem Guernisaci* spectat.

scente; ascis fusoido-cylindræis, apice truncato-rotundatis crassissime tunicatis majusculè 1-foveolatis 150-180 \approx 6-7 densissime paraphysatis; sporidiis filiformi-clavulatis, apice obtusatis, basi acutatis 120-130 \approx 2-3, dense multiseptatis, hyalinis. — c) crassiusculè marginata integra alba, disco sordide melleo; ascis cylindræis, apice rotundatis crasse tunicatis non foveolatis 230-250 \approx 6 μ . parce paraphysatis, octosporis; sporidiis filiformibus, utrinque acutatis 200-210 \approx 2, obscure multiseptatis, hyalinis. An species distincta? — * **brachyspora** Sacc. et Berl. F. Austral. n. 13: ascomatibus fere typi, sed margine angustiore et disco cinereo-violascente; sporidiis brevioribus et crassioribus bacillari-fusoidis, sæpe curvulis, 70-85 \approx 3-3,5, hyalinis, 15-18-septatis. In caule putri, Logan Australiæ et in Gallia. — * **St. minuscula** Karst. Rev. p. 166; sparsa, margine subintegro, disco subcærulescente, 0,3-0,4 mm. lat., ascis cylindricis 150 \approx 8; sporidiis filiformibus 135-160 \approx 2-3. In cortice *A. biëtis excelsæ* in par. Kyrkslätt Fennicæ (WAINIO).

2. **Stictis mollis** Pers. M. E. I, p. 337, Rehm Disc. p. 177, *Stictis* 2796
Pupula Fr. Syst. Myc. II, p. 193 et Elench. Fung. II, pag. 25, *Agyrium atro-virens* Fr. Syst. Myc. II, p. 332 (status abortivus ex Fr.), *Stictis ollaris* Wallr. Crypt. n. 2406, *Schm. Pupula* Fr. Summ. Veg. Scand. pag. 364. — Sparsa, solitaria, interdum confluens, ligno adnata, per peridermium erumpens, primitus subsphæroidea alba, intus albido-gilva v. pallida, ceracea, disco punctiformi, nigrescente impresso, margine albo-farinoso, dein urceolata, ore rotundo constricto, subvirente-pallida, hymenio atro-virente paginam cupulæ interiorem undique tegente, tandem tota atro-virens v. sordide atra, 0,5-1 mm. lat.; ascis cylindræis, 145-220 \approx 8-11, jodæ non cærulescentibus, 8-sporis; sporidiis conglobatis, filiformibus, apicibus attenuatis, varie flexuosis et curvatis, multiseptatis, chlorino-hyalinis, 100-180 \approx 2-3; paraphysibus copiosissimis, filiformibus, 1,5-2 μ . cr.

Hab. in ramulis exsiccatis *Alni*, *Populi*, *Quercus*, *Fraxini*, *Syringæ*, *Loniceræ*, *Aceris*, *Rhamni*, *Mori*, *Salicis*, *Piri Mali* et *Viburni Opuli* in Fennia, Germania, Italia, Suecia, Lapponia, Ruthenia, Pyrenæis Amer. bor., Sibiria.

3. **Stictis uberrima** Cast. Cat. pl. Mars. p. 172, Mont. VI, Cent. in 2797
 Ann. Sc. Nat. XII, (3 ser.) p. 315. — Ascomatibus conicis, primo cinerescentibus, deinde nigris; ascis numerosis, elongatis, flexuosis, paraphysatis; sporidiis (loculis) 40 et ultra in quoque asco, ovato-truncatis.

Hab. in sarmentis *Vitis*, Marseille Gallix (CASTAGNE). — Species male descripta, *St. molli*, præeunte Montagneo, proxima nisi eadem.

4. **Stictis virginea** C. et Phil. Grev. VII, pag. 64. — Sparsa, nivea, 2798
per matricem stellato-fissam erumpens, 0,5-0,8 mm. diam.; ascis
cylindraceutis; sporidiis filiformibus, 250 μ . long.; paraphysibus fili-
formibus, flexuosis.

Hab. in ramis, Waitaki in Nova Zelandia. — Pulchella species. 2799

5. **Stictis incarnata** Quél. 11, Suppl. p. 22, t. XII, f. 15. — Urceo-
lato-ovoidea, 500-600 μ . diam., membranacea, pruinosa, incarnata,
immersa, margine carneo, expanso cincta, nucleo lenticulari, ce-
raceo, hyalino-roseo, caduco; sporidiis cylindraceuto-filiformibus,
120-150 μ . longis, in ascis spiraliter revolutis, guttulatis, hyalinis.

Hab. in truncis salicinis, Champagne (BRIARD). — Affinis
Sticti radiatæ.

6. **Stictis elevata** Karst. Rev. p. 166, *Schmitzomia* Karst. M. F. I, 2800
pag. 240. — Sparsa, per epidermidem erumpens, dein plus minus
prominula, orbicularis, suburceolata, primitus clausa, dein aperta,
margine subintegro niveo-pulverulento, disco plano subaurantiaco,
dein expallente, 0,4 mm. lat.; ascis cylindraceutis, 140-160 \approx 6-6,5,
jodo lutescentibus; sporidiis conglobatis, filiformibus, 125 \approx 1-1,5;
paraphysibus copiosissimis filiformibus.

Hab. ad ramos *Symphoricarpi racemosæ*, Mustiala Fen-
niæ. — Excipulum tenuissimum album, denique nigrescens.

7. **Stictis annulata** Cooke et Phil. Grev. 1880, p. 7. — Sparsa, or- 2801
bicularis; cupulis depressis 0,3-0,5 mm. diam.; margine albo, inte-
gro, annulato; hymenio ochraceo v. pallido; ascis elongato-cylin-
dricis; sporidiis filiformibus, subflexuosis, 160-180 μ . long.

Hab. in cortice *Loniceræ* in Britannia et Amer. bor. — A
St. radiata bene distincta videtur.

8. **Stictis bella** Kalch. et Cooke Grev. IX, p. 25. — Immersa, or- 2802
bicularis, 1 mm. diam., margine niveo, expanso, lobato-lacerato;
disco aureo vel flavido excavato; ascis cylindraceutis; sporidiis fili-
formibus 300 μ . long.; paraphysibus filiformibus, subflexuosis.

Hab. in ramis in Africa australi. — Ascoma elegans, albo-
fimbriatum, capitulum *Bellidis* fere imitans.

9. **Stictis sulphurea** Rehm Disc. p. 177. — Gregaria, immersa, sub- 2803
urceolata dein mox erumpens, dilatata, 0,5-1,5 mm. lat., disco con-
cavo flavo-rubello, margine 4-5-lobo, albo-furfuraceo, dein sulphu-
reo cincto; ascis cylindricis, apice incrassatis, 100-120 \approx 8-9, octo-

sporis; sporidiis aciculari-filiformibus, acutis, rectiusculis, pluriseptatis, $75-80 \approx 4-4,5$, parallelis; paraphysibus filiformibus $1,5 \mu$. cr. hyalinis.

Hab. in ramis quercinis putrescentibus in Franconia.

10. **Stictis lichenoides** Speg. F. Fueg. n. 353. — Sparsa v. hinc inde 2804
2-20-gregaria, sæpe confluens, matrice nuda v. macula alba farinoso-furfuracea obducta insidens, primo globulosa clausa, dein discoideo-aperta 0,5 mm. diam., margine prominulo candido non vel vix laciniato, disco impresso minutissimo fuscidulo; ascis cylindraceis, apice acutato-rotundatis crasseque tunicatis minute 1-foveolatis, deorsum brevissime crasseque attenuato-pedicellatis $75-80 \approx 5$; paraphysibus filiformibus densiusculis non v. vix longioribus subcoalescentibus obvallatis, octosporis; sporidiis ascorum longitudine filiformibus flexuosis fasciculatis, tenuissimis, $0,5-0,8 \mu$. crass., hyalinis, dense obsolete guttulatis.

Hab. ad truncos fagineos deludatos induratosque in Staten island Fuegiæ. — Species summopere lichenibus affinis, gonidiis tamen deficientibus ac jodi ope nulla!

11. **Stictis Megarrhizæ** Phil. et Hark. Grev. XIII, p. 22. — Grega. 2805
ria, minuta, immersa 0,1-0,3 mm. diam., margine albo, crenulato, disco minime profundo, pallide flavo; ascis cylindraceo-clavatis, octosporis; sporidiis filiformibus $75-80 \approx 3$, pluriseptatis; paraphysibus filiformibus.

Hab. in ramis Megarrhizæ californicæ in California (HARKNESS).

12. **Stictis aurantiaca** Hazsl. Einig. Discom. pag. 2, et Mag. Szab. 2806
t. III, f. 2. — Innata per peridermium radiatim fissum erumpens, laciniisque epidermicis reflexis coronata, disco 2 mm. lat., orbiculari, plano, aurantiaco, atro-marginato; hypothecio nigro; ascis lanceolatis longe stipitatis; sporidiis acicularibus, pluriseptatis, paraphysibus filiformibus, flexuosis.

Hab. in ramis Fagi, pr. Eperies Hungariæ.

13. **Stictis Coryli** Cr. Finist. p. 42. — Sessilis, concaviuscula, albi- 2807
da, margine in 4-6 dentes acutos lacero, disco albido; ascis oblongis, 8-sporis; sporidiis longis, cylindricis 20-septatis, hyalinis.

Hab. in ramis emortuis Coryli, Finistère Galliæ.

14. **Stictis corynespora** Mont. Cent. VII, n. 96. — Corticalis, im- 2808
mersa, erumpens, cupuliformis, margine obtuso, crasso, farinoso; disco cinereo, primitus albo-velato; ascis clavatis, octosporis paraphysatis; sporidiis longissimis, clavatis, multiseptatis, 24-36-guttulatis.

Hab. in cortice ramorum in provincia Carabaia Peruviae. — Thallos lichenum occupat et steriles reddit. «An *Cryptodiscus?*»

15. **Stictis macroloma** Dur. et Lév. Expl. Sc. Alg. t. 29, f. 6 (absque diagnosi). — Gregaria, immersa, orbicularis, 1,5 mm. lat., plana, margine (spurio?) crasso integro albido prominulo cincta, disco badio-fusco; ascis tereti-fusoideis, filiformi-paraphysatis, octosporis; sporidiis filiformibus utrinque acutiusculis, pluri-100-septatis, hyalinis.

Hab. in ramis corticatis in Algeria.

16. **Stictis oculiformis** Sacc. *Stictis thelotrema* Dur. et Lév. Expl. Sc. Alg. t. 29, f. 3 (absque diagnosi), nec Mont. Cub. — Sparsa, immersa, orbicularis, plana, 1 mm. lata, margine tenui, albo integro, disco atro; ascis tereti-clavatis, filiformi-paraphysatis, octosporis; sporidiis filiformi-bacillaribus, crebre septatis, hyalinis.

Hab. in corticibus dealbatis in Algeria.

17. **Stictis conicola** Hazsl. Einig. Disc. p. 2. — Affinis *St. Carestiae* a qua differt quia non biophila sed saprophila; ascis fusoideis, nec cylindraceis.

Hab. in squamis strobilorum prope Iglo Hungariae.

18. **Stictis fimbriata** Schw. Syn. Am. bor. n. 179 in 986. — Gregaria, immersa, 200 μ . diam. suberumpens, sicca subclausa, disco tremelloso-ceraceo, orbiculari, subconvexo, pruinoso, cinereo, limbo candidissimo, prominente eleganter fimbriato-fisso; sporidiis (immaturo visis) filiformibus.

Hab. in strobilis Pini inopis, Philadelphia Amer. bor. — *Aecidium* exacte refert.

19. **Stictis sphaeroides** Niessl Hedw. 1876, p. 116 et in Just. Jahr. 1876, p. 208. — Sparsa, erumpens, atra, margine lacerata, disco atro, convexo; ascis clavatis, in stipitem attenuatis, 75-80 \approx 9, octosporis; sporidiis fusoideis, subclavatis, curvulis, 5-septatis vel 6-guttulatis, hyalinis, 14-21 \approx 3; paraphysibus stipatis, sursum incrassatis, fuscidulis.

Hab. ad corticem Pini silvestris in Moravia. — «An *Coccomyces?*»

20. **Stictis Carestiae** (De Not.) Rehm Disc. pag. 175, *Schmitzomia Carestiae* De Not. Comm. critt. I, p. 362. — Gregaria, immersa dein orbiculariter aperta, 0,3-0,8 mm. lat.; disco urceolato, flavido, margine candido tenuiter denticulato, farinoso cincto; ascis cylindricis, apice incrassatis, 150-200 \approx 15, octosporis; sporidiis filiformibus

mibus, pluriseptatis, hyalinis, 130-180 \approx 2,5-3,5, parallelis, subinde subcontortis; paraphysibus filiformibus.

Hab. in cortice ramorum Pini silvestris, Abietis excelsæ et Taxi in Italia et Germania.

21. **Stictis pachyspora** Rehm Disc. pag. 175, *Schmitzomia* Rehm 2815

Ascom. n. 420. — Gregaria, cortici immersa, orbicularis, urceolata, primitus subclausa, dein aperta, margine orbiculari, subintegro, niveo-pulverulento, dein hic illic fisso cincta, disco testaceo-cinereo, c. 0,3-4 mm. diam.; ascis cylindraceo-clavatis, 8-sporis, 220 \approx 27; sporidiis filiformibus, hyalinis, 60-cellularibus, plerumque singula cellula nucleata, ad septa subconstrictis, rectis vel scoliformiter curvatis atque extra ascos anguilliformiter incurvatis, parallelis, circumflexis, 200 \approx 4-5; paraphysibus filiformibus, in clavam piriformem ampliatis itaque epithecium flavidulum formantibus.

Hab. ad ramos siccos Abietis in silva prope Augustam Vindelicorum (BRITZELMAYR).

22. **Stictis thelotremoides** Phil. in Kalchbr. Fung. Mac-Ow. Grev. XI, 2816

pag. 25. — Sparsa, immersa, orbicularis, $\frac{1}{3}$ - $\frac{1}{2}$ mm. diam.; disco melleo, excavato, margine prominente, subintegro, albo; ascis cylindraceis; sporidiis filiformibus 150 μ . long.; paraphysibus filiformibus.

Hab. in ramis Boschberg Africae austr. (M. OWAN). — Habitus fere *Thelotrematis*.

23. **Stictis Stigma** C. et E. Grevillea VI, pag. 9. — Erumpens, or- 2817

bicularis, urceolata, 2-3 mm. diam., disco atro-fuligineo, ore contracto, integro, pallide marginato; ascis longissimis, cylindraceis; sporidiis linearibus, ascum æquantibus.

Hab. in ramis Corni, New Jersey Amer. bor. (ELLIS). — Marggo demum nigrescit et tunc fungillus *Sphaerium* semiimmersam imitatur.

24. **Stictis Sarothamni** Fuck. Symb. App. II, p. 48. — Cupulis gre- 2818

gariis, immersis, majusculis, 1-1,5 mm. lat., primo clausis, margine integro, demum erumpentibus, in lacinias 4-5, triangulares, crassas, candidas, subrevolutas dehiscentibus, disco concavo, carnosio, constanter pallide ochraceo; ascis cylindraceis, 8-sporis, 178 \approx 8; sporidiis filiformibus, continuis, asci longitudine.

Hab. in ramis corticatis siccis Sarothamni scoparii, rarius in Rhenogovia. — *St. molli* affinis, dentibus candidis, disco ochraceo distincta.

25. **Stictis atro-alba** (Phill. et Plowr.) Sacc. *Schmitzomia* Phill. et 2819

Plowr. Disc. p. 379, t. XII, f. 74. — Sparsa, orbicularis, minuta urceolata, initio clausa dein aperta, margine integro, angusto candido, mox deciduo; disco nigricante; ascis cylindricis, octosporis; sporidiis filiformibus, $90 \approx 1$; paraphysibus filiformibus, tenerrimis.

Hab. in ramis Clematidis, Dinmore Britannicæ (PLOWRIGHT).

26. **Stictis stellata** Wallr. Fl. crypt. pag. 144, *Schizoxylon* Fuck. 2820

Symb. p. 251, *St. Saccardoï* Rehm Mich. II, p. 614. — Ascomatibus immersis operculo atro, mox evanescente tectis, dein emerisis orbiculatis exiguis sessilibus, disco cornicolore, concavo, extus tegmine furfuraceo grumoso albo-cinereo 4-6-radiato obductis v. stellatis; ascis cylindraceutis 200 \approx 6-7, octosporis; sporidiis filiformibus, septatis, hyalinis, 150-200 \approx 1-1,5.

Hab. in caulibus Spirææ, Arctii, Eupatori, Salviæ, Solidaginis, Rubi in Germania, Italia, Gallia. — Forma **Equiseti**: ascis 130 \approx 8; sporidiis filif. 120 \approx 1. — Forma **Humuli**: ascis 180 \approx 10; sporidiis filif. 180 \approx 1 minutissime guttulatis. — Forma **intermedia** Sacc. F. it. fig. 2423: disco roseo, laciniis 5-6 albis, latis; ascis 110-120 \approx 10; sporidiis 90-100 \approx 2, distincte 20-30-septatis, hyalinis. — ***S. pallidula** Sacc. Mich. II, p. 614, F. it. fig. 1422: disco immerso pallide luteolo, subcirculari, $\frac{1}{3}$ - $\frac{1}{2}$ mm. diam., limbo erecto candidissimo, vix crenulato cincto; ascis cylindraceutis subsessilibus, 150 \approx 9; paraphysibus filiformibus, rectiusculis, obvallatis, octosporis, jodi ope non cærulescentibus; sporidiis filiformibus curvulis, 120 \approx 2-2 $\frac{1}{2}$, initio pluriguttulatis, dein 20-30-subcuboideonucleatis hyalinis. F. *Equiseti* et f. *Humuli* in eorum caulibus in agro tarvisino; f. *intermedia* in ramis Albizziæ, Treviso. f. *pallidula*, quæ forte specificè distinguenda, in ramulis emortuis Rosæ centifoliæ, Selva Italia boreali.

27. **Stictis pustulata** Ellis Bull. Torr. 1881, p. 65. — Pustuliformis, 2821

primitus clausa, dein centro ore albo-pruinoso perforata, margine incurvo subfimbriato; disco in sicco obscuro nitidoque; ascis cylindraceutis, angustis, 75-80 μ . long.; sporidiis filiformibus, longitudine ascos æquantibus.

Hab. in caulibus vetustis Trifolii pratensis humi jaentibus ia America borealis.

28. **Stictis Lupini** Phill. et Hark. Calif. p. 5. — Gregaria v. sparsa, 2822

emergens, orbicularis, urceolata, margine albo, prominulo integro vel laciniato; disco albo; ascis cylindraceutis, filiformi-paraphysatis; sporidiis clavato-cylindraceutis, numerose septatis, ad septa constrictis, 50 \approx 2,5-4.

Hab. in Lupino arboreo in California Amer. bor. — Habitu ad *S. mollem* sed sporidiis brevioribus ad septa constrictis recedit.

29. **Stictis minima** S. et S. Mich. I, p. 421, F. it. f. 1424. — Ascomatibus 2823
immersis, minimis, vix $\frac{1}{10}$ - $\frac{1}{8}$ mm. diam., margine exiguo integro albicante, excipulo laxo parenchymatico fuscidulo, matricem circum circa breve atroinquinante; disco infosso, dilutissime roseo; ascis cylindricis, 160-190 \approx 5-6 $\frac{1}{2}$, breve stipitatis; paraphysibus filiformibus obvallatis, octosporis; sporidiis asci longitudine, filiformibus 1 μ . cr. continuis, hyalinis.

Hab. in caule putrescente Lamii Orvalæ, Conegliano Ital. bor. — A speciebus affinibus minutie et excipuli fabricâ distincta species videtur.

30. **Stictis polycocca** Karst. Rev. pag. 166, *Schm. polycocca* Karst. 2824
M. F. I, p. 241. — Subgregaria, emergens, tandem plus minus prominula, primitus subsphæroidea vel oblongato-sphæroidea, clausa, vertice 3-7-cocca, virescente-cinerea, albido-farinosa, dein aperta, urceolata, margine reflexo, albo-farinoso tandemque integro, disco testaceo-pallido, 0,3-0,5 mm. lat.; ascis cylindræis, 120-185 \approx 6-8, jodo non cœrulescentibus; sporidiis conglobatis, filiformibus, guttulatis vel spurie tenuiter septatis, longissimis, gracillimis; paraphysibus copiosissimis, filiformibus, apice sæpe curvato-flexuosis, 1-1,5 μ . crass.

Hab. ad caules Epilobii angustifolii aridos prope oppida Abo et Wasa Fennicæ. — A reliquis sui generis ascomatibus vertice tuberculis, tandem secedentibus, instructis mox dignoscitur; ceteroquin ad *St. arundinaceam* proxime accedit.

31. **Stictis monilifera** Phillips et Harkness Grev. XII, pag. 73. — 2825
Gregaria, minuta, immersa; margine integro vel sublaciniato, prominulo; disco albido; sporidiis filiformibus moniliformibusque, 100 \approx 2; paraphysibus numerosissimis.

Hab. in fructibus Pittospori in California (HARKNESS).

32. **Stictis anaxæa** Speg. Mich. I, pag. 261. — Parvula $\frac{1}{3}$ - $\frac{1}{4}$ mm. 2826
diam., maculis albicantibus insidens, sparsa, vel laxissime gregaria, parenchymati immersa, epidermide tecta, dein erumpens eaque fissâ cincta, patelliformis vel suburceolata, labiis crassiusculis, siccitate intus revolutis, extus grisea, disco olivaceo-fuligineo; ascis cylindræis, brevissime pedicellatis, apice crassiuscule tunicatis, octosporis, 80-90 \approx 8-9; paraphysibus crassiusculis, guttulatis, apice subramuloso, coalescentibus, mucosis atque fuligineis obvallatis.

tis; sporidiis filiformibus, primo pluriguttulatis, dein pluriseptatis, hyalinis $70 \approx 2$; ascis et paraphysibus jodo haud cœrulescentibus.

Hab. ad folia dejecta putrescentia Vaccinii Oxycocci in alpinis Cadore Ital. bor.

33. **Stictis Panizzei** De-Not. Comm. Critt. I, p. 362 et Microm. ital. 2827
Decas IV, n. 2, f. 2. — Lenticulari-discoidea, immersa, epidermide stellatim fissâ cincta, 1 mm. diam. ceraceo-mollis; disco pallide citrino, subpulvereo, udo turgescente; ascis lineari-oblongis, vix clavatis, filiformi-paraphysatis; sporidiis filiformibus, longissimis, flexuosis, pluriguttulatis, dein septatis, flavidulis, $50-60 \approx 1-1,5$ (ex icone).

Hab. in foliis dejectis Oleæ San Remo (PANIZZI), Spezia (CALDESI). — Epidermis circa ascomata in lacinas 3-5 fissa.

34. **Stictis foliicola** B. et C. Cub. Fungi n. 712. — Suborbicularis, 2828
pallida, epidermide stellatim rupta cincta; disco plano; sporidiis linearibus.

Hab. in foliis emortuis Clusiæ in insula Cuba. — Sporidia non vere filiformia.

35. **Stictis Araucariæ** Phil. et Hark. Grev. XIII, p. 22. — Sparsa, 2829
immersa, demum erumpens, epidermide elongato-fissurato; cupulis discoideis vel subellipticis, disco pallide-cinereo, margine demum reflexo albo; ascis cylindraceo-clavatis; sporidiis filiformibus, $50-75 \approx 2$ pluri-septatis; paraphysibus filiformibus, numerosissimis, furcatis.

Hab. in foliis Araucariæ in California (HARKNESS).

36. **Stictis quadrifida** Lév. Ann. Sc. nat. Ser. III, vol. V, p. 255, *Pro-* 2830
polis quadrifida Mont. in Gay. Fl. Chil. vol. VII, p. 425. — Minuta 0,5-1 mm. diam., amphigena, non vel macula vix pallescente, indeterminata, orbiculari insidens, 3-15 gregaria, rarius hinc inde sparsa, primo tecta, dein erumpens et epidermide 3-4-gonofissa cincta, margine vix prominulo, irregulari, albescente, tenui donata; disco plano, subdepresso, ceraceo-viridi vel glaucescente; ascis cylindraceis, sursum acutiuscule rotundatis, deorsum brevissime nodoseque stipitatis, $80-85 \approx 8-9$, octosporis; paraphysibus filiformibus apice brevissime 2-5-ramulosis obvallatis; sporidiis filiformibus, polystichis, utrinque rotundatis, $75-80 \approx 1,5-2$, dense multi-guttulatis, hyalinis; jodi ope nulla.

Hab. ad folia coriacea, dejecta subputrescentia plantæ cujusdam, in nemorosis Brasiliæ meridionalis et Chili.

37. **Stictis quercina** Peck 28 Rep. p. 69. — Amphigena, sparsa, mi- 283

nuta, erumpens, epidermide in laciniâs tres vel quatuor divisa cincta; disco albo; ascis cylindrâceis; sporidiis filiformibus, 40-65 μ . longis.

Hab. in foliis quercinis dejectis Port Jervis Amer. bor.

38. **Stictis quercifolia** Cooke Grev. V, p. 50, t. 81, f. 7. — Hypo- 2832
phylla, orbicularis, parvula, margine lacerato-dentato, disco griseo-albido; ascis cylindrâceis; sporidiis filiformibus, 60-70 μ . long. ascum subæquantibus; paraphysibus lineari clavulatis.

Hab. in foliis quercinis, New Jersey Amer. bor. — Ascoma 0,2-0,3 mm. lat.

39. **Stictis arundinacea** Pers. M. E. I, p. 336. *Schm. arundinacea* 2833
Pers. Karst. M. F. I, pag. 239, *Stictis graminum* Desm. Crypt. Franc. p. 185, Pat. Tab. f. 69, *Schmitzonia graminum* Karst. Symb. p. 253. — Sparsa, immersa, orbicularis, urceolata, primitus clausa, dein aperta; margine prominente integro vel subintegro, niveo-pulverulento; disco cæsiopallente vel albido, circiter 0,5 mm. lat.; ascis cylindrâceis, 260-280 \approx 6-8, jodo non cœrulescentibus; sporidiis conglobatis, filiformibus, multiseptatis, 130-240 \approx 1,5-2; paraphysibus copiosissimis, filiformibus, vix 1 μ . cr.

Hab. ad culmos Tritici repentis, Andropogonis, Poæ, Festucæ, Phalaridis in Germania, Fennia, Gallia, Italia, Britannia, Belgio, Amer. bor., Fuegia. — Excipulum tenuissimum demum nigrescens, superne strato albido niveo-pulverulento tectum. Hymenium in fundo cupulæ locatum, concavum. Margo supra matricem plus minus elevatus. Color interne subinde demum cœrulescens. *St. graminum* Desm.: ascis sporidiisque brevioribus (60-70 μ . long.) videtur forma immatura.

40. **Stictis Sesleriæ** Lib. Crypt. Ard. n. 102, Rehm Asc. n. 961, 2834
Schmitzonia De Not. Comm. I, p. 363. — Ascomatibus immersis, orbicularibus; excipulo parenchymatico, brunneolo; disco flavido; margine annuliformi, candido, crassiusculo subcartilagineo, nec pulvereo nec lacero; ascis cylindrâceis 20 \approx 5-6; sporidiis filiformibus, hyalinis, 90 \approx 1 (non omnino evolutis).

Hab. in foliis languidis et emortuis Sesleriæ cæruleæ in Arduennis et Italia bor. — *St. arundinaceæ* peraffinis.

41. **Stictis Luzulæ** Lib. Exs. n. 133. — Immersa, punctiformis, or- 2835
bicularis, urceolata, margine prominulo farinoso albo, disco nigricante; ascis cylindrâceis, 8-sporis, 156 \approx 8; sporidiis filiformibus, asci longitudine, non secedentibus.

Hab. in foliis Luzulæ maximæ et L. Forsteri in Germa-

- nia, Belgio, Italia. — Sec. Rehm est forma *St. arundinaceæ*. —
 Var. **Junci** Karst. M. F. I, p. 238: sparsa, erumpens, orbicularis, urceolata, 0,4 mm. lat., disco roseo vel subaurantiaco, margine integro albo-pulverulento; ascis cylindricis 130-170 \approx 6-6,5 jodo non cœrulescentibus; sporidiis conglobatis filiformibus, pluriseptatis, 120-130 \approx 1-1,5; paraphysibus copiosis filiformibus. In calamis Junci effusi et conglomerati in Fennia et Germania.
42. **Stictis graminicola** Lasch in Rab. H. M. n. 713, Rehm Disc. p. 2836 180. — Sparsa, immersa, dein per epidermidem fissam erumpens, orbicularis, 0,5-1,2 mm. lat.; disco urceolato, rubescente; margine annulato prominente albo-pulverulento extus brunneolo; ascis cylindricis; sporidiis filiformibus.
- Hab.* in foliis siccis Deschampsiae cæspitosæ pr. Driesen in Neumark.
43. **Stictis pusilla** Speg. F. Fueg. n. 354. — Sparsa immersa, primo globulosa tecta, dein erumpens 350-500 μ . diam., margine prominulo candido non vel vix laciniato cincta, disco aurantiaco impresso; ascis cylindræo-fusoideis, antice truncato-rotundatis, tenuiter tunicatis, deorsum breviter crassiusculeque pedicellatis, 80-95 \approx 5-6, octosporis; paraphysibus paucis filiformibus non vel vix longioribus obvallatis; sporidiis filiformibus ascorum longitudine, utrinque obtusiusculis 70-90 \approx 1, dense minuteque guttulatis, hyalinis; jodi ope nulla.
- Hab.* ad culmos dejectos putrescentes Rostkoviæ grandifloræ in Staten island Fuegiæ.
44. **Stictis rubicunda** Dur. et Lév. Expl. Sc. Alg. t. 29, f. 6 (absque diagnosi). — Gregaria, oblonga, plana, immersa, 2 mm. long., vix 1 mm. lat., margine integro, prominulo, rubro, disco ovato-lanceolato, rufo-nigricante; ascis minutis, clavatis, octosporis; sporidiis filiformibus continuis, hyalinis; paraphysibus filiformi-clavulatis.
- Hab.* in cortice, ut videtur, fibroso quodam in Algeria. — Habitu subhysterioideo a typo deflectit.
45. **Stictis filicina** Peck 29 Rep. p. 56. — Pustulata, erumpens, epidermide laciniato-lacerata brunnea cincta; disco plano vel concavo, pallido vel cremoricoloro; sporidiis filiformibus, 40-50 μ . long.
- Hab.* in stipitibus Osmundæ cinnamomeæ, Center Amer. bor. — Pustulæ numerosæ, initio brunneolæ.
46. **Stictis Cladoniæ** (Rehm) Sacc. *Schmitzomia Cladoniæ* Rehm 2841 Ascom. Alp. n. 35. — Solitaria, sparsa, primitus cortici immersa, dein per eam dilaceratam prorumpens, primitus clausa, dein cor-

ticem superans, fere sessilis, urceolata, margine crasso involuta, disco pallidulo subconspicuo, fusco-atra, rugulosa, parenchymatice fusco-contexta, 0,4-0,5 mm. diam.; ascis clavatis, lata basi sessilibus, apice incrassatis, 8-sporis 45-50 \approx 8; sporidiis filiformibus, rectis vel subcurvatis, nucleatis, 1-cellularibus, parallelis, 36 \approx 2; paraphysibus teneris, filiformibus, superne incrassatis; jodi ope apice ascorum cœrulescente.

Hab. ad podetia Cladoniæ prope Taschach-Gletscher in valle Piz alpium tyrolensium, c. 2000 metr. (DR. REHM). — In Rehmii Disc. omissa.

47. **Stictis æcidiiformis** Speg. Mich. I, pag. 471. — *Æcidiiformis*, 2841
3-12 dense gregarie stipata, vix $\frac{1}{10}$ - $\frac{1}{5}$ mm. diam. ceraceo-subdiaphana, tenaciuscula, sordide luteolo-albida, semiimmersa; margine libero, stellatim laciniato-lacero; contextu excipuli parenchymatico, minuto, e cellulis 2-4 μ . diam., conflato, dilutissime fuscidulo; ascis cylindraceo-clavatis, brevissime stipitatis, octosporis; paraphysibus apice toruloso-clavulatis obvallatis, 65-85 \approx 8-9; sporidiis distichis vel subtristichis, cylindraceo-fusoideis, utrinque obtusiusculis, 7-10-septatis, ad septa plus minusve constrictis, 30-35 \approx 4-4 $\frac{1}{2}$, hyalinis.

Hab. parasitica in stromatibus Diatrypellæ verruciformis et Diaporthis Mahoniæ, in ramulis emortuis dejectis Mahoniæ Aquifolii, Conegliano Ital. bor. — Apex ascorum et paraphysum jodi ope dilute cœrulescit.

II. Species, fructificatione ignota, dubiæ.

48. **Stictis bullata** Pers. Myc. Eur. I, p. 339. — Orbicularis convexa levis albida, nullo margine genuino cincta. 2842

Hab. in ramis exsiccatis Castaneæ in Gallia (DUFOR).

49. **Stictis thelotrema** Mont. Cuba p. 356, nec Dur. et Lév. — Erumpens, membranacea, subtremellosa, pateræformis, dein planiuscula; margine tenui libero; hymenio (disco) livido-viridescenti, deliquescente. 5843

Hab. ad cortices ramorum in Cuba (RAMON DE LA SAGRA).

50. **Stictis insculpta** Wallr. Crypt. n. 2396. — Ascomatibus hypophlœodeis insculptis corneo-coactis hemisphæricis albidis, summa epidermidis pellicula diu obtectis illamque dein a centro inde scissam umbonatum elevantibus, humectis in discum album tenuem poroso-fatiscentem immersum immarginatum reclusis, siccando iterum contractis. 2844

Hab. ad ramulos salicinos in Thuringia (WALLR.)

51. **Stictis glaucoma** B. et C. North Am. Fungi n. 777, Cooke Disc. 2845
U. S. II, p. 28. — Per epidermidem erumpens, mox liberata nigra, extus pruinosa; disco plano demum elevato.

Hab. in ramis Rosæ rubiginosæ, Viburni Opuli, Kerriæ japonicæ in Amer. bor.

52. **Stictis ceracea** Schw. Syn. Amer. bor. p. 180, n. 989. — Spar- 2846
sa vel aggregata, in macula exalbescente, immersa, disco ceraceo, albido, sæpe regulari, limbo non pulverulento sed crassiusculo, albido.

Hab. in caulibus passim, Bethlehem Amer. bor.

53. **Stictis Hydrangeæ** Schw. Am. bor. p. 179, n. 984. — Ab affini 2847
St. radiata differt magnitudine multo majore et disco globoso elevato, rufescente.

Hab. in ramulis emortuis Hydrangeæ, Bethlehem et Salem in mont. Virgin. Amer. bor.

54. **Stictis Rubi** Schw. Syn. Am. bor. p. 179, n. 985. — Subimmer- 2848
sa, cum epidermide erumpens, orbiculata, ab epidermide arcte cincta, disco excavato nigrescente, limbo albo-pulvereo, plicatim inflexo, facili detergibili.

Hab. in caulibus vetustis Rubi villosi, Bethlehem Americæ borealis.

55. **Stictis Umbellatarum** Schw. Syn. Am. bor. pag. 179, n. 988. — 2849
Sparsa, late gregaria, immersa, disco ime excavato, pallido, margine pulverulento, sublacero, valde prominulo, albo.

Hab. in caulibus Pastinacæ, Bethlehem Amer. bor. — Ab affini *St. radiata* differt minutie et margine vix radiato.

56. **Stictis Hyssopi** Schw. Syn. Am. bor. p. 180, n. 999. — Ime im- 2850
mersa, minuta, urceolata, ore contracto, limbo albo-pulverulento, in radios patentes diviso; disco lutescenti, in cavitate demum sublibero.

Hab. in caulibus Hyssopi nepetoidis, Bethlehem Amer. bor. — Distinguitur ore contracto.

57. **Stictis Stella** Schw. Syn. Am. bor. p. 180, n. 990. — Ime im- 2851
mersa, disco nigro, urceolato, minuta, limbo albo stellatim fisso, valde prominente, laciniis 3-4 reflexis, pulvere obtectis.

Hab. in ramis decorticatis ignotis, Bethlehem Amer. bor.

58. **Stictis Ligustri** Schw. Syn. Am. bor. p. 180, n. 991. — Sparsa, 2852
erumpens, carnosio-tremellosa, patellæformis primum nigrescens, demum sublutescens, margine elevato, sublacero, discoque subpruinosis.

Hab. in ramulis decorticatis Ligustri, Bethlehem Amer. bor.

— Affinis dicitur *Ocellariæ aureæ*.

59. **Stictis Philadelphi** Schw. Syn. Am. bor. p. 180, n. 992. — Erumpens, orbicularis, disco subceraceo, tremelloso, pulvere cinereo omnino oblecto, limbo crassiusculo copiose pulvereo. 2853

Hab. in ramulis tenerrimis Philadelphi inodori, Bethlehem Amer. bor.

60. **Stictis tenuis** Fr. S. M. II, p. 195. — Immersa, minima, plana, albida, margine corticali spurio cincta. 2854

Hab. ad epidermidem ramorum duriorum in Suecia et in Carolina Amer. bor. — Species admodum tenuis, sub lente punctiformis, orbicularis, albida vel pallescens, margine corticali tumido cincta; non vero erumpens. Admodum variat.

61. **Stictis stereicola** B. et C. North Am. Fung. n. 776. — Rufa, minuta, gregaria, margine radiato. 2855

Hab. parasitice in Stereo frustuloso in Pennsylvania Amer. bor. (MICHENER).

62. **Stictis sparsa** (Schw.) Berk. N. Am. Fungi n. 326, *Sphærobo-
lus sparsus* Schwein. North Amer. Fungi n. 2232. — Sparsa, epidermide subtecta, conico-elevata; ascomate plano-concavo intus pallido, immerso, ore rotundo, margine nigro, albo-pulverulento, latiusculo; sporangiis (discis?) atris, apice depressis, demum ejectis. 2856

Hab. in stipitibus dejectis Hydrangeæ pr. Bethlehem Amer. borealis. — Ascoma 1 mm. circ. latum.

63. **Stictis crustacea** (Schw.) Berk. l. c., *Sphærobo-
lus crustaceus* Schw. North Amer. Fungi n. 2231. — Ascomate globoso, majusculo, cum cortice crustaque candida, sublichenosa elevato, ore contracto, aperto margine albo-pulverulento, non stellato, intus post disci (?) ejectionem flavo, glabro; disco atro primum cylindraco, apice rotundato vel applanato depresso, sicco corneo; sporidiis longissimis (Berk.). 2857

Hab. in ramis putrescentibus prope Bethlehem in Pennsylvania Amer. bor. — Ascoma 4-5 mm. latum.

64. **Stictis Corii** (Schw.) Berk. North Am. Fungi n. 326, *Sphæro-
bolus Corii* Schwein. North Amer. Fungi n. 2234. — Gregaria, plane immersa, primum villo albido tecta; ascomate in lacinias 3-4 regulares fisso, stellatim revoluto, candido, pulverulento; sporangio (disco?) applanato, corrugato, pallido. 2858

Hab. in vetusto corio dejecto et in linteis affixis pr. Bethlehem in Pennsylvania Amer. bor. — *Sphærobo-
lo stellato* affinis at

minor teste Schw. Sec. Berk. loc. cit. ad *Stictidem radiatam* referenda.

65. **Stictis Tiliæ** Lasch in Kl. H. M. n. 638, Bot. Zeit. 1845, p. 66. 2859
— Carnoso-subtremellosa, erumpens, subrotunda, convexa, albido-pallescentem demum planiuscula et sublobata.

Hab. in ramis Tiliæ, Driesen Germaniæ. — **Stictis variolosa** Pers. in Gaud. Voy. Uran. p. 178. (Non vidi). — In Guiana.

LASIOSTICTIS Sacc. Misc. mycol. II, p. 24, t. XI, f. 30 (Etym. *lasi-* sios pilosus et *Stictis*). — Ascomata immersa, concava, ceracea, margine non laciniato sed pilis filiformibus continuis ornato. Asci tereti-fusoidei, paraphysati, octospori. Sporidia e bacillari-fusoideo filiformia, septata, hyalina. — A gen. *Stictide* margine conspicue piloso differt.

1. **Lasiostictis conigena** Sacc. et Berl. Misc. myc. II, p. 24, t. XI, f. 30. 2860
— Ascomatibus dense gregariis, profunde immersis, concavis, cinereis, $\frac{1}{3}$ mm. diam., margine emergente primitus connivente, dein subexpanso, pilis filiformibus, continuis, asperulis, hyalinis copiosis ornato; ascis tereti-fusoideis, subsessilibus, apice acutiusculis, 80-112 \approx 8-9; paraphysibus bacillaribus, guttulatis, obvallatis; sporidiis fusoido-bacillaribus, rectis curvulisve, spurie 4-5-septulatis, non constrictis, hyalinis, 50-60 \approx 2-2,4.

Hab. in squamis strobilorum Pini dejectorum, Troyes Galliæ (BRIARD).

LICHENOPSIS Schwein. Syn. Amer. bor. p. 308, t. XIX, f. 6 (1834) Mont. Ann. Sc. n. 1849, p. 316 (Etym. *lichen* et *opsis* aspectus). — Ascomata immersa, urceolata, operculo deciduo tecta, disco libero subgelatinoso, demum sicco circumscisso dejecto, cupulam vacuum relinquentia. Asci elongati, cylindranei, 8-spori, paraphysati. Sporidia filiformia ascum subæquantia, pluriseptata, subhyalina. — Ab icone Schweinitzii l. c. deceptus, genus inter Sphæropsideas jam recepi. Cfr. Syll. III, p. 442.

1. **Lichenopsis sphæroboloidea** Schw. l. c. *Stictis* Ellis N. A. Fungi 2861
n. 463. — Ascomatibus ligno v. cortice immersis, 2 mm. lat., urceolatis, intus carneis, extus pallidis, operculo tandem circumscisso deciduo; ascis longissimis, tereti-clavatis; sporidiis linearibus sigmoideis, 25-pluriseptatis, 150 \approx 3-4, ascum subæquantibus.

Hab. in ramis Caryæ, Syringæ, Quercus, Persicæ in Carolina, Pennsylvania Amer. bor. — In ascomate sæpe parasitatur

Coniosporii species (conidiis brunneis ovoideis 40 μ . long.) unde diagnosis errata Schweinitzii.

2. **Lichenopsis magnifica** (B. et Br.) Sacc. *Placographa magnifica* 2862
B. et Br. Fung. of Ceyl. n. 973, tab. V, f. 26, *Platysticta* Cooke
Grev. XVII, p. 95 — Hymenio croceo-lateritio, cuticula elevata
rigida cincto, pulverulento; sporidiis sigmoideis, multiseptatis, ad
septa constrictis, 100-110 \approx 12-17, demum in articulos ellipsoideos
secedentibus.

Hab. in ramis in silvis tropicalibus in insula Ceylon infer.

SCHIZOXYLON Pers. Ann. Wett. I (1810), p. 11, em. Tul. Carp. III,
p. 148, nec Leighton (Etym. *schizo* findo et *xylon* lignum), *Cy-*
clostoma Crouan Finist. pag. 30. — Ascomata subimmersa, initio
sphæroidea, vertice plano atro, dein ore rotundo aperta et ampliata
discumque sordidum revelantia, extus sæpe pallidius furfuracea.
Asci cylindrici, octospori, paraphysati. Sporidia bacillari-filiformia,
pluriseptata, mox in articulos cylindræcos dilabentia. — **S. tuber-**
culatum Schw. Am. bor. n. 2172: in tuberculis ligneis Robiniæ,
nigrum, dein rotunde apertum secedens dubium est.

1. **Schizoxylon Berkeleyanum** (Dur. et Lev.) Fuck. Symb. myc. p. 251, 2863
Stictis Dur. et Lév. Alg. t. 89, f. 8, *Cyclostoma* Finist. pag. 30,
Schmitzomia Phill. Disc. p. 379, *Sphærolina xantholeuca* Fuck.
olim. — Sparsum v. gregarium, erumpens, dein subsuperficiale ses-
sile orbiculare, dein supra dehiscendo explanatum, flavo-virens dein
cinerescens v. pallidum, pulverulentum, disco olivaceo-atro, initio
subfarinoso, margine vix exserto, integerrimo; ascis cylindræcis,
230-260 \approx 7-10; paraphysibus filiformibus longioribus obvallatis;
sporidiis ascorum longitudine, septulatis, in articulos, 6-10 \approx 1,5-2,
secedentibus, hyalinis.

Hab. in caulibus et ramis emortuis Epilobii, Artemisiæ,
Œnotheræ, Galii, Pulicariæ, Loniceræ, Rosæ, Rubi, Po-
puli, Vitis in Algeria, Gallia, Italia, Germania, Britannia.

2. **Schizoxylon decipiens** Karst. Rev. p. 165, *Schmitzomia* Karst. 2864
M. F. I, p. 240. — Sparsum, erumpenti-superficiale orbiculare pla-
niusculum vel patellatum, subluteo-virescens dein expallens v. cine-
rescens, intus albidum pulverulentum, 0,7 mm. diam., margine vix
exserto, integerrimo; disco seu epithecio olivaceo vel subatro, ini-
tio farinoso; ascis cylindræcis 155-200 \approx 6-10, octosporis; sporidiis
longissimis pluriseptatis, in articulos cylindræcos vel oblongatos

4-8 = 2 mox dilabentibus; paraphysibus copiosis filiformibus, 1,5-2 μ . cr.; hymenio jodo vage cœrulescente.

Hab. ad caules *Artemisiæ vulgaris* etc., Mustiala et Helsingfors Fennicæ et in California. — Peraffine præcedenti.

3. **Schizoxylon immersum** Pass. Diagn. fung. nov. n. 14. — Cupulis 2865
epidermide tectis, margine circulari levi fusco tandem prominulo cinctis; disco concavo atro; ascis cylindricis basi vix attenuatis, paraphysibus tenuissimis æquilongis continuis obvallatis, 100 = 12, 8-sporis; sporidiis ascorum longitudine filiformibus hyalinis, demum intra ascos in articulos cylindricos 5 μ . long. secedentibus.

Hab. ad caules aridos *Clematidis Vitalbæ* in Apennino Parmensi (alla Cise) Ital. bor.

4. **Schizoxylon Bagnisianum** Speg. F. Arg. III, p. 82. — Sparsum v. 2866
paucigregarium, primo hemisphærico-lenticulare, tectum, dein erumpenti-subsuperficiale, subcupulato-applanatum $\frac{1}{3}$ - $\frac{3}{4}$ mm., udum convexum, disco glauco-virescente, margine crassiusculo, subintegro, candido; ascis longe cylindræis, sursum obtuse rotundatis et crasse tunicatis, deorsum attenuato-stipitatis, 180-200 = 10, octosporis, paraphysibus filiformibus obvallatis; sporidiis ascorum longitudine, in articulos subcuboideos, subæquales 4-5 = 4-5, hinc inde aliis duplo longioribus 8-10 = 4-5 intermixtos secedentibus.

Hab. in ramulis dejectis *Acaciæ bonariensis* al Bagnado de San José de Flores Argentinæ. — Species *Sch. æruginoso* affinis. — Var. **minus** Speg. Arg. IV, n. 232: ascis minoribus 150-160 = 10, articulis sporidiorum gracilioribus 5-6 = 2-3. In ramulis dejectis *Pruni domesticæ* in hortis a la Chacarita Argentinæ.

5. **Schizoxylon hormosporum** Speg. Fung. Arg. III, n. 81. — Cylin- 2867
dræceo-ellipticum, matrici profunde immersum, primo tectum, clausum, dein corticem perforans, ore libero, integro, candido $\frac{1}{2}$ mm. lat. superficiem vix attingente; disco tenuissimo ascomata inferne vestiente, aurantiaco-fulvo; ascis cylindræis sursum acutiuscule rotundatis, deorsum brevissime et crasse stipitatis, 150-160 = 7-8, octosporis, paraphysibus filiformibus, longioribus, apice coalescentibus in articulos secedentibus obvallatis; sporidiis filiformibus ascorum longitudine, mox in articulos globulosos 2 μ . diam., omnes æquales secedentibus.

Hab. ad ramulos dejectos *Populi Italicæ* en Barracas del Sur Argentinæ. — Jodi ope asci et paraphyses apice cœrulescunt.

6. **Schizoxylon albo-atrum** Rehm Ascom. n. 478. — Solitarium vel 2868
binatum in superficie ligni denudati nidulans, globosum, ceraceum,

circ. 1-2 mm. diam., extus albido-farinaceum, vertice applanato, atrum, poro rotundo perspicuo pertusum; ascis cylindræis, apice subincrassatis, 300-350 \approx 9-10, 8-sporis; sporidiis filiformibus, plerumque rectis multicellularibus, fragilibus, hyalinis, parallelis 180-200 \approx 2, mox in articulos 4-6 μ . long. dilabentibus; paraphysibus filiformibus, tenerrimis, apice subcurvatis.

Hab. ad truncum cariosum Tiliæ, Cratægi, Pini pr. Windsheim, Algäu et Heidelberg Germaniæ.

7. **Schizoxylon argentinum** Speg. Fung. Argent. I, p. 186, n. 106. — 2869

Ascomatibus minutis, 250-300 μ . diam., hinc inde sparsis v. 3-5-gregariis, cortice immutato v. paullulo tumefacto immersa, ore integro vel subintegro superficiem attingente, disco concaviusculo, pruinoso donatis, totis candidis; ascis longissimis cylindræis, apice rotundatis, substipitatis, 300 \approx 15-20, filiformi-paraphysatis; sporidiis filiformibus, ascos subæquantibus, 3-4-stichis, creberrime septatis, hyalinis, oculis 10-12 \approx 4-5, facillime secudentibus.

Hab. in ramulis dejectis putrescentibus Bauhinia grandifloræ a la Recoleta Rep. Argentina. — *S. Berkeleyano* affine.

8. **Schizoxylon Sarothamni** (Fuck.) Rehm Disc. p. 183, *Calloria* Fuck. 2870

Symb. myc. App. II, p. 57, fig. 22. — Cupulis ascigeris carnosis, sparsis, erumpentibus, sessilibus, intus pallide sordide virescentibus, primo clausis a corticis laciniis circumdatis, extus strigosis, sordidis, demum centro poro orbiculari apertis, margine crasso, involuto, postremo 1-1½ mm. lat., orbicularibus, disco toto explanato, pulveraceo, atro-olivaceo, margine albido, lacinulato sæpe evanescente circumdatis; ascis cylindræis, stipitatis, 8-sporis, 200-250 10-12; paraphysibus filiformibus, simplicibus, multiguttulatis; sporidiis filiformibus parallelis 180-220 \approx 3-4, pluriseptatis, mox in articulos 6-8 μ . long. dilabentibus.

Hab. in ramis putridis Sarothamni scoparii in Rhenogovia. — Fungus conidiophorus *Dacryomycetem* exhibens, per corticis rimas erumpens; tuberculis sparsis confluentibusque, sessilibus, 1-2 μ . crass., convexis, levibus, nitidis, gelatinosis, hyphis ramosis contextis, atro-viridibus, siccis nigricantibus, applanatis, rugosis; conidiis ovatis obovatisve, continuis, nucleatis, 10-12 \approx 7, pallide viridibus.

9. **Schizoxylon Idæi** Fuck. Symb. p. 25. — Cupulis sparsis, sub epi- 2871

dermide nidulantibus, ½ mm. latis, primo clausis, demum laciniis 3-4 dehiscentibus erumpentibusque, laciniis ochraceis, triangularibus; disco primo concavo, fusco, demum margine evanescente, ex-

planato; ascis substipitatis, oblongis, 8-sporis, $80 \approx 14$; sporidiis in asco fasciculatis, cylindræo-fusiformibus, subcurvatis, 16-articulatis septatisve, hyalinis, demum in articulos secedentibus, $46 \approx 4$.

Hab. in sarmentis putridis Rubi idæi in silva Cæstrich Rhenogoviæ.

10. **Schizoxylon æruginosum** Fuck. Symb. p. 251, Sacc. Mich. I, p. 422, 2872

non *Stictis æruginosa* Pers. Myc. eur. p. 338. — Cupulis gregariis, erumpentibus, jam initio planis, punctiformibus, dein ampliatas usque ad 2 mm. latis, planis, disco saturate æruginoso, pulveraceo, margine subelevato, candido, pulveraceo, ramulorum epidermide laciniata, inflexa circumdatis, intus sordidis, corneis; ascis cylindræis, 8-sporis, $164-180 \approx 8-10$; sporidiis filiformibus, asci longitudine, dein in articulos cylindræos, $8-12 \approx 2-3$ hyalinos secedentibus.

Hab. in ramis putridis Rubi cæsii et Robiniæ Pseudacaciæ in Rhenogovia et Italia bor. — *Stictis furfurella* Ces. Bot. Zeit. p. 284 huc spectat v. ad *Sch. Sarothamni*.

11. **Schizoxylon lichenoides** Speg. Fung. Arg. Pug. IV, n. 233. — 2873

Ascomatibus superficialibus, lenticulari-hemisphæricis, perfecte discoideis, 0,8-3 mm. diam., margine stricto obtusulo albicante; disco tumido griseo-glaucos, primo pruinulosos, dein glabros; ascis cylindræis sursum rotundatis, deorsum breviter attenuatis, crasse stipitatis, $170-190 \approx 10-11$, paraphysibus filiformibus, guttulatis, hyalinis obvallatis; sporidiis mox in eodem asco in articulos numerosissimos secedentibus; articulis elongatis vel subcuboideis, $3,5 \approx 3$, utrinque truncatis, angulis obtusiusculis.

Hab. in ramis corticatis decorticatisve Citri Aurantii L. in El Parque de Palermo, Buenos-Ayres Argentinae.

12. **Schizoxylon occidentale** E. et E. Journ. Mycol. I, p. 90. — Gre 2874

gremium, depresso globosum, album, operculo nigricante, circulari, parce perforato; disco cupulari, flavido vel cornicolore, ceraceo; ascis longissimis $200-300 \approx 6-8$, octosporis; sporidiis filiformibus, ascum æquantibus, $2,5-3,5 \mu$. cr., subinde sursum attenuatis, multiseptatis, hyalinis, ad septa alterne constrictis, in articulos $6-15 \mu$. long., cylindræos utrinque rotundatos 1-septatos secedentibus; paraphysibus filiformibus nucleolatis.

Hab. in truncis, Utah Amer. bor. — Affine *S. albo-atro* et *Berkeleyano*.

13. **Schizoxylon moniliferum** Ell. et Ever. Torr. Club. 1884, p. 42. — 2875

Cæspitosum, 4-6-aggregatum, disco pallido, circ. $1,5 \mu$. diam., mem-

brana interiori tenui cinerea dein centro perforata tecto, margine membranæ exterioris subreflexo, imperfecte dentato; ascis copiose paraphysatis, 250-300 \approx 6-8; sporidiis filiformibus, ascos subæquantibus, multiseptatis, loculis globosis 4-5 μ . diam.

Hab. in ligno sicco et emortuo *Quercus coccineæ* et albæ Newfield N. J. Amer. bor.

14. **Schizoxylon bambusinum** Speg. Fung. Puigg. Pug. I, p. 200. — 2876

Pauci-aggregatum vel rarius sparsum; ascomatibus infossis, margine erumpenti-prominulo, albo, integro, disco plano olivaceo 400-600 μ . diam., levi; ascis subcylindræis, apice rotundatis, deorsum cuneatis substipitatisque 45-50 \approx 8-9, octosporis (?); sporidiis fasciculatis, linearibus, jam in asco in articulos subcuboideo-ellipticos, 2 \approx 1,5 mox secedentibus, chlorinulis; paraphysibus ascos longioribus, apice sæpe ramulosis, tenuibus.

Hab. ad culmos dejectos putrescentes *Bambusaceæ* cujusdam in uliginosis, Apiahy Brasilæ (PUIGGARI). — Species habitu externo *Stictidi radiatæ* Pers. simillima.

15. **Schizoxylon sepinolum** Pers. Ann. Wett. I, 1810, p. 11, t. X, 2877

f. 9, Mont. Fl. Alg. t. 27, f. 4, *Limboria* Ach., *Cycledum* Wallr., *Lecanidion* Rabenh. *Phacidium* Fr. — Initio subglobosum, clausum, verruciforme, dein patellatum, sessile, disco plano, nigricante, cyaneo-pulvereo, carnosio-ceraceum, intus atro-sanguineum, margine crenulato, nitidulo; ascis clavatis 130-160 \approx 7-9 deorsum stipitato-attenuatis, 50-60-septatis; sporidiis subhyalinis ascum subæquantibus, mox in articulos cuboideo-cylindricos, utrinque truncatos 3,5-4 μ . long. secedentibus; paraphysibus filiformibus pluries furcatis.

Hab. in ligno vetusto quercino et abietino in Vogesis, Gallia, Alsatia, Thuringia, Algeria. — Cfr. Tul. Carp. III, p. 148.

NEMACYCLUS Fuck. Symb. App. II, p. 49, Sacc. Consp. Disc. p. 12

(Etym. *nema* filum et *cyclos* discus circul.), *Stictidis*, *Schmitzomiacæ*, *Propoleos* spec. Auct. — Ascomata immersa, immarginata, plano-concaviuscula, ceracea, pallida, sæpius ovato-oblonga. Asci tereti-clavati, paraphysati, octospori. Sporidia bacillari-vermicularia, parallela, hyalina, continua vel septulata.

1. **Nemacyclus niveus** (Pers.) Sacc. Consp. Disc. p. 12, *Stictis* Pers. 2878

Myc. Eur. I, p. 339, Fr. Syst. Myc. II, p. 196, De-Not. Micr. ital. Dec. I, fig. 5, *Schmitzomia nivea* De-Not. Comm. p. 562, Niessl Beitr. p. 64, t. VII, fig. 51, *Propolis Pinastri* de Lacr. in Desm. Exs. n. 791, Fuck. Symb. mycol. p. 255. — Erumpens, per perider-

mium longitudinaliter dehiscens, ellipticus, concavus, pallidus v. lutescens, furfuraceus, margine exiguo albido, 0,3-0,5 mm. long., 0,2-0,4 mm. lat.; ascis oblongo-clavatis sessilibus, apice rotundatis, 8-sporis, $100 \approx 10-15$; sporidiis faretis, curvulis, vermiculari-bacillaribus utrinque obtusis, fere hyalinis seu dilutissime lutescentibus, sæpe 4-nucleatis, $80-90 \approx 3-4$; paraphysibus densissime stipatis, apice ramulosis et saturate flavis.

Hab. in acubus Pini silvestris, maritimæ, Laricionis montanæ, Pinastri in Italia, Germania, Britannia, Gallia et Belgio. — Teste Niessl et Fuck., stat. conid. adest: disculis superficialibus, sparsis, molle gelatinosis, oblongis rotundatisque, convexis, colore et magnitudine disci ascophori, siccis corneis, diaphanis, planis, fusciscentibus; conidiis filiformibus, plerumque subrectis, utrinque acuminatis, continuis, hyalinis, $60 \approx \frac{1}{2}-1$.

2. **Nemacyclus macularis** (B. et C.) Sacc. *Stictis macularis* B. et C. 2879
Cub. Fung. n. 711. — Subellipticus, elongatus, e macula pallida oriundus, epidermide marginata; disco pallido; ascis cylindricis; sporidiis flocciformibus.

Hab. in foliis Cyperi in insula Cuba.

3. **Nemacyclus griseus** (C. et E.) Sacc. *Propolis grisea* C. et E. Grev. 2880
V, p. 91. — Gregarius, immersus, orbicularis, ellipticusve, planus; margine brunneo; disco pallide griseo; ascis cylindræis; sporidiis filiformibus, 100 μ . long.

Hab. in ramis Cupressi thyoidis (*white cedar*) New Jersey Amer. bor. — Ascoma 1 mm. lat.

4. **Nemacyclus flavus** Rehm Disc. p. 174. — Gregarius, immersus, 2881
orbicularis vel oblongus, per epidermidem leniter atratam 4-6 laciniatam erumpens, 0,5-1 mm. long., 0,3-0,5 mm. lat.; disco plano flavido, obscurius marginato; ascis clavatis, obtusis, tenui-stipitatis $75-80 \approx 8-9$, octosporis; sporidiis filiformibus, rectiusculis, hyalinis, 7-septatis, $35-45 \approx 3$, parallelis; paraphysibus filiformibus, septatis, sursum ramulosis flavidis, 2,5 cr.

Hab. in caulibus siccis Adenostylidis alpinæ in M. Rigi Helvetiæ.

KARSTENIA Fr. in litt. ad Karst., Karst. Rev. pag. 166 (Etym. a mycologo celeberrimo P. A. KARSTEN), *Chailletia* Karst. Myc. fenn. I, p. 21, nec DC. — Ascomata immersa, urceolata, mox disciformi-concaviuscula, ceracea per peridermium stellatim fissum et cum eo margine subconnata erumpentia. Asci tereti-clavati, octospori, pa-

raphysati. Sporidia bacillaria, pluriseptata, conglobata, hyalina. —
Est quasi *Ocellaria* scolecospora.

1. **Karstenia sorbina** Karst. Rev. p. 166, *Chailletia* Karst. M. F. I, 2882
.p 241. — Sparsa v. gregaria, cortici immersa, primitus subsphæ-
roidea et clausa deinde laciniato- v. lacerato-dehiscens et hemisphæ-
rico-concava, tandem leviter emergens, pallescens, disco fulvescente
vel gilvo-pallido, 0,5-1 mm. lat.; ascis elongato-clavatis, sessilibus,
80-100 \approx 10-13, 8-sporis; sporidiis conglobatis, bacillaribus utrinque
attenuatis 38-62 \approx 3-4, 15-16-septatis, rectis curvisve, hyalinis;
paraphysibus filiformibus, haud bene discretis.

Hab. in cortice Sorbi aucupariæ pr. Helsingfors Fenniae.
— Hymenium juvenile cœrulescit.

Sect. 5. **Dictyosporæ** Sacc.

PLATYSTICTA Cooke et Mass. Grev. XVII, p. 95 (1889) ex p. (Etym.
platys latus et *sticta*). — Ascomata erumpentia, orbicularia, urceo-
lata, marginata; disco dein plus v. minus decedente. Asci cylin-
dracei. Sporidia majuscula tereti-elongata, pluri-septata, murifor-
mia, hyalina.

1. **Platysticta simulans** Cooke et Mass. Grev. XVII, p. 96, *Licheno-* 2883
psis sphæroboloides Berk. Herb. ex parte. — Immersa, erumpens,
discoideo-urceolata, margine albo; ascis cylindraceis; sporidiis cy-
lindraceis, utrinque rotundatis, medio constrictis, pluriseptatis, dein
muriformibus, hyalinis, 120-135 \approx 16-17.

Hab. in truncis *Quercus* in Carolina austr. Amer. bor.

PLEIOSTICTIS Rehm Ascom. Lojk. n. 70, (1882) Sacc. Consp. Disc.
p. 12 (Etym. *pleios* plenior et *Stictis*). — Ascomata immerso-erum-
pentia, circulari-ovata, subplana, aperta, tenui-marginata, fusce-
scentia. Asci monospori, elongati, paraphysati. Sporidia oblonga, plu-
riseptato-muriformia, hyalina vel fuscidula. — Cl. Rehm nuper ge-
neri *Meltiosporio* subjungit sed ascis monosporis satis distinguitur.

1. **Pleiostictis propolidoides** Rehm Ascom. Lojk. n. 70. — Ascoma- 2884
tibus in ligni dealbati superficie primitus immersis, gregariis,
supremo ligni strato cinctis, dein fere sessilibus, primitus ellipticis
dein rotundatis, subplanis, apertis, margine tenui, sublacerato, con-
colori cinctis, atro-fuscis vel atro-rufis, circ. 0,8 mm. diam.; ascis
elongatis, monosporis; sporidiis oblongis, obtusis, hyalinis, dein fu-

scidulis, transverse 12-16-, longitudinaliter 1-2-septatis, 24-30 \approx 5-9; paraphysibus filiformibus, superne circ. 3 μ . cr., clavatis, fuscidulis, conglutinatis; hymenio 45 μ . alt.; hypothecio dilute fuscidulo, jodi ope cœrulescente dein vinoso-rubescente.

Hab. ad ramulos Abietum et ad lignum Pini Cembræ in alpinis Transsylvaniæ et Tyrolis.

MELITTOSPORIUM Corda Ic. fung. II, p. 38 (1838) Sacc. Gen. Disc. p. 12 (Etym. *melitton* apiarium et *spora*). — Ascomata subcarnoso-ceracea immerso-erumpentia, plana, oblonga, breve marginata. Asci octospori, tereti-clavati, paraphysati. Sporidia oblonga pluriseptato-muriformia, hyalina vel fuscilla. — *Stictis lichenicola* Mont., sporidiis fenestratis, huc pertineret, sed ex plurium sententia verus lichen (*Urceolaria scruposa* β . *parasitica* Somm.).

1. **Melittosporium æruginosum** (Pers.) Rehm Disc. p. 173, *Stictis* Pers. 2885
M. E. I, p. 338, *Xylogramma versicolor* Wallr. Crypt. p. 510, *Melittosporium* Corda Ic. II, p. 38, t. XV, f. 131. — Erumpens, oblongum, hysteroideum; disco æruginoso, pulveraceo; margine elevato membranaceo-corneo; ascis maximis, clavatis, 8-sporis; sporidiis oblongo-ovatis, distichis 4-6-septato-muriformibus, ad septa constrictis, subhyalinis; paraphysibus copiosis, filiformi-clavulatis.

Hab. in ramis decorticatis et ligno plurium arborum in Germania, Bohemia et Suecia.

2. **Melittosporium hysterinum** (Fr.) Gill. Disc. p. 187, *Stictis hyste-* 2886
rina Fr. S. M. II, p. 199 ex parte? — Subparallele sparsum, immersum, nigricans, subellipticum v. lanceolatum; ascis brevibus, tereti-clavatis, 45-57 \approx 15-22; sporidiis oblongis, muriformibus, 15-22 \approx 7,5-11, subdistichis ex hyalino flavidulis; paraphysibus filiformibus, sursum septatis brunneolis.

Hab. in ligno siccò Abietum et Pini Strobi in Gallia et Amer. bor. — *Stictis hysterina* Fr. saltem p. p. ad *Xylogramma* refertur (n. 2781). Cfr. Farlow Flor. Whit. Mount. p. 246.

3. **Melittosporium cruentatum** (Mont.) Sacc. *Stictis cruentata* Mont. 2887
Guy. Lich. ad calcem n. 462. — Erumpens, convexo-planum, lenticulare; limbo radiatim lacero dehiscente, sanguineo-pulverulento; disco planiusculo atro-fusco, nudo; ascis magnis, clavatis, 8-sporis paraphysibus obvallatis; sporidiis ex oblongo ovoideis 25 μ . long., 5-septato-muriformibus, loculis quadratis.

Hab. ad cortices in Guyana (LEPRIEUR). — Hypophlœum, gregarium confluensque. Discus sub epidermide corticis, quam erumpen-

do ejecit, oriens, primitus limbo aut velo integro mox radiatim lacero pulvere rubro consperso tectus, tandem nudus, fusco-ater. An *Platysticta*?

4. **Melittosporium attenuatum** Dur. et Lév. Expl. Sc. Alg. t. 29, f. 7, 2888 (*Xylographa*) [Absque diagnosi]. — Gregarium, lanceolatum, utrinque acutum, parallelum, immersum, nigricans, margine leniter prominulo, integro, pallidiore; ascis obovato-clavatis, brevissime stipitatis, octosporis; sporidiis subtristichis, ovato-oblongis, 5-septato-muriformibus, haud constrictis, hyalinis.

Hab. in ramis decorticatis dealbatis in Algeria.

5. **Melittosporium schizoxylon** (Fr.) Sacc. *Phacidium schizoxylon* 2889 Fr. Sclerom. n. 412, Summa p. 369. *Xylographa schizoxylon* De Not. Comm. Critt. I, p. 375. — Ascomatibus.....; ascis octosporis, demum diffluentibus; sporidiis majusculis, ovoideis, dilutissime fuligineis, diaphanis, plurilocularibus, bullatis.

Hab. ad palos in vineis, San Siro supra Genova in Italia boreali et in Suecia.

6. **Melittosporium pteridinum** (Phill. et Buckn.) Sacc. *Stictis* Phill. et 2890 Buck. Disc. pag. 384. — Sparsum, leviter immersum, circulare v. elongatum, inæquale, planum, disco pallide brunneo, convexiusculo, margine membranaceo; ascis late clavatis, 8-sporis; sporidiis distichis clavatis vel clavato-fusoideis, 6-7-septato-muriformibus, 28-44 = 5-9; paraphysibus adhærentibus.

Hab. in stipite *Pteridis aquilinæ* Leigh Wood pr. Bristol Britannicæ (BUCKNALL).

Fam. 8. **Phacidieæ** Fr. Syst. Myc. II, p. 317.

Ascomata innata, ex urceolato applanata, nigricantia, minuta, ceracea vel ceraceo-firma, matrice sæpius atrata dein varie fissa tecta vel cincta, excipulo præsentem, sæpius fibroso. Asci suboctospori, paraphysati. Sporidia varia. — In *Dermateas*, *Sticteas*, *Patellarieas* sensim abeunt.

Clavis analytica generum.

Sect. 1. Hyalosporæ Sacc. Sporidia ellipsoidea vel ovoidea vel oblonga, continua, hyalina.

Cryptomyces. Ascomata per matricem late atratam tuberculosam vel bullosam frustuloso-vel sinuoso-erumpentia.

Phacidium. Ascomata superne cum epidermide concreta et cum illa radiatim fissâ dehiscencia, firma.

Pseudopeziza. Ascomata epidermide non vel vix concreta varie fissâ diu tecta, mollia, exigua.

Trochila. Ascomata, epidermide varie fissa et secedente, mox nudata, inferne duriuscula atra.

Stegia. Ascomata supra cum epidermide concreta et cum hac circumscissa operculatim aperta.

Sect. 2. Phæosporæ Sacc. Sporidia ellipsoideo-oblonga, fusca, continua.

Stictopacidium. Ascomata ex urceolato applanata, laciniatim dehiscentia. [*Hymenobolus*. Cfr. inter *Dermateas*].

Sect. 3. Didymosporæ Sacc. Sporidia ellipsoideo-oblonga, 1-septata, hyalina v. colorata.

Fabræa. Ascomata *Pseudopezizæ*; sporidia bilocularia, hyalina.

[*Melaspilella*. Cfr. Sect. 2. *Celidii*].

[*Schizothyrium* (Desm.) Rehm. Ascomata hysteroideo-erumpentia, atra; sporidia bilocularia. Huc: *S. Parmicæ* Desm., Sacc. Syll. II, p. 725 et *S. aquilinum* (Fr.) Rehm Disc. p. 75, Sacc. Syll. II, p. 789].

Marchalia. Ascomata *Cryptomycetis*; sporidia bilocularia, hyalina.

Cocconia. Ascomata *Cryptomycetis*; sporidia bilocularia, fusca.

Abrothallus. Ascomata subhemisphærica, lichenicola; sporidia bilocularia fuliginea.

Sect. 4. Phragmosporæ Sacc. Sporidia oblonga 2-pluriseptata, hyalina.

Sphæropeziza. Ascomata sphæroideo-depressa, supra cum matrice concreta dentato- v. laciniato-dehiscentia.

Celidium. Ascomata planiuscula, lichenicola, exigua; sporidia 2-3- (raro 1-) septata.

[*Pseudographis*. Ascomata hysteroidea. Cfr. Syll. II, p. 769].

[*Metadothis*. Cfr. Sectio II *Dothioræ*].

Sect. 5. Scolecosporæ Sacc. Sporidia bacillaria vel filiformia, septata v. continua, subhyalina.

Coccomyces. Ascomata orbiculari-angulosa, supra cum epidermide concreta et cum ea radiatim fissa.

[*Colpoma* et *Sporomega*. Ascomata hysteroidea. Cfr. Syll. II, p. 801 et 803].

Rhytisma. Ascomata *Cryptomycetis*; sporidia filiformia, rarius elongato-fusoidea.

Duplicaria. Ascomata *Cryptomycetis*; sporidia cylindracea utrinque clavata, medio coarctata.

Sect. 6. Dictyosporæ Sacc. Sporidia ovoideo-oblonga, pluriseptato-muriformia.

Dothiora. Ascomata subirregularia, diu clausa tandem parce rimoso-dehiscentia, subcarbonacea.

Sect. 1. **Hyalosporæ** Sacc.

CRYPTOMYCES Grev. Scott. IV, p. 206 p. p. (1826) em. Rehm Disc. p. 107 [Etym. *cryptos* absconditus et *myces* fungus], *Rhytismatis* spec. Fr. — Ascomata innata, tecta, applanata per matricem tegentem late nigrificatam tuberculosam inæqualiter erumpentia, subcarbonacea, atra. Asci clavati, paraphysati, octospori. Sporidia ellipsoidea vel oblonga, continua, hyalina. — A *Rhytismate* sporidiorum forma mox dignoscitur.

1. **Cryptomyces maximus** (Fr.) Rehm Disc. pag. 107, *R. maximum* 2891
Fr. S. M. II, p. 566, Tul. Carp. III, p. 122, t. XVI, f. 9-15, *Xyloma Cicatrix* Wallr. Crypt. n. 2301, *Crypt. Wauchii* Grev. Scott. f. 306, *Sph. aurea* Sow. t. 356. — Subinnatus, latissimus, levis, in ambitu lobatus, frustulato-dehiscens, strato sub disco candido; ascis tereti-clavatis, prælongis, octosporis; sporidiis ellipsoideis v. ovoideis, rectis, 1-guttatis, hyalinis vel flavidulis 20-26 \approx 10-13; paraphysibus clavulatis, septatis, brunneolis.

Hab. in ramis vivis *Salicum* et *Corni* in Suecia, Britannia, Germania, Lusitania, Amer. bor. — Epidermis non secedit, sed cum ascomatibus connata. Plagas sistit bullatas, planas, 7 cm. usque longas, 1 mm. crass., inæquales, sed ambitu determinato, lobato. Discus levis, livido-pallidus, strato crasso candido incumbens.

2. **Cryptomyces Melianthi** (Thüm.) Sacc. *Rhytisma Melianthi* Thüm. 2892
in Flora 1876, p. 569, Myc. un. n. 1267. — Ascomatibus minoribus, epiphyllis tandem amphigenis, dense gregariis, orbiculatis, elevatis, raro confluentibus, utrinque emersis, nitido-aterrimis; ascis angustato-clavatis, utrinque angustatis, apice subacutatis, 60 \approx 20, hyalinis, 8-sporis, sporidiis ellipsoideis, apicibus rotundatis, 10 \approx 6, vitreis, pellucidis; paraphysibus numerosis, filiformibus, continuis, simplicibus, hyalinis, 60-80 μ . long.

Hab. in foliis languescentibus *Melianthi* majoris, in promont. Bonæ Spei prope Grahamstown (MAC-OWAN).

3. **Cryptomyces Myrciæ** (Mont.) Sacc. *Rhytisma Myrciæ* Mont. Guy., 2893
n. 458. — Amphigenus, macularis, innatus, tuberculis confertis irregulariter confluentibus constans, ater opacus, subtus convexus levis, supra applanatus rugulosus, rimis flexuosis dehiscens, intus niger; nucleis minutis albis in macula alte immersis; ascis cylindricis, 8-sporis, 100 \approx 10; sporidiis oblongo-cymbiformibus, monosubdistichis, 15 μ . long., quadrinucleolatis hyalinis.

Hab. in utraque pagina foliorum *Myrciæ* cujusdam, in Guyana (LEPRIEUR). — Maculæ gregatim confertæ, atræ, opacæ, utramque folii paginam invadentes, supra deplanatæ, rugosæ, tandem rimis flexuosis percursæ, subtus ascomatibus primo hemisphærico-depressis dein confluentibus tuberculosæ subpapillosæque; ascomata lenticularia, alte sepulta, nucleum album gelatinosum foventia.

4. **Cryptomyces Myricæ** (Mont.) Sacc. *Rhytisma Myricæ* Mont. Cent. 2894
IV, n. 96. — Epi-et hypophyllus, innatus, orbiculatus, atro-nitens, in pagina inferiori glandulis albo-punctatus, intus niger, rimis pluribus dehiscens; sporidiis oblongis utroque fine truncatis.

Hab. in foliis *Myricæ cordifoliæ*, prom. Bonæ Spei (BOIVIN).

5. **Cryptomyces Austini** (Cooke) Sacc. *Rhytisma Austini* Cooke Grev. 2895
VII, pag. 48. — Tenuis, convexus, ater, nitidus, rugulosus, hinc illinc fertilis; ascis clavatis; sporidiis ellipticis, hyalinis $20 \approx 10$.

Hab. in foliis *Cotoosa Floridæ* (AUSTIN). — Habitus *Rhyt. tosti*.

6. **Cryptomyces circumscissus** (Lév.) Sacc. *Rhytisma Lév.* Ann. Sc. 2896
nat. 1846 p. 255. — Amphigenus, innatus, orbicularis, crassus, niger, circulatim dehiscens, labiis laceratis, disco sordide albo, macula fusca insidente; ascis clavatis filiformi-paraphysatis; sporidiis oblongis, hinc obtusis illinc acutis.

Hab. ad folia arboris Oaxaca Mexici (JURGENSEN).

7. **Cryptomyces Eugeniacearum** (Corda) Sacc. *Rhytisma Eugeniacearum* 2897
Corda Ic. IV, p. 45, f. 130. — Gregarius, minutulus, ater, ascomate dimidiato, subcarbonaceo, nitido, irregulariter rimose dehiscente, nucleo luteolo; ascis cylindricis, 3-sporis; sporidiis ovato-oblongis, monostichis 1-nucleatis luteolis; paraphysibus filiformibus, simplicibus ascos superantibus.

Hab. in foliis *Eugeniæ apiculatæ* et alius speciei indeterminatæ in Africa australi (PÖPPIG).

8. **Cryptomyces Pongamiæ** (B. et Br.) Sacc. *Rhytisma Pongamiæ* 2898
B. et Br. Fung. of Ceyl. n. 1128. — Irregularis, in macula lutea insidens; cellulis prominulis late conicis; ascis clavatis; sporidiis ellipticis endochromate utrinque contracto.

Hab. in foliis *Pongamiæ glabræ*, Peradenya Ceylon (TWAITHES, BECCARI). — Adest ibique forma cupulis dispersis.

9. **Cryptomyces Berkeleyanus** (Ces.) Sacc. *Rhytisma Berkeleyanum* 2899
Ces. Myc. Born. p. 25. — Epiphyllus, gregarius, tuberculosus; singulis tuberculis 3-6 mm., magisque (ubi confluentibus), superficialibus inæqualibus rugulosis (immaturis?); ascis ovali-oblongis; sporidiis ellipticis hyalinis biguttulatis.

Hab. in pagina superiori foliorum herbæ, uti visum, suffruticosæ subtus ad nervos venulasque hispidulorum *Cyrtandraceæ* vel adfinis familiæ facie, Sarawak Bornei (BECCARI).

10. **Cryptomyces Rubiæ** (Mont.) Sacc. *Rhytisma Rubiæ* Mont. Syll. 2900

Crypt. n. 656. — Innatus, hypophyllus, gregarius confluensque, punctiformis, convexus, cupulari-depressus, fusco-ater, opacus, intus fuscus, frustulatim secedens; ascis e fundo erectis clavatis, 8-sporis 70 μ . long.; sporidiis oblongis altero fine attenuatis, quadrinucleolatis, 10 μ . long. hyalinis.

Hab. in pagina inferiori foliorum *Rubiæ tinctorum* et *R. silvestriis*, Montaud in Gallia meridionali (CASTAGNE) et Bruslaco Lusitaniæ (MOLLER). — Macula nulla; ascomata hemisphærico-depressa, vix 1 mm. diametro æquantia, quandoque confluentia, centro collapsa, fusco-atra, rima unica pluribusve (sæpius ternis) a centro radiantibus dehiscentia, tandem secedentia. Sec. Cooke Grev. XIII, p. 104, sporidia 3-septata.

11. **Cryptomyces Pteridis** (Reb.) Rehm Disc. p. 107, *Sphæria* Reb. 2901

Neom. p. 324, t. I, f. 3 *Xyloma et Dothidea* Fr. *Phyllachora Pteridis* Fuck. Symb. p. 218, Sacc. Syll. II, p. 607, quam confer. — Ascomatibus planis, simplicibus, subcarbonaceis, supra demum dehiscente laceratis, subcutaneis, ab epidermide matricis numquam omnino liberatis, seriatis, confluentibus, atris subopacis, 0,5–3 mm. long., 0,5 lat.; ascis clavatis 60–65 \approx 15, octosporis; sporidiis subdistichis ellipsoideis, 2-guttatis, continuis, 8–10 \approx 5–6.

Hab. ad frondes emortuas *Pteridis aquilinæ* in Fennia, Suecia, Britannia, Gallia, Germania, Italia, Belgio, Sibiria asiatica.

PHACIDIUM Fr. Syst. Myc. II, p. 371 ex p. (1822), Sacc. Consp. Disc. pag. 12 (Etym. *phacos* lens), *Trochilá* Karst. M. F. I, p. 246, p. m. p. — Ascomata immersa v. subimmersa depresso-globosa, excipulo solidiusculo, nigro superne epidermide concreto et cum illo in lacinias varias e centro fissa et dehiscentia. Asci tereti-clavati, paraphysati, 8-spori. Sporidia ovoidea v. oblonga, continua, hyalina. — Species quædam forte ad *Pseudophacidium* vel *Pseudopezizam* vel *Trochilam* spectant; plures, ignota fuctificatione, dubiæ.

• **Phacidium Vaccinii** Fr. S. M. II, p. 575 *Xyl. erumpens* Fr. Obs. 2902

I, pag. 202 Sel. Suec. exs. n. 289. — Erumpens, minutum, convexum, nitidum, in lacinias 4 dehiscens rugosum, disco fuligineo-nigro; ascis oblongis, sessilibus, 8-sporis, 46 \approx 8 μ . crass.; sporidiis distichis, lanceolatis, rectis, simplicibus, hyalinis, 10 \approx 2½.

Hab. in foliis *Vaccinii Vitis-ideæ* in Suecia, Gallia, Germania, Britannia, Belgio. — Epiphyllum, sparsum, primo innatum, leve, convexum, nitidum, astomum; dein erumpens, epidermide lacerata, rimose dehiscens; etiam maculæ albicanti indeterminatæ in nascitur. Stat. spermog. est *Dothiorella latitans* (Fr.) Sacc.

2. **Phacidium Oxycoccus** Fr. S. M. II, p. 575, Rehm Disc. p. 69, 2903
Trochila Karst. M. F. I, p. 250. — Suberumpens, orbiculatum, applanatum, leve, in lacinias subtres dehiscens; disco nigricante 0,5 mm. lat.; ascis clavatis, 8-sporis, 60-70 \approx 11-14; sporidiis oblongo-fusoideis rectis curvulisve, 2-guttatis, 14-18 \approx 5, hyalinis; paraphysibus filiforme-clavulatis.

Hab. in foliis exsiccatis *Vaccinii Oxycoccus* in Suecia, Germania, Fennia. — Cum proximis vix comparandum, certe distinctissima species, nitidum. Laciniæ plerumque tres, cum epidermide subconnatæ. Stratum sub disco late aperto pezizoideo vix ullum.

3. **Phacidium multivalve** (DC.) K. et S. Mycol. Heft I, p. 42, *Xyloma* 2904
 DC. Fr. 2, p. 303, Mem. Mus. III, p. 324, t. 3, f. 7, *Ph. Ilicis* Tul. Carp. III, pag. 138, Fres. Beitr. t. VIII, f. 20. — Disseminatum, epidermide pustulata nitida initio tectum, subinnatum, convexum, nigrum, in lacinias 5-6 dehiscens; ascis clavatis, 8-sporis, 60-100 \approx 9-10; sporidiis fusoideis rectis, hyalinis, 9-10 \approx 3-4, distichis; paraphysibus filiformibus 2,5 μ . cr. hyalinis, disco albicante, 0,5-2 mm. lat.

Hab. in pagina superiore foliorum *Ilicis Aquifolii* in Gallia, Britannia, Germania, Belgio. — Stat. spermog. est *Ceuthospora phacidioides* Grev.

4. **Phacidium sphæroideum** C. et E. Grev. VII, pag. 7. — Gregarium, sphæroideum, cinereum, in lacinias 4-5 obtusas dehiscens, disco cinereo; ascis clavatis; sporidiis fusiformibus, hyalinis, 20 \approx 6; paraphysibus filiformibus. 2905

Hab. in foliis *Ilicis glabræ*, New Jersey Amer. bor.

5. **Phacidium elegantissimum** B. et C. North Am. Fungi n. 779. — 2906
 In maculas orbiculares albas nigrocinctas situm punctiforme angulatum; ascis..... non descriptis.

Hab. in foliis *Ilicis*, Alabama Amer. bor. (PETERS). — Pulchella species sed sterilis observata.

6. **Phacidium Vincæ** Fuck. Symb. p. 261. — Cupulis hypophyllis 2907
 gregariis, innatis, orbicularibus, depresso-conicis, 1 mm. circ. latis, nigris, vertice pallidioribus, siccis clausis, madidis apertis, in laci-

nias plerumque 4, regulariter triangulares, strictas usque ad cupulæ medium fissis; ascis oblongo-clavatis, 8-sporis, 56-65 = 8-9; sporidiis simplicibus, cylindræis, sæpe curvatis, multiguttulatis, hyalinis, 8-10 = 2-3; paraphysibus filiformibus.

Hab. in foliis siccis Vincæ minoris prope Mappen in Rhénogovia.

7. **Phacidium Arbuti** Cooke et Harkn. Grev. XIV. p. 10. — Ascomatibus 2908 emergentibus, demum subsuperficialibus, applanatis, atris, discoideis, quadratis, triangulis vel difformibus, $\frac{1}{3}$ - $\frac{1}{2}$ mm., margine obtuse dentato; ascis clavatis, octosporis; sporidiis biserialibus, elliptico-lanceolatis, continuis, hyalinis, 12-14 = 5.

Hab. in foliis Arbuti Menziesii in California (HARKNESS).

8. **Phacidium Arctostaphyli** Karst. Symb. p. 256, *Propolis phacidioi-* 2909 *des* Fr. Summ. Veg. Scand. p. 372, *Stictis phacidioides* Fr. Syst. Myc. II, p. 198, *Trochila* Karst. M. F. I, p. 249. — Subgregarium, innatum, dein epidermide in laciniis 5 vel plures æquales, acutas, patentés fissa, erumpens, disco convexo, pallido-fuscum, siccum nigricans, 0,3-0,4 mm. lat.; ascis clavatis, 70-90 = 11, 8-sporis; sporidiis distichis, fusoideo-elongatis vel fusoideo-oblongatis, rectis vel curvulis, guttulis 2 majusculis præditis, 18-22 = 4-5; paraphysibus filiformibus, cohærentibus, 1,5-2 μ . cr., apice clavula fuscescente, cuneato-incrassata aut non determinata instructis, 3-5 μ . cr.

Hab. in foliis Arctostaphyli officinalis demortuis in Suecia, Britannia et Fennia meridionali.

9. **Phacidium nigrum** Cooke in Grev. XII, p. 23. — Gregarium, hypo- 2910 phyllum, erumpens, in maculas nigras consociatum, demum laciniato-fissum, 1 mm. diam. disco fuligineo; ascis clavatis, octosporis; sporidiis ellipticis, rectis, continuis, hyalinis, 13-25 = 5-7.

Hab. in pag. inf. foliorum Andromedæ, Darien Georgiae Amerbor. (RAVENEL).

10. **Phacidium latebrosum** QuéL. XIII Suppl. p. 9. — Ascomatibus 2911 punctiformibus, discoideis, 200-300 μ . diam. membranaceis, olivascensibus vel brunneis, margine denticulatis; hymenio subtiliter granuloso, glauco, in sicco nigrescente; sporidiis fusiformibus, 10 μ . longis, vix arcuatis, hyalinis.

Hab. in petiolis foliorum Sorbi terminalis (?), Jura.

11. **Phacidium Heteromelis** Phill. et Hark. Grev. XII, p. 23. — Gre- 2912 garium, orbiculare, tectum, dein laciniato-laceratum, disco cinereo;

ascis clavatis vel cylindraceo-clavatis, octosporis; sporidiis ellipticis 10-12 \approx 2-3; paraphysibus filiformibus, superne incrassatis.

Hab. in pag. infer. foliorum *Heteromelis arbutifoliæ*, California (HARKNESS).

12 **Phacidium Rhododendri** Schwein. Syn. Amer. bor. n. 2051. — 2913

In macula lata expansa albescente innatum; ascomatibus nigro-fuscescentibus, majoribus 4 mm. lat. aut ultra, sparsis, obtuso-oblongis, subflexuosis, demum in lacinias tres, irregularites ruptis disco fuscescente subpulverulento.

Hab. in pagina superiori *Rhododendri maximi* foliorum, Bethlehem Amer. bor.

13. **Phacidium exasperans** Schwein. Syn. Amer. bor. n. 2052. — 2914

Erumpens demum libere folio insidens, minutum, sparsum, folium tactum exasperans, subrotundum applanatum, truncatum, aterrimum, absque nitore, undique punctulato-asperum, demum in paucas lacinias ruptum; disco indistincto.

Hab. in utraque pagina foliorum emortuorum *Kalmiæ latifoliæ*, Bethlehem et Salen Amer. bor.

14. **Phacidium minutissimum** Auersw. in Rab. F. E. n. 228, Sacc. F. 2915

it. f. 1392, Fresen. Beitr. t. VIII, f. 17-19, *Nævia* Rehm Disc. p. 138, *Trochila* Karst. M. F. I, p. 251. — Maculis late dealbatis innatum, gregarium brunneo-fuscum per epidermidem 3-4-fidam erumpens, suborbiculare v. subangulosum, 0,2-0,3 mm. lat., disco flavido tenuissime marginato; ascis tereti-clavatis, subsessilibus, 40-50 \approx 8-10, octosporis; sporidiis distichis, oblongo-fusoideis, 7-8 \approx 3-3,5 granulosis, hyalinis; paraphysibus filiformibus capitulatis.

Hab. in pag. inf. foliorum *Quercus pedunculatæ* in Italia, Austria, Germania, Britannia, Fennia, Gallia.

15. **Phacidium perexiguum** Desm. 17 Not. p. 36. — Erumpens, am- 2916

phigenum, gregarium, minutissimum, orbiculare, fusco-nigricans, in lacinias 4-5 dehiscens; disco flavescens; asci clavatis, 40 μ . long.; sporidiis ovoideis.

Hab. in foliis exiccatis *Quercus rubræ* in Gallia bor. — Greges ascomatum 3-4 mm. lat.

16. **Phacidium quercinum** Schwein. Syn. Amer. bor. n. 2061. — Mi- 2917

nutum, nudo oculo punctiforme nigrum aut fuligineum; lente admota omnino difforme, varie lobatum, subelevatum, applanatum, absque nitore demum dehiscens laciniis irregularibus.

Hab. in aversa pagina foliorum *quercinorum* rarum, Bethlehem Amer. bor.

17. **Phacidium fimbriatum** K. et Schm. Myc. Heft I, p. 39. — Innatum, 2918
orbiculare, hemisphærico-applanatum, radiatim striatum, atrum, in
lacinias plures teneras rumpens, disco albo.

Hab. in foliis Populi nigræ in Germania. — Vix 2 mm.
latum, opacum, striis radiatum, secundum quas fimbriato-dehiscens.

18. **Phacidium Platani** Schwein. Syn. Amer. bor. n. 2060. — Innatum, 2919
minutissimum, creberrime sparsum, atronitens, punctiforme, sed pro
ratione valde elevatum, ovale, aut difforme, superficie primum no-
tato plicis tribus elevatis, demum fissa in lacinias tres; disco pallido.

Hab. frequens in aversa pagina folii Platani occidentalis
Bethlehem Amer. bor.

19. **Phacidium fraxineum** Schwein. Syn. Amer. bor. n. 2059. — In- 2920
natum, majus *Coccom. dentato*, absque macula in pagina aversa,
gregatim sparsum, subrotundum aut difforme, atrum absque nitore,
convexo-applanatum; superficie plicato-rugosa, demum irregulari-
ter fissa in lacinias.

Hab. in foliis Fraxini acuminatæ rarum, sed copiose ag-
gregatum, Bethlehem Amer. bor. — An ad *Ph. fimbriatum*? Si-
stit puncta nigra conspicua in epidermide cinerescente folii.

20. **Phacidium aterrimum** (Fuck.) Sacc. *Pezicula aterrima* Fuck. Symb. 2921
Mycol. pag. 278. — Cupulis sparsis, erumpentibus, ab epidermide
lacerata cinctis, $\frac{1}{2}$ mm. diam., orbicularibus, convexis, aterrimis,
opacis, pulveraceis, margine acuto, fisso; paraphysibus ascorum
longitudine, filiformibus, simplicibus bipartitisve, apice globulige-
ris, globulis uniguttulatis, fuscis, 5 μ . diam.; ascis lineari-oblongis,
8-sporis, 50 μ . long.; sporidiis distichis, cylindræis, simplicibus,
rectis 8 = 2, hyalinis.

Hab. in acubus putridis dejectis Pini silvestris pr. Freien-
weinheim Rhenogoviæ.

21. **Phacidium cicatricolum** Fuck. Symb. App. II, p. 52, fig. 17. — 2922
Discis ascigeris foliorum dejectorum cicatrices totas occupantibus,
erumpentibus, carnosis, planis, olivaceis, 1 mm. diam., margine
minute lacerato; ascis oblongo-clavatis, sessilibus, 8-sporis, 72 = 8;
sporidiis subdistichis, fusiformibus, rectis, continuis, hyalinis, 12 =
4; paraphysibus filiformibus, tenuissime acuminatis, arcuatis.

Hab. in costa primaria foliorum Abietis pectinatæ in silvis
Rhenogoviæ. — St. spermog. perfecte ut in *Phacidio salicino*, sed
sporulis cylindræo-fusiformibus.

22. **Phacidium lacerum** Fr. Obs. 2, p. 313. — Erumpens, subrotun- 2923
dum, nigrum, in lacinias subsenas obtusas inæquales rumpens, di-

sco atro-fusco; ascis sessilibus, elongatis, apice acuminatis, 8-sporis, 60-70 \approx 8-9; sporidis subdistichis, oblongo-fusiformibus, utrinque obtusiusculis, rectis, continuis, hyalinis, 12-14 \approx 3,5-4; paraphysibus simplicibus, filiformibus, asci longitudine.

Hab. in foliis Pini silvestris in Suecia, Germania, Belgio, Fennia. — Sec. Fuck st. spermog. est *Dothiorella Pinastris*. Est optima generis species. Primo sistit maculas minutas orbiculares; demum erumpens, 1-1,3 mm. latum, disco dilatato, laciniis epidermide folii tectis, ad basin fere divisis, fragilibus. Stratum sub disco intense fusco vix ullum.

23. **Phacidium infestans** Karst. Symb. Mycol. Fenn. XIX, p. 87. — 2924

Subgregarium, erumpens, subrotundum, in lacinias inæquales epidermide tectas dehiscens, 1 mm. lat.; disco pallescente; ascis clavatis, subsessilibus, 90-130 \approx 18-21, octosporis, distichis, fusoideo-oblongis, rectis vel curvulis, eguttulatis, hyalinis, 22-35 \approx 8-9; paraphysibus filiformibus 1 μ . crassis.

Hab. in foliis Pini silvestris (cui valde noxium), Tammela Fenniæ.

24. **Phacidium abietinum** Kunz. et Schmidt Myc. Heft I, p. 35, Fr. 2925

Syst. Myc. II, p. 576. — Erumpens, subrotundum, convexo-depressum, nigrum, in lacinias 3-4 obtusas dehiscens, disco cinereo; ascis clavatis, 8-sporis, 40-45 \approx 8-10; sporidiis oblongo-fusoideis, 9-11 \approx 3,5-4,5, biguttatis, rectis, hyalinis; paraphysibus filiformibus.

Hab. ad folia Abietis excelsæ, A. pectinatæ et Pinorum dejecta in Suecia, Germania, Gallia, Britannia, Italia, Amer. bor. — Orbiculare vel subovatum, 0,5-1,5 mm. lat., opacum, præcedenti affine.

25. **Phacidium Taxi** Fr. Syst. Myc. II, p. 575, *Trochila Taxi* Fr. 2926

Summa p. 367. — Erumpens, minutum, applanatum, cinereo-nigrum, ascomatis laciniis acutis; disco nigro.

Hab. ad folia Taxi dejecta in Suecia, Germania. — Applanatum, epiphyllum in lacinias distinctas, cum epidermide junctas, unde color cinerescens, rumpens. Spermogonium nunc tantum notum; sporulis in sporophororum apicibus, obovato-oblongis, unicellularibus, hyalinis, 12 \approx 6. Cfr. Fuck. Symb. p. 277.

26. **Phacidium hemisphæricum** Fr. Syst. Myc. II, p. 572. — Superfi- 2927

ciale, hemisphæricum, atrum, in lacinias 4 obtusas dehiscens, leve disco albido subnigricante.

Hab. in cortice betuligno, *Hyst. pulicaris* comes, in Kamtschatka (WORMSK). — Affinitas adest cum *Hyst. pulicari*, quo ma-

jus, orbiculare, passim confluens. Gregarium, basi applanata sessile, nudum, atrum, convexum, demum ruptum, inæquabile. Lacinie plerumque quatuor, obtusæ, inæquales, duæ oppositæ nempe majores subclausæ, demum vero lacerato-diffractæ. Discus firmus, albido-pallens, raro rufescens, ætate vero nigricans, ascis cylindricis, strato albo adfixis. Fr. loc. cit.

27. **Phacidium salicinum** Fuck. Symb. App. I, p. 40. — Cupulis asci- 2928
geris, vere sequente in spermogoniorum latere nascentibus, sparsis, raro confluentibus, erumpentibus, orbicularibus, deplanatis, atris, usque ad 2 mm. diam., medio primo papillatis, demum laceratis, laciniis 3-5, triangularibus, patentibus; disco nudato griseo-nigro; ascis sessilibus, elongatis, 8-sporis, $66 \approx 8$; sporidiis oblique monostichis vel subdistichis, fusiformibus, rectis continuis, biguttulatis, hyalinis, $12 \approx 4$; paraphysibus filiformibus.

Hab. in ramis siccis corticatis dejectis Salicis capreæ in Rhenogovia. — Stat. spermog. sec. Fuck. loc. cit.: spermogoniis dense aggregatis confluentibusque, quasi stromata erumpentia, convexa 1-2 mm. long., $\frac{1}{2}$ -1 mm. lat., seu irregularia, multicellularia, intus grisea, superficie multilacerata papillatave, atra referentibus; spermatis demum expulsis cylindraceis, rectis, continuis, hyalinis, $16-18 \approx 2\frac{1}{2}-3$.

28. **Phacidium alneum** (Fr.) Sacc. *Clithris alnea* (Fr.) Rehm Disc. p. 106, 2929
Xyl. rhombeum A. S. Lus. pag. 61, *X. alneum* Wormsk in Fr. Syst. Myc. II, p. 573. — Erumpens, angulato-rotundatum, plano-depressum, marginatum, nudum, laciniato-dehiscens, strato sub disco albo.

Hab. ad ramos siccos Alni glutinosæ in Germania et Alni cordatæ in Kamtschatka. — Epidermide lacerata cinctum, magnitudine varium, 2 mm. circiter latum, leve, nigrum, opacum; disco plano-depresso, margine prominulo cincto; ceterum forma subrotunda, sed varie angulata, sæpe triangularis, rhombea e. s. p., specimina minima hysteriformia. Lacinie tot, quot ascomatis anguli, subadpressæ. Discus nigrescens, sed stratum sub disco album. Interdum plura specimina confluunt.

29. **Phacidium corticale** Schwein. Syn. Amer. bor. n. 2053. — Erum- 2930
pens, atrum, rugosum, elliptico-ovatum marginatum, maximum, plano-depressum, epidermide lacerata cinctum, demum irregulariter in lacinias fissum, strato discoideo fuscescenti, in exoletis subfatiscente.

Hab. in ramis exsiccatis Rhododendri, Bethlehem Am. bor.

30. **Phacidium pusillum** Lib. Exs. n. 268, Sacc. et Roum Reliq. Lib. 2931
IV, n. 59. — Ascomatibus epidermide amœne virescente initio tectis, dein erumpentibus, atris, minutis; ascis subfusoides, apice rotundatis, paraphysatis, 70-85 = 12-15, octosporis; sporidiis distichis ellipsoideo-oblongis, 12-15 = 6-7, granulosi hyalini.

Hab. in ramis siccis Rubi fruticosi in Arduennis,

31. **Phacidium striatum** Phill. et Plowr. Disc. p. 392, t. XII, f. 76. 2932
— Sparsum orbiculare, rugoso-striatum, in lacinias 5-6 dehiscens, disco fuligineo; ascis clavatis, sursum tenuatis, 8-sporis; sporidiis fusoides, continuis v. (spuriæ?) 1-septatis, 25-30 = 2-4; paraphysibus filiformibus, copiosis, apice curvis.

Hab. in sarmentis emortuis Rubi, Dinmore Britannicæ. — Habitu *Ph. rugosum* leviter revocat, sed fructificatio omnino diversa.

32. **Phacidium plicatum** Fr. Elench. II, p. 132, *Peziza plicato-crenata* 2933
Schwein. Car. n. 1257. — Cæspitosum, substipitatum, opacum, in lacinias plurimas acutas profunde divisum, disco cervino.

Hab. ad cortices Pruni in America septentrionali (SCHWEINIZ). — Pulcherrima et luculentissima *Phacidii* species. Limbus discum valde depressum cingens multo magis prominet et distinctus est, quam in alia specie. Discus siccus saltem pulchræ cervinus apparet. — *Tympanis plicato-crenata* Fr. Syst. Myc. II, p. 175 delenda est, specimina enim a Frieso examinata ad *Cen. Andromedæ* pertinebant.

33. **Phacidium discolor** Mout. et Sacc. (sp. nov.). — Ascomatibus 2934
sparsis, margine arcte inflexis, 3-4-laciniatis, siccitate contractis e peridermio erumpentibus, $\frac{2}{3}$ mm. diam., ardosiacis-cinereis, disco nigricante; ascis cylindrico-clavatis, octosporis, 140 = 16-17; sporidiis monostichis, ovato-ellipsoideis, granulosi, 1-2-guttatis, 20-22 = 9-10, hyalini; paraphysibus filiformibus, copiosis, septatis, apicem versus violaceis.

Hab. in ramis corticatis Piri pr. Liege Belgii.

34. **Phacidium pulverulentum** Schmidt in Myc. Heft I, pag. 33, Fr. 2935
Syst. Myc. II, p. 573. — Immersum, minutum, orbiculare, pulverulentum, fuliginosum, in lacinias acutas dehiscens, disco cæsius; sporidiis (ex Quél.) ellipsoideis.

Hab. in ligno decorticato Pini silvestris Lipsiæ in Germania. — Sparsum, subhemisphæricum, nudo oculo punctiforme, vix 1 mm. latum; laciniis quatuor æqualibus, dein magis divisis liberis. Asci in basi ascomatis fixi.

35. **Phacidium sparsum** Peck in Bot. Gaz. 1880 pag. 35. — Minu. 2936

tum, 0,4-0,5 mm. lat., sparsum, parcum, nigrum, in dentes obtusos paucos dehiscens; disco nigro; ascis brevibus, clavatis; sporidiis confertis, oblongis, subinde uno apice leviter tenuatis, hyalinis, 12-15 \approx 4; paraphysibus filiformibus, ascum superantibus.

Hab. in ligno dejecto, Vermont in Amer. bor. (PRINGLE). — Dentes subinde obsoleti et tunc species *Tryblidium* revocat.

36. **Phacidium humigenum** C. et Mass. Grev. XVI, p. 78. — Planiusculum, in dentes plures, inæquales dehiscens, extus brunneum, 2 mm. diam., disco flavido-albo v. pallide flavo; ascis clavato-cylindraceis; sporidiis fusoides utrinque obtusulis v. subteretibus, 1-3-nucleatis, hyalinis, 25-28 \approx 6-7; paraphysibus filiformibus, apice curvis.

Hab. in foliis ramisque dejectis in humidis, Carlisle Britanniae. (CARLYLE).

37. **Phacidium Patellaria** Fr. Summa p. 369. — Orbiculare, erumpens, dein subsuperficiale applanatum, 1-2 mm. lat., in lacinias, inæquales obtusas dein deciduas dehiscens, disco margine obtuso inæquali cincto, firmo, nigro-cæsi, pruinato; ascis clavatis; sporidiis simplicibus.

Hab. in ligno decorticato pineo in Suecia.

38. **Phacidium phomatoides** Mont. Guy. n. 456, Cfr. *Phylaspora phomatoides* (Mont.) Sacc. Syll. I, p. 440.

Hab. in foliis delapsis in silva Oyapok Guyanæ.

39. **Phacidium Cytisi** Fuck. Symb. App. I, p. 40. — Cupulis ascigeris sparsis, erumpentibus, 1 mm. latis, nigris, demum 4-6-lacinia-tis, apertis, disco sordido; ascis sessilibus, elongatis, 8-sporis, 64-70 \approx 8-10; sporidiis distichis, fusiformibus, sed utrinque obtusis, curvatis, continuis, 4-guttulatis, hyalinis, 10-12 \approx 3-4; paraphysibus filiformibus.

Hab. in caulibus *Cytisi sagittalis* emortuis in Rhenogovia, in ramis *Sarothamni* in Arduennis.

40. **Phacidium mollisioides** Sacc. et Br. in Rev. Myc. 1885, p. 210. — Erumpenti-sessile, dentibus callosis coronatum, epidermide relaxata velatum, disco concaviusculo, flavo-pallido dein obscuriore; ascis tereti-acutatis, sessilibus, octosporis, 44-56 \approx 6-8; sporidiis distichis, oblongo-clavatis, rectis curvulisve, 12-14 \approx 2-3; paraphysibus filiformibus.

Hab. in caulibus siccis *Euphorbiæ palustris*, Troyes Galliae. — Affine *Pseud. repandæ (autumnali)* et forte *Næviæ*.

41. **Phacidium? verrucosum** (Wallr.) Sacc. *Colp. verrucosum* Wallr.

Crypt. n. 2337. — Ascomatibus primum hypophlæodeis ovalibus convexis turgidis nigris opacis verruciformibus, dein vertice mediotenus striato epidermidem scissam perforantibus, diu clausis ibique demum tenuiter longitudinaliterque hiantibus discumque dilutum monstrantibus v. integris omnino secedentibus maculamque conformem nigrescentem relinquentibus.

Hab. ad Galii veri caules aridos agri northusani Germaniæ. — Vix, nisi Jove pluvio favente, discum recludere solet, et humectando caules undique verrucosos reddit, siccando vero plane delitescit.

42. **Phacidium simulatum** B. et C. North Am. Fungi n. 778, B. et Br. Ann. N. H. n. 967, t. XVI, f. 20. — Erumpens, lineare, concavum, hysteriiforme, hymenio lineari, rufo-brunneo; ascis 8-sporis, clavatis; sporidiis obovatis binucleatis, $10 \approx 4,5$; paraphysibus filiformibus, apice clavulatis.

Hab. in caule emortuo Clinopodii in Britannia, Gallia et Amer. bor.

43. **Phacidium Eryngii** Fuck. Symb. p. 262. — Cupulis sparsis, basi applanatis, quasi a stromate nigro, angulato cinctis, obtuso-conicis v. ellipticis, primo clausis, demum laciniis 3-4, triangularibus irregularibusve dehiscentibus, aterrimis, disco fusco; ascis elongatis, stipitatis, 8-sporis, $64 \approx 5$; sporidiis distichis, oblongis, continuis, hyalinis, $8 \approx 2-3$.

Hab. in caulibus siccis Eryngii campestris, raro, prope Budenheim Rhenogoviæ.

44. **Phacidium microscopicum** Desm. 19 Not. p. 23. — Erumpens, amphigenum, maculæ brunneæ insidens, orbiculare vel ovatum, convexum, nigrum, nitidum, in lacinias 3-4 obtusas dehiscens; disco sordide luteo; ascis..... non observatis.

Hab. in foliis languidis v. emortuis Plantaginis in Gallia bor. — Ascoma 150 μ . diam.

45. **Phacidium Teucris** Cr. Finist. p. 42. — Brunneum, ambitu lobatum, 3-4 mm. lat.; disco griseo; ascis cylindraceutis 8-sporis; sporidiis ovoideis hyalinis; paraphysibus filiformibus.

Hab. in caulibus emortuis Teucris Scorodonniæ, Finistère Galliæ.

46. **Phacidium Saponariæ** Ces. in Flora 1853 p. 201, Klotzsch H. M. n. 1728. — Ascomatibus.....; ascis tubulosis sat amplis; sporidiis oblongis, vel ellipsoideis, 2-guttulatis.

Hab. ad caules foliaque exsiccata Saponariæ officinalis in agro Vercelli Ital. bor.

47. **Phacidium pumilum** Desm. 17 Not. p. 35. — Erumpens, sparsum, 2948
minutissimum, rotundatum v. ovatum, in lacinias 4-5 dehiscens,
bruneum; disco flavescente; ascis minutis, clavulatis, 20 μ . long.

Hab. in caulibus foliisque emortuis Silenes conicæ in Gallia bor. — Ascoma $\frac{1}{8}$ - $\frac{1}{5}$ mm. lat.

48. **Phacidium nervisequum** Ces. in Flora 1848 p. 505, Kl. M. n. 1054. 2949
— Diu sub epidermide tectum, dein erumpens, seriatum, extus nigrum, disco e virescenti fuligineo, margine lacero.

Hab. in nervis foliorum Digitalis parvifloræ, Brescia Ital. bor. — *Pseud. repandæ* affine dicitur.

49. **Phacidium fimbriferum** Fr. Syst. Myc. III, pag. 140 (index), *Ph.* 2950
fimbriatum Fr. Elench. II, p. 133 nec K. et S., *Pez. phacidioi-*
des Fr. Syst. Myc. II, p. 115, *Pez. obtrita* Pers. M. E. I, p. 245,
Heterosph. phacidioides Fr. Summa p. 365. — Sessile, erumpens,
hemisphærico-collapsum, nigrescens, extus striato-fibrosum, mar-
gine fibroso-lacero, disco urceolato, livido.

Hab. ad caules plantarum aridos in Suecia. — Est e maxime notabilibus speciebus. Siccum clausum, concavum, subcrispum, nigrum; humectatum turget, fuscescit, extus eleganter et conferte fibrosum, margine coarctato, tenui, denticulato. In hoc statu *Phacidium* (sed superficiale), in illo collapsio *Heterosphæriam Patellam* refert.

50. **Phacidium caulincolum** Schwein. Amer. bor. n. 2054. — Erum- 2951
pens aut potius subinnatum, exacte orbiculare, depresso-planum,
atro-nitens, sparsum, multis tamen gregariis 1 mm. diam., super-
ficie primum plicata, demum in lacinias paucas dehiscens.

Hab. in variis caulibus majoribus e. c. Eupatorii, Bethlehem Amer. bor.

51. **Phacidium geographicum** Kickx Fl. crypt. Fland. I, pag. 459. — 2952
Erumpens, brunneo-rufum, mox nigricans, confertum, orbiculare,
secus nervos sæpe confluentis, disco nigricante; ascis clavatis, cur-
vulis; sporidiis oblongis, leniter curvis.

Hab. in pag. sup. foliorum Orobi aurei et verni in Belgio. — In lineolas rectas v. flexuosas seriatum vel congregatum, hinc chartam topographicam bene imitans.

52. **Phacidium brunneolum** Peck 31 Rep. p. 48. — Ascomatibus mi- 2953
nutis, innatis, brunneis v. brunneo-atris per dentes 4-5 latos de-
hiscens; disco sordide albo; ascis cylindræis v. clavatis, angustis;

sporidiis minutis, hyalinis, sublanceolatis v. oblongo-ovoideis, sæpe 2-nucleatis, 7-10 μ . long.

Hab. in foliis submortuis Galii trifidi, Sommit Americæ borealis.

53. **Phacidium Calthæ** Phill. Disc. p. 391 et in Stev. Myc. Scot. p. 341. 295

— Hypophyllum, innatum, in areis brunneis cengregatum, disciforme, convexum, cinereum; ascis late clavatis; sporidiis oblongo-fusoideis v. subclavatis, enucleatis, 15-23 \approx 5-7; paraphysibus filiformibus, subinde apice furcatis.

Hab. in foliis dejectis Calthæ palustris in Scotia (STEVENSON).

54. **Phacidium capsulare** Schwein. Amer. bor. n. 2055. — Primum 295

innatum, hemisphæricum, punctiforme, fuscum, subpellucidum, minutissimum, demum adnatum, atrum, orbiculare, depressum, corrugatum, in plures lacinias ruptum.

Hab. frequens in capsulis emortuis Verbasci Thapsi, Bethlehem Amer. bor.

55. **Phacidium glandicolum** Schwein. Amer. bor. n. 2056. — Erumpens 295

atro-nitens, minutum, sparsum, ovato-obtusum, centro fere, ut *Hysterium* assurgens, sed in plures lacinias dehiscens, disco dilute fuscescente, 1 mm. diam.

Hab. rarius obvium in glandibus quercinis, Bethlehem Americæ bor.

56. **Phacidium ignobile** Karst. Rev. p. 160, *Trochila* Karst. M. F. I, 295

p. 248, *Nævia* Rehm Disc. p. 142. — Subgregarium, per epidermidem varie fissam erumpenti-superficiale, primitus clausum, mox apertum, planum v. concavusculum, margine integro fuscidulum, disco pallidiore, siccum subfuscum, 0,3-0,4 mm. lat.; ascis fusoido-clavatis, 50-60 \approx 8-11, octosporis; sporidiis distichis fusoidelongatis 2-4-guttulatis v. spurie tenuiter 1-septatis rectis curvulisve, 14-19 \approx 3-4; paraphysibus filiformibus subinde dichotome ramosis, apice ovoideo-clavato.

Hab. ad folia Eriophori vaginati et Caricum arida pr. Mustiala Fennicæ et ad Albula-Pass Helvetiæ. — Maculis albicantibus insidens.

57. **Phacidium fuscillum** Karst. Rev. p. 160, *Trochila* Karst. M. F. 295

I, p. 248. — Gregarium, innato-erumpens, subhemisphæricum, fusco-pallidum, margine albicans, siccum difformiter contractum, depressum, nigricans, 0,3-0,4 mm. lat.; ascis clavatis, 70-90 \approx 14; sporidiis fusoido-oblongatis v. sæpius oblongatis, rectis curvulisve,

2-guttulatis, 18-20 \approx 6-7; paraphysibus numerosis filiformibus, 2-3 μ . cr., apice 3-4 μ . cr.

Hab. ad folia et calamos Caricis leporinæ exsiccatos, Mustiala Fennicæ.

58. **Phacidium arundinaceum** Ces. Hedw. I, p. 102, t. XIV, C. — 2959

Punctiforme, innatum, e brunneo nigrum carbonaceum, apice dentibus 3-4 valvatim dehiscens; disco pallido; ascis numerosis, terti-clavatis, octosporis, 64 \approx 12-14, paraphysibus nullis; sporidiis fusoides, curvulis, continuis, hyalinis, 18-22 μ . longis, quadriguttatis.

Hab. in vaginis diu exsiccatis Phragmitis isiaci in palustribus, Vercelli Ital. bor.

59. **Phacidium diminuens** Karst. Rev. p. 160, *Trochila diminuens* 2960

Karst. Myc. Fenn. I, p. 248, *Nævia* Rehm Disc. p. 142. — Sparsum, innato-erumpens, primo epidermide connata tectum, dein ea dejecta nudatum, concavum, margine sublacero, orbiculare v. subellipticum, fuscum, 0,2-0,4 mm. lat.; ascis 8-sporis, subfusoides-elongatis, 60-65 \approx 10-13; sporidiis subdistichis v. conglobatis, fusoides-elongatis, subinæquilateralibus, 2-guttatis, hyalinis, 18-20 \approx 3-5; paraphysibus filiformibus, 2-3 μ . cr., clava fusoides 5-6 μ . cr. terminatis.

Hab. in culmis foliisque emortuis Caricis lagopinæ, Car. glareosæ, Car. ursinæ, C. vesicariæ, C. elongatæ, Hierochloæ alpinæ et Luzulæ arcuatæ β . confusæ in Fennia, Spetsbergia et Germania. — Var. **prominens** a typo cupulis magis prominulis, sporidiis oblongatis, minoribus, 15-18 \approx 4-5,5; paraphysibus apice minus distincte subulatis differens. In foliis Alopecuri ovati et Catabrosæ algidæ ad Green Harbour Spetsbergiæ (KARST.) — ***Ph. crastophilum** Sacc. Mich. I, p. 420 (*Troch.*): ascomatibus orbiculari-ellipsoideis, innatis et epidermide diu velatis nigricantibus, $\frac{1}{4}$ mm. longis; ascis fusoides-elongatis 55-60 \approx 10 brevissime stipitatis; paraphysibus bacillaribus, septulatis, 65-70 \approx 4-5, apice clavula crassiuscula terminatis obvallatis, octosporis; sporidiis distichis cylindræis, utrinque obtusiusculis, 16-18 \approx 3-4, crasse 2-guttatis, hyalinis. In foliis languidis Moliniæ cæruleæ, Conigliano Ital. bor. A typo præcipue ascomatibus margine integris nec laceris distingui potest. *Stegia subvelata* Rehm habitu huic affinis videtur.

60. **Phacidium Plinthis** Fr. Elench. II, p. 134, *Sphæria* Fr. Syst. Myc. 2961

II, p. 511, *Heterosphæria* Fr. Summa Veg. p. 365. — Erumpens,

orbiculare, depressum, rugosum, atrum, in lacinias quatuor dehiscentes, disco fuligineo.

Hab. ad culmos Scirpi lacustris vetustos in Suecia (FRIES) et Argentorati Germaniæ (NESTLER). — Primo punctiforme.

61. **Phacidium gracile** Niessl in Voss, Zwei Ascom. p. 1, Rehm Disc. 2963 p. 66. — Sparsum, innatum, suborbiculare, atro-brunneum, in lacinias tenues æquales 4 rarius 8 dehiscens, 0,2-0,4 mm. lat.; disco plano flavido; ascis elongatis, sessilibus, octosporis, 18-24 = 6-8; sporidiis oblongis, rectis, continuis, 1-2-guttatis, hyalinis, 5-6 = 1,5-2, distichis; paraphysibus filiformibus, ramulosis.

Hab. in ramulis emortuis Lycopodii Chamæcyparissi, Laibach Carniolie (Voss).

62. **Phacidium? Pirolæ** Karst. in Grev. 1878, n. 42, p. 64. — Spermogoniis sparsis, epiphyllis immersis epidermide lacerata tectis vix 0,5 mm. latis; spermatis cylindræis, utrinque obtusis, rectis, hyalinis, simplicibus, 13-16 = 2-2,5.

Hab. ad folia sicca Pirolæ rotundifoliæ prope Helsingforsiam Fenniæ. — Spermogonia *Dothideæ latitanti* similia; fungus ascophorus nondum inventus.

63. **Phacidium? nitidum** Welw. et Curr. Fung. Ang. p. 279. — Innatum, dimidiatum, interdum confluens, cum folii substantia concretum, orbiculatim dispositum, nigrum, nitidum, in 3-4 lacinias latas dehiscens; disco nigro-olivaceo; sporidiis ovalibus v. irregularibus, fuligineis, 15 μ . long.

Hab. ad folia perennantia Parinari in editis, Morro de lo Pollo Angola. — Fungus tantum stylosporeus observatus.

64. **Phacidium depressum** Berk. Exot. Fung. p. 399, *Sph. depressa* 2964 Hook. in Kunth. Syn. vol. 3, p. 7. — Sparsum, orbiculare, depressum, ostiolo 5-6 laciniis acutis prædito, disco atro, demum denudato, excipulo cincto; ascis brevibus linearibus, obtusis.

Hab. in Andibus, socio *Cordycipite gracili* (HUMBOLDT).

65. **Phacidium compactum** Fr. Summa p. 369. — *Phac. alneo* affine 2965 sed disco albo.

Hab. in Abiete in Suecia.

66. **Phacidium levigatum** Fr. Summa p. 359. — *Phac. rugoso* affine 2966 sed leve.

Hab. in Vaccinio uliginoso in Suecia.

67. **Phacidium Philadelphi** Niessl in Verhandl. zool. bot. Ges. Wien 2967 1858 II, p. 33, t. VIII, f. 1 (Non vidi).

Hab. ad Philadelphum in Tyroli.

PSEUDOPEZIZA Fuck. Symb. p. 290 (1869) [Etym. *pseudēs falsus* et *Peziza*], *Phacidium*, *Stictis*, *Leptotrochila*, *Mollisia* Auct. ex parte. — Ascomata erumpentia, plerumque maculis insidentia, gregaria, minuta, glabra, ceraceo-carnosa, plana vel concava, margine spurio, crenulato, obscuriori cincta v. epidermide lacerata matricis circumdata. Asci plerumque stipitati, oblongi vel cylindraceo-clavati, 4–8-spori. Sporidia ovata, oblonga, continua, hyalina. — Est quasi *Mollisia velata* vel *Phacidium tenerius* et non laciniato-dehiscens. Ceterum species *Pseudopezizæ*, *Phacidii* et *Trochilæ* nova et comparata epicrisi omnino egent. Ad hoc genus cl. Karst. ducit *Moll. Dehnii* (supra n. 1347); de qua cfr. quoque Wint. in Hedw. 1881, p. 71.

1. **Pseudopeziza Bistortæ** (Lib.) Fuck. Symb. pag. 290, t. IV, f. 13, 2969
Polystigma et *Ectostroma Bistortæ* Auct. (f. sterilis), *Rhytisma* Lib. Exs. p. 68. — Cupulis hypophyllis, erumpentibus, gregariis, sessilibus, orbicularibus, elongatis, irregularibus confluentibusque, discis convexis planisque, sublacerato-marginatis, ochraceis, opacis, $\frac{1}{2}$ mm. circiter latis; ascis longissime stipitatis, elongato-clavatis, 8-sporis, $75 \approx 12$; paraphysibus numerosis, filiformibus, simplicibus; sporidiis subdistichis, ovato-clavatis, curvatis, simplicibus, hyalinis, $12 \approx 4$.

Hab. in foliis vivis *Polygoni Bistortæ* in Arduennis, Vogesis, Belgio et Rhenogovia. — E macula nigra, præcipue foliorum paginam superiorem occupanti, cupulæ ascigeræ solum in pagina inferiore nascuntur.

2. **Pseudopeziza Trifolii** (Biv. Bernh.) Fuck. Symb. p. 290, *Ascobolus* Biv. Bern. Manip. p. 27, t. VI, f. 5, *Phacidium* Boud. Ann. S. N. 1869 p. 69, Sacc. F. it. fig. 1391. — Sessilis, epiphylla, minuta, planiuscula, glabra dilute flavo-mellea; ascis oblongo-clavatis, $80 \approx 15$, brevissime stipitatis, paraphysibus filiformibus crassiusculis obvallatis, octosporis; sporidiis distichis, oblongo-ellipsoideis, $12-14 \approx 6-7$, 2-guttulatis, hyalinis.

Hab. in foliis languescentibus *Trifolii hybridi*, repentis, pratensis, medii, incarnati, in Italia, Germania, Belgio, Gallia, Lusitania, Britannia, Amer. bor. — An satis diversa a *Ps. Medicaginis*? Ascomata epiphylla, raro hypophylla, urediniformia, subhemisphærico-convexa, $\frac{1}{2}$ mm. lata, gregaria, numerosa, distincta, epidermide demum rupta aperta, ore circulari plerumque denticulato interdum nigrescente, disco subdepresso.

3. **Pseudopeziza Medicaginis** (Lib.) Sacc. Fung. Ard. n. 90, *Phacidium* Lib. Exs. n. 176 (1832), Sacc. Fung. it. fig. 1390, *Phacidium* Lasch in Kl. H. M. n. 1729, *Phyllachora* Sacc. Specim. pag. 145, tab. XVI, f. 58-60. — Sparsa, minuta, mox applanata, ochraceo-brunnea, macula suborbiculari lutescenti innata, dein epidermide 3-4-laciniata cincta, 0,5-1 mm. lat.; ascis stipitatis, elongatis, antice acuminatis, 8-sporis, 75-80 \approx 10; paraphysibus asci longitudine, filiformi-clavatis; sporidiis distichis, ovatis, simplicibus, hyalinis, 8-11 \approx 4-6, 2-guttulatis.

Hab. in foliis subvivi*s* Medicaginis sativæ, lupulinæ, minimæ, Willdenowii, rarius Trigonellæ in Belgio, Gallia, Germania, Italia, Lusitania, Amer. austr., Sibiria. — Sec. Tul. stat. pycnid. est *Sporonema æstivale*.

4. **Pseudopeziza divergens** (Desm.) Sacc. *Phacidium* Desm. 14 Not. p. 181, Gill. Disc. p. 171. — Epiphylla, divergens, subnervisequa; ascomatibus fusco-nigris, rotundis, oblongis vel difformibus, aliis solitariis, aliis confluentibus seriatim dispositis raro sparsis; disco fusco-pallido; ascis clavatis 70 μ . long.; sporidiis ovato-oblongis.

Hab. in foliis languescentibus Medicaginum, Gallia bor. — Ascomata 1,5 mm. lat. vel 3 mm. longa.

5. **Pseudopeziza Astrantiæ** Niessl in Rehm Ascom. n. 613 (ut var. *Pseud. Saniculæ*) Cfr. *Mollisia?* *Saniculæ* (Wallr.) supra n. 1371, *Phlyctidium* Wallr. Crypt. n. 2328? — Hypophylla, innata, fuscescens, dein erumpens, orbicularis, convexula, demum deplanata, disco flavido, margine scisso nigricante cincto; ascis clavatis, 50-60 \approx 9, bi-quadrifidis; sporidiis distichis, oblongis obtusis, rectis curvulisve, distichis, 16-18 \approx 4-5, continuis v. demum (spurie?) 1-2-septatis (Rehm).

Hab. in pagina inferiore foliorum vegetorum Artrantiæ majoris in Saxonia, Baden, Carniolia.

6. **Pseudopeziza radians** (Rob. et Desm.) Sacc. Reliq. West. pag. 8, Karst. Rev. p. 161, *Phacidium* Rob. et Desm. IX Not. pag. 26, *Leptotrochila* Karst. M. F. I, p. 245. — Erumpens, nigricans, ex urceolato applanata, gregaria vel in lineas radiatas disposita fibrillisque innatis suffulta, suborbicularis, minuta, disco fuligineo v. fuligineo-pallido, epidermide atrata sæpe 3-4-laciniata cincto; ascis clavatis, 40-50 \approx 6, octosporis; sporidiis distichis, subfusoideo-oblongis, rectis, hyalinis, 8-10 \approx 2-3; paraphysibus filiformibus.

Hab. in foliis adhuc vivis Campanulæ patulæ, C. Rapunculi in Britannia, Fennia, Gallia, Belgio.

7. **Pseudopeziza sibirica** Sacc. Mich. I, p. 60 (*Phac.*), F. it. 1389. — Af. 2975
 finis *P. radianti* sed cupulis sporidiisque quam in typo majoribus; ascis cylindraceo-clavatis, breve noduloso-stipitatis, 70-75 \approx 10-11; paraphysibus crassiuscule filiformibus obvallatis, octosporis; sporidiis distichis oblongis, 11-13 \approx 4-4½, utrinque obtusiusculis, 2-guttulatis, hyalinis.

Hab. in utraque pagina foliorum *Campanulæ sibiricæ*, Conegliano in Italia boreali. — Cupulæ atræ erumpentes e macula atra vaga.

8. **Pseudopeziza Cerastiorum** (Wallr.) Fuck. Symb. pag. 291, Schröt. 2976
 F. Siles. exs. n. 52, *Peziza Cerastiorum* Wallr. Fl. Crypt. Germ. p. 465, *Mollisia* Phill. Disc. p. 199, t. VI, f. 36, *Phacidium* Gill. Disc. p. 169, *Trochila Cerastiorum* De Not. Discom. in Comm. critt. I, p. 320. — Ascomatibus primum innatis, dein emersis subsessilibus subceraceis, rotundatis, in discum helvolum planiusculum saturatius marginatum reclusis, scutellaribus, demum fusco-liventibus marginem reclinantibus; ascis clavatis, breve crassiuscule stipitatis, apice acutatis, 50-70 \approx 7-8, paraphysibus filiformibus, quandoque bifidis, 80 \approx 2-3, obvallatis, 8-sporis; sporidiis fuscoideis v. subclavulatis, 8-12 \approx 3-3½, 2-guttulatis, nubilose hyalinis; contextu, excipuli laxè parenchymatico, atro-fuligineo.

Hab. in foliis languidis caulibusque *Cerastiorum* et *Stellariæ mediæ* in Germania, Italia, Belgio, Britannia, Gallia. — Ascoma 300-500 μ . lat.

9. **Pseudopeziza Morthieri** Sacc. Mich. I, p. 357, F. it. f. 1404. — Macu- 2977
 lis foliorum ochraceo-fulvis, amplis; cupulis hypophyllis hinc inde gregariis, plano-scutellaribus, adnato-sessilibus, minutissimis, vix 1/10 mm. diam., glabris, madore disco apertis, flavo-fulvis, pellucidis; contextu excipuli parenchymatico, margine subprosenchymatico; ascis cylindraceo-clavulatis, 45 \approx 7, subsessilibus, paraphysibus filiformibus apice aduncis, obvallatis, octosporis; sporidiis distichis, cylindraceo-clavatis, 7-10 \approx 2-2½, quandoque curvulis, hyalinis.

Hab. in pagina inferiore foliorum *Rubi glandulosi* in alpibus Helveticis (Doct. P. MORTHER). — A *Pseudopeziza exigua* Niessl probe diversa.

10. **Pseudopeziza exigua** Niessl in Hedw. 1876, p. 107, Just. Jahresb. 2978
 1876, p. 201. — Epiphylla, erumpens, minutissima, margine obsoleto; disco plano, sordide æruginoso, sicco nigrescente; ascis clavato-oblongis, 42-54 \approx 15-16, apice rotundatis, 8-sporis, paraphysatis; sporidiis oblongis, subcuneatis, continuis, 12 \approx 5.

Hab. in foliis deciduis Rubi fruticosi in Moravia. — Asci, paraphyses et sporidia sæpissime æruginosa.

11. **Pseudopeziza Ranunculi** (Wallr.) Fuck. Symb, p. 290, *Phlyctidium* 2979
Wallr. Fl. crypt. II, p. 416, *Excipula* Rabenh. Handb. p. 153, *Phacidium* Lib. Exs. n. 69, *Stigmatea* Fr., *Phac. Friesii* Ces. — Ascomatibus innato-erumpentibus, orbiculatis, atris, opacis, dein in discum nigrum cum margine concolore apertis, maculis atro-brunneis insidentibus; ascis clavatis, stipitatis, 8-sporis, $80 \approx 14$; sporidiis distichis faretisve, clavatis, hyalinis, $16 \approx 6$, continuis.

Hab. in pag. inf. foliorum vivorum Ranunculi repentis, nemorosi, polyanthemi in Germania, Belgio, Gallia. — Olim cum *Fabræa litigiosa* comparavi et imprimis maculis atris sporidiisque diversam reperi, invitis plurimis mycologis: res iterum scrutanda.

12. **Pseudopeziza protrusa** (B. et C.) Rehm Ascom. n. 310, *Peziza* 2980
B. et C. North Am. Fungi n. 745, *Pyrenopeziza* Sacc. supra n. 1503. — Erumpens, punctiformis epidermide hic illic circumdata, ore flexuoso, extus granulata castanea, intus concava alba; ascis octosporis, clavatis, vertice incrassatis, $45-50 \approx 5$; sporidiis oblongo-clavatis, obtusis, continuis, hyalinis, $7-8 \approx 1,5$; paraphysibus filiformi-clavulatis.

Hab. in pag. infer. foliorum Magnoliæ glaucæ in Carolina infer. Amer. bor.

13. **Pseudopeziza sanguinolenta** Speg. Fung. Puigg. I, pag. 211. — 2981
Ascomatibus epiphyllis minutis, $250-300 \mu$. diam., discoideo-applanatis, fuscescenti-atris, dense gregariis sæpeque confluentibus, disco flavescenti, levi, macula indeterminata 2-8 mm. diam., orbiculari, obscure sanguineo-purpurescente cinctis; ascis e cylindraceo clavulatis, $80-90 \approx 15$, octosporis; sporidiis subfusoido-obovatis, $22-25 \approx 5-6$, acutiusculis, subinæquilateralibus, recte vel oblique distichis, continuis, hyalinis; paraphysibus filiformibus, sublongioribus sæpe ramulosis.

Hab. ad folia viva Pleromatis cujusdam in dumetis prope Apiahy Brasilæ (PUIGGARI).

14. **Pseudopeziza versicolor** (Wahl.) Rost. Fung. Groenl., pag. 541, 2982
Hysterium Wahl. Flora Lapp. p. 522, t. XXX, f. 5, Fr. S. M. II, p. 592. — Maculæ exaridæ innata, ovalis, subdepressa, levis, glauco-pruinata, nigricans, labiis rufescentibus; sporidiis ellipsoideis, $18 \approx 9$ (Rost.),

Hab. in utraque pagina foliorum Salicis hastatæ, S. ar-

busculæ, *S. groenlandica* et *S. glaucæ* in Lapponia et Groenlandia. — Cl. Rehm ad *Lophodermia* dubitanter retulit, nam sporidia ipse non vidit.

15. **Pseudopeziza repanda** (Fr.) Karst. Rev. p. 161, *Phacidium* Fr. 2933

Syst. Myc. II, p. 578, *Xyloma herbarum* A. et S. Lus. p. 65, t. 14, f. 6, *Leptotrochila repanda* Karst. M. F. I, pag. 246. — Innata, subrotunda, viridi-pallens, demum nigra, in laciniis obtusas inæquales rumpens, disco fuligineo, 0,3 mm. diam.; ascis clavatis 50-60 = 6-7, octosporis; sporidiis distichis elongato-acicularibus, rectis curvulisve, hyalinis, 11-12 = 3; paraphysibus filiformibus.

Hab. ad caules, petiolos, rarius folia viva *Potentillarum*, *Cerastii* in Fennia, Germania. — Primo minuta, punctiformis, mollis, tremellosa, dein in staturam *Cocc. coronati* adolescens consolidatur, colore etiam pallido, cum herbæ virore mixto, fuligine quasi afflato ac ita sensim nigrescente etc. Forte distingui possunt:

Ps. vernalis (Fuck.) Sacc. *Phacidium* Fuck. Symb. p. 263, t. IV, f. 27, *P. repandum* Fr. loc. cit. pr. p.: hypophylla; cupulis gregariis, primo clausis, atris, demum apertis, excavatis, 1/2 mm. lat., disco fusco, margine lacerato, inflexo; ascis oblongis, stipitatis, 8-sporis, 60 = 8; sporidiis distichis, clavatis, continuis, hyalinis, 10 = 4. In foliis vivis, rarius caulibus *Galii Molluginis* in Gallia, Belgio, Rhenogovia. — **Ps. autumnalis** (Fuck.) Sacc. *Phacidium* Fuck. Symb. p. 202, t. IV, f. 26, *P. repandum* Fr. Syst. Myc. II, p. 578 p. p.: hypophylla; cupulis gregariis, primo clausis, atris, demum lacerato-apertis, 2 mm. latis, planis, disco fusco, margine lacerato; ascis stipitatis, oblongis, 8-sporis, 60 = 6; sporidiis elongato-ellipticis, 2-3-guttulatis, rectis, hyalinis, 13 = 2-3. In foliis vivis *Galii borealis*, *G. silvatici* et *Asperulæ* in Gallia, Belgio, Rhenogovia, Britannia, Sibiria. — *Placosphæria punctiformis* (Fuck.) Sacc. [*Phyllachora* Fuck. Symb. pag. 219], hujus spermogonium videtur.

16. **Pseudopeziza atrata** (Desm.) Sacc. *Stictis atrata* Desm. 11 Not. 2984

p. 368. — Gregaria, immersa, epidermide nigricante tecta, dein subemorsa, ovata, immarginata, ceraceo-mollis, ochroleuca, sicca clausa; ascis subclavatis, 50 μ . long.; sporidiis oblongis, continuis, 10 μ . long.

Hab. in ramulis exsiccatis *Aceris Negundinis* in Gallia boreali.

17. **Pseudopeziza caricina** (Lib.) Sacc. Funghi Lib. Ard. p. 10, *Pe-* 2985

ziza Lib., Exs. n. 232. — Sparsa, crassiuscula, tecta dein erumpens,

ceracea, concava, umbrina dein nigricans, glabra, disco griseo-albo, margine integro concolore; ascis clavatis brevè stipitatis, apice obtusiusculis 100-110 \approx 15-20, 8-sporis; sporidiis oblongis utrinque rotundatis, 2-guttulatis, distichis, leniter curvis, 18-20 \approx 5-6, hyalinis; paraphysibus filiformi-clavulatis.

Hab. in foliis emortuis Caricis patulæ in Arduennis. —

Phac. fuscillum Karst. huic affine videtur.

18. **Pseudopeziza Alismatis** (Phill. et Trail) Sacc. *Mollisia* Phill. et Trail Grev. XVI, p. 93. — Maculis brunneis insidens, gregaria, initio tecta, globulosa, dein erumpens margineque tenui lacerato cincta, uda umbrino-brunnea, sicca nigra; disco pallidiore plano; ascis late clavatis, 50-60 \approx 10, octosporis; sporidiis oblongis, polari-guttatis, 10-14 \approx 3-4; paraphysibus filiformibus. 2986

Hab. in utraque pagina putrescente Alismatis Plantaginis prope Aberdeen Britanniae. — Ascoma 100-300 μ . lat. An eadem ac *Mollisia?* *Alismatis* (supra n. 1354) ex ipso Phill.?

19. **Pseudopeziza phyllachorophila** Speg. Fung. Puigg. I, p. 210. — 2987
Ascomatibus innato-superficialibus, 300-500 μ . diam., sessilibus, olivascenti-fuscis, hypophyllis, circinantibus, disco obscure fusco-olivascenti, levi; ascis e fusoideo clavatis, 80-90 \approx 8-10, octosporis; sporidiis sæpius oblique monostichis e cylindraceo ellipticis, utrinque obtuse rotundatis, 7-10 \approx 4-5, continuis, hyalinis; paraphysibus filiformibus, asco sublongioribus, apice subcoalescentibus, fuscescentibus.

Hab. ad stromata vetusta Phyllachoræ trivialis in foliis vivis Asclepiadeæ cujusdam prope Apiahy Brasiliæ (PUIGGARI).

TROCHILA Fries S. v. Sc. p. 367 (1849) [Etym. *trochos* rota], *Peziza*, *Phacidium*, *Stictis* Auct. p. p. — Ascomata ex urceolato patellata, disciformia, tumidula, subimmarginata, erumpentia, ceracea, epidermide integra v. laciniata cincta, excipulo infero (hypothecio) subcoriaceo. Asci tereti-clavati, 4-8-spori. Sporidia oblonga vel ovoidea, continua, hyalina. Paraphyses typice filiformi-clavulatae.

1. **Trochila Craterium** (DC.) Fr. Summa pag. 367, Tul. S. F. C. III, 2988
p. 180, *Sphaeria* DC. Fl. fr. II, p. 299, *Peziza Hederæ* Lib. *Pez. insidiosa* Desm. — Ex urceolato cupulata, dein subplana, ex olivaceo nigricans, per epidermidem laciniatim fissam erumpens, disco pallidiore, 0,2-0,4 mm. lat.; ascis clavato-oblongis, sessilibus, 8-sporis, 48-55 \approx 9-12, tunica crassa; sporidiis oblique monostichis

v. subdistichis ovatis, continuis, hyalinis, 7-8 \approx 4,5-6; paraphysibus filiformibus apice clavulatis subolivaceis.

Hab. in pag. inf. foliorum *Hederæ Helicis* in Suecia, Gallia, Germania, Britannia, Italia, Belgio, Lusitania. — Stat. conid. est *Glæosporium paradoxum* (De Not.) Fuck.

2. **Trochila Laurocerasi** (Desm.) Fr. Summa pag. 367, *Phacidium* 2989
Desm. Exs. n. 188. — Orbicularis, punctiformis, collabascendo excavata, nigrescens, in lacinias tres acutas dehiscens, disco udo submelleo; ascis stipitatis subcylindræis, 8-sporis, 48-60 \approx 7-8; sporidiis oblique monostichis, oblongo-ovatis, continuis, hyalinis, 8-10 \approx 4-5; paraphysibus supra clavulatis, olivaceis.

Hab. in foliis siccis *Pruni Lauro-Cerasi* et *Photiniæ serrulatæ* in Gallia, Britannia, Italia, Germania, Belgio. — Hypophylla, dense sparsa, 0,5-1 mm. lat., primo hemisphærica, nigro-olivacea, dein cupulari-depressa, marginata, nigra, demumque dentibus tribus dehiscens. — In forma **Photiniæ** asci cylindræi 60 \approx 7, breve stipitati, paraphysati, octospori; sporidia fusoidea vel clavulata, 8 \approx 2 $\frac{1}{2}$, utrinque minute 1-guttulata, hyalina. — Var. **smaragdina** Lev. Ann. S. N. III, vol. V, p. 252 (*Peziza*): disco udo amœne smaragdino-viridi. In fol. *Pruni lusitanicæ* in Gallia, Belgio, Italia.

3. **Trochila Tini** (Duby) Fr. Summa p. 367, Quél. Ench. p. 339, *Phacidium* Duby Bot. Gall. II, p. 722. — Gregaria, areis amplis expallentibus innata, dein per epidermidem lacinulatam erumpens, extus brunneo-atra, 0,2-0,5 mm. lat., disco sublenticulari, subæqualiter marginato, griseo-nigricante.

Hab. in pag. inf. foliorum exsiccatorum *Viburni Tini* in Gallia et Germania.

4. **Trochila Buxi** Capron in Cooke Handb. n. 2315, *Ph. Buxi* Lasch 2991
in H. M. II, n. 717? — Hypophylla, nigricans, cæspitosa v. sparsa, per epidermidem minute æqualiter laciniatam erumpens; disco lenticulari, olivaceo-brunneo; sporidiis ellipsoideis v. ovato-oblongis, 10-12,5 \approx 4-5.

Hab. in pag. sup. foliorum *Buxi sempervirentis*, Sehre Britannicæ et in Germania.

5. **Trochila Populorum** Desm. Exs. III, n. 451, 24 Not. p. 6, Sacc. 2992
F. ital. fig. 1430. — Ascomatibus discoideis, atris, 3-4-laciniato-erumpentibus, minutis, 0,2-0,3 mm. lat., disco brunneo; ascis clavatis, 70-80 \approx 15, breve stipitatis, apice, tunica integra, obtusiusculis, paraphysibus bacillaribus obvallatis, 8-sporis; sporidiis di-

stichis, oblongo-ellipsoideis, 12-15 \approx 5-6, utrinque subrotundatis, 2-guttatis, hyalinis.

Hab. in pagina inferiore foliorum Populi nigrae, et pubescentis et Salicis capreae, Conegliano Ital. bor. et in Germania.

6. **Trochila commoda** (Rob. et Desm.) Quél. Ench. p. 340, *Phacidium* 2993
Rob. et Desm. Exs. n. 1242 et XIV Not. pag. 180, Gill. Disc. p. 167. — Maculis amphigenis, irregularibus, brunneis, siccis cinereis; ascomatibus hypo-raro epiphyllis, minutissimis orbiculatis, convexis, nitidulis, in lacinias plures dehiscentibus; disco convexo, dein plano, griseolo, sicco brunneo-pallido; ascis minutis cylindraceis, 50 μ . long.; sporidiis monostichis, ovato-oblongis.

Hab. in foliis exsiccatis Viburni Lantanæ in Gallia bor. — Ascoma 0,3 mm. lat.

7. **Trochila Oleæ** (De Not.) Fr. Summa p. 367, *Stictis Oleæ* De Not. 2994
Mier. ital. Dec. III, n. I, f. 1. — Amphigena, sparsa, innata, discoidea, convexa, sicca depressa, epidermide stellatim v. frustulatim rupta, erumpens, atro-fuscescens; ascis clavatis, obtusis, octosporis; sporidiis oblongis, curvulis, oblique monostichis, continuis, subhyalinis, 12-13 \approx 3 (ex icone); paraphysibus filiformi-clavatis, obscure septatis.

Hab. ad folia marcescentia Oleæ europææ prope Genova in Italia boreali.

8. **Trochila Salicis** Tul. Carp. III, p. 181. — Innata, depresso-globosa vel lentiformi, perexigua, atra, primum stylosporea; stylosporis biformibus, aliis tereti-clavulatis, utrinque obtusissimis, continuis, biguttatis, 16 \approx 6,5, aliis anguste ovatis, rectis, 6,4 \approx 2,5; tandem ascophora: ascis elongato-clavatis, 50-60 \approx 12-13, clavato-paraphysatis, octosporis; sporidiis late ovatis, hyalinis.

Hab. in foliis Salicis albæ sub vivis in Gallia, Germania et Belgio. — Cfr. Fuckel Symb. p. 276, t. I, f. 33 (*stylosp.*).

9. **Trochila petiolicola** (Fuck.) Rehm Disc. p. 131, *Excipula* Fuck. 2996
Symb. myc. p. 40, App. I, pag. 41. — Sparsa, per epidermidem erumpens, dein sessilis, sicca plerumque longitudinaliter compressa, madefacta dilatata, rotunda, subplana, extus atra, marginata, disco hyalino, contextu parenchymatico fusco-viridulo, 0,5 μ . diam.; ascis clavatis, 8-sporis, 40-45 \approx 5, apice jodo cœrulescente; sporidiis distichis, ellipticis, 1-cellularibus, hyalinis, 6-8 \approx 1,5-2; paraphysibus plerumque superne dichotomis, clava subrotunda, hyalina, 4-5 μ . diam., præditis.

Hab. ad petiolos foliorum Tiliæ putrescentes in silva prope Lipsiam (Dr. G. WINTER).

10. **Trochila perexigua** Speg. Mich. II, p. 261. — Sparsa, minutissima 2997

100 μ . diam., primo globosa, tecta dein erumpens, subpatellaris, sessilis, siccitate labiis intus revolutis, extus atro-olivacea, disco dilutiore; ascis clavatis, deorsum in stipitem brevem productis, apice acutiuscule rotundatis, octosporis, $80 \approx 15$, paraphysibus filiformibus, apice clavulatis atque subuncinatis obvallatis; sporidiis distichis, ellipticis v. ovoideis, utrinque obtuse rotundatis, non v. 1-2-guttulatis, hyalinis, $14 \approx 7$; ascorum apice jodi ope dilute cœrulescente.

Hab. ad folia dejecta, putrescentia Hippophaëos rhamnoidis in alveo del Cordevole (Cadore) Ital. bor.

11. **Trochila prominula** S. et S. Mich, I, p. 420, F. ital. fig. 1429. — 2998

Ascomatibus laxè gregariis, innatis, dein, epidermide operculatim disrupta, erumpenti-prominulis, patellulatis, concaviusculis, atris, $\frac{1}{5}$ mm. diam., margine rectiusculo; excipuli contextu laxè parenchymatico, fuligineo; ascis clavatis, $65-70 \approx 10-12$, breve sensim stipitatis, apice obtusatis, paraphysibus filiformibus apice subincrassatis, obvallatis, octosporis; sporidiis distichis, ovoideo-suboblongis, $18-20 \approx 6$, utrinque obtusiusculis rectis curvulisve, crasse 2-guttatis, hyalinis.

Hab. in foliis Juniperi Sabinæ vel affinis emortuis, Conegliano Ital. bor.

12. **Trochila æruginosa** Fuck. Symb. pag. 277, *Nævia* Rehm Disc. 2999

p. 148. — Cupulis primo tectis, demum liberis, gregariis, punctiformibus, duris, persistentibus, convexis, demum concavis, marginatis, atris, epidermidem æruginose tingentibus, 0,2-0,3 mm. lat., disco ochraceo; ascis oblongis, octosporis, $52 \approx 10-12$; sporidiis oblongo-clavatis, continuis, hyalinis, $12 \approx 4$.

Hab. in caulibus siccis adhuc stantibus Tanaceti vulgaris in Judensand pr. Æstrich Rhenogoviæ.

13. **Trochila Conioselini** Rost. Svampe Finm. pag. 231. — Gregaria, 3000

primitus clausa, mox aperta, subhemisphærica, nigricans, 0,2 mm. lat.; ascis cylindræo-clavatis, $38-40 \approx 6-7$, octosporis; sporidiis distichis fusoidèo-elongatis, rectis, 2-guttatis, $10-13 \approx 3$; paraphysibus filiformibus.

Hab. ad caules et vaginas Conioselini in Kaafjord Finmarkiæ.

14. **Trochila Stellaris** Rostr. Fung. Groenl. p. 540. — Subgregaria, 3001

innata, primitus tecta, orbicularis, 0,2-0,4 mm. lat.; ascis clavatis, longe pedicellatis, 80-130 \approx 9-10, octosporis; sporidiis subdistichis, fusoideo-claviformibus, 2-guttulatis, 15-16 \approx 3-4; paraphysibus apice clava fusoidea, magna.

Hab. in foliis emortuis *Stellarie* longipedis in Groenlandia (JENSEN).

15. **Trochila cinerea** Pat. Champ. Chin. p. 1. — Dense et late gregaria, initio clausa, subepidermica, dein cum epidermide in laciniis 4-5 triangulas extus nigras intus cinereas fissa, erumpens, disco cinereo; ascis octosporis; sporidiis distichis, ovoideis, rectis, 6-7 \approx 1,5. 3002

Hab. in utraque pagina petiolisque emortuis *Pirolæ* in Sinis (AB. DELAVAYE).

16. **Trochila Potentillæ** Rostr. Fung. Groenl. p. 540. — Amphigena, gregaria, angulata, innata, concaviuscula, margine crenulata, fusca, sicca contracta, nigricans, 0,2-0,3 mm. lat.; asci tereti-clavatis, 50-70 \approx 8-12; sporidiis oblongo-fusoideis, 2-3-guttulatis, 12-15 \approx 2-3. 3003

Hab. in foliis emortuis *Potentillæ* tridentatæ, niveæ, emarginatæ, anserinæ in Groenlandia.

17. **Trochila Winterii** Speg. Fung. Fueg. n. 357. — Epiphylla, laxe gregaria, innata, primo tecta dein laciniato-erumpens, 250-300 μ . diam., atra subnitens, glabra, coriaceo-membranacea, epithecii contextu indistincto opaco fuligineo; ascis subcylindraceutis v. obclavatis, antice obtusissime lateque rotundatis crassiuscule tunicatis, postice subcoarctatis, pedicello crasso brevissimo noduloso suffultis, 40-50 \approx 10-12, paraphysibus paucis crassiusculis obvallatis, octosporis, jodi ope ascorum obturaculo intense cœrulescente; sporidiis recte v. oblique distichis, ovoideis, utrinque obtusis 12-13 \approx 5, granuloso-farctis, hyalinis, continuis (an postremo 1-septatis?) 3004

Hab. ad folia dejecta putrescentia *Drymidis* Winterii in Staten island Fuegiæ.

18. **Trochila exigua** Rostr. Fung. Groenl. pag. 540. — Minutissima, innata, urceolata, seriatim disposita; ascis elongatis, 32 \approx 6; sporidiis cylindraceuto-elongatis, 8-10 \approx 0,8; paraphysibus filiformibus. 3005

Hab. in foliis emortuis *Nardi* strictæ, Nanortalik Groenlandiæ.

19. **Trochila juncicola** Rost. Svampe Finm. p. 231. — Gregaria, subhemisphærica, fusca, 0,3 mm. lat., margine albicante; ascis fusoideo-clavatis, 40-45 \approx 5-6, octosporis; sporidiis distichis, fusoideo-oblongis, 2-guttatis, 8-9 \approx 1-1,5; paraphysibus filiformi-clavulatis. 3006

Hab. ad calamos et folia Junci compressi in Kaafjord Finmarkiæ (WARMING).

STEGIA Fr. Obs. II, pag. 352 (1818) [Etym. *stege* tectum], *Stegilla* Reich., *Eustegia* Fr. nuperius, *Sphærothyrium* Wallr. — Ascumata e scutellato disciformia, ceracea, fusca nigricantia, parte superiore cum epidermide sæpius atrata concreta et cum hac operculatim aperta. Asci tereti-clavati, octospori. Sporidia ovato-oblonga, continua, hyalina. Paraphyses plerumque lanceolatae.

1. **Stegia Ilicis** Fr. Obs. myc. II, p. 312, *Xyloma concavum* Grev. 3007 Ed. p. 368, *Sph. complanata* Moug. et Nestl. Exs. n. 82, *Trochila Ilicis* Crouan. — Innata, orbicularis, 0,3-1 mm. lat., margine albido annulato, operculo epidermico plano caduco, disco griseo-brunneo, patellato; ascis elongatis, longe stipitatis, 8-sporis, 80-90 \approx 9-11; sporidiis oblique monostichis oblongo-ovatis, utrinque obtuso-rotundatis, continuis, hyalinis, 9-12 \approx 3,5-4.

Hab. in foliis Ilicis Aquifolii plerumque epiphylla, in Suecia, Belgio, Gallia, Germania, Italia, Britannia. — Recte observante Rehm, habitus *Stegiae* sed fabrica potius *Trochilæ*.

2. **Stegia Lauri** (Cald.) Sacc. F. ital. f. 1425 (immat.), Rehm Disc. 3008 p. 155, *Nævia Lauri* Cald. in Erb. crittog. Ital. Ser. I, n. 491. — Gregaria innata, epidermide orbiculatim scissa dein operculatim secedente velata dein aperta, suborbicularis, 0,3-0,8 mm. lat., disco patellari, plano griseo-brunneo, denticulato-albido marginato; ascis clavatis apice rotundatis, 30-35 \approx 3,5-4, octosporis; sporidiis distichis, oblongis, 4-5 \approx 2, hyalinis, continuis; paraphysibus lanceolatis, 6-8 μ . cr., ascum superantibus.

Hab. in foliis Lauri nobilis languidis v. emortuis in Italia, Germania et Lusitania.

3. **Stegia alpina** (Fuck.) Rehm Disc. pag. 155, *Næmacyclus* Fuck. 3009 - Symb. App. III, pag. 27. — Discellis sparsis, per foliorum epidermidem a latere circumscissam, ut epidermis operculum laterale persistens fingat, erumpentibus, oblongis, convexis, usque ad milimetrum longis, brunneo-ochraceis, opacis, carnosis; ascis subclavatis, antice parum acuminatis, sessilibus, 8-sporis, 45-54 \approx 10-12; sporidiis distichis, fusiformibus, rectis, continuis, biguttulatis, hyalinis, 10-12 \approx 4; paraphysibus clavatis, simplicibus asci longitudine, inferiori parte hyalina 4-5-septatis, clavula 4 μ . crass., ochracea.

Hab. in foliis anno præterito jam dejectis Laricis in alpinis pr. St. Moritz Helvetiæ et in Moravia.

4. **Stegia dumeti** S. et S. Mich. p. 420, F. it. f. 1427. — Ascomati- 3010
bus disciformibus, immersis dein epidermide operculatim disrupta
parum emergentibus, subcinereis, margine denique paullulum ele-
vato pallidiore; ascis cylindraceo-clavatis 50-60 \approx 7-8, breve sti-
pitis, initio apice cuspidatis, mox cuspede amissa, obtusiusculis,
pseudoparaphysibus cylindraceo-cuspidatis obvallatis; sporidiis octo-
nis (an quandoque pluribus?) cylindraceis, 6-7 \approx 1, rectiusculis,
utrinque obtusiusculis, hyalinis.

Hab. in sarmentis emortuis Rubi fruticosi, Conegliano Ital.
bor. — Ob epidermidem supra ascomata circulariter scissam nec
non ob fabricam ascomatis generi *Stegia* adscribenda species, etsi
ramulicola.

5. **Stegia subvelata** Rehm Disc. pag. 156, *Micropeziza subvelata* 3011
Rehm Ascom. n. 417. — Gregaria, primitus sub epidermide in folii
parenchymate nidulans, dein humida per epidermidem fissam erum-
pens, sicca quasi operculo epidermidis velata, 0,2-0,3 μ . diam., mi-
nima, oblonga v. orbicularis, sicca fusco-nigra, complicata, humida
fuscidula, subplana, margine tenui, obscuriore basi parenchymatico-
in marginem prosenchymatico-contexta; ascis clavatis, subcurva-
tis, apice incrassatis, octosporis, 60 \approx 10, apice jodo cœrulescentibus;
sporidiis obtuse cuneiformibus, subcurvatis v. rectis, guttulis 2 api-
calibus instructis, 1-cellularibus, hyalinis, subdistichis, 10-12 \approx 3;
paraphysibus lanceolatis, ascos superantibus, basi 7-9 μ . crassis.

Hab. ad folia graminea emortua in alpibus editissimis tyro-
lensibus juxta glaciem æternam. — Var. **Winterii** Rehm l. c. *Microp.*
subvelata Wint. Hedw. 1880, p. 176: ascis 75-90 \approx 10-12; spori-
diis 17-20 \approx 5. Ad Caricem curvulam, atratam, Sesleriam,
Avenam, Albula-Pass Helvetiæ.

6. **Stegia fenestrata** (R. et Desm.) Rehm Disc. p. 156, *Stictis fene-* 3012
strata Rob. et Desm. 19 Not. p. 26, nec Lambotte. — Sparsa, per-
exigua, innata dein per epidermidem operculatim scissam dehi-
scens; disco tenui inæqualiter marginato, subplano, melleo, 0,3-0,5
mm. lat., orbiculari v. subelliptico; ascis 50 μ . long.; sporidiis ob-
longis, 7 μ . long., 2-guttatis; paraphysibus sublanceolatis, apice
acutis, ascum superantibus.

Hab. in calamis Scirpi lacustris in Gallia bor. et Arduennis.

7. **Stegia discolor** Fr. Obs. II, p. 351, *Eustegia* Fr. Syst. Myc. II, 3013
p. 533, t. 8, f. 2, *Stegilla* Rab. Pilze pag. 163, *Sphærothyrium*
Wallr. Crypt. n. 2356. — Infra pezizæformis, submembranacea,
atra, intus albida, dein evacuata cava, margine concolori promi-

nente, operculo convexo, leviter papillato-umbonato deciduo fuscorufescente.

Hab. ad asseres pineos, in Suecia, Gallia, Germania. — An hujus generis?

Sect. 2. Phæosporæ Sacc.

STICTOPHACIDIUM Rehm Ascom. n. 916 (1888) [Etym. *Stictis* et *Phacidium*]. — Ascomata immersa, suborbicularia, dein per epidermidem laciniatim erumpentia, applanata, vertice laciniato-dehiscencia submembranacea. Asci tereti-clavati, 8-spori, paraphysati. Sporidia oblonga, continua, violaceo-brunnea.

1. **Stictophacidium carniolicum** Rehm l. c. — Gregarium extus sulphureum, 0,5–3 mm. long. 0,5–1,5 mm. lat., disco orbiculari vel oblongo, plano, olivaceo; ascis tereti-clavatis, apice rotundatis, 150–180 = 10–12, octosporis; sporidiis oblongis, obtusis, rectis, continuis 1–3-guttatis dein eguttatis, hyalinis, mox violaceo-brunneis, levibus, 15–21 = 8–9, monostichis; paraphysibus furcatis, septatis, 2 μ . cr., apice clavulatis, 6 μ . cr. flavidis. 3014

Hab. in ramis emortuis Corni maris pr. Zirklach Carniolie (ROBIC et VOSS). — Ab *Hymenobolo* differt substantia tenui, colore lætiore etc.

Sect. 3. Didymosporæ Sacc.

FABRÆA Sacc. Mich. II, p. 331 [1881] (Etym. ab eximio mycologo gallico J. H. FABRE). — Ascomata innato-erumpentia (hucusque phyllogena) sessilia, depressa, disco mox aperto applanato, tenui-marginata, molliuscula. Asci elongati, octospori. Sporidia ovato-oblonga, 1-septata, hyalina. — Est *Phacidium* v. *Pseudopeziza* hyalodidyma.

1. **Fabræa litigiosa** (Rob. et Desm.) Sacc. *Phacidium* R. et Desm. 3015 Ann. S. N. 1847, p. 181, *Mollisia Ranunculi* Phill. Disc. p. 200, *Fabræa congener* (Ces.) Sacc. Mich. I, p. 515, F. it. f. 1322, *Phacid. congener* Ces. H. M. n. 1727, *Niptera congener* (Ces.) De Not. Discom. p. 375, *Phacid. Ranuncolorum* Desm. *Pseudopeziza Ranunculi* Rehm Asc. n. 659. — Ascomatibus innato-erumpentibus, depressis, tenui-marginatis, $\frac{1}{4}$ mm. diam., maculis vix ullis insidentibus, atris, disco pallidiore; ascis clavatis, 70–90 = 14–15, paraphysatis, octo-

sporis; sporidiis distichis, oblongo-clavulatis, 15-17 \approx 5-6, infra medium 1-septatis, 4-5-guttulatis, hyalinis.

Hab. in pag. inf. Ranunculi repentis, R. bulbosi, R. acris, R. pinnati, in Britannia, Germania, Gallia, Belgio, Italia, Africa austr.

2. **Fabræa confertissima** Karst. Rev. Mon. p. 162 (ut subsp. præcedentis). — Ascomatibus maculis atris insidentibus, confertissimis, innato-erumpentibus, concaviusculis, fuscis; ascis clavatis; sporidiis rite evolutis, non visis; paraphysibus numerosis, flexuosis, 2 μ . crassis; contextu excipuli parenchymatico, fuligineo.

Hab. in pagina inferiore foliorum vivorum Geranii silvatici prope Mustiala Fenniæ.

3. **Fabræa aterrima** Karst. in Hedwigia 1885, p. 73. — Subgregaria, elevata, disciformis, breve marginata, epidermide atrata, tandem rimose vel laciniatim fissa, tecta, tota atra, minuta; ascis tereti-clavatis, subsessilibus, 45-60 \approx 8-9, octosporis; sporidiis distichis, elongato-clavatis, infra medium uniseptatis, hyalinis, 10-13 \approx 2-3; paraphysibus clavulatis.

Hab. in caulibus aridis Achilleæ Ptarmicæ prope Mustiala Fenniæ.

4. **Fabræa Arctii** (Lib.) Sacc. Fung. Lib. pag. 10, *Phacidium* Lib. Exs. n. 359 (1837), De Not. Prof. Discom. p. 376. — Innato-erumpens, dein sessilis, denudata, nervisequa, fusco-nigra, extus fibroso-striata, margine laciniato; disco livido; ascis clavatis; sporidiis oblongis, pellucidis, bilocularibus (De Not.).

Hab. ad folia putrida Arctii majoris in Arduennis.

5. **Fabræa? variolaria** (Pat.) Sacc. *Peziza variolaria* Patoull. Bull. Soc. Mycol. III, p. 125, t. X, f. 3. — Epiphylla orbicularis, sessilis, 0,5-1 mm. diam., atro-virescens, extus obscurior, membranacea; disco plano concavulo; ascis clavatis, subsessilibus octosporis; sporidiis distichis, ovoideis, chlorino-viridulis, 1-septatis, 6-7 \approx 1; paraphysibus linearibus, simplicibus, filiformibus apice subcoalescentibus.

Hab. in foliis Rubiacearum arborescentium, Leguminosarum etc., Congo Africæ. — Folia tenuiter bullato-inflata, loco infecto albida.

6. **Fabræa? Melastomacearum** Speg. Fung. Puigg. I, pag. 212. — Ascomatibus hypophyllis, 300-500 μ . diam., sæpius laxè circumstantibus, circulo 3-5 mm. diam., primo fulvis, dein atris, patellaribus, glabris, maculis nullis vel tantum epiphyllis, pallescentibus, 5-15

mm. diam., indeterminatis; ascis clavatis, 60-120 \approx 16-20, modice stipitatis, octosporis; sporidiis recte distichis vel oblique monostichis, ellipticis vel subovoideis, 17-20 \approx 9 hyalinis, primo continuis, dein medio 1-septatis, loculis subæquilongis, continuis vel 1-pseudo-septatis (an demum triseptatis?)

Hab. ad folia viva *Melastomacearum* in campis pr. Apiahy Brasiliæ (PUIGGARI). — Species pulchella cum *Blitrydio?* *Melastomacearum* non comparanda.

MARCHALIA Sacc. (Etym. a cl. botanico belgico E. MARCHAL), *Rhytismatis* spec. Auct. — Ascomata per matricem breve v. late atratam, tuberculosam vel bullosam, frustuloso- v. sinuoso-erumpentia, ex urceolato scutellata. Asci elongati vel clavati, typice octospori. Sporidia ovato-oblonga, 1-septata, hyalina. — Est mihi *Rhytisma* sporidiis ovato-oblongis, 1-septatis.

1. **Marchalia constellata** (B. et Br.) Sacc. *Rhytisma* B. et Br. Fung. 3021
Ceyl. n. 1132. — Maculis orbiculatis, granulis marginalibus circinantibus circumdatis; ascis clavatis; sporidiis elongatis, asperulis, uniseptatis, 15-23 μ . longis.

Hab. in foliis *Artocarp*i integrifoliæ, Peradenya Ceylon.

2. **Marchalia spurcaria** (B. et Br.) Sacc. *Rhytisma* B. et Br. F. of 3022
Ceyl. n. 1131. — Maculis tenuibus orbicularibus, hic illic rimulis granulisve marginalibus apertis; ascis brevibus; sporidiis obtusis, medio contractis, uniseptatis 25 μ . long.

Hab. in foliis *Artocarp*i integrifoliæ, Peradenya Ceylon.

3. **Marchalia Pterygotæ** (B. et Br.) Sacc. *Rhytisma* B. et Br. Fung. 3023
Ceyl. n. 1129. — Orbicularis, tenuis, cellulis irregularibus, quandoque circinata; ascis late ellipticis; sporidiis oblongis, uniseptatis, extus gelatinosis; spermatis oblongis minimis.

Hab. in foliis *Pterygotæ* alataæ, Peradenya Ceylon.

4. **Marchalia maculosa** (B. et Br.) Sacc. *Rhytisma* B. et Br. Fung. 3024
of Ceyl. n. 1126. — Orbicularis, tenuis, margine tenui celluloso; cellulis minutis numerosis granuliformibus; ascis brevibus late obovatis; sporidiis oblongis obtusissimis, centro contractis, uniseptatis, 25 μ . long.

Hab. in foliis *Sterculiæ* alataæ, *Causjeræ* Rheedii, Peradenya Ceylon.

5. **Marchalia leptospila** (B. et C.) Sacc. *Rhytisma* B. et C. Cub. Fungi 3025 *coll*
n. 721. — Stromate tenui orbiculari, atro-fusco, medio hic illic *microthyriae*

demum rimoso; ascis clavatis; sporidiis ellipticis, obtusis, uniseptatis, demum medio contractis.

Hab. in foliis Lauraceæ in insula Cuba. — Maculæ vix 2 mm. lat.

6. **Marchalia ustulata** (Cooke) Sacc. *Rhytisma ustulatum* Cooke 302
Grev. V, p. 17. — Amphigena, atra, irregularis; ascomatibus elevatis, papillatis, substantia tenui fragili; stylosporibus linearibus curvulis 20 μ . longis.

Hab. in foliis emortuis verisimiliter Fici in India (HOBSON). — Maculæ 2-12 mm. latæ. Sporidia 13-15 \approx 5, hyalina, uniseptata, verisimiliter huc pertinent, sed asci non visi.

7. **Marchalia filicina** (B. et Br.) Sacc. *Rhytisma* B. et Br. Fung. of 302
Ceyl. n. 1127. — Maculis suborbicularibus tenuibus; cellulis elongatis flexuosis tenuibus; ascis clavatis; sporidiis oblongis angustis uniseptatis, 12-14 μ . long.

Hab. in frondibus Alsophilæ giganteæ, Galagama Central Province, Ceylon. — *Lembosicæ* subaffinis.

COCCONIA Sacc. (Etym. a cl. botanico italico HIERON. COCCONI), *Rhytismatis* spec. Auct. — Ascomata per matricem breve vel late atrata, sæpe tuberculosam, inæqualiter rimose dehiscentia, e globoso depressa. Asci tereti-clavati, suboctospori. Sporidia ovato-oblonga, 1-septata, fusca v. fuliginea. — Est *Rhytisma phæodidyma*.

1. **Cocconia Placenta** (B. et Br.) Sacc. *Rhytisma* B. et Br. Fung. of 302
Ceyl. n. 1130. — Parva, orbicularis, cuticula demum marginem versus rupta; ascis brevibus; sporidiis oblongis obtusissimis, uniseptatis, medio constrictis, 30 μ . long., fuscis.

Hab. in foliis Symploci spicatæ, Peradenya. — Var. **microspora**: sporidiis 15 μ . long. In foliis Pavettæ indicæ, Peradenya.

2. **Cocconia Porrigo** (Cooke) Sacc. *Rhytisma Porrigo* Cooke Grev. 302
X, p. 129. — Epiphylla; maculis orbicularibus, convexis, atris, opacis 2 mm. diam. circinato-rimosis; ascis clavatis; sporidiis ellipticis, arcte ad medium constrictis, fuscis, utrinque obtusis 22-25 \approx 12; paraphysibus copiosis, superne fuscis.

Hab. in foliis, Inanda Natali Africae.

3. **Cocconia sparsa** (P. et C.) Sacc. *Rhytisma* P. et C. Bot. Gaz. 1879, 303
pag. 171. — Stromate exiguo, tenui, sparso, vix 2 mm. lat., suborbiculari, convexulo, nigricante, rimis 2-3 inæqualibus dehiscente; ascis obovatis vel ellipsoideis, 8-sporis; sporidiis oblongis, 1-septa-

tis, dilute coloratis, 20-25 μ . long., ad septum leniter constrictis, oculis subinæqualibus.

Hab. in utraque pagina foliorum Sabal Palmetto Floridæ (CLINTON). — Stromata punctiformia, in pagina aversa maculas flavidas efficiunt.

4. **Cocconia Astrocaryi** (Mont.) Sacc. *Rhytisma* Mont. Guy. n. 457. 3031

— Epiphylla, sparsa, tenuis, irregulariter oblonga, confluens, atrofusca, opaca, demum costis elevatis rectis hystericis rimose rupta secedensque; ascis breviter clavatis, 8-sporis; sporidiis bilocularibus, fusciscentibus.

Hab. ad folia *Astrocaryi* vulgaris in Guyana, frequens (LEPRIEUR). — Maculæ gregarie, tenuissimæ, fragiles, secedentes, quoad formam magnitudinemque variæ, centro nigrescentes, ambitu fuscae. Mox costæ lineares, rectæ, directione variæ sensim elevantur, quæ tandem rimosæ seu labiatim dehiscunt.

ABROTHALLUS De Not. in Giorn. bot. ital. II, p. 192 (1846), Karst.

Rev. p. 163 (Etym. *abros* pulcher et *thallus*). — Ascomata parasitica, lichenicola, erumpentia, primitus aperta, mox subhemisphærica, excipulo omnino carentia, immarginata. Asci clavati, 8-spori. Sporidia ellipsoidea, 1-septata, fuligineo-fusca. — Genus ab auctoribus pluribus Lichenibus adscriptum, hinc species aliæ in libris lichenologicis forte inveniendæ.

1. **Abrothallus Parmeliarum** (Somm.) Nyl. in Arnold in Flora 1874, 3032

p. 102, *Abroth. Buellianus* De Not. l. c. Karst. Rev. p. 165, *Endocarpon parasiticum* Ach. Syn. pag. 100, *Lecidea Parmeliarum* Somm. Suppl. p. 176, *Abrothallus Smithii* Tul. Mem. p. 113, Körb. Syst. p. 456, *Abr. Bertianus* et *Buellianus* Mass. Ric. p. 180 et 181. — Erumpens, pulviniformis, scabriusculus, fusco-niger, minutus, hypothecio grumoso; ascis clavatis; sporidiis ellipsoideis, 1-septatis, hyalinis, 12-18 \approx 4-6.

Hab. in thallo *Parmeliæ saxatilis*, *P. fraudantis*, *P. sulcatæ*, *Platysmatis Pinastri* et *Pl. glauci*, *Usneæ barbatae*, *Cetrariæ islandicæ* in Fennia, Suecia, Gallia, Germania, Italia, Britannia.

2. **Abrothallus microspermus** Tul. Mém. p. 115, t. XVI, f. 22-26. — 3033

Affinis *Abr. Buelliano* sed minor, 0,2-0,3 mm. lat., vix unquam æruginoso-pruinosis, immarginatus; sporidiis minutis, pallidioribus, 7-9 \approx 3-4.

Hab. in thallo *Imbricariæ caperatæ* in Italia, Gallia et Germania.

3. **Abrothallus Usneæ** Stein Schles. Flecht. p. 211, vix Rabenh. — 303
Convexus, 0,7 mm. lat., diu marginatus, flavo-brunneus, amœne aureo-pruinosis; ascis clavatis; sporidiis 8-10 \approx 3-4, brunneis.

Hab. in *Usnea barbata* v. *florida* in Silesia.

4. **Abrothallus Welwitschii** Mont. Syll. p. 188, Tul. Mém. p. 115. — 303
Ascomatibus gregariis erumpentibus, pulvere chlorino velatis, cuticulæ matricis segmentis erectis obvallatis, convexo-hemisphæricis; ascis clavatis, 6-8-sporis; sporidiis ovatis, uniseptatis, crassis, atris, loculis inæqualibus; paraphysibus clavatis.

Hab. in thallo *Stictæ silvaticæ*, *S. fuliginosæ* et *S. Dufourei* in Lusitania (WELWITSCH).

5. **Abrothallus viduus** Körb. in Stein Schles. Flecht. p. 211. — Mi- 303
nutus, erumpens, plano-convexus, mox immarginatus, brunneo-nigricans, granulosis; sporidiis oblongis 10-14 \approx 4-5, brunneis; paraphysibus sursum fuscis.

Hab. in thallo *Stictæ pulmonariæ* in Riesengebirge Silesiæ (STRIKER).

6. **Abrothallus protohallinus** Anz. Lich. Sondr. p. 116. — Microscop- 303
icus, ater, sessilis, planus, margine tenui; ascis clavatis, 6-8-sporis; sporidiis ovoideis, bilocularibus, saturate fuscis, 9-10 \approx 5-6; loculis rotundis æqualibus; paraphysibus laxis.

Hab. in thallo *Massalongiæ carnosæ* in mont. Sondrio Ital. bor. — Stylosporæ ovoideæ pellucidæ, 4-5 \approx 2. Hymenium jodo saturate cœrulescit; hypothecium fuscum. Sec. Körb. Par. p. 460, hæc et sequens species *Karschiæ* sunt adscribendæ.

7. **Abrothallus pulverulentus** Anzi Lich. Sondr. p. 116. — Erumpens, 303
minutissimus, sessilis, planus marginatus, tandem convexus immarginatus, hymenio jodi ope saturate cœrulescente; hypothecio fusco; ascis clavatis, 8-sporis; sporidiis ellipsoideis, bilocularibus, 16-19 \approx 7-9, articulis subæqualibus; paraphysibus filiformibus laxis.

Hab. in thalli part. sup. *Parmeliæ pulverulentæ* prope Premadio, Sondrio Ital. bor.

Sect. 4. **Phragmosporæ** Sacc.

SPHÆROPEZIA Sacc. Consp. Gen. Disc. pag. 14 (1884), Rehm Disc. p. 72 (Etym. *Sphæria* et *Peziza*). — Ascomata erumpentia, globoso-depressa, ceraceo-coriacea, atra, dein margine connivente in lacinias fissas dehiscencia. Asci tereti-clavati, 8-spori, paraphysati.

Sporidia oblonga, 2-pluriseptata, hyalina. — Recte observante cl. Rehm, *Phacidieis* magis quam *Patellarieis* (ubi locaveram) affinis.

1. **Sphæropezia alpina** Sacc. loc. cit. *Heterosphæria* Sacc. Mich. II, 3039 p. 165, Fung. it. f. 1361. — Ascomatibus hypophyllis, innato-erumpentibus, depresso-urceolatis, $\frac{1}{4}$ mm. diam., coriaceo-carbonaceis, nigris, margine connivente denique in lacinias 4-7 diviso; contextu excipuli parenchymatico, fusco; ascis (in ascomatibus fundo reperiendis) cylindraceo-clavatis, apice rotundatis lumineque paullulum coarctato, 45-50 \approx 6-7, subsessilibus, paraphysibus bacillaribus obvallatis, octosporis; sporidiis bacillari-fusoideis 13-16 \approx 3, leniter curvis, utrinque obtusiusculis, 3-septatis, non constrictis, hyalinis.

Hab. in pag. superiore foliorum *Dryadis octopetalæ* in alpinis Vette di Feltre Ital. bor. (BIZZOZERO).

2. **Sphæropezia Vaccinii** Rehm Disc. p. 74, *Pseudopeziza Vaccinii* 3040 Alp. n. 25. — Gregaria, sessilis, c. 0,2 mm. diam., sicca, plana, opaca, atra, irregularis, humida plana v. subconvexa, orbicularis, vix marginata, pallidula, basi parenchymatica fusca; ascis crassis, clavatis, 8-sporis, 45 \approx 12; sporidiis elongatis, obtusis, 2-4-cellularibus, hyalinis, rectis, distichis, 15 \approx 3,5; paraphysibus filiformibus, apice clava mucosa, 4 μ . crassa, fuscidula instructis et conglutinatis.

Hab. ad paginam inf. foliorum putridorum *Vaccinii* uliginosi, Taschach-Gletscher in valle Piz alpium tyrolens. alt. c. 2000 m. (REHM).

3. **Sphæropezia Andromedæ** (Fr.) Rehm Disc. p. 73, *Phacidium An-* 3041 *dromedæ* Fr. Syst. Myc. II, p. 574, *Trochila Andromedæ* (Fr.) Karst. M. F. I, p. 250. — Sparsa v. subgregaria, innato-erumpens, primitus clausa, subsphæroidea, dein in lacinias 3-4 obtusas dehiscens, atra, disco fusco-pallido, 0,3 mm. lat.; ascis clavatis, 75-80 \approx 12, 8-sporis; sporidiis distichis, fusoideo-oblongatis, 2-guttulatis, rectis v. leniter curvulis, 15-18 \approx 4-5, demum 1-3-septatis; paraphysibus cohærentibus.

Hab. ad folia et caules *Andromedæ* polifoliæ emortua in Suecia, Germania et in tota Fennia. — Habitus *Phac. Arctostaphyli*.

4. **Sphæropezia Empetri** (Fr.? Fuck.) Rehm Disc. p. 73, *Sphæria* Fr. 3042 Syst. Myc. II, p. 522?, Fuck. Symb. App. III, p. 18! *Heterosphæria* Rehm Ascom. Ill, n. 324, non *Sph. Empetri* Fr. in Grev. V, p. 65. — Ascomatibus brunneo-virentibus, gregariis, subinde congestis,

areis dealbatis innatis, per epidermidem atratam laciniatam dehiscentibus; disco plano, 0,3-0,4 mm. lat.; ascis cylindræis, apice truncatis, 70 \approx 9, octosporis, obturaculo jodo intense violascente; sporidiis subdistichis, ellipsoideo-ovatis, obtusulis, 15 \approx 6, hyalinis, 3-septatis; paraphysibus filiformibus, ramulosis.

Hab. in foliis siccis sed adhuc pendulis, ad pag. sup., *Empetri nigri* in Alpibus.

CELIDIUM Tul. Mem. p. 121 (1852), Karst. Rev. mon. p. 162 (Etym. *celis* nævus), *Melaspilea* et *Pseudopeziza* Auct. ex p. — Ascomata parasitica, lichenicola, innato-erumpentia, planiuscula, exigua, atra, excipulo fere carentia. Asci clavati, sessiles, apice pariete incrassata 6-8-spori. Sporidia oblongato-clavata vel ovoideo-oblongata, 1-3-septata, hyalina. Paraphyses conglutinatæ. — Inter lichenes a pluribus adscitum genus. Cfr. libros lichenologicos ubi et alias species forte invenias.

I. *Eu-Celidium*. Sporidia 2-3-septata, hyalina.

1. **Celidium Peltigeræ** (Nyl.) Karst. Rev. p. 163, *Melaspilea* Nyl. Obs. 3045 p. 651, *Pseudopeziza* Fuck. Symb. p. 291, *Peziza circinans* Lib. Herb., ?*Leciographa* Phill. Grev. 1880, p. 84. — Cupulis gregariis in macula expallescens plerumque in orbem dispositis, erumpentibus, sessilibus, punctiformibus, orbicularibus, planis, margine crispulo, tenui, atro, disco pallido, demum (sicco) atro; ascis curvato-clavatis, amplis, 60-75 \approx 10-16, 8-sporis; sporidiis farctis, oblongis, 3-septatis, ad septa constrictis, hyalinis, 10-20 \approx 4-6.

Hab. in thallo viventi *Peltigeræ caninæ* in Germania, Fennia, Hungaria, Gallia, Belgio.

2. **Celidium varians** (Dav.) Arn. in Flora 1862, p. 313, Karst. Rev. 3044 p. 163, *Lichen varians* Dav. in Trans. Linn. Soc. p. 2, t. 28, f. 3, ex Ach. et Nyl. Lich. scand. p. 260. — Planum vel demum convexiusculum, rotundatum vel nonnihil difforme, epithecio virescenti-atro, circiter 1 mm. lat.; ascis ovalibus, sessilibus, apice pariete valde incrassata, jodo non tinctis, 40 \approx 15, 8-sporis; sporidiis di- vel tristichis, ovoideis vel oblongato-clavatis, 3-septatis, hyalinis, 12-18 \approx 5-7; paraphysibus conglutinatis ascos superantibus apice articulatis et subclavulatis; gelatina hymenea jodo vinose rubente vel fulvescente.

Hab. supra apothecia, rarius thallum *Lecanoræ glaucomæ* et *Lecanoræ sordidæ* in Britannia, Fennia, Lapponia, Germania.

3. **Celidium Stictarum** (De Not.) Tul. Mem. p. 121, Karst. Rev. p. 162, 3045
Dothidea Lichenum Somm. Suppl. pag. 224, *Homostegia* Fuck. Symb. p. 224. — Erumpens, orbiculare, planiusculum, rugulosum, a matrice marginatum, atrum, exiguum, hypothecio virescente; ascis clavatis apice pariete valde incrassata, $70 \approx 30$, 6-8-sporis; sporidiis distichis, oblongato-clavatis, utrinque obtusis, 3-septatis, guttula unica magna in quoque loculo, hyalinis, $16-24 \approx 6-9$; paraphysibus ramosis; hymenio jodo primitus cœrulescente dein vinose rubente.

Hab. in apotheciis Stictæ pulmonariæ in Italia, Germania, Britannia, Lapponia, Fennia.

4. **Celidium varium** (Tul.) Körb. Par. p. 456, *Phacopsis* Tul. Mém. 3046 p. 125. — Orbiculare, maculi- v. tuberculiforme, rugulosum, atrum; ascis piriformi-clavatis, stipitatis, 6-8-sporis; sporidiis elliptico-oblongis, utrinque obtusis, hyalinis, demum fuscidulis, $10-13 \approx 4-5$.

Hab. in apotheciis et thallo Xanthoriæ parietinæ in Gallia et Germania.

II. *Celidiopsis* Mass. Sporidia 3-septata, fusca.

5. **Celidium insitivum** Flot. in Körb. Syst. p. 217. — Minutissimum, 3047 primo innatum, dein adpresse sessile, disco fusco-nigro scabriusculo, tandem tumidulo, immarginato; ascis obovatis octosporis; sporidiis ex ovoideo ellipsoideis 3-septatis, $10 \approx 6-8$, ferrugineo-fuscis.

Hab. in thallo Lecanoræ subfuscae etc. in Germania et Italia.

6. **Celidium Gyrolophii** Mass. Misc. p. 15 (*Celidiopsis*). — Orbiculare, 3048 prominulum, minutum, scabriusculum, nigrum, udum castaneo-fuscum, tumidum, marginatum; sporidiis ovoideis, 3-septatis, $19-36 \approx 12$, fuligineis.

Hab. in thallo Gyrolophii mauritiani in Peruvia.

III. *Melaspileella* Karst. Rev. p. 163. Sporidia 1-septata, hyalina.

7. **Celidium nephromiarium** (Nyl.) Karst. Rev. p. 163, *Arthonia ne-* 3049
phromiaria Nyl. Lich. Lapp. p. 187. — Rotundatum immarginatum, nigricans, epithecio nigricante, hypothecio fusco, 0,1-0,3 mm. lat.; sporidiis ovoideis, 1-septatis hyalinis, $9-11 \approx 3-4$ gelatina hymenea jodo vinose rubente.

Hab. supra thallum Nephromii tomentosi ad Pertnavolok Lapponiæ (TH. SIMMING).

8. **Celidium neglectulum** (Nyl.) Karst. Rev. p. 164, *Arthonia negle-* 3050

ctula Nyl. Flora 1874, p. 13, Wain. Adj. Lich. Lapp. II, p. 155. — Rotundatum, planum vel convexum, immarginatum, nigrum, nudum, opacum, circ. 0,1 mm. lat.; ascis piriformibus, minoribus, 8-sporis; sporidiis ovoideis, 1-septatis, hyalinis, 7-11 \approx 3-4; paraphysibus indistinctis; hymenio jodo vinose rubente.

Hab. supra thallum et apothecia *Bæomycetis carnei* in par. Kianta Fennicæ (EDW. WAINIO).

9. **Celidium proximellum** (Nyl.) Karst. Rev. p. 164, *Arthonia proximella* Nyl. Lich. scand. p. 262, *Melaspilea proximella* Nyl. in Norrl. Torn. p. 342. — Rotundatum, planum, tenuiter marginatum, nigrum, opacum, minutum, epithecio fusco-nigricante vel olivaceo, hypothecio hyalino, lutescente vel dilute fuscescente; ascis piriformibus, apice membrana incrassata, 40-60 \approx 20-22, 8-sporis; sporidiis ovoideis 1-septatis (raro 2-septatis), medio haud raro constrictis, hyalinis vel demum obscuris, 18-22 \approx 7-9; paraphysibus distinctis, cohærentibus, apice clavatis; hymenio jodo fulvescente v. dilute rubescente.

Hab. ad corticem *Juniperi* passim in Fennia et Lapponia.

Sect. 5. *Scolecosporæ* Sacc.

COCCOMYCES De Not. Mém. in Giorn. bot. it. vol. II, p. 38 (1847) [Etym. *coccus* granum et *myces*], *Phacidii* et *Coccophacidii* spec. Auct. — Ascomata carnosu-ceracea, hemisphærico-depressa, uda tumidula, fuscescentia, orbiculari-polygona, epithecio cum epidermide tegente concreto, a centro versus ambitum in lacinias plures diviso. Asci tereti-clavati, paraphysati, octospori. Sporidia filiformia vel fusoido-filiformia, septata vel continua, subhyalina.

1. **Coccomyces coronatus** (Schum.) De Not. in Erb. critt. ital. ser. I, n. 236, Karst. Fenn. I, p. 256, Sacc. Fung. it. f. 1298, *Ascobolus* Schum. Saell. II, p. 437, *Lophodermium Phacidium* De Not. Pir. ister. p. 42, *Phacidium coronatum* Fr. Obs. I, p. 167, *Pez. comitalis* Batsch Elench. f. 152, *Xyloma pezizoides* Pers. Ic. pict. t. X, f. 1. — Innatus, orbicularis, hemisphærico-depressus, nigricans, in lacinias plures acutas dehiscens, disco flavescens, 1-2 mm. lat.; ascis clavatis 140 \approx 12-15, longe crassiuscule stipitatis, apice subtruncatis, paraphysibus filiformibus apice curvatis obvallatis, octosporis; sporidiis bacillaribus v. subclavulatis, 4-5-nucleatis v. varie guttulatis, hyalinis, 35-75 \approx 2-3,5.

Hab. in foliis dejectis fagineis, quercinis, castaneis, *Betulæ*, *Carpini*, *Rubi* in Suecia, Britannia, Belgio, Italia, Gallia.

2. **Coccoomyces laciniatus** (Alb. et Schw.) Karst. M. F. I, pag. 257, 3053
Peziza laciniata Alb. et Schw. Consp. Fung. nisk. p. 333, t. 7, f. 8, Fr. Syst. Myc. II, p. 113, *Phacidium laciniatum* Fr. Elench. Fung. II, p. 132, *Heterosphæria laciniata* Fr. Summ. Veg. Scand. p. 365. — Gregarius vel subsparsus, primitus innatus, dein erumpens, orbicularis, hemisphærico-depressus, demum omnino denudatus, liberatus obconicus vel distincte stipitatus, in lacinias plerumque 5 acutas stellatim fissus, fuscescens, venis subtilissimis obscurioribus arcte reticulatus vel areolatus, disco planiusculo, pallido, 1,5-2,5 mm. lat.; ascis cylindræo-clavatis, apice attenuatis, 105 \approx 13-15 (parte sporifera), octosporis; sporidiis conglobatis, filiformibus, apice utroque acutatis, flexuosis, guttulatis, 68-70 \approx 3-3,5; paraphysibus filiformibus, flexuosis vel circinatis, 2,5 μ . cr.

Hab. in foliis putridis Salicis, Alni, Betulæ locis udis vel aquosis in Suecia, Fennia, Germania.

3. **Coccoomyces trigonus** (K. et S.) Karst. M. F. I, p. 257, *Colpoma* 3054
 Wallr. Crypt. p. 422, *Cocc. coron.* var. *megathecius* Speg. Dec. n. 98, *Pez. epiphega* Nyl. *Phacidium trigonum* Schmidt. Myc. Heft I, p. 40, t. II, f. 12. — *C. coronato* sat similis, sed ascomatibus sæpe oblongatis; ascis 120-170 \approx 14; sporidiis 28-46 \approx 2-3,5 tandem 1-7-septatis.

Hab. in foliis putrescentibus Quercus, Fagi, Tiliæ, Lauri in Germania, Lusitania, Italia, Fennia. — Huc quoque forsans pertinet *Hysterium tumidum* β . *trigonum* Fr. Syst. Myc. II, p. 592.

4. **Coccoomyces dentatus** (K. et Schm.) Sacc. Mich. I, pag. 59, *S.* 3055
punctif. γ . Pers. syn. p. 91, *Xyloma lichen.* Dec. Fr. II, p. 304, *Sphæria* loc. cit. p. 147 var. *Pez. infula* Reb. Ind. pag. 45, *Ph. dentatum* Schmidt. et Kunz. Myc. Heft I, p. 41. — Quadratus, maculæ pallidæ insidens, ater, in lacinias 4-5 acutas dehiscens, disco sordide luteo, 1 mm. lat.; ascis clavatis, longe stipitatis, 8-sporis, 70-90 \approx 8-9; sporidiis filiformibus, demum pluri-septatis, 45-55 \approx 1,5-2; paraphysibus filiformi-clavulatis.

Hab. in foliis dejectis quercinis et castaneis in Suecia, Germania, Italia, Gallia, Belgio, Britannia, Lusitania, Amer. bor., Brasilia et Borneo. — Stat. spermogonicus: *Leptothyrium quercinum* et *L. Castaneæ*. Junior punctiformis, dein dilatatus planus subquadratus, medio depressus, nitens, ruptus laciniis 4 æqualibus vel 5 inæqualibus, disco nigrescente-luteo, subvidido.

5. **Coccoomyces peltiformis** (Pr.) Sacc. *Phacidium peltiforme* Preuss 3056
 Hoyersw. n. 340. — Gregarius, punctiformis; ascomatibus depres-

so-orbiculatis, peltiformibus, atris; ascis clavatis cum paraphysibus mixtis; sporidiis baculiformibus albis, cum guttulis oleosis.

Hab. in foliis dejectis quercinis, Hoyerswerda. — Verisimiliter forma cujusdam speciei quercicolæ ex præcedentibus.

6. **Coccoomyces quadratus** (Schm. et K.) Karst. M. F. I, p. 255, *Phacidium quadratum* Schm. et K. in Myc. Heft p. 32, *Xyloma Leptostroma* Fr. Obs. I, p. 197, *Phacidium leptideum* Fr. Syst. Myc. II, p. 576. — Gregarius, innato-erumpens, orbicularis, aut 3-5-gonus, depresso-planus, tenuis, subnitidus, ater, primum clausus dein in lacinias 3-5 acutas dehiscens, disco pallido vel stramineo, 1-2 mm. lat.; ascis cylindræo-clavatis, apice attenuatis, 150 \approx 16; sporidiis filiformibus, longissimis 66-90 \approx 2,5-3.

Hab. ad caules *Vaccinii Myrtilli* et *Vaccinii Vitis idææ* aridos in Fennia, Lapponia, Suecia, Germania, Gallia, Belgio, Hungaria, Scotia. — ***C. ursinus** Sacc. et Paol. Myc. Sib. p. 20, t. V, f. 18: a typo differt ascis brevissime stipitatis, 110-120 \approx 11-13; sporidiis filiformibus, 25-30 cuboideo-guttulatis (an tandem septatis?) 75-80 \approx 1. In foliis *Arctostaphyli Uvæ-Ursi* prope *Kosatchinskoya Sibiria* (MARTIANOFF).

7. **Coccoomyces macer** Karst. M. Fenn. I, p. 255. — Sparsus vel aggregatus, innato-erumpens, subsphæroideo-applanatus, tenuis, nigrescens, in lacinias irregulares vel varie rimose dehiscens, disco subvirescenti-pallido, 1-1,5 mm. lat.; ascis cylindræo-subclavatis, apicem versus sensim attenuatis, 60 \approx 8; sporidiis filiformibus, apicibus attenuatis, pluriguttulatis, 50-54 \approx 2.

Hab. in caulibus semiputridis *Umbelliferarum* prope *Mustiala Fennia*.

8. **Coccoomyces albidus** (Phill. et Harkn.) Sacc. *Phacidium albidum* Phil. et Hark. Grev. XII, p. 83. — Hypophyllus, gregarius, tectus, convexus, demum in lacinias dehiscens; disco albedo; ascis cylindræo-clavatis; sporidiis linearibus, utrinque acutis, multinucleatis, 60-75 \approx 2; paraphysibus numerosissimis, filiformibus.

Hab. in pag. inf. foliorum *Vaccinii* in California (HARKNESS).

9. **Coccoomyces Piceæ** (Fuck.) Sacc. *Phacidium* Fuck. Symb. App. II, p. 51, fig. 16. — Cupulis sparsis, erumpentibus, oblongis orbicularibusque, 1-2 mm. long., disco olivaceo, concavo, in lacinias 2-4 irregulares, nigras, carbonaceas, extus foliorum epidermide decolorata tectas fissis; ascis oblongis, basin versus attenuatis, 8-sporis, 144 \approx 12; sporidiis fasciculatis, filiformibus, antice obtusis, basi acuminatis, parum curvatis, multiguttulatis, hyalinis, 112 \approx 2 $\frac{1}{2}$.

Hab. in acubus siccis dejectis Abietum, rarius in Frankensteinier Kopf pr. Œstrich Rhenogoviæ.

10. **Coccoomyces tumidus** (Fr.) De Not. in Giorn. bot. it. II, p. 38, 3061

Hysterium Fr. Syst. Myc. II, pag. 591, *Lophodermium* Lamb., Rehm Disc. p. 40. — Epiphyllus, prominens, ovalis, fusco-nigricans, rima longitudinali dehiscens, disco sublivido; ascis clavatis, 8-sporis, 75–80 \approx 9–10; sporidiis filiformi-clavulatis, 45–50 \approx 2; paraphysibus filiformibus, hamatis.

Hab. ad folia dejecta Fagi, Quercus, Betulæ, Sorbi, Aucupariæ in Suecia, Belgio, Germania, Amer. bor. — Analogus, teste Fr., cum *Cocc. coronato*, 2–4 mm. longus, eximie ovalis, turgidus, submollis, ex habitu omnino superficialis, junior vero depressus maculæformis, exoletus collapsus rugosus; ascoma tenue, e fusco-ferrugineo colore demum nigrum, opacum, marginibus tenuibus integris discum superantibus. Discus concaviusculus, colore varius. — Var. **Napelli** Rehm loc. cit. rima latiore flexuosa; ascis 100 μ . long.; sporidiis 60–75 \approx 1,2. In caule Napelli in Tyroli. Sec. Lamb. et Rehm verum *Lophodermium*.

11. **Coccoomyces pluridens** (B. et C.) Sacc. *Phacidium pluridens* B. 3062

et C. Cub. Fung. n. 713. — E macula lata pallida illimitata oriundus; ascomate pluridentato, suborbiculari; sporidiis flocciformibus.

Hab. in foliis emortuis Clusiæ parasiticæ in insula Cuba.

12. **Coccoomyces limitatus** (B. et C.) Sacc. *Phacidium* B. et C. Cub. 3063

Fung. n. 714. — E macula pallida linea nigra limitata oriundus; ascomatibus triangularibus quadratisve ore 3–4-dentato; sporidiis flocciformibus.

Hab. in foliis coriaceis emortuis, verisimiliter Clusiæ, in insula Cuba. — Habitus *Lophod. Deltæ*, sed non nitens.

13. **Coccoomyces Clusiæ** (Lév.) Sacc. *Phacidium Clusiæ* Lév. Fung. 3064

Novo-granat. p. 291 (Ann. Sc. nat. 1863). — Ascomatibus hypophyllis, sparsis, polygoniis, nigris, 4–5-dentatis in macula pallida interdum insidentibus, disco convexo nigricante; ascis clavatis, octosporis; sporidiis filiformibus, continuis, hyalinis; paraphysibus filiformibus, simplicibus, continuis, apice globosis.

Hab. ad folia Clusiæ ad La Vega Novæ Granatæ (LINDIG) et in America æquinoctiali (BONPLAND).

14. **Coccoomyces Spegazzinii** Sacc. *Coccoomyces basiliensis* Speg. (Fung. 3065

Puigg. I, pag. 212, nec Karst. — Maculis albo-pallescensibus, amphigenis, 5–15 mm. diam., indeterminatis; ascomatibus hypophyllis, quadratis (rarius trigonis), 300–600 μ . diam., sparsis vel

laxe gregariis, quadrifido-erumpentibus, atris, glabris, contextu fusco-fuligineo; ascis cylindræis, 90-100 = 8-10, sursum rotundatis, deorsum substipitatis; sporidiis filiformibus, 70-80 = 2, utrinque obtusiuscule acutatis, primo dense guttulatis, dein septulatis, hyalinis; paraphysibus apice non v. vix clavulato-incrassatis, 1,5-2 μ . cr.

Hab. ad folia coriacea dejecta putrescentia in silvis pr. Apiahy Brasiliæ (PUIGGARI).

15. **Coccoomyces tridentatus** (Lév.) Sacc. *Phacidium* (Xyloma) *tridentatum* Lév. Fung. Novo-granat. p. 291 (Ann. Sc. nat. 1863). 3066

— Ascomatibus hypophyllis, sparsis, trigonis, rarissime tetragonis, convexis, nigris, dentibus 3 dehiscentibus, disco albo; ascis clavatis, octosporis; sporidiis linearibus continuis, incoloribus; paraphysibus filiformibus, simplicibus, hyalinis.

Hab. ad folia Vaccinii (?) Bogota, Monserrato, alt. 2800 m. in Nova Granata (LINDIG). — *Coccomycete dentato* paullo major, in foliis obsoletis etiam cum *Usnea* crescens. Decedens foveolam trigonam nigerrimam relinquit.

16. **Coccoomyces Rhododendri** (Schw.) Sacc. *Hyst.* (Xyloma) *Rhododendri* Schw. Syn. Am. bor. n. 2116. — In macula expallente ef- 3067

figurata orbiculatim situs, majusculus, 4 mm. lat., sparsus sæpe transversim valde elevatus, ovalis, tumidulus sordide viridi-niger, interdum trifariam dehiscens, labiis semper quasi undulatis.

Hab. in foliis Rhododendri, Bethlehem, in foliis Rh. maximi Forestburgh Amer. bor. — Affinis *C. tumido*. An idem cum *Phacidio Rhododendri*?

17. **Coccoomyces Tetraceræ** (Rud.) Sacc. *Phac.* *Tetraceræ* Rud. in 3068

Linnæa IV, p. 118, V, p. 551, Mont. Cub. p. 359. — Ascomatibus orbicularibus, hemisphærico-depressis, nigricantibus, cum epidermide concretis, et in lacinias plures obtusas annuliformes dehiscen-
tibus dein subliberis disco nigro; ascis ovatis.

Hab. ad folia viventia *Tetraceræ volubilis* in insula Cuba (POEPPIG). — *Coccomyceti coronato* affinis dicitur, a quo distinguitur ascomatibus arctius collabentibus, rugoso-scabris, magis inæqualibus, opacis.

18. **Coccoomyces Pini** (Alb. et Schw.) Karst. M. F. I, p. 254, Sacc. 3069

Fung. it. f. 1299, *Xyloma Pini* Alb. et Schw. Consp. Fung. nisk. p. 60, t. 5, f. 8, *Phacidium Pini* Fr. Syst. Myc. II, p. 573, Tul. Sel. Fung. Carp. III, p. 136, *Coccophacidium* Rehm Disc. p. 98, *Phacidium valvatum* Schm. et K. Myc. Heft I, p. 30, t. 2, f. 11. — Sparsus, innato-emergens, suborbicularis, subinde angulosus, hemi-

sphærico-depressus, primitus prorsus clausus et nitens, deinde in lacinias obtusas dehiscens, opacus, ater, disco fuligineo-pallido, 1,5-4 mm. lat.; ascis cylindræo-clavatis, longe pedicellatis, 100-130 \approx 10-15, apice jodo non cœrulescentibus, 8-sporis; sporidiis conglobatis, filiformi-clavatis, utrinque acutis, vulgo spurie 5-9-septatis, chlorinis, 65-80 \approx 3-4 ex hyalino flavidis; paraphysibus filiformibus, simplicibus, conglutinatis, superne clavatis et infuscatis.

Hab. ad cortices Pini silvestris et Strobi in Suecia, Gallia, Germania, Fennia, Britannia, Italia, Belgio, Amer. bor. — Spermogonia commixta, vulgo punctiformia et acute umbonata, nigra, cavitate simplici, sinuosa et angustata. Spermata filiformia, leviter curvula, incoloria, 10 \approx 1. Hypothecium crassiusculum, album, ex parenchymate sclerotioide. — Var. **Fuckelii** Rehm Disc. pag. 99, *Phac. Pini* Fuck. Symb. p. 263, t. IV, f. 31: major, 4 mm. usque lat.; ascis 180 \approx 15; sporidiis 70-80 \approx 4-5, 7-11-septatis, ad septa subconstrictis, utrinque appendicula filiformi 18-20 μ . long. auctis. In ramis Pini silvestris in Rhenogovia.

19. **Coccoomyces Juniperi** Karst. M. F. I, pag. 254, *Colpoma* Rehm 3070

Ascom. n. 272, Peck et Cooke 26 Rep. p. 84 *Phacidium* Karst. Symb. p. 257. — Sparsus, subinde 2-3 individuis confluentibus, innato-emergens, suborbicularis, interdum difformis, demum in lacinias obtusas dehiscens, ater v. fusco-ater, disco pallido, 1-3 mm. lat.: ascis cylindræo-clavatis, apice attenuatis, 75-100 \approx 8-10, 8-sporis; sporidiis conglobatis, fusoideo-filiformibus, rectis v. leniter flexuosis, incoloribus, 35-50 \approx 1-2; paraphysibus numerosis, apicem versus curvato-flexuosis, 1,5-2 μ . cr.

Hab. ad cortices Juniperi communis et J. virginianæ in Fennia, Lapponia, Germania et Amer. bor. — Stat. spermog. *Fusicoccum Juniperi* (Fr.) Karst.

20. **Coccoomyces Cembræ** Rehm in Hedwigia 1885, p. 232. — Asco- 3071

matibus in ramulorum decorticatorum superficie plerumque longe lateque gelatinose atratis immersis, sparsis, primitus clausis, atris, rotundis, dein excipulo irregulariter laciniatim rupto, carbonaceo, crasso, atro, orbicularibus vel ellipticis, sæpe subcurvatis, 0,5-3 mm. diam., humidis discum flavidulum mucosum aperientibus, contextu fusco-nigro, carbonaceo, parenchymatico, hypothecio fusco nigro, hymenio flavidulo; ascis clavatis, apice acutatis, 90-100 \approx 9, octosporis; sporidiis rectis, acicularibus, superiore apice crassiore, inferiore acutatis, rarissime subcurvatis, continuis, nucleolis parvulis

crebris præditis, hyalinis, parallelis, 45-50 \approx 2-2,5; paraphysibus filiformibus, apice circinatis, c. 3 μ . cr., hyalinis.

Hab. ad ramos putridos decorticatos Pini Cembrae supra Gampenhöfe prope Sulden in monte Ortler Tyrol. (REHM).

21. **Coccomyces atactus** Rehm Disc. p. 81. — Ascomatibus gregariis, primitus inter fibras nigrefactas ligni innatis, dein rotundato-v. lanceolato-prominentibus, carbonaceis, atris, haud levibus, clausis, demum in parte convexa 4-6-laciniato-ruptis, disco subplano flavescenti-griseo, 0,5-2,5 mm. longo latove; ascis clavatis superne obtusulis, octosporis, 90-100 \approx 10-12; sporidiis acicularibus, rectis, singulis grosse 2-guttulatis, hyalinis, 21-25 \approx 3-5, distichis; paraphysibus filiformibus, rectis, 5 μ . latis, sursum flavescentibus. 3072

Hab. in fragmento subputrescenti Pini in Cetzthal Tyroliae. — A *Coccom. Cembrae* omnino distinctus.

22. **Coccomyces umbonatus** (Pr.) Sacc. *Phacidium umbonatum* Pr. 3073
Hoyersw. n. 339. — Ascomatibus scutiformibus, corneis, primo clausis papillatis, atris; nucleis disciformibus; ascis erectis; paraphysibus mixtis; sporidiis baculiformibus, septatis, albis.

Hab. in cortice Pini, Hoyerswerda. — An diversus a *C. Pini*?

23. **Coccomyces brasiliensis** Karst. Hedw. 1889, p. 193. — Sparsus, innato-emergens, admodum tenuis, suborbicularis, planus, primitus clausus, deinde in lacinias obtusas dehiscens, opacus, atratus, disco convexulo, testaceo vel testaceo-pallido, pruinello, 1-2 mm. lat.; ascis cylindraceutis, 10 μ . crassis, 8-sporis; sporidiis filiformibus flexuosis, guttulatis vel spurie septatis, hyalinis, 60-90 \approx 1-1,5; paraphysibus flexuosis, hyalinis, 0,5 μ . crassis. 3074

Hab. ad corticem arborum frondosarum, Minas Geraes, Sitio Brasiliae.

24. **Coccomyces triangularis** (Schw.) Sacc. *Cenangium* Fr. Syst. Myst. 3075
II, p. 182, El. II, p. 22, *Peziza* Schw. Carol. n. 1255. — Solitarius, in triangulum complicatus, subnudus, fuscus, ore connivente, disco pallido; sporidiis filiformibus (ex Berk.).

Hab. in ramis junioribus *Quercus* albæ in Carolina, Canada super. et Pennsylvania Amer. bor. An *Colpomatis* (*Clithris*) species? — Gregarius, omnino sessilis, elliptico-triangularis, angulo laterali magis obtuso, junior *Sphaerium* erumpentem plane referens, etiam ostiolo papillæformi instructus, dein apertus, margine inflexo, numquam explanato, demum nigrescit.

25. **Coccomyces Rehmii** Sacc. *Coccomyces Rhododendri* Rehm Ascom. 3076
Alp. n. 36, nec Schw. *Clithris* Rehm Disc. p. 104. — Carbona-

ceus, gregarius, rotundatus v. plerumque oblongus, longitudinaliter seriatus, super epidermidem dilaceratam emergens, denique fere sessilis, ater, fragilis, siccus corrugatus, perfecto statu superne irregulariter dilaceratus, senilis foveolam oblongam, dealbatam v. cineream relinquens, 0,8-1 mm. diam.; ascis clavatis, superne truncato-acuminatis, 8-sporis, $115 \approx 15$; sporidiis filiformibus, vix curvatis, subtilissime nucleatis, utrinque acuminatis, 1-cellularibus, $50-60 \approx 2$; paraphysibus filiformibus, apice hamulatis; hypothecio fuscidulo.

Hab. ad ramulos siccos *Rhododendri ferruginei* alpium tyrolens. pr. Taschach-Gletscher in valle Piz 2200 m. (Dr. REHM) in monte Peischlkopf, c. 1800 m. alt. (BRITZELMAYR). — An ibidem quoque ad ramulos *Vaccinii Myrtilli*?

26. **Coccoomyces Clematidis** (Phill.) Sacc. *Phacidium Clematidis* Phill. 3077

Grev. XVI, p. 46. — Sparsus v. gregarius, erumpens, orbicularis, minutus, per epidermidem inæqualiter laciniatam erumpens; disco pallide brunneo, margine serrulato v. denticulato; ascis clavatis v. clavato-fusoideis $55-60 \approx 10$, 8-sporis; sporidiis linearibus, acutis, 5-6-guttulatis, rectis, $35 \approx 4$; paraphysibus tenuiter filiformibus.

Hab. in ramis emortuis *Clematidis*, Carlisle Britannicæ (CARLYLE). — Ascoma 0,2-0,5 mm. lat.

27. **Coccoomyces Rubi** (Fr.) Karst. M. F. I, p. 258, *Phac. Rubi* Fr. 3078

Syst. Myc. II, p. 578. — Umbonatus, innatus, rotundatus, hemisphærico-applanatus, rugulosus, ater, in lacinias inæquales obtusas rumpens, disco albido; ascis subclavatis; sporidiis linearibus, 6-8-guttulatis.

Hab. epiphyllus in *Ruboidæo*, cæsio, fruticoso in Suecia, Fennia, Britannia, Gallia, Italia, Germania, Belgio. — Gregarius, passim confluens, forma et magnitudine varius, 2-4 mm. latus, vivus nitidus, siccus opacus, primo papilla obtusa centrali umbonatus, sero et rarius rumpens. Junior virens visus. Sec. Kickx Crypt. Fl. I, p. 457: sporidia ovoidea obtusa; ergo ne diversa species, an immatura?

28. **Coccoomyces Dianthi** (Fuck.) Rehm Disc. p. 79, *Phacidium Fuck.* 3079

Symb. p. 262, t. IV, f. 25. — Cupulis sparsis, primo clausis, spadicis, 2 mm. latis, orbicularibus, demum arcte laceratis, laciniis 4-6, erectis, disco convexo, pallide fusco; ascis stipitatis, oblongo-clavatis, 8-sporis, $72 \approx 12$; sporidiis fusiformibus, curvatis, utrinque obtusiusculis, obscure uniseptatis, multiguttulatis, hyalinis, 28

≈ 5 ; spermatis in disco ascophoro natis, filiformibus, curvatis, continuis, $24 \approx 2$.

Hab. in caulibus foliisque siccis Dianthi Carthusianorum pr. Budenheim et Altensand Rhenogoviæ.

29. **Coccomyces insignis** Karst. Symb. myc. XXIV, p. 16. — Ascomatibus sparsis, superficialibus, oblongatis v. ellipsoideis, primitus clausis, tumidis, levibus, atris, dein rima longitudinali flexuosa dehiscentibus, disco pallido vix 1 mm. lato; ascis cylindræo-clavatis, apice attenuatis, $215-240 \approx 21$; sporidiis conglobatis, filiformibus, guttulatis, $180 \approx 2-3$, dilutissime flavescentibus; paraphysibus numerosis, filiformibus, dichotome ramosis, discretis, $1-2 \mu$. cr., hyalinis.

Hab. in foliis putridis Caricis paucifloræ in regione mustialensi Salois Fenniæ. — Ad *Lophodermium* nonnihil vergit.

30. **Coccomyces Maydis** (Rehm) Sacc. *Phacidium Maydis* Rehm 308
Ascom. Lojk. n. 67. — Gregarius, hemisphæricus, epidermidè denigrata pustulatimque elevata immersus, dein in lacinias 4-6 triangulares dilaceratus et discum pallidum, orbicularem, planum aperiens, contextu parenchymatico viridi-fusco, c. 0,8-1 mm. diam.; ascis clavatis, 8-sporis, $60 \approx 7-8$; sporidiis filiformibus, ut videtur 8-cellularibus et in cellulas singulas haud difficiliter secedentibus, hyalinis, parallele contortis, $30-36 \approx 1,5$; paraphysibus filiformibus, 2μ . cr.

Hab. ad culmum putridum Zeæ Maydis, Kaposvár Somogy Hungariæ (LOJKA).

31. **Coccomyces Musæ** (Lév.) Sacc. *Phacidium Musæ* Lév. Ann. Sc. 308
nat. 1846, V, p. 303. — Ascomatibus sparsis, polygonis, 4-5-dentatis, macula parva insidentibus, disco convexo, nigricante; ascis clavatis, octosporis; sporidiis linearibus, ascum subæquantibus.

Hab. ad folia Musarum in America æquinoctiali (BOMPLAND). — Ascoma 1-2 mm. lat.

RHYTISMA Fries S. M. II, p. 569 (1822) [Etym. *rhytis* ruga] *Placuntium* Ehrenb. Cham. n. 32 ex p. — Ascomata matrice vage atratâ subcrustaceâ innata, simplicia, subdimidiata, primo clausa, dein in rimas flexuosas v. transversales frustulatim rumpentia, a disco discreta. Hymenium placentæforme, carnosum, subpersistens. Asci erecti, subclavati, octospori, paraphysati. Sporidia filiformia v. elongato-fusoidea, continua, hyalina, rarissime (in subg. *Criëlla*) ellipsoidea, brunnea. — Cl. Cooke in Grev. XIII, p. 100 et 104 genus

hoc inter Dothideaceas enumerat, sed natura tota Discomycetum. Plurimæ species, maxime Schweinitzianæ, omnino imperfecte cognitæ, sunt forte tantum aliorum fungorum incunabula.

I. *Eu-Rhytisma*. Sporidia filiformia.

1. **Rhytisma acerinum** (Pers.) Fr. Syst. myc. II, p. 569, Tul. Carp. 3083
III, p. 116, t. XV, f. 9-12 *Xyloma* Pers. Syn. p. 104, Nees Syst. f. 21, DC. Mem. p. 318, t. III, f. 9, X. *lacrymans* et *gyrans* Wallr. Crypt. n. 2293 et 2294. — Innatum, maculiforme, ut plurimum suborbiculare, atrum, in pagina foliorum superiori protuberans, hymeniis compluribus lirelliformibus, elongatis, flexuosis, rarius ovoideis vel disciformibus, plagis plus minus laxis sterilibus invicem disjunctis, hypothecio crassiusculo, albo, tandem secus hymenia in labia flexuosa dehiscentia, epithecio pallescente vel cinereo, circiter 1,5 cm. lat.; ascis fusoido-clavatis, 120-130 \approx 9-10, 8-sporis; sporidiis conglobatis, filiformibus, utrinque attenuatis, flexuosis, interdum partim circinatis, guttulatis, 65-80 \approx 1,5-3; paraphysibus filiformibus apice flexuoso-curvatis, 1 μ . cr.

Hab. in foliis *Aceris campestris*, *A. platanoidis*, *A. Pseudoplatani*, *A. rubri* in Suecia, Fennia, Italia, Germania, Gallia, Belgio, Britannia, Amer. bor. — Stat. spermog.: *Melasmia acerina* Lév.

2. **Rhytisma punctatum** (Pers.) Fr. S. M. II, p. 569, *Xyloma* Pers. 3084
Obs. 2 p. 101, DC. Mem. t. 3, f. 6. — Innatum, confertum, angulato-subrotundum, rugosum, atro-nitens, frustulatim rumpens, intus fusco-atrum; ascis clavatis 70-80 \approx 9-10 octosporis; sporidiis filiformi-clavulatis, rectis curvulisve, 30-36 \approx 1,5-2, hyalinis, obsolete nucleatis; paraphysibus filiformibus.

Hab. ad folia *Aceris campestris*, *A. Pseudoplatani*, *A. spicati* in Suecia, Gallia, Germania, Italia, Britannia, Belgio, Amer. bor. — Quoad stat. spermog. cfr. Fuck. Symb. p. 264. Ascوماتa minora, viginti circiter in maculam subrotundam disposita, tamen inter se libera nec nisi rarius confluentia, subumbonata, epiphylla.

3. **Rhytisma salicinum** (Pers.) Fr. S. M. II, p. 568, *Xyl. salic.* Pers. 3085
disp. p. 5, t. 2, f. 4, Nees syst. f. 20, *Xyl. leucocreas* Dec. Mem. l. c. p. 319, t. 3, f. 5, *Xyl. amphigenum* Wallr. Crypt. n. 2299. — Innatum, crassum, tuberculosum, subnitens, squamoso-rumpens, disco lutescenti-stramineo, intus album; ascis clavatis, 8-sporis,

120-150 \approx 10-15; sporidiis filiformibus curvulis, hyalinis, guttulatis 60-90 \approx 1,5-3; paraphysibus filiformi-clavulatis.

Hab. ad folia viva Salicis capreæ, cinereæ, auritæ, fuscæ (b. tantum), vitellinæ, lanatæ, reticulatæ, purpureæ, phlomoidis in Suecia, Gallia, Belgio, Germania, Italia, Britannia, Sibiria. — In utraque folii pagina observatur, subtus vero tantum ut macula plana; magnitudine et forma maxime varium, sed superficie haud rugosa et carne crassa alba facile dignoscitur. Stat. spermog. *Melasmia salicina* Lév. — b. **R. umbonatum** Hoppe (*Xyl.*), Wahl. Lapp. p. 324: minus, subrotundum, umbonatum.

4. **Rhytisma australe** Dur. et Mont. Fl. Alg. p. 561. — Epiphyllum, 3086
innatum, parvulum, complanatum, maculam carneo-pallescentem insidens, rugosum, opacum, atrum, rima orbiculata gyrosa dehiscens; disco maculæ concolori; ascis clavatis, initio apice acuminatis, octosporis; sporidiis longissimis lineari-subulatis hylinis.

Hab. in foliis Salicis purpureæ in paludibus, Arrach Algeriæ (DURIEU).

5. **Rhytisma Andromedæ** (Pers.) Fr. Syst. myc. II, p. 567, *Xyloma* 3087
Andromedæ Pers. Syn. Fung. p. 104. — Innatum, vulgo oblongatum, sæpe paginam superiorem foliorum totam occupans, costato-rugosum, nigrum, nitidum, hypothecio crasso, albo, hymenio elongato, flexuoso, concavo, epithecio pallido; ascis cylindraceo-clavatis, apice acutiusculis, deorsum attenuatis, 155-160 \approx 20-25; sporidiis conglobatis, filiformibus, apice supero clava magna subfusoido-oblongata instructis, simplicibus, eguttulatis, luteolis, 50-60 \approx 5-7 long.; paraphysibus filiformibus, flexuosis.

Hab. in foliis Andromedæ polifoliæ in Fennia, Lapponia, Suecia, Germania, Gallia, Helvetia, Britannia, Belgio, Amer. bor. — Ascomata tandem in rimas secus hymenia rumpentia, varie flexuoso-curvata.

6. **Rhytisma lineare** Peck 25 Rep. p. 100, tab. I, f. 24-26. — Lineare, 3088
hinc inde interruptum vel constrictum, atrum; ascis latis, clavatis, octosporis; sporidiis longissimis, obtusis, medio angustatis, muco obvolutis, 50-75 μ . longis.

Hab. in foliis Pini Strobi, Guilderland, Greenbush et Sand-lake Amer. bor. — Folia inquinata mox decidua.

7. **Rhytisma Arbuti** Phillips Grev. VII, pag. 13. — Hypophyllum, 3089
innatum, in maculas rugosas atras irregulares confluentis, dein in rotundas flexuosas fissuras dehiscens; disco brunneo, atro; ascis latis, subclavatis; sporidiis filiformibus.

Hab. in foliis *Arbuti* in California.

8. **Rhytisma circumscissum** Lév. Champ. Mus. n. 286. — Amphige- 3090
num, receptaculo innato, orbiculari, crasso, nigro in orbem dehiscente, labiis laceratis, disco sordide albo macula fusca insidente; ascis clavatis; paraphysibus filiformibus; sporidiis elongatis, uno apice obtusis, altero acuminatis.

Hab. ad folia arboris, Oaxaca Mexici.

9. **Rhytisma Bistortæ** (DC.) Rostr. F. Groenl. p. 542, *Xyloma* DC. Fr. VI, 3091
p. 153. — Ascomatibus innatis, maculiformibus, oblongo-rotundatis, fuscis, in pagina foliorum superiori epidermide diu tectis; disco lirelliformi, epiphyllō; ascis cylindraceo-clavatis, 60-70 \approx 10, octosporis; sporidiis conglobatis filiformibus flexuosis, apice clava fusoidea, luteola instructis, 45-55 \approx 3-4; paraphysibus filiformibus, apice incrassatis, 75-80 μ . longis.

Hab. in foliis *Polygoni vivipari* in Groenlandia et Gallia.

10. **Rhytisma Urticæ** Fr. S. M. II, p. 570, Fuck. Symb. p. 265, Rehm 3092
Disc. p. 86. — Innatum, crusta elongata ambiente cohærens, tuberculis prominulis levibus flexuoso-dehiscentibus; ascis elongatis, utrinque apiculatis, 60-80 \approx 9-10, 8-sporis, sessilibus; sporidiis elongato-filiformibus, hyalinis, rectis, 20-24 \approx 4-5; paraphysibus filiformibus.

Hab. ad caules *Urticæ dioicæ* in Suecia, Germania, Belgio, Britannia, Amer. bor. — Tubercula fere *Rhytismatis acerini*, sed subrotunda, leviora, intus cinerescentia. Maculas sistit aterrimas, confluentes, caulem ambientes, 2-5 cm. longas, tuberculosas, epidermide caulis innata tectas. Fuckel (Symb. App. II, p. 53) describit st. conidicum.

11. **Rhytisma juncicolum** Rehm Ascom. Alp. n. 32. — Stromate ni- 3093
gro, oblongo vel subrotundo, c. 0,5 mm. diam., 0,3 mm. crass., intus albido, rimis dehiscente, sessili; ascis clavatis, apice obtuse subacuminatis, 8-sporis, 90 \approx 10; sporidiis filiformibus, acutatis, multicellularibus, hyalinis, sæpe uno apice (ut in *Lophodermio*) capitulatis, parallelis, 60 \approx 1,5; paraphysibus filiformibus, apice subincrassatis et hamulatis.

Hab. ad culmos siccos *Junci Hostii* prope Kühtai, Cetz al-
pium tyrolens., alt. 2000 m. (Dr. REHM.)

II. *Nothorhytisma* Sacc. Sporidia elongato-fusoidea.

12. **Rhytisma erythrosporum** Berk. et C. in N. Pac. expl. p. 128, 3094
n. 160 et North Am. F. n. 783. — Stromate tenui piceo hic illic in papillas elevato, dentato-dehiscens; ascis amplis; sporidiis fu-

soideis salmonicoloribus magnis rectis vel curvulis utrinque apiculatis, 30-35 μ . long.

Hab. ad pag. utramque foliorum *Quercus virentis* in California. — Magnitudine et colore sporidiorum distincta species.

13. **Rhytisma Curtisii** B. et Rav. North Am. Fungi n. 780. — Cras- 3095
sum, elevatum, nitidum, dentato-apertum; disco aurantio; paraphy-
sibus longis filiformibus sursum curvatis; sporidiis biseriatis clavatis.

Hab. in foliis *Ilicis opacæ* in Carolina inf. et Georgia Amer.
bor. — Sæpe laciniis triangulis dehiscens.

14. **Rhytisma Grewiæ** Kalch. Grev. 1880, p. 32, tab. 137, f. 40. — 3096
Epiphyllum, piceo-atrum, orbiculare, applanatum; cellulis circinan-
tibus convexis, rimoso-dehiscentibus; ascis clavatis; sporidiis sub-
lanceolatis, hyalinis, continuis, binucleatis, 40 \approx 7.

Hab. in folis subvivi *Grewiæ occidentalis* in Africa austr.

15. **Rhytisma maculans** Mont. Cuba p. 357, Syll. Crypt. n. 653. — 3097
Epiphyllum, innatum, minutum, convexum, leve, atro-nitens, macu-
lis folii decolorati gregatim insidens; ascis....; sporidiis fusiformi-
oblongis.

Hab. ad folia coriacea in Cuba (RAMON DE LA SAGRA).

16. **Rhytisma gyrosum** Mont. Cuba p. 357, Syll. Crypt. n. 652. — 3098
Epiphyllum, innatum, orbiculatum, atro-nitens, colliculosum, folio
immutato insidens, tandem centro pustulæ secedente annulare;
ascis clavatis; sporidiis subsenis multiformibus.

Hab. ad paginam superiorem foliorum coriaceorum in Cuba
(RAMON DE LA SAGRA), Guyana (LEPRIEUR).

III. *Criella* Sacc. Sporidia ovoidea, brunnea.

17. **Rhytisma austro-caledonicum** Crié Veg. fong. Nouv. Caled. p. 5. 3099
— Solitarium vel aggregatum, nigrum, zona crassa cinctum; asco-
matibus oblongis, varia magnitudine, primo levibus, dein rugulosis,
confluendo inæqualibus, umbonatis, in quoque stromate solitariis v.
15-20 aggregatis; ascis anguste clavatis, 10-12-sporis; sporidiis
subovoideis, brunneis.

Hab. in foliis *Simploci gracilis*, *Vieillardii*, *Lenor-
mandianæ*, cœrulescentis, arboreæ in silvis montanis Ba-
lade et Wagap Novæ Caledoniæ.

IV. Species, fructificatione ignota, dubiæ.

18. **Rhytisma atramentarium** B. et C. Cub. Fung. n. 717. — Super- 3100

Est Hemisphaeriaca!

ficiale; stromate tenui maculari irregulari sæpe subannulato, pustulis brevibus irregularibus granuliformibus.

Hab. in pag. inf. foliorum in insula Cuba. — Maculas atramentarias imitatur.

19. **Rhytisma rufulum** B. et C. Cub. Fungi n. 722. — Tenue, orbiculare, atro-rufum, rimis minutis radiantibus rugosum. 3101

Hab. in pag. sup. foliorum in ins. Cuba. — Initio *Micropeltim* simulat. Asci ignoti.

20. **Rhytisma monogramme** B. et C. North Am. Fungi n. 782. — In maculam brunneam nigro-marginatam situm; ascomatibus hysteriiformibus solitariis. 3102

Hab. in foliis *Vitis*, æstivalis in Amer. bor. (CURTIS), in foliis vivis *Vitis*, Port Jervis Amer. bor. (PECK).

21. **Rhytisma Vitis** Schw. Syn. Amer. bor. n. 2037. — Innatum, minutum, 2-4 mm. diametro, orbiculatum aut subquadratum, atrum; pagina superiori demum dehiscens plicis flexuosis irregularibus; pagina inferiori subcinerascens, aut cum folio pruinose; æquabile sed tamen punctulatum. 3103

Hab. in foliis putridis (nec in vigentibus observatum) *Vitis* æstivalis, Carolina ac Pennsylvania Amer. bor.

22. **Rhytisma laciniatum** Fr. S. M. II, p. 566. — Erumpens, confluens, fuligineo-atrum, linea longitudinali flexuosa transversim laciniata dehiscens. 3104

Hab. ad ramos arborum in Europa. — Longitudinaliter erumpens, prominens, elongatum v. angulatum, opacum, subconfluens, 2 mm. longum, primo clausum, intus superne mollius albidum, basin versus fuligineo-nigricans, ex habitu *Dothidea* sed rumpens ut *Rhytisma*.

23. **Rhytisma adglutinatum** Schw. Syn. Amer. bor. n. 2046. — Irregulariter effusum, nigrofuscum, induratum, rimosum, plicis transversis rugosis, et arctissime ramis adhærens, crassiusculam membranam, coriaceo-viscosam exhibens, marginibus siccitate solutis involutis, ceterum innatum et a ligno non separabile, intus albidum. 3105

Hab. in ramis *Salicum* variarum e. g. *S. lucidæ*, marginatæ etc. in ripis crescentium, sæpe plures connectens, et inter se conglutians in Amer. bor.

24. **Rhytisma seriale** Schw. Syn. Amer. bor. n. 2041. — Seriatim confluens, liaeolis atronitentibus ex numerosis aggregatis ascomatibus, varie formatis et flexuosis, rimis demum dehiscentibus; ascomatibus minutis. 3106

- Hab.* in vetusto ligno Caryæ, Bethlehem Amer. bor.
25. **Rhytisma concentricum** B. et C. Cub. Fung. n. 719. — Stromate 3107
suborbiculari atramentario tenero, pustulis concentrice dispositis
rugoso.
Hab. in corticibus in silvis Cubæ. — Stromata 2-4 mm. lat.
26. **Rhytisma decolorans** Fr. S. M. II, p. 567, *Xyl. Andromedæ* 3108
ligustrinæ Schwein Carol. n. 265. — Innatum, subrotundum, ru-
gosum, in ambitu effiguratum, macula decolorata cinctum.
Hab. in foliis viridibus *Andromedæ ligustrinæ* in Carolina
et Gainesville Floridæ. — A *R. Andromedæ* differt tuberculis te-
nuioribus ambitu subpolyhedro macula decolorata lutescente (brun-
nea) subrotundata cincto. In pagina inferiori haud prominet.
27. **Rhytisma Vaccinii** Fr. S. M. II, p. 567, *Xyl. Androm. ligustr.* 3109
β. Vaccin. Schwein l. c. — Innatum, hypophyllum, subrotundum,
bullatum leviusculum, intus album.
Hab. in foliis *Vaccinii frondosi* in Carolina Amer. bor.
— Hypophyllum, sed superne adest macula picea; a priori quoque
differt macula decolorata cingente nulla, ambitu æquali, tubercu-
lis minoribus, crassioribus, haud costatis, sed punctulatis.
28. **Rhytisma Rhododendri** Fr. S. M. III, p. 567. — Innatum, oblon- 3110
gum, subrugosum, nitidum, intus nigrum.
Hab. in pagina superiore foliorum emortuorum *Rhododendri*
Kamtschatka (WORMSKJOLD). — Maculæ piceæ, oblongæ, 4-6 mm.
longæ, 3-4 mm. latæ, crassiusculæ.
29. **Rhatysma Sassafras** Schw. Syn. Amer. bor. n. 2036. — Innatum, 3111
minus, epiphyllum, orbiculatum, 2 mm. lat., pagina inferiori glau-
co-subvelatum, æquabile, in superiori nigro-nitens, flexuoso-plica-
tum, plicis demum rimose hiantibus.
Hab. in foliis *Sassafras* in Carolina. — Affine *R. decolo-*
ranti.
30. **Rhatysma Magnoliæ** Schw. Syn. Amer. bor. n. 2039. — Paginae 3112
superiori folii insidens, maculis subeffiguratis, 6-7 mm. lat. nigro-
fuscis, ambitu orbiculato minus obscuro, demum frustulatim dehi-
scens, cortice tenuissimo.
Hab. in foliis dejectis adhuc viridibus *Magnoliæ glaucæ*
prope Philadelphia Amer. bor. — Folium in ambitu plerumque
exaridum; pagina aversa glaucescit fungus.
31. **Rhytisma Juglandis** Schw. Syn. Amer. bor. n. 2038. — Minutum, 3113
punctiforme, quasi placentulam orbiculatam referens, applanatam,
in aversa pagina folii nigram, plicis radiantibus flexuosis, demum

dehiscentibus, multi-aggregatis plerumque, sed non inter se confluentibus.

Hab. in foliis emortuis equidem corruptissimis Juglandis tomentosæ et albæ, Bethlehem Amer. bor.

32. **Rhytisma Aceris-eriocarpæ** Schw. Syn. Amer. bor. n. 2032. — 3114
Innatum, magnum, atro-nitens, orbiculato-lobatum, luteo-marginatum, demum in plicis ramoso-undulatis radiantibus dehiscens.

Hab. in juniorum arborum foliis *Aceris eriocarpæ* in hortis Philadelphia Amer. bor. — Vix mera varietas *R. acerini*.

33. **Rhytisma fuscum** Fr. Linnæa 1830, V, p. 551. — Fuscum, innatum, difforme, maculare, rugosum 4 mm. lat. 3115

Hab. in folio Sapindaceæ in India orient. (RUDOLPHI). — Ascomata juniora *Rh. acerini* similia, sed species colore insolito distinguenda.

34. **Rhytisma Prini** Schwein Carol. n. 268, Fr. S. M. II, p. 568. — 3116
Innatum, orbiculatum, utrinque prominulum, corrugatum, infra albo-cinctum, intus album.

Hab. frequens in foliis *Prini verticillati* in Carolina Americæ bor. — Dignoscitur tumoribus utrinque prominulis; ceterum 15 mm. fere latis, 6 mm. crassis, subtus in ambitu linea angusta alba sericea cinctis.

35. **Rhytisma ilicinolum** Schwein. Carol. n. 269, Fr. S. M. II, p. 568. 3117
— Innatum, effiguratum, crassum, atro-nitens, supra corrugatum, infra leve, albo-cinctum.

Hab. frequens in foliis vigentibus *Ilicis prinoidis* in Carolina (SCHW.) et Santee Canal (RAVENEL) Amer. bor. — Irregulare, 12 mm. latum et longum, ascomatibus minime separatis.

36. **Rhytisma velatum** (Schw.) Fr. S. M. II, p. 568, *Xyloma velatum* 3118
Schwein. Carol. n. 270. — Innatum, orbiculatum, folium in ambitu decolorans, fusco-nigrum, in frustulis stellatis rumpens, disco ochraceo.

Hab. in foliis vigentibus *Ilicis prinoidis* in Carolina Amer. bor. — Maculæ in superiore pagina nudæ, subtus disco prominenti velo cinereo tectæ, quo deciduo dirumpitur in frustula stellata et deoperitur nucleus ochraceus, cereus, subfuscus.

37. **Rhytisma Bauhiniae** F. Nees ab Esenbeck in Reliqu. Hank. vol. 1, 3119
pag. 1. — Sparsum, orbiculare, atrum, lucidum, disco depresso demum in lacinias tres vel quatuor subregulares dehiscente.

Hab. ad folia binata *Bauhiniae* cuidam speciei verosimiliter adscribenda, viva infestans, in Amer. tropica. — Ascomata pro-

tuberantia et per totam folii substantiam coriaceam penetrantia in utraque folii pagina in conspectum veniunt, orbicularia, in pagina superiore folii atra, nitida, planiuscula, margine parum elevato. In centro ascomatis umbo minutus prominet, qui in paucis in laciniis tres vel quatuor subregulares et conniventes rumpitur. Discus vix hiat et substantia interna e nigro fuscescit. Dehiscencia pro genere isto satis regularis, transitum ad *Phacidia* monstrat.

38. **Rhytisma tostum** B. et C. N. A. Fungi n. 781, Rav. F. Am. n. 177. 3124

— Tenue in macula lutea situm, gyrosum hic illic tantum fertile; ascomatibus secedentibus.

Hab. in foliis *Quercus lancifoliæ* etc. in Alabama, Darien, Gainesville in Florida Amer. bor.

39. **Rhytisma Ulmi** Fr. Elench. II, p. 128. — Minutum, difforme, 3124
nitidum, costis elevatis gyrosum demumque labiatim dehiscens.

Hab. ad *Ulmorum* folia in America septentrionali (MÜHLENBERG). — Minimum fere in toto genere, puncto haud multo majus, at optime distinctum, et cum characterem genericum in angusta areola colligat, peculiari modo costis elevatis contortis et implexis gyrosum. Gregarium, atro-nitens, intus concolor.

40. **Rhytisma Smilacis** (Schw.) Fr. S. M. II, p. 570, *Xylom.* Schwein. 3125
Carol. n. 259. — Innatum, effusum, confluens, ascomatibus minutis numerosis orbiculatis, medio quasi tuberculatis.

Hab. ad *Smilacem laurifoliam* et *rotundifoliam* in Carolina. — Sec. Fr. in Elench. II, p. 129, potius dothideaceum, ad *D.* (*Asteroma?*) *Epilobii* accedens. Ad longitudinem 40-50 cm. stipes emortuos ambit, maculis rugosis, inæqualibus, atris; hinc inde cinerescit et occurrit etiam ascomatibus sparsis, demum, sed rarius, apertis.

41. **Rhytisma confluens** (Schw.) Fr. S. M. II, p. 570, *Xyloma* Schw. 3125
Carol. n. 260. — Innatum, minutum, confluens, truncato-applanatum, atro-nitens, in ambitu fibrillis immersis radians.

Hab. ad insignem longitudinem et latitudinem infestans caules *Eupatoriorum* adhuc semivivorum in Amer. bor., et *Eupatori cannabini* in Rhenogovia. — Asci, teste Fuck., ignoti: præcedentibus affine, sed filamentis tenuissimis sub epidermide repentibus diversum.

42. **Rhytisma elevatum** Schw. Syn. Amer. bor. n. 2044. — Minus, 3124
confluens, multo magis elevatum quam præcedens, atro-nitens, irregulariter demum ruptum, colore atro; copia magna quasi aggregatum, in maculas indeterminatim effusas.

Hab. in caulibus, forte *Urticæ*, Bethlehem Amer. bor.

43. **Rhytisma Empetri** White Ann. N. H. n. 1630 (vix Fr.). — Cau- 3125
licolum, ambiens, atrum, lucidum, secundum longitudinem rugosum;
ascis elongatis (immaturis).

Hab. in ramulis *Empetri* nigris, quos omnino obducit, Ran-
noch Britannicæ (BUCHANAN WHITE). — «An forma caulicola *Du-
plicariæ Empetri?*»

44. **Rhytisma hysteroioides** Fr. S. M. II, p. 571. — Gregarium, elon- 3126
gatum, costa longitudinali demum rimose dehiscente insignitum,
demum secedens.

Hab. in caulibus exaridis *Cacaliæ* hastatæ in Kamtschatka
(WORMSK.). — Gregarium, parallelum, magnitudine et forma varium
in eodem caule, ellipticum, oblongum, lineare, passim longitudina-
liter confluentem, rima flexuosa irregulari dehiscens, labiis demum
diffracto-secedentibus, disco fuligineo-nigro.

45. **Rhytisma micraspis** B. et C. Cub. Fungi n. 720. — Stromate 3127
orbiculari tenui convexulo atro ruguloso, apice rimis brevibus aperto.

Hab. in foliis *Rubiaceæ* cujusdam in insula Cuba. — Stro-
mata 2 mm. lat. *Est Mycothyriaceæ!*

46. **Rhytisma ilicis-canadensis** Schw. Syn. Am. bor. n. 2026. — 3128
Hypophyllum, *Rh. ilicincolo* minus angulato-orbiculatum, valde
elevatum, atrum sed absque nitore et superficie punctata, centro
sæpius impressum, folio subinnatum, margine pallido cinctum, in-
terdum ambitu lobatum 2-5 mm. altum latumque.

Hab. in foliis *Nemopanthes canadensis* in M. Pocono,
Canada (POE) Buffalo (CLINTON) Amer. bor.

47. **Rhytisma nitidum** Lév. Champ. Mus. n. 285. — Epiphyllum; stro- 3129
mate 2-10 mm. lat., innato deplanato suborbiculari effigurato cor-
rugato atronitente, squamoso-erumpente, intus aterrimo.

Hab. ad folia *Myricæ* in Abyssinia.

48. **Rhytisma durissimum** Cooke Grev. V, p. 16. — Crassum, 6-12 3130
mm. diam., suborbiculare vel irregulare, durissimum, elevatum,
rugulosum, nitidum, atrum, intus albidum; macula contrapositione
atra; ascis sporidiisque..... non visis.

Hab. in foliis coriaceis in India (HOBSON).

49. **Rhytisma conoideum** Cooke Grev. V, p. 16. — Orbiculare, 2-5 3131
mm. diam., demum elevatum, obtuse conicum, atrum, nitidum, *R.*
Asteris simillimum; ascis sporidiisque.....

Hab. in foliis in India (HOBSON).

50. **Rhytisma piceum** Berk. Dec. n. 475. — Orbiculare, 12-15 mm. 3132

latum sublobatum, opacum, piceum, centro depressum, rugosum dein leniter turgescens; margine levi; ascis.....

Hab. in foliis vivis *Pteridis*, Tambur Vall, Nepal (HOOKER).

51. **Rhytisma giganteum** (Rebent.) Fr. S. M. II, p. 566, *Xyloma* Reb. 313
Neom. p. 342, t. II, f. 8. — Strato pseudostromatico orbiculari plano crasso subrugoso fuscescente, dein deplanato laxe adnato, supra ascomatibus labiato- v. reticulato-dehiscentibus discumque albidum monstrantibus inscripto.

Hab. ad folia *Brassicæ oleraceæ capitatae* agri Neomarch. (REBENTISCH). — Ultra 2 cm. lat., 1 mm. cr.

52. **Rhytisma Cacti** Schw. Syn. Amer. bor. n. 2040. — Innato-sub- 313
tectum, demum erumpens, atro-nitens, varium, difforme, satis elevatum, superficie irregulariter flexuoso-plicata, plicis dehiscentibus; pluribus aggregatis confluentibus.

Hab. in foliis plerumque corruptis *Cacti Opuntiae* passim, Salem Amer. bor.

53. **Rhytisma Silphii** Schw. Syn. Amer. bor. n. 2045. — Innatum, ef- 313
ficiens maculas minores ellipticas aut ovatas, utrinque acuminatas, etiam interdum orbiculares, atro-nitentes, conflatas ex ascomatibus effiguratim confluentibus, in ambitu simplicibus; superficie æquali, primum striata, demum tuberculosa, hinc inde rimose dehiscente.

Hab. in caulibus *Silphii* culti in Horto Nazareth Amer. bor.

54. **Rhytisma astericolum** Sacc. *R. Asteris* Schw. Syn. Amer. bor. 313
n. 2033, nec Carol. n. 271. — Innatum, exacte orbiculatum, margine latiusculo exalbescente, ambitu lobato, amphigenum, atrum sed expers nitoris, tenuiusculum, punctulatum, 2 mm. diam., primum velo tenuissimo cinereo tinctum demum evanescente.

Hab. in foliis variorum *Asterum*, Carolina et Pennsylvania. — Species quam distincta. Dehiscens non obvia. In planta ubi occurrit plerumque, frequenter infestat folia.

55. **Rhytisma bifrons** Schw. Syn. Amer. bor. n. 2035. — Innatum, 313
amphigenum, orbiculatum, gregarium aut subconfluens, convexum in ambabus paginis et satis crassum, margine in folio exalbescente, sursum indutum cortice aut velo crassiore fusco-griseo exteriori, demum frustulis soluto, cortice interiori atro, intus carbonaceum, 6 mm. diametro; interdum perforatum invenitur, an casu; ceterum inapertum.

Hab. in folio *Solidaginis sempervirentis*, New York Amer. bor. (D. TORREY).

56. **Rhytisma Solidaginis** Schwein. Syn. Amer. bor. n. 2034. — Inna- 3138
tum, aterrimum, absque ullo velo aut nitore, clausum orbiculatum
vel ovatum, margine (in folio) luteo, in superiori pagina conve-
xum, in inferiori concavum, 2-15 mm. diam.
Hab. in foliis vigentibus *Solidaginis lanceolatae*, *lepto-*
cephalæ, *cæsiæ* et *Asteris gracilis*, Bethlehem Pennsylva-
niæ, Louisiana, New York et New Jersey. — Sæpe plura ascomata
confluunt.
57. **Rhytisma Asteris** Schwein. Carol. n. 271 sub *Xylom.* Fr. S. M. 3139
II, p. 571. — Innatum, oblongum, tenue, subeffiguratum, rugosum
opacum in ambitu decolorans.
Hab. in foliis *Asteris* in Carolina Amer. bor.
58. **Rhytisma Pedicularis** (DC.) Rehm Disc. p. 87, *Xyloma* DC. Fl. 3140
Fr. V, p. 153. — Maculis atris, rotundatis plerumque confluenti-
bus, vix prominulis, superficie leniter granulata.
Hab. in foliis siccis *Pedicularis incarnatæ* et *Bartsisæ*
alpinæ ad M. Cenisio.
59. **Rhytisma nervale** (A. et S.) Rehm Disc. p. 87, *Xyloma* A. et 3141
S. Lus. pag. 64, t. 7, f. 7, *Sclerotium nervale* Fr. Syst. Myc. II,
p. 260. — Nervisequum, semiteres, lineariter elongatum, durum
subrugulosum, nigrum, intus album, 2-4 cm. longum, 2 mm. lat.,
hypophyllum.
Hab. in foliis *Alni* et *Betulæ* in Lusatia. — « Vix, præun-
te Rehm, *Rhytisma* ».
60. **Rhytisma Cotini** Ces. in Kl. H. M. n. 1953, Rehm Disc. p. 87. — 3142
Habitus *Apiosporii* cujusdam, fructificatione vero omnino diversa,
immo dubia.
Hab. in foliis *Rhois Cotini* pr. Brescia Ital. bor.
61. **Rhytisma Montiniæ** Fries Obs. I, p. 197, sub *Xyl.* — Habitus 3143
Rhytismatis salicini, sed intus fuscescens; ruptum non visum.
Hab. in foliis *Montiniæ* in Amer. bor.
62. **Rhytisma Liriodendri** Wallr. n. 2292 sub *Xylom.*, *Ectostroma* 3144
Fr. Syst. Myc. II, p. 602. — Ascomatibus innatis epiphyllis sub-
rotundis umbonatis gregariis atris nitidis, intus concoloribus, in
aversa folii parte maculas nigro-fuscas relinquentibus.
Hab. ad folia *Liriodendri Tulipiferæ* languida horto-
rum in Germania, Italia.
63. **Rhytisma Punctum** Chev. Par. pag. 451 (*Xyloma*). — Amphige- 3145
num, atrum, subleve, punctiforme, intus fuscum.

Hab. in foliis *Convallariæ Polygonati* in Gallia. — Videtur *Phacidium*? clausum.

64. **Rhytisma Lagerstrœmia** Rabenh. Hedw. 1878, p. 31 (nomen). — 3143
In pag. sup. foliorum *Lagerstrœmiæ* in India centrali (S. KURZ).

DUPLICARIA Fuckel. Symb. p. 265, t. IV, f. 22 (1869) [Etym. *duplex*, ob sporidia bi-clavulata]. — Ascomata scutiformia, carbonacea, astoma, demum irregulariter lacerata. Asci ampli 8-spori. Paraphyses longissimæ, filiformes. Sporidia farcta, elongata, medio anguste contracta, quasi e clavulis binis pedicellatis ad stipites connatis formata, hyalina, multiguttulata, continua. — Sec. Rhem genus a *Rhytismate* non separandum.

1. **Duplicaria Empetri** (Fr.) Fuck. Symb. p. 265, t. IV, f. 22, *Xylo-* 3144
ma Fries Obs. 2, p. 363, *Rhyt. Empetri* Fr. Elench. II, p. 127. — Minuta, subrotunda, tenuis 0,5-1 mm. lat., nitens, atra, demum costis elevatis rimose rupta; ascis amplis, sessilibus, antice acuminatis, 8-sporis, 134-150 \approx 20-25; sporidiis farctis, 58 \approx 6, hyalinis.

Hab. in pag. sup. foliorum marcescentium *Empetri nigri* in Suecia, Lapponia, Fennia. — Est quasi macrior status *Rhytismatis Andromedæ*, sine dubio tamen distinctum. In pagina superiore folii secus nervum observantur maculæ subgregariæ, rotundatæ aut oblongæ, vix 2 mm. excedentes, admodum tenues, primo leves, dein vero costatæ demumque pro generis more costæ rimose dehiscunt.

Sect. 6. **Dictyosporæ** Sacc.

DOTHIOIRA Fr. Summa p. 419 (1849) em. Fuck. Symb. p. 274, nec Berk. (Etym. *dothien* tumor), *Dothidea* et *Cenangii* spec. Auct. — Ascomata innato-erumpentia, demum emergentia, majuscula, applanata, subirregularia, diu clausa, tandem rimoso-dehiscencia, subcarbonacea, atra, intus pallidiora. Asci elongati, octospori, paraphysati. Sporidia ovato-oblonga, pluriseptato-muriformia, hyalino-flavida vel fuscilla. — Recte cl. Rehm inter *Phacidieas* enumerat, potius quam inter *Dermateas*. — *Doth. levigata* et *D. tuberculosa* Fr. Summa p. 419 (sporidiis globosis) mihi ignotæ.

1. *Eu-Dothiora*. Sporidia muriformia.

1. **Dothiora sphæroides** (Pers.) Fr. Summa pag. 419, Fuck. Symb. 3145
p. 274, t. IV, f. 51, *Sclerot. sphæroides* Pers. syn. p. 125, *Dothidea* Fries Obs. II, p. 348. — Gregaria, subfasciculata, erum-

pens, difformi-angulata, planiuscula, nigra, intus albida; ascis oblongo-clavatis, 100-130 \approx 18-20, octosporis; sporidiis elongato-clavatis, obtusulis medio leviter constrictis, inæqualiter didymis, demum 5-septatis muriformibusque 18-21 \approx 3, ex hyalino flavidis; paraphysibus nullis.

Hab. ad corticem Populi tremulæ in Suecia, Arduennis, Belgio et Germania. — Subinde obsolete rumpens, inde summa affinitas cum *Rhytismate* et *Phacidio* patet. Forma valde inconstans, nunc simplex *sclerotioidea*, nunc confluens, cellulis pluribus obsoletis, intus alba. Stat. pycnid. est *Sphæronæma Fuckelianum* Sacc. *Sphæria subsecrata* Sowerb. t. 373, f. 3, ambigit inter hanc et *D. mutilam*.

2. **Dothiora Rhamni** Fuck. Symb. p. 276. — Cupulis plerumque in seriebus longitudinalibus erumpentibus, primo orbicularibus elongatisve, applanatis, demum umbilicatis, lato-marginatis, obscure apertis, margine rugulosis, atris, disco concolori, nucleo sordide albo, continuo; ascis cylindraceutis, sessilibus, plerumque curvatis, 8-sporis, 112 \approx 12; sporidiis oblique monostichis, oblongis, utrinque attenuatis, medio valde constrictis, inde æqualiter didymis, 3-septatis septisque 1-2-longitudinalibus, pallide fuscis, 15 \approx 7; macrostylosporibus, quæ quandoque adsunt, lato-oblongis, utrinque valde attenuatis, sed obtusis, 4-5-septatis muriformibusque, fuscis, 20 \approx 9; paraphysibus simplicibus, filiformibus, multiguttulatis.

Hab. in ramulis Rhamni Frangulæ in silva Æstrich Rhénogoviæ. — Stat. pycn. *Sphæronæma Rhamni* Sacc.

3. **Dothiora Loniceræ** Fuck. Symb. p. 275, t. IV, f. 29. — Cupulis sparsis, innatis, demum erumpentibus, 1-2 mm. longis, oblongis rotundatisve, planis, margine subrepando, aterrimis, semper clausis; disco infra operculo nigro, sordido, subcoriaceo, continuo, asci-gero; ascis amplis, basin versus attenuatis, 8-sporis, 112 \approx 18; sporidiis inordinatis, irregulariter oblongis, utrinque obtusis, 6-8-septatis muriformibusque, ad septa constrictis, hyalinis, 30-36 \approx 8-10.

Hab. in ramis siccis Loniceræ alpigenæ in Jura Helvetiæ (MORTHIER). — Quo spectet *Tympanis Loniceræ* Fr. et Mont. in Ann. Sc. Nat. 1836, p. 283, t. XIII, f. 4 (in ramis Lon. Periclymeni in Vogesis) nescio. Affinis dicitur *Cenang. viticolo*, a quo differret minutie et forma cylindraceuta.

4. **Dothiora elegans** (B. et C.) *Phacidium elegans* B. et C. North Am. Fungi n. 777. — Punctiforme, radiato-apertum nigrum; sporidiis clavatis, fenestratis, 25 μ . long.

Hab. ad bracteas amentorum Pinuum in Carol. inf. Amer. bor. — Per duos v. tres lobos dehiscens. Sporidia septis pluribus transversis v. longitud. divisa.

5. **Dothiora platyasca** (Peck) Sacc. *Cenangium platyascum* Peck 315
Bot. Gaz. 1879, p. 231. — Ascomatibus parvis aggregatis, primo margine albo, dein planis et nigro-marginatis; ascis numerosis, ovatis vel subsphæroideis; sporidiis oblongo-ovatis, muriformibus, coloratis, 20 \approx 12.

Hab. in corticibus, Alabama Amer. bor.

6. **Dothiora asterinospora** Ell. et Ev. Bull. Torr. Cl. 1883, p. 76 (*Cen.*) 315
— Erumpens, acervulos 2-3 mm. crass. ex ascomatibus 6-10 coalitis compositos efformans, ascomatibus stipatis, mutua pressione irregulariter angulatis, disco convexo v. plano, atro, levi immarginato, 0,5-1 mm. diam., intus sordide albescente; ascis subglobosis 35 μ . diam.; paraphysibus non visis; sporidiis oblongo-ellipsoideis v. subpiriformibus, subhyalinis, granulosis, ad medium constrictis, dein 3-septatis, submuriformibus, 15-20 \approx 6-8.

Hab. in trunculis vivis et in ramis Vaccinii corymbosi, Newfield Amer. bor.

7. **Dothiora Sorbi** (Wahl.) Fuck. Symb. p. 275, *Hysterium* Wahl. 315
Lapp. p. 523, *Dothidea* Fr. Syst. Myc. II, p. 552, *Dothiora* Fr. Summa p. 418. — Ascomatibus insculptis erumpentibus globulosis v. ellipticis levibus atris, dein epidermidem 3-4-laciniatam infarciensibus plano-convexiusculis, nigricantibus, carbonaceis, demum irregulariter v. rimose dehiscentibus, 1-2 mm. lat.; ascis elongatis, 8-sporis, 80-100 \approx 18-20; sporidiis distichis, oblongis, medio constrictis, parte superiore crassiore, 3-7-septatis, hyalinis, 26-35 \approx 6-8, subinde septulo longitud. accedente.

Hab. ad ramos Sorbi Ariæ et aucupariæ, Piri americanæ in Germania, Suecia, Arduennis, Amer. bor. — St. pycnidicus (*Micropera Fuckelii* Sacc.). Cfr. Fuck. l. c. Peritheciis spuris, sparsis subcæspitosisve, sub epidermide flavo-facta nidulantibus, globosis, atris, media magnitudine, in rostrum conicum obtusum, prominulum, aterrimum, perithecium æquans attenuatis; stylosporibus anguste fusiformibus, curvatis, continuis, 14-18 \approx 2-3, guttulatis, hyalinis. In ramis Sorbi Ariæ.

II. *Metadothis* Sacc. Sporidia transverse septata, nec muriformia.

8. **Dothiora mutila** (Fr.) Fuck. Symb. p. 275, t. IV, f. 53, *Sphæria* 315
Fr. Syst. Myc. II, p. 424, saltem ex p. — Cupulis in cæspitibus

dense aggregatis, 5-6-nis, sparsisve, erumpentibus, in cortice interiori natis, demum liberis, cæspitibus orbicularibus, 0,5-1 mm. latis, cupulis singulis, clausis, atris, globosis v. pressione angulatis subtriangularibusque, vertice convexis, nucleo continuo, sordido-albo; ascis stipitatis, cylindraceutis, 8-sporis, $128 \approx 8-12$; paraphysibus filiformibus; sporidiis oblique monostichis, oblongis, utrinque perparum attenuatis obtusisque, rectis, 3-septatis, ad septa valde constrictis, flavis, $18-20 \approx 5-6$.

Hab. in ramis putridis corticatis Populi italicæ pr. Æstrich Rhenogoviæ et in Suecia. — St. pycnid. *Cornularia microscopica* (Fr.) Sacc.

9. **Dothiora Xylostei** Fuck. Symb. App. I, p. 44. — Cupulis sparsis, 3156 per corticis rimas erumpentibus, $\frac{1}{2}$ mm. long., orbicularibus seu oblongis, planis, margine quandoque prominenti, seu irregularibus, atris, intus sordidis, corneis; ascis oblongis, sessilibus, 8-sporis, $96 \approx 10$; sporidiis oblique monostichis, oblongo-fusiformibus, inæqualiter didymis, totis 4-septatis, sub medio constrictis, parte parum crassiori uniseptata, parte angustiori biseptata, rectis, hyalinis, $20 \approx 4-5$.

Hab. truncis corticatis Loniceræ Xylostei prope Æstrich Rhenogoviæ. — Quoad pycnid. et spermog. cfr. Fuck. l. c.

10. **Dothiora elliptica** Fuck. Symb. App. II, p. 55. — Patellulis in- 3157 natis, parallele dispositis, demum erumpentibus et epidermide lacera circumdatis, ellipticis vel lanceolato-ellipticis (hysteriiformibus), 1 mm. long., disco plano, nigro, nucleo albo, farcto; ascis elongatis, in stipitem attenuatis, 8-sporis, $96 \approx 12$; sporidiis distichis, oblongo-fusiformibus, 3-septatis, inæqualiter didymis, loculo subultimo crassiori, hyalinis, $16 \approx 7$.

Hab. in ramulis siccis Vaccinii uliginosi in Jura Helvetiæ (MORTIER).

III. Species dubia.

1. **Dothiora cellulosa** Wallr. Crypt. n. 4134 (*Dothidea*). — Subro- 3158 tunda, levis, atro-fusca, dein epidermide scissâ cincta, plana, intus globulis ascophoris albidis veluti intercepta.

Hab. ad ramos Rhois typhinæ frigore tactos rarius in Germania.

Fam. 9. Patellarieæ Fr. Summa p, 345, em.

Ascomata superficialia v. erumpenti-superficialia, scutellata v. cupulata, breve marginata, sessilia vel brevissime stipitata, coriaceo-cornea, nigricantia, rarius minus atra, excipulo pachydermatico. Asci 2-4-8-16-spori, paraphysati. Sporidia varia. — Hic ad *Phacidieas*, hinc ad *Dermateas* nutant; situ magis superficiali et consistentia dignoscuntur.

Clavis analytica generum.

Sect. 1. Hyalosporæ. Sporidia ellipsoidea v. oblonga, continua hyalina.

p. 769 - *Patinella*. Ascomata scutellata, margine subintegro.

p. 774
p. 775 - *Actinoscypha*. Ascomata lentiformi-cupulata, subiculo radiato inserta.

Heterosphæria. Ascomata sphæroidea, margine inflexo umbilicata, dein ore denticulato dehiscentia.

p. 776 - *Pseudophacidium*. Ascomata (erumpenti-superficialia) scutellata, dein late laciniato-dehiscentia.

Sect. 2. Didymosporæ. Sporidia oblonga vel ellipsoidea, hyalina vel colorata.

p. 779 - *Karschia*. Ascomata plano-scutellata. Asci octospori. Sporidia fuliginea.

p. 782 - *Ravenelula*. Ascomata plano-scutellata. Asci 16-spori. Sporidia fuliginea.

p. 783 - *Patellea*. Ascomata scutellata, glabra. Asci octospori. Sporidia hyalina.

p. 785 - *Johansonia*. Ascomata patellata, setosa. Asci octospori. Sporidia hyalina.

A. 786 - *Tryblidiopsis*. Ascomata suburceolata, ore mox eximie laciniato dehiscentia. Sporidia hyalina.

Sect. 3. Phragmosporæ. Sporidia oblonga vel fusoidea, 2-pluriseptata, hyalina v. colorata.

A. 786 - *Patellaria*. Ascomata plano-scutellata, subintegra. Sporidia fuliginea.

A. 790 - *Durella*. Ascomata scutellata, subintegra, sicca contorta. Sporidia hyalina.

p. 795 - *Lecanidion*. Ascomata plano-scutellata, subintegra, sicca subimmutata. Sporidia hyalina.

Sect. 4. Dictyosporæ. Sporidia oblonga v. ovoidea, septato-muriformia, subhyalina v. colorata.

p. 802 - *Blitrydium*. Ascomata sphæroideo-depressa, mox laciniatim vel orbiculatim dehiscentia.

Sect. 5. Scolecosporæ. Sporidia filiformia v. bacillaria, continua vel septata, subhyalina.

p. 807 - *Scutularia*. Ascomata subscutellata, margine integro v. demum lacerato dehiscentia.

Sect. 1. **Hyalosporæ** Sacc.

PATINELLA Sacc. Grev. IV, p. 22 (1875) [Etym. *patina*], *Patellariæ* et *Patinellariæ* spec. Auct. — Ascomata scutellata v. applanata, sessilia, subcoriacea, nigricantia v. obscure colorata. Asci elongati v. cylindracei, octospori. Sporidia ellipsoidea v. oblonga, rarissime globosa, continua, hyalina. Paraphyses apice capitatae vel subæquales. — Ab hoc genus [sect. *Patinellaria*] ducendæ sunt, teste Karst. *Mollisia arctata* Karst. (n. 1409) et *Tapesia sanguinea* (Pers.) Fuck. (n. 1528).

I. *Eu-Patinella*. Paraphyses conidium globosum apice exserentes.

1. **Patinella hyalophæa** Sacc. in Grev. l. c., F. Ven. Ser. IV, n. 62, 3159 F. ital. fig. 3. — Cupulis dense gregariis, ceraceo-tenacellis, totis atris, patellaribus, sessilibus superficialibus, margine tenui parum elevato cinctis, ambitu circularibus v. subrepandis, $\frac{1}{2}$ - $\frac{2}{4}$ mm. diam., glabris, disco late aperto, plano; ascis cylindraceis, apice nonnihil attenuatis, truncatis ibique crassius tunicatis, 50-55 \approx 4 $\frac{1}{2}$, p. s. 30-35 μ . long., 8-sporis; paraphysibus filiformibus, hyalinis apice conidiophoris; conidiis sphaeroideis, 4 μ . diam. mox secedentibus, sæpius 1-guttulatis, fuligineis; sporidiis oblique monostichis, ovoideis, minutissimis, 4 \approx 3, continuis, hyalinis.

Hab. in ligno decorticato putrescente fagineo in silva Can-siglio, Treviso, Ital. bor. — Paraphysibus hyalinis conidia fuliginea gerentibus sporidiisque minutissimis ovoideis hyalinis species prædistincta.

II. *Patinellaria* Karst. Rev. p. 152. Paraphyses conidium apice non exserentes (v. ignotæ).

2. **Patinella flexella** (Ach.) Sacc. *Limboria* Ach. Vet. Ak. Handl. 1815, 3160 p. 258 et 1817, p. 222, *Peziza* Fr. Syst. Myc. II, p. 152, *Xylographa* Fr. Summa pag. 372, *Placographa* Th. Fries. Lich. Scand. p. 637, *Patinellaria* Karst. Rev. pag. 153, *Patellaria* Phill. Disc. p. 362. — Superficialis, oblongata v. varie angulosa, 0,2-0,6 mm. long., margine tenui, elevato incurvove, atra, excipulo distincto, fusco-nigro, 0,2-0,6 mm. lat.; ascis clavatis jodo cœrulescentibus, octosporis; sporidiis ovoideis v. ellipsoideis, continuis, hyalinis, 4-6 \approx 2-3; paraphysibus filiformibus supra clavatis nigricantibus.

Hab. in ligno putri, præcipue pineo, abietino, juniperino in Suecia, Germania, Fennia, Lapponia, Gallia, Italia, Amer. bor.

— *Placogr. tesseratam* (DC.) et *varangricam* Th. Fries, utpote saxicolas, omitto.

3. **Patinella inquinans** (Cooke) Sacc. *Peziza* (Patellea) *inquinans* Cooke 3161
Hedw. 1875, p. 84. — Subgregaria, sessilis, ceraceo-sicca, atra, quandoque in macula dealbata insidens, cupula minuta $\frac{1}{3}$ - $\frac{1}{2}$ mm. lata, patellata, margine leniter elevato; disco concavo; ascis clavato-cylindræis; sporidiis biseriatis, fusiformibus, trinucleatis, hyalinis, $20 \approx 4$; paraphysibus clavatis apicibus brunneis.

Hab. ad ramulos denudatos Piri Mali, New Jersey Amer. bor. (ELLIS).

4. **Patinella tasmanica** (Berk.) Sacc. *Patellaria* Berk. Fl. Tasm. p. 276. 3162
— Exigua, sessilis; cupulis e concavo planis; hymenio e rufo nigro; sporidiis oblongis, curvulis, 10-12 μ . long.

Hab. in ligno emortuo in Tasmania.

5. **Patinella pallida** (Berk.) Sacc. *Patellaria pallida* Berk. Ann. N. 3163
H. n. 1831. — Gregaria, sessilis, pallida, margine obtusiusculo; ascis....; sporidiis biseriatis, oblongis, curvulis, 12-13 μ . longis.

Hab. in cortice levio in Britannia.

6. **Patinella violacea** (B. et Br.) *Patellaria* B. et Br. Fung. of Ceyl. 3164
n. 964. — Sessilis, applanata, margine incurvo crenato, violacea; sporidiis cymbiformibus, 12 μ . longis.

Hab. in ligno putri in insula Ceylon.

7. **Patinella viridi-rufa** (B. et Br.) Sacc. *P. viridi-rufa* B. et Br. 3165
F. of Ceyl. n. 966. — Subhemisphærica, extus rufa striata; hymenio griseo-viridi; sporidiis fusiformibus, brevibus angustis, 10 μ . longis.

Hab. ad truncos in insula Ceylon.

8. **Patinella stictioides** (B. et Br.) Sacc. *Patellaria stictioides* B. et 3166
Br. Fung. of Ceyl. n. 968. — Irregularis, tenuis, expansa, lobata, extus nigra; hymenio luteo-olivaceo; sporidiis minimis.

Hab. ad truncos in insula Ceylon. — *Stictidem* parvam æmulatur.

9. **Patinella olivacea** (Batsch) Sacc. *Patellaria* (Bat.) Phill. Disc. 3167
p. 361, *Peziza* Batsch Elench. p. 127, f. 51, B. et Br. Ann. N. H. n. 1077, t. XV, f. 22, *Rhizina nigro-olivacea* Curr. Linn. Trans. XXIV, p. 494, t. LI, f. 10-12. — Initio subcircularis, atro-olivacea, margine profunde incurvato granulato-plicato, brunneo-virenti, demum effusa, margine angusto lenissime incurvo brunneo; ascis cylindræis, 8-sporis; sporidiis ellipsoideis vel subturbinatis, pallide chlorino-cyaneis, monostichis, 2-nucleatis, 7-10 μ . longis.

- Hab.* in ligno putri salicino in Britannia, in ligno putri, Adirondack et Catskill Mont. Amer. bor. — Ascoma 3-9 mm. lat. Forma, in America bor. occurrens, præbet ascomata nigro-strigosa.
10. **Patinella hirneola** (B. et Br.) Sacc. *Patellaria hirneola* B. et Br. 3168
Fung. of Ceylon n. 965. — Sessilis, applanata, extus velutina; hymenio gilvo; sporidiis ellipticis levibus 10 μ . longis.
Hab. in Polyporo v. Fomite vetusto in insula Ceylon.
11. **Patinella applanata** (B. et C.) Sacc. *Patellaria applanata* B. et C. 3169
C. Fung. of Ceyl. n. 967. — Adpressa expansa, margine incurvo extus rubiginosa, 1-2 mm. lata; hymenio fusco; sporidiis subellipticis binucleatis 10-11 \approx 5-7.
Hab. in ligno putri Peradenya Ceylon et in Corno suecica in Carolina, Pennsylvania et Connecticut Amer. bor.
12. **Patinella abietina** (Cooke) Sacc. *Patellaria abietina* Cooke Grev. 3170
VII, p. 4. — Sparsa, atra; cupulis orbicularibus, applanatis, 0,4-0,6, margine vix elevatis; ascis clavatis; sporidiis fuscoideis, hyalinis, 10 \approx 2; paraphysibus supra brunneis, connatis, gelatina hymenea olivacea.
Hab. in ligno decorticato Abietis Douglasii in California Amer. bor. (HARKNESS).
13. **Patinella Euphorbiæ** (B. et Br.) Sacc. *Peziza* (Patellea) *Euphorbia* 3171
bica B. et Br. Ann. N. H. n. 1829. — Minuta, sessilis, margine prominulo, atro; disco albo; ascis clavatis; sporidiis distichis, globoso-ellipsoideis, 5 μ . long.
Hab. in caule Euphorbiæ amygdaloidis, Batheaston Britannicæ. — Ascoma 0,4 mm. lat.
14. **Patinella gnaphaliana** (C. et E.) Sacc. *Patellaria gnaphaliana* C. 3172
et E. Grev. VI, p. 91. — Sparsa v. subgregaria; cupulis demum convexis, extus margineque atro-brunneis, disco pallide fuligineo; ascis clavatis; sporidiis ovalibus 8 \approx 5; paraphysibus linearibus, furcatis.
Hab. in caulibus Gnaphalii decurrentis, New Jersey Amer. bor. — Ascoma 0,5-1 mm. lat.
15. **Patinella Ulmi** (Cr.) Sacc. *Patellaria Ulmi* Cr. Finist. p. 45. — 3173
Ascomatibus sessilibus, albido-flavis 1-2 mm. diam., primo punctiformibus, dein subhemisphæricis, demum explanatis margineque valde undulatis, disco brunneo-virescente vel flavido; ascis parvis subclavatis, octosporis; sporidiis minutissimis, ovoideis, hyalinis; paraphysibus filiformibus.
Hab. in ligno corticeque putrescentibus Carpini, Finistère Gal-

liæ. — Contextus e cellulis hexagoniis, apicem versus filiformi-elongatis efformatus. Vix hujus generis.

16. **Patinella polytrichina** (Karst.) Sacc. *Patellaria polytrichina* 317

Karst. et Starb. Rev. Myc. 87, p. 160, Symb. myc. XXIII, p. 5. — Ascomatibus subgregariis, sessilibus, planis ut plurimum orbiculatis, submarginatis nigris nitentibus nudis, circiter 0,2 mm. latis; ascis cylindraceo-subclavatis, 45-50 \approx 6, octosporis; sporidiis ellipsoideis v. oblongatis, rectis, continuis, hyalinis, 6-9 \approx 3; paraphysibus vix 1 μ . crassis.

Hab. supra folia perigonialia *Polytrichi communis* putrescentia prope pagum par. Tammela, Heinamaa Fennicæ passim obvia.

17. **Patinella plumbea** (Cr.) Sacc. *Patellaria plumbea* Cr. Finist. p. 45. 317

— Ascomatibus 1-2 mm. diam., griseo-plumbeis, disciformibus, sessilibus; ascis subcylindraceis, octosporis; sporidiis subpiriformibus, hyalinis; paraphysibus filiformibus, furcatis, ramis clavatis, granulosis, coloratis.

Hab. in truncis cæsis *Quercus*, Finistère Gallicæ.

18. **Patinella cœrulescens** (Cr.) Sacc. *Patellaria cœrulescens* Cr. 317

Finist. p. 45. — Ascomatibus 3-4 mm. diam., cœruleo-atris, subhemisphæricis, sessilibus; ascis clavatis, octosporis; sporidiis naviculæformibus, hyalinis; paraphysibus simplicibus.

Hab. in ramulis emortuis *Populi* ad ripas stagni cujusdam Finistère Gallicæ.

19. **Patinella artemisioides** (Roum. et Pat.) Sacc. *Patellaria Roum.* 317

et Pat. in Bomm. et Rouss. Fl. mycol. pag. 136, Pat. Tab. anal. fig. 73. — Ascomatibus regulariter patelliformibus, erumpentibus, superficialibus, margine prominulis, pallide olivaceo-brunneis, disco pallidiori; ascis clavatis; sporidiis distichis, hyalinis, 2-guttatis, 10 \approx 2 (ex icone); paraphysibus filiformibus, ramosis, subinde apice tumidis.

Hab. in caulibus siccis *Artemisiæ vulgaris* Groenendael in Belgio.

20. **Patinella Adamsoni** (Berk.) Sacc. *Peziza (Patellea) Adamsoni* 317

Berk. Austral. Fung. 224. — Orbicularis, plana, marginata, nigerrima; sporidiis breviter et anguste fusiformibus, nec articulatis.

Hab. in ramis *Eucalypti* ad Melbourne Australiae. — *K. li-gnyotæ* similis sed sporidiis diversa.

21. **Patinella viridis** (Cr.) Sacc. *Patellaria viridis* Cr. Finist. p. 45. 317

— Ascomatibus 2 mm. diam., sessilibus, pallide viridibus, crassis;

ascis subclavatis, octosporis; sporidiis subpiriformibus, hyalinis; paraphysibus capillaribus.

Hab. in ligno emortuo Sambuci Finistère Galliæ. — Vix hujus generis.

22. **Patinella? antarctica** Speg. Fung. Patag. p. 55. — Ascomatibus 3180
sparsis, hemisphærico-cupulatis, minutis, 300-350 μ . diam., atris, levissimis, glaberrimis, disco concaviusculo non vel vix pallidiore, carnosulo-subcarbonaceis, contextu disci dense minutissimeque merenchymatico, olivaceo; ascis cylindræis, subtorulosis, apice obtuse rotundatis, postice in stipitem crassum ac breviusculum productis, 65-70 \approx 7-8, octosporis, paraphysatis, muco fuscescente tenacissimo immersis; sporidiis recte vel oblique distichis, ellipticis, 10-11 \approx 5-6,5, utrinque obtusis, hyalinis non v. grosse 1-ocellatis, jodi ope nulla.

Hab. in stercore vetusto Rheæ Darwinii in altiplanitie, Meseta vocata, secus Rio S. Cruz Patagoniæ.

23. **Patinella subcærulescens** (Karst.) Sacc. *Patellaria subcærulescens* Karst. Hedw. 1888, p. 258. — Ascomatibus sessilibus, scutellatis, planis vel convexis immarginatis, siccitate sæpe concavis margineque elevato, atratis, circiter 0,5 mm. lat.; ascis clavatis, obtusissimis, 45-50 \approx 10-14, octosporis; sporidiis tri- vel distichis, oblongatis, rectis vel leniter curvulis, primitus 2-guttulatis, continuis, hyalinis vel chlorino-hyalinis, 10-15 \approx 4; paraphysibus coalitis; epithecio fulvo hypothecio fulvescente vel cærulescente; gelatina hymenio jodo saturate cærulescente.

Hab. supra folia putrescentia herbarum in regionibus borealibus.

24. **Patinella rubro-tingens** (B. et Br.) Sacc. *Patellaria rubro-tingens* B. et Br. in Phill. Disc. p. 367. — Contigua, greges crustiformes, elongatos efformans, subinde solitaria; ascomatibus minutis, circ. 2 mm. diam., hemisphæricis, concavis, atris, rugosis, margine obscure rufo-brunneo tincto, serrato, incurvo; ascis clavatis, octosporis; sporidiis anguste fusiformibus, 3-4-guttulatis, 8-14 \approx 2; paraphysibus filiformibus, validiusculis.

Hab. in trunco Quercus Batheaston Britannicæ (BROOME).

25. **Patinella sanguineo-atra** (Rehm) Sacc. *Patellaria* Rehm Beitr. 3183
Augsburg. n. 52. — Ascomatibus sparsis, minutis, sessilibus, obscure sanguineo-atris, patellulatis, planis, margine tenui cinctis, disco dilutiore sanguineo, primitus subclausis dein apertis; ascis clavatis octosporis stipitatis 70 \approx 9; sporidiis elliptico-clavatis, utrinque obtusis, continuis 1-nucleatis, hyalinis, 15 \approx 5, monostichis; para-

physibus superne di-trichotome divisio, apice circa 3 mm. crassis clavatis, articulatis; hypothecio rubro-fusco, jodi ore non cærulescente.

Hab. ad ramum fagineum decorticatum pr. Augustam Vindelicorum h. e. Augsburg Bavaricæ.

III. *Globuligera* Sacc. Sporidia perfecte globosa.

26. **Patinella mauriatra** (C. et E.) *Peziza mauriatra* C. et E. Grev. 3184
VI, p. 91. — Subgregaria, atra; cupulis demum applanatis, discoideis vel ellipticis, margine elevatis; ascis cylindræis; sporidiis globosis, minutis; paraphysibus filiformibus, hyalinis.

Hab. in ramis decorticatis *Andromedæ*, New Jersey Amer. bor. — Ascoma 0,2-0,3 mm. lat., extus cellulis elongatis, brunneis, piliformibus præditum.

ACTINOSCYPHA Karst. Symb. XXIII, p. 5 (1887) [Etym. *actin* radius et *scyphos* cupula]. — Ascomata e subiculo tenui, ambitu breviter tenuiterque radiato-fibrilloso enata, primitus lentiformia et clausa, mox aperta, cupulata, plana, sessilia, coriacea vel carbonaceo-membranacea, disco carnosoceraceo. Asci tereti-clavati, octospori, paraphysati. Sporidia ellipsoidea, continua, hyalina. — Est *Patinella* subiculo radiato prædita.

1. **Actinoscypha graminis** Karst. Symb. Myc. XXIII, p. 5. — Ascomatibus sparsis v. subgregariis planiusculis, orbicularibus, margine elevato, obtuso, integerrimo, e subiculo orbiculari, tenuissimo, fuligineo enatis, pallescentibus vel rufescenti-pallidis siccis nigrescentibus, disco pallescente sicco rufescente pallido, excipulo tenui subcoriaceo, circiter 0,3 mm. lata; ascis cylindræo-clavatis, apice obtusiusculo 48 ≈ 9 octosporis; sporidiis ellipsoideis continuis hyalinis, 6-8 ≈ 3; paraphysibus filiformibus sursum incrassatis.

Hab. in culmis, foliisque *Molinia* cæruleæ exsiccatis ad lacum Salois Fennicæ. — Forte statum ascophorum *Actinothyrii graminis* sistit, observante Karst., invito Fuck. Symb. App. III, p. 28.

2. **Actinoscypha melaxantha** (Fr. et Hoffm.) Sacc. *Riedera* Fr. et Hoffm. Ic. Anal. p. 98, t. XXIII, f. 2. — Pulposoceracea, sessilis, atro-nitida, convexula, margine velo sulphureo-tomentoso radiante cincta, disco intus incolori; ascis cylindræis majusculis apice subtruncatis, filiformi-paraphysatis; sporidiis monostichis ellipsoideis, 2-guttatis, hyalinis, 16 ≈ 12.

Hab. in ligno putri Fagi in silvis udis in Oberwald Germaniæ. — *Riedera elæochrysa* Fr. Summa p. 358 (ceraceo-gelatino-sa, sessilis, glaberrima, margine prominente aureo, disco plano olivaceo; ascis dissilientibus; sporidiis.....; ex Rossia), quid sit latet. Ex auctore *Orb. chrysocomæ* affinis.

HETEROSPHERIA Greville Scott. II, t. 103 (1824) [Etym. *heteros* diversus et *sphæria*), *Sphæriæ*, *Phacidii*, *Pezizæ* spec. Auct. — Ascomata erumpenti-superficialia, sphæroideo-depressa, margine inflexo profunde umbilicata, et subclausa, dein ore dentato dehiscentia. membranaceo-coriacea, atra, Asci elongati, octospori, paraphysati. Sporidia oblonga, rarius globulosa, continua vel pseudoseptata, hyalina. Pycnidia nota.

1. **Heterosphæria Patella** (Tode.) Grev. Scot. crypt. Flor. t. 103, Sacc. 3187 F. it. f. 136, t. 7, Malbr. et Let. Champ. Norm. p. 21, *Sphæria penetrans* a *Patella* Tod. Fung. Meckl. II, p. 45, f. 121, *Sphæria Patella* Pers. Syn. Fung. p. 76, Fr. Syst. myc. II, p. 511, *Peziza fimbriata* Chaill. sec. Fr. *Pez. leucomela* β . *Umbelliferæ* et *Pez. Ligustici* De C. Flor. Franc. pag. 21, *Phacidium Patella* Fr. Elench. Fung. II, pag. 133 et 134 (f. *campestris*), *Tympanis* Wallr. Flor. crypt. Germ. pag. 425, *Heterosphæria* Fr. Summ. Veg. Scand. p. 365, Tul. Sel. Fung. Carp. III, p. 174, t. 18, fig. 16-22, *Excipula Bonordeni* Hazsl. — Sparsa, erumpens, dein libera, sessilis, ex olivaceo nigra, levis, collapsa urceolato-patellata, primum prorsus clausa, deinde ore denticulato aperta, disco albido, circiter 0,8-1 mm. lat.; ascis elongatis, 60-82 \approx 8-11, apice jodo non cœrulescentibus, 8-sporis; sporidiis distichis, subchlorino-hyalinis, subfusoideo-oblongatis v. elongatis, simplicibus, eguttulatis, rectis vel leniter curvulis, 12-16 \approx 3-5, demum (spurie?) -1 3-septatis; paraphysibus filiformibus, simplicibus, gracilibus.

Hab. in caulibus exsiccatis Dauci, Angelicæ, Pastinacæ sativæ Myrrhidis, Galii, Atriplicis in Suecia, Lapponia, Fennia, Gallia, Germania, Britannia, Italia, Lusitania, Belgio, Hungaria. — Nascitur abeunte æstate in caulibus adhuc semivivis aut recens demortuis, nec nisi vere aut æstate anni subsequentis perficitur. Stat. pycnidicus sistit *Heteropatellæ* speciem: Cfr. Tul. loc. cit. — Var. **alpestris** Fr. Elench. II, p. 133, *Pez. Chailletii* et *P. Scleropyxis* Pers., *Pyrenop. fusco-atra* Hazsl.?: ascomate vertice magis striato, trigono-dentato, margine brunneo;

disco subroseo 1-2 mm. lat. In caulibus *Heraclei*, *Gentianæ*, *Veratri* etc. in Alpibus. — Var. **Lojkæ** Rehm Ascom. n. 15: ascomate brunneo-flavo margine pallidiore, subdenticulato; disco subroseo, 1,5-2 mm. lat.; ascis 50-80 \approx 7-8; sporidiis 9-12 \approx 2,5-3, biguttatis, tandem (spurie?) 1-septatis. In caulibus *Adenostyidis alpinæ* et *albifrontis* in Tyrolis et Austria infer.

2. **Heterosphæria Linariæ** (Rab.) Rehm Disc. p. 203, *Peziza* Rabenh. 3188 H. M. n. 724, *Heteropatella lacera* Fuck. F. rhen. n. 2565 (quoad formam ascoph.), *Peziza corneola* Cooke et Peck, Myc. univ. n. 611. — Cupulis subgregariis, erumpentibus, mox nudis, elevatis, brunneo-nigris, coriaceis vel corneis, primo subsphæricis, opacis, subrugosis, deinde cupulæformibus, 0,5-1 mm. lat., margine inflexo vix denticulato; disco pallido vel fulvo-griseo; ascis clavato-cylindræcis, 60-90 \approx 9-12, octosporis; sporidiis anguste ellipticis, hyalinis, binucleatis, distichis, 9-14 \approx 3-4; paraphysibus filiformibus, septulatis, 2 μ . cr.

Hab. in caulibus exsiccatis *Linariæ vulgaris* et *Ononidis spinosæ* in Germania bor., Franconia et Amer. bor. — Ascomatibus sporidiisque paullo minoribus ab *H. Patella* dignoscitur. *Heteropatella lacera* Fuck. Symb. App. II, pag. 54, f. 31 est status pycnidicus.

3. **Heterosphæria Poæ** Fuck. Symb. pag. 266, *Nævia* Rehm Disc. 3189 p. 148. — Cupulis plano-convexis, punctiformibus, margine elevato, nigro, demum lacerato, disco fuscescente; ascis linearibus, utrinque attenuatis; sporidiis?

Hab. in foliis siccis *Poæ sudeticæ* in silva *Œstrich* Rhénogoviæ. — Sec. Rehm loc. cit.: ascomata 0,2-0,3 mm. lat. disco brunneo-flavo.

4. **Heterosphæria Morthieri** Fuck. Symb. p. 266. — Cupulis gregariis, 3190 primo tectis, demum liberatis, *Pleosporæ herbarum* magnitudine, orbicularibus, planis, demum excavatis, plerumque fibrillis delictulis, repentibus, sæpe confluentibus, fuscis circumdatis; ascis lineari-clavatis, sporidia 6-8, globosa, hyalina includentibus.

Hab. in caulibus siccis adhuc stantibus *Trollii europæi* in Jura Helvetiæ (MORTIER).

PSEUDOPHACIDIUM Karst. Rev. p. 155 (1885) [Etym. *pseudēs* falsus et *Phacidium*]. — Ascomata erumpentia, mox superficialia, ex urceolato scutellata, orbicularia vel oblonga, late laciniato-aperta, subcarbonacea, nigricantia. Asci tereti-clavati, octospori, paraphy-

sati. Sporidia ovoidea vel oblonga, continua, hyalina. — Inter *Patellariæ* et *Phacideas* medium.

1. **Pseudophacidium Ledi** (A. et Schw.) Karst. Rev. p. 157, *Ph. Ledi* 3191
(Alb. et Schw.) Schm. Myc. Heft I, p. 31 sec. Fr., *Xyloma Ledi*
Alb. et Schw. Consp. Fung. nusk. pag. 60, t. 9, f. 1, *Phacidium*
Ledi Fr. Syst. Myc. II, p. 574. — Sparsum v. subgregarium, erumpens, orbiculatum v. ellipsoideo-rotundatum, rugulosum, fusco-nigricans, primum clausum, tandem in laciniis 6-9 subtriangulares obtusas dehiscens, disco violaceo-pallido, sicco nigricante, 1-1,5 mm. diam. lat.; ascis clavatis, obtusissimis, curvatis, $72-75 \approx 12$; sporidiis ellipsoideis v. oblongato-subreniformibus, simplicibus et eguttulatis, incoloribus, $10-16 \approx 5$.

Hab. ad ramos Ledi palustris siccos vere in Fennia, Germania, Suecia.

2. **Pseudophacidium affine** Sacc. et Paol. Fung. Malac. n. 115, t. III, 3192
fig. 4 (*Phacid.*). — Maculis epiphyllis, minutis, ochraceo-pallidis; ascomatibus subcutaneis, mox erumpentibus, atris, ambitu obtuse hexagonis, nigris, nitidulis, $\frac{1}{2}$ mm. diam., centro denique excavatis; ascis clavatis brevissime stipitatis, apice obtusis, $90 \approx 18$, crassiuscule tunicatis, octosporis (paraphysibus non visis); sporidiis distichis, ovato-oblongis, plerumque biguttatis, $18 \approx 6$, hyalinis.

Hab. in foliis coriaceis amplissimis, languidis, Malacca (SCORTECHINI). — *Pseudoph. Ledi* affine.

3. **Pseudophacidium Rhododendri** Rehm Disc. p. 95, *Propolis* Rehm 3193
Hedw. 1882, p. 116. — Gregarium, primitus globosum, subclausum sub peridermide nidulans eamque sensim elevans et plerumque in quatuor æquales laciniis centro dirumpens, siccum atrum, corrugatum, humidum suborbiculare, margine subnigro cinctum, disco plano fuscidulo, c. 1 mm. diam., senile elapsum et foveolam fusconigram, laciniis haud cinctam relinquens; ascis clavatis, teneris, 8-sporis, $90-100 \approx 9-10$; sporidiis ellipticis, obtusis, interdum subcurvatis, 1-cellularibus, hyalinis, $12-15 \approx 4-6$, 1-stichis; paraphysibus filiformibus, hyalinis, non clavatis.

Hab. ad ramos siccos Rhododendri ferruginei supra St. Gertraud prope Gulden juxta montem Ortler alpium tyrolens. alt. 2000 m. (Dr. ARNOLD). — Ascoma parenchymaticum, fuscum, extus nigrescens, hypothecium fuscidulum.

4. **Pseudophacidium Betulæ** Rehm Ascom. Ill. n. 866. — Gregarium, 3194
primitus globosum, per epidermidem plerumque quadrilobe scissam

prorumpens, dein vertice irregulariter quadrilobe apertum et discum cinereum aperiens, semiglobosum, membranaceum, nigro-fuscum, demum flavescens, 1-3 mm. lat; ascis clavatis, stipitatis, apice rotundatis, 8-sporis, 70-80 \approx 9-10; sporidiis oblongis, obtusis, rectis vel subcurvatis, 1-cellularibus, utraque apice nucleolo præditis, hyalinis, 10-14 \approx 5-6, distichis, in asci superiore parte; paraphysibus filiformibus, apice subramosis et 4-5 μ . cr., hyalinis.

Hab. ad ramulos siccos, cæsos Betulæ prope Königstein ad E. SAXONÆ (KRIEGER). — A *Ps. Callunæ* ascomatibus majoribus sporidiisque minoribus mox dignoscendum.

5. **Pseudophacidium degenerans** Karst. Rev. pag. 157, *Phacidium* 3195
Karst. M. F. I, pag. 25?. — Ascomatibus gregariis v. subsparsis, erumpentibus, elongatis vel oblongatis aut rotundatis, levibus, primum clausis, dein in laciniis aut labia distantia subcrenata dehiscens, fusco-nigricantibus, disco molli livido, sicco nigrescenti, 1-1,3 mm. lat.; ascis clavatis, 80 \approx 12; sporidiis subellipsoideis v. oblongato-subreniformibus, eguttulatis, incoloribus, 8-12 \approx 3,5-4,5.

Hab. ad ramos Vaccinii uliginosi aridos in Fennia, Lapponia et Germania.

6. **Pseudophacidium Callunæ** Karst. Rev. p. 157, Rehm Disc. p. 96, 3196
Phacidium Karst. M. F. I, p. 253. — Ascomatibus subgregariis, erumpentibus, subsphæroideis in laciniis 4 subtriangulares obtusas a centro dehiscens, atris, disco pallido, circiter 1 mm. lat.; ascis clavatis, 62-95 \approx 10-12, jodo non cærulescentibus; sporidiis ellipsoideis vel oblongato-ellipsoideis, eguttulatis, incoloribus, 9-17 \approx 4-6.

Hab. ad ramos Callunæ vulgaris emortuos in Fennia et Saxonia.

7. **Pseudophacidium microspermum** (Fuck.) Rehm Disc. p. 97, *Discella* 3197
microsperma Fuck. Symb. p. 263. — Ascomatibus gregariis, primo tectis, demum subliberis, 2-4 mm. latis, orbicularibus, planis subconvexisve, nigris; ascis fasciculatis, oblongo-clavatis, antice obtusis, seorsum attenuatis, tunica crassa, 8-sporis, 80 \approx 12; sporidiis subdistichis, oblongis, utrinque obtusis, curvatis, continuis, hyalinis, 16 \approx 5.

Hab. in ramulis siccis corticatis Salicis auritæ in silvaticis supra Iudensand pr. Æstrich Rhenogoviæ.

8. **Pseudophacidium rugosum** (Fr.) Karst. Rev. p. 96, *Ph. rugosum* 3198
Fr. El. II, p. 135. — Erumpens, elliptico-rotundum, collapsum marginatum plicatum, in laciniis obtusas incisas dehiscens, disco tur-

gido hyalino; ascis clavatis, 8-sporis, 70-80 \approx 10; sporidiis oblongis v. ellipsoideis, obtusis, curvulis, hyalinis 9-13 \approx 3-5, subdistichis; paraphysibus filiformibus, 1 μ . cr., hyalinis.

Hab. in caulibus Rubi idæi et fruticosi in Suecia, Fennia, Italia, Germania. — Eximia species. Gregarium, sed absque ordine digestum, basi lata ligno adnatum (ascoma evidenter dimidiatum), per epidermidem erumpens et superne omnino denudatum, opacum, e fuligineo nigricans; in statu clauso centro depressum, una alterave plica rugosum, margine obtuso cinctum, intus subcavum ob nucleum mollissimum collabentem; *Heterosph. Patellæ* subsimile, sed abunde diversum statura majori, forma subelliptica, disco non cupulari, plicis etc. Solo favente plerumque in lacinias quattuor dehiscit, profunde fissum, laciniis sæpius multifidis. Discus apertus, mollissimus hemisphæricus, pellucidus, albido-hyalinus, ab ascomate facile discretus. Fr. loc. cit.

9. **Pseudophaacidium propolideum** Rehm Disc. p. 96, *Propolis Rubi* 3199
Rehm Ascom. Ill. et Exs. n. 721. — Ascomatibus gregariis rotundatis ellipticisve clausis sub epidermide griseo-atro-tincta evolutis dein epidermide tumefacientibus et rumpentibus, marginatisque, disco demum denudato, flavescente, dein obtuse conoideo, brunneolo, membranaceo, 2,5 mm. diam.; ascis clavatis, sursum obtusis, 100-120 \approx 12-15, octosporis; sporidiis ellipticis ovatisve, obtusis, rectis, continuis, sursum distichis, 10-15 \approx 6-8, hyalinis; paraphysibus tenuibus, filiformibus, superne paullulum latioribus, hyalinis.

Hab. in sarmentis siccis Rubi fruticosi in Saxonia.

Sect. 2. **Didymosporæ** Sacc.

KARSCHIA Körb. Parerg. p. 459 (1865) [Etym. a cl. prof. KARSCH germanico], *Patellariæ*, *Abrothalli* sp. Auct. — Ascomata superficialia, sessilia, plano-patellata, coriaceo-carbonacea, atra, marginata, demum subinde deformata. Asci tereti-clavati, octospori, paraphysati. Sporidia ovato-oblonga, 1-septata, fusca.

1. **Karschia lignyota** (Fr.) Sacc. *Pat. lignyota* Fr. S. M. II, p. 150, 3200
sec. Phill. Ellis etc., *Karschia Strickeri* Körb. Parerg. lichen. pag. 460, *K. nigricans* Rehm Ascom. n. 21, *Patellaria Strickeri* (Körb.) Sacc. Mich. I, p. 57, F. it. f. 1411, *Arthonia melaspermella* Nyl. — Cupulis superficialibus, patellaribus, extus atro-rufis, margine tenui mox flexuoso, disco concaviusculo aterrimo; ascis clavatis, 40-55 \approx 12; paraphysibus copiosissimis arcte obvallatis,

octosporis, jodo cœrulescentibus; sporidiis subdistichis, oblongis, constricto-1-septatis, $10-16 \approx 3\frac{1}{4}-4$, 2-4-guttulatis, dilute fuligineis.

Hab. in ligno putrescente Carpini Betuli, Quercus, Nysæ in Suecia, Germania, Galicia, Italia, Britannia Amer. bor. — Sec. Fr. Syst. Myc. II, pag. 150, species *abieticola*, ascomate 0,5 mm. lat., nigrescente, margine tumidulo, disco madore fuligineo. An eadem? Nomen a *lignys* fuligo, nec a *ligno*.

2. **Karschia nigerrima** Sacc. F. Ven. IV, p. 29, F. it. f. 108, *P. lignyota* Rabenh. F. E. n. 1152, nec Auct. — Cupulis sparsis aggregatisque superficialibus, coriaceis, glabris, patellulatis, sessilibus, subtus vero convexis et circum circa liberis, ubique aterrimis, arescendo sæpe contortis, disco plano v. madore tumidulo, tenuissime ruguloso, margine exiguo, rotundato; ascis clavatis basi attenuatis, $60 \approx 15$. 8-sporis; paraphysibus filiformibus apice coalescentibus, subfuligineis, obvallatis; sporidiis inordinate distichis, oblongo-fusoideis vel subcylindræis, $18-22 \approx 4\frac{1}{2}-5$, rarissime $15 \approx 6$, utrinque obtusiusculis, rectis curvulisve, 1-septatis, ad septum leniter constrictis, 2-4-guttulatis, fuligineis.

Hab. in ramis corticatis putrescentibus Alni incanæ, Vittorio Ital. bor. et in Germania.

3. **Karschia buellioides** Sacc. Mich. II, pag. 333, F. it. fig. 1412. — Ascomatibus gregariis superficialibus, scutellatis, centro affixis, 1 mm. diam., concaviusculis, distincte acutiuscule marginatis, atro-nitentibus, subcoriaceis; ascis tereti-clavatis apice rotundatis, breve stipitatis, $100 \approx 18$; paraphysibus filiformibus obvallatis, octosporis; sporidiis distichis oblongo-ellipsoideis $15-17 \approx 8$, utrinque rotundatis, 1-septatis, lenissime constrictis. atro-fuligineis, quandoque 2-guttulatis.

Hab. in ramis corticatis putrescentibus fagineis in Gallia boreali (GILLET). — Sporidiis crassioribus a *K. nigerrima* facile distinguenda species. Comparavi quoque cum *Buellia parasema* De Not., a qua, præter thalli defectum, ascomatibus concavis, acute marginatis, atro-nitidis etc. dignoscitur.

4. **Karschia patinelloides** (S. et R.) Sacc. *Patellaria patinelloides* Sacc. et Roum. Rev. Mycol. 1880, pag. 189, Pat. Tab. an. f. 74, Sacc. F. it. 1410. — Ascomatibus superficialibus, gregariis, plano-patellatis, breve marginatis, $\frac{1}{3}-\frac{1}{2}$ mm. diam., opace nigris; ascis clavatis, breve stipitatis, apice rotundatis, $45 \approx 10-15$; paraphysibus filiformibus, apice capitulo fusco subrotundo varie septato terminatis obvallatis, octosporis; sporidiis distichis oblongo-ellipsoi-

deis, 10-12 \approx 5-5½, uniseptatis, non constrictis, 2-guttulatis, fuliginis.

Hab. in cortice Robiniæ Pseudacaciæ prope Lyon Galliæ (TERRY). — A *K. lignyota* differt paraphysibus apice septato-capitatis, sporidiis crassioribus et brevioribus, ascomatibus prorsus nigris etc.

5. **Karschia Sabinæ** Rehm Ascom. Alp. n. 29. — Sessilis, sparsa, 3204
atra, orbicularis, primitus clausa, dein aperta, margine crasso, irregulari cineta, c. 0,5 mm. diam., contextu parenchymatico, fusco; ascis clavatis, crassis v. piriformibus, 4-sporis, 90 \approx 27; sporidiis ellipticis, obtusis, bicellularibus, quaque cellula nucleo 1 magno prædita, sæpe fere biscociformibus, primitus hyalinis, dein fuscis, 1-2-stichis, 30-36 \approx 14; paraphysibus crassis in massam gelatinosam flavescens coalitis.

Hab. ad ramum siccum Juniperi Sabinæ prope Längenfeld in valle Cetz alpium tyrol. (Dr. REHM).

6. **Karschia nigro-marginata** (Fuck.) Sacc. *Patellaria nigro-marginata* Fuck. Symb. App. II, p. 53, f. 20. — 3205
Cupulis sparsis, carnis, sessilibus, adnatis, ½-1 mm. diam., orbicularibus, planis, disco diaphano, sordido, margine distincto, carbonaceo, nigro, granuloso; ascis oblongo-ovatis, sessilibus, 8-sporis, 72 \approx 24; sporidiis conglobatis, ovatis, inæqualiter didymis, pallide fuscis, 16 \approx 8.

Hab. in ligno putri Piri Mali pr. Cestrich Rhenogoviæ.

7. **Karschia torulispora** (Phill.) Sacc. *Patellaria* Phill. Grev. XV, 3206
p. 16. — Congesta, sessilis, orbicularis; disco plano nigro v. brunneo-nigricante, margine leniter clavato; ascis cylindræis; sporidiis oblongis, constricto-1-septatis, 10 \approx 4-5, in articulos subglobosos facile secedentibus, brunneis; paraphysibus filiformibus apice obtuse clavatis, brunneis.

Hab. in cortice emortuo in Nova Zelandia (COLENZO). — Ob sporidia secedentia asci simulate sexdecimspori.

8. **Karschia fuispora** (C. et P.) Sacc. *Patellaria* C. et Peck 28 Rep. 3207
p. 67. — Gregaria, immarginata, sordide nigricans, convexa, lenticularis, subcoriacea; ascis teretiusculis, basi attenuatis; sporidiis fusoides, 1-septatis, 20-24 \approx 5, initio 4-guttatis, dein brunneis; paraphysibus simplicibus sursum clavulatis.

Hab. in lignis putrescentibus, Portville Amer. bor.

9. **Karschia Bloxami** (Berk. et Phill.) Sacc. *Patellaria* Berk. in Phill. 3208
Disc. pag. 361. — Gregaria, sessilis, applanata, 7-12 mm. diam., plana v. convexa, atra, intus atro-brunnea, demum immarginata;

ascis cylindraceo-clavatis, octosporis; sporidiis ellipticis uniseptatis, 10-15 \times 5-8, brunneis; paraphysibus numerosis filiformibus, leviter sursum incrassatis brunneisque, coalescentibus.

Hab. in ligno putrescenti in Britannia (BLOXAM).

10. **Karschia populina** (Cr.) Sacc. *Patellaria populina* Cr. Finist. 3209 p. 46. — Ascomatibus 1 mm. diam., atris, sessilibus, disciformibus; ascis clavatis, octosporis, filiformi-paraphysatis; sporidiis oblongis, brunneis, grosse biguttatis, uniseptatis.

Hab. in ramulis emortuis Populi, Finistère Galliae.

11. **Karschia imperfecta** (Ellis) Sacc. *Patellaria* Ellis in Bull. Torr. 3210 1881, p. 74. — Minuta, 450 μ . diam., orbicularis, sessilis, atra, margine pallidiori, obsoleto; ascis oblongo-cylindraceis; sporidiis distichis, cylindraceo-fusiformibus, uniseptatis, primo subhyalinis, dein rufescenti-brunneis, 10-12 \times 3,5-4.

Hab. in culmis vetustis Zeæ (Corn) in America boreali.

12. **Karschia talcophila** (Ach.) Körb. Parerg. pag. 460, *Lecidea* Ach. 3211 Lich. Univ. p. 113, *Abrothallus* Mass. Misc. p. 42, *Buellia* Körb. Syst. p. 230, *Pœtschia* Körb. in Stein Schles. Flecht. p. 223. — Primitus innata, globulosa, clausa, mox prominula, sessilis, patellata, opace atra, margine varie explicato; ascis clavatis, noduloso-paraphysatis, typice octosporis; sporidiis elliptico-soleæformibus, fuscis, minutis 9-11 \times 4-5.

Hab. in thallo Urceolariae scruposae in Germania, Italia.

RAVENELULA Speg. Fung. Arg. Pug. IV, n. 229 (1882) [Etym. a cl. H. W. RAVENEL, mycologo americano]. — Ascomata applanata, sessilia, glaberrima, atra, minuta, phyllogena (semper?). Asci aparaphysati, 16-spori. Sporidia elliptica, didyma, fuliginea.

1. **Ravenelula gainesvillensis** Speg. l. c. n. 229. — Applanata, minuta 180-200 μ . diam., sessilis, atra, maculis albescentibus, indeterminatis, majusculis insidens, sparsa v. subgregaria, glaberrima, margine obtusato-prominulo, contextu excipuli minutissime et indistincte celluloso, fuligineo-atro, epithecio e cellulis crustaceo-conglutinatis (sub pressione liberis), irregulariter globosis 5 μ . diam., olivaceo-fuligineis, subopacis (an conidiis?) composito; ascis clavatis, sursum obtusissime rotundatis, et crassissime tunicatis, deorsum brevissime attenuato-pedicellatis, 50-60 \times 15-18, 16-sporis, aparaphysatis; sporidiis inordinate conglobatis, ellipticis, sæpe inæquilateralibus ac subcymbæformibus, utrinque obtusiusculis, 10-12

≈ 5 medio 1-septatis, non constrictis, hyalinis; tunica ascorum jodi ope intense cœrulescente.

Hab. in foliis Sabalidis spec. in Florida Americæ septentrionalis (RAVENEL, North-American Fungi, n. 81, socia *Meliola furcata*). — Species et genus inter fungos lichenesque ambigua etsi gonidiis adhuc non visis.

PATELLEA Fr. S. M. II, p. 149 (1823) em. Sacc. Consp. gen. Disc. p. 18 (Etym. *patella*). — Ascomata subsuperficialia, scutellata, coriacea, nigricantia, in sicco subcontorta. Asci tereti-clavati, octospori, paraphysati. Sporidia ovato-oblonga, 1-septata, hyalina.

1. **Patellea variella** (Nyl.) Karst. Rev. p. 152, *Peziza* Nyl. Obs. p. 67, 3213
Patellaria Karst. M. F. I. p. 232. — Sordide lutea v. griseo-pallescens vel fusca vel nigricans, minuta, 0,2-0,4 mm. lat., plana, marginatula vel margine tenui evanescente; ascis clavatis, 35-45 ≈ 8-9, octosporis; sporidiis incoloribus, ovoideo-oblongatis (apice supero sæpius leviter crassioribus), simplicibus, dein tenuiter uniseptatis, 7-10 ≈ 2,5-3,5; paraphysibus haud bene discretis.

Hab. ad lignum vetustum Sorbi Aucupariæ prope Helsingfors (W. NYLANDER) et Abo Fennicæ (KARSTEN). — Macula mycelica nulla; ascomata adnata, subgregaria; statu humido lamina ascomatis parum amplius quam 0,1 mm. alta; epithecium incolor; hypothecium sordide luteo-rufescens, parum crassum, circiter 25 μ . cr. Nulla reactio jodica.

2. **Patellea cæcula** Karst. Rev. p. 152, *Patellaria* Karst. M. F. I, 3214
p. 232. — Ascomatibus gregariis, planiusculis vel concaviusculis sessilibus, rugulosis, nigricantibus, disco fuliginoso, arescendo nigricante, circiter 0,2 mm. lat.; ascis clavatis apice obtusis 40-50 ≈ 6-7, apice jodo non cœrulescentibus octosporis; sporidiis distichis elongatis vel fuscideo-elongatis, guttulis plerumque 2 majusculis præditis v. spurie tenuiter uniseptatis, rectis v. lenissime curvulis, 7-10 ≈ 1,5-2,5; paraphysibus filiformibus flexuosis, gracilibus.

Hab. ad lignum sectum Alni incanæ prope Mustiala Fennicæ.

3. **Patellea stygia** (B et C.) Sacc. *Patellaria stygia* B. et C. North 3215
Am. Fung. n. 757. — Atra, orbicularis, superficialis, margine elevato; sporidiis uniseptatis, oblongis, utrinque subattenuatis, 12-14 μ . long.

Hab. in ligno putri, New Jersey, Carolina inf., Boston Amerbor. — Habitus *Lecanidii atrati*. Si sporidia colorata, esset *Karschiæ* species.

4. **Patellea Coriariæ** (Pers.) Sacc. *Durella Coriariæ* Pass. Diagn. 3216
 Funghi nuovi p. 259. — Sparsa vel gregaria, sessilis, firma, ma-
 dore discoideo-applanata, disco subconcavo, cinereo-violacea; in sta-
 tu siccio contracta, difformis, fusco-nigrescens; ascis breviusculis,
 clavatis stipitatis octosporis; sporidiis distichis, tereti-oblongis, te-
 nuibus, hyalinis, endoplasmate granuloso, medio tandem tenuiter
 diviso; paraphysibus crassiusculis, subclavatis, intus granulosis,
 ascos æquantibus.

Hab. in ramulis siccis dentatisque Coriariæ myrtifoliæ,
 Rocca Prebalza in regione parmensi Ital. bor.

5. **Patellea Urceolus** (Fuck.) Sacc. *Pat.* (?) *Urceolus* Fuck. Symb. 3217
 App. II, p. 54, f. 19. — Cupulis in ramulis nigrificatis superfi-
 cialibus, gregariis, totis glabris, vernicosis, fusco-nigris, primo ses-
 silibus, globosis, perforatis, demum distincte stipitatis, stipite crasso,
 cupulam dimidiam æquante, concolore, cupulis demum urceolatis,
 sub margine acuto contractis, magis apertis, seminis Cannabis ma-
 gnitudine, disco concavo, concolore; ascis sessilibus, cylindraceutis,
 8-sporis, $100 \approx 9$; sporidiis oblique monostichis, oblongo-ovatis,
 didymis, hyalinis, $16 \approx 8$; paraphysibus copiosis, elongato-clavatis,
 pallide fuscis.

Hab. in ramulis siccis R u b i pr. Neuchâtel Helvetiæ (MORTIER).

6. **Patellea cyanea** (E. et M.) Sacc. *Patellaria* E. et M. Journ. Myc. 3218
 col. I, p. 97, nec Cooke. — Gregaria v. sparsa, hypophylla, patel-
 lata, sessilis, orbicularis, 275μ . diam., convexa v. obscure mar-
 ginata, demum concava, cyanea, mycelio evanescente, folium cya-
 nescens reddente cincta; ascis oblongo-cylindraceutis, basi contractis,
 8-sporis, $27-30 \approx 6-9$; sporidiis distichis, obovatis, 1-septatis, $7-9$
 ≈ 3 ; paraphysibus filiformibus, dichotomis.

Hab. in foliis subviviis Q u e r c u s (laurifoliæ?) in Amer. bor.

7. **Patellea cenangicola** E. et E. Jour. Myc. 1888 p. 56. — Sessilis, 3219
 subgregaria, patellæformis, disco (siccio) concavo, sordide olivaceo-
 viridi, margine acuto suberecto, extus pallidiori, circ. 1 mm. diam.;
 ascis late clavato-cylindraceutis, $75-80 \approx 12-15$, indistincte paraphy-
 satis; sporidiis confertis, biseriatis, subnavicularibus, clavato-fusoi-
 deis, subhyalinis, granulosis, dein uniseptatis, $30-40 \approx 7-9$.

Hab. ad Cenangium turgidum in truncis Quercus coc-
 cineæ Newfield N. J. Amer. bor.

8. **Patellea pudica** (B. et C.) Sacc. *Patellaria pudica* B. et C. Cub. 3220
 Fung. n. 697. — Minima, applanata, marginata; hymenio luteolo,
 margine nigro; ascis lanceolatis, uniseptatis, 7μ . long.

Hab. ad Filices in insula Cuba.

9. **Patellea gregaria** Kunze Flora 1830 p. 370. — *Gregaria sessilis*, 3221
pusilla, applanata, subceracea, rugulosa, fusco-olivacea, disco palli-
diore, margine prominulo.

Hab. in petiolis foliorum *Caricæ* *Papayæ* in ins. Madera. —
Sæpe lineari-disposita.

10. **Patellea glandicola** Schw. Syn. p. 177, n. 955. — Minuta, nigro- 3222
fusca, subcæspitosa et fasciculata, sessilis, margine plicato-inflexo,
disco concavo, glabro, interdum griseo-pulveraceo.

Hab. in glandibus putridis Bethlechem Amer bor. — Quasi zona-
tim glandes circumdant greges densissimæ hujus speciei, quæ asco-
matibus valde variant, difformibus sæpe flexuosis et conniventibus.

JOHANSONIA Sacc. (Etym. a cl. mycologo C. J. JOHANSON Sueco, casu
infelici sed glorioso præmature erepto), *Ravenelula* Wint. in Rev.
Mycol. 1885 p. 206, nec Speg. — Ascomata applanata, orbicularia,
exigua, nigricantia (phyllogena) extus pilosa vel setosa. Asci 8-spo-
ri, clavati v. elliptici. Sporidia oblonga, 1-septata, hyalina.

1. **Johansonia setosa** (Wint.) Sacc. *Ravenelula* Wint. in Rev. Myc. 3223
1885 p. 206. — Ascomatibus hypophyllis sparsis vel laxe gregariis
orbicularibus vel subangulatis applanatis margine (in sicco) parum
prominulo epithecio pallide olivaceo, e cellulis minutissimis, subglo-
bosis, fuscidulis, fere crustulatum cohærentibus constituto, setis rigi-
dis, obtusis, parce septatis, olivaceis, sparsis obsitis, usque $\frac{1}{2}$ mm. la-
tis, mycelio effuso, tenuissimo, ex hyphis repentibus, ramosis, varie
intertextis, hyalinis formato insidentibus; ascis clavatis, brevissime
noduloseque stipitatis, apice late rotundatis, crasse tunicatis, 8-spo-
ris, 40-52 \approx 12-14; sporidiis inordinatis, anguste subclavatis, utrinque
parum (deorsum magis) attenuatis, supra medium uniseptatis, sub-
constrictis, hyalinis interdum curvulis vel inæquilateralibus 11-14
 \approx 3,5; paraphysibus nullis.

Hab. ad folia viva *Sapindaceæ* cujusdam, Guarapi Paraguay
Amer. austr.

2. **Johansonia nigro-capitata** (Wint.) Sacc. *Rav.* Wint. Grev. XV, p. 91. 3224
— Ascomatibus sparsis hypophyllis minutissimis, depresse globosis,
sessilibus, ambitu hyphis erectis intense æruginosis, apice capitulo
globoso vel clavæformi, æruginoso coronatis cinctis, sine excipulo
proprio, 83-128 μ . diam.; ascis ellipticis v. ovato-ellipticis, sessili-
bus octosporis, 24-27 \approx 12,5-16; paraphysibus crassis, æruginoso-ca-
pitatis; sporidiis inordinatis, conglobatis, oblongo-clavatis, utrinque

rotundatis, medio uniseptatis, parum constrictis, loculo superiore latiori, hyalinis, 11,5-12,5 \approx 4.

Hab. in foliis vivis Solani speciei cujusdam prope S. Francisco Brasiliæ (ULE).

TRYBLIDIOPSIS Karst. M. F. p. 24 (1871) [Etym. *Tryblidium* et *opsis* aspectus]. — Ascomata erumpenti superficialia, substipitata, difformia, coriaceo-cornea, primum clausa dein laciniato-dehiscentia. Asci clavati, 8-spori, paraphysati. Sporidia fusoido-oblonga, continua, demum 1-septata, chlorino-hyalina. Cl. Rehm nuper (Disc. p. 195) suam *Pseudographem Arnoldi* (Syll. II, p. 770) huc ducit.

1. **Tryblidiopsis Pinastri** (Pers.) Karst. M. F. I, p. 262, *Pez. Pinastri* Pers. syn. p. 672, *Tryblidium* Fr. exs. n. 55, *Cenangium* Fr. S. M. II, p. 184, Sacc. F. it. f. 1308, *Phacidium* Fr. Elench. II, pag. 131. — Erumpens, coriaceo-cornea, substipitata, difformis, rugosa, atro-nitens, margine obtuso demum crasse 5-8-laciniato, 1-3 mm. lat., disco albido; ascis perfectis clavatis, antice acuminatis, 8-sporis, 96-100 \approx 15-17; sporidiis anguste fusiformibus, curvatis, flavidis vel hyalinis, 15-35 \approx 9-11 (Karst.) vel 18-26 \approx 6-7 (Rehm), initio strato mucoso cinctis, dein 1-septatis; paraphysibus filiformibus, ramulosis, septatis.

Hab. in cortice Pini silvestris, Laricum et Abietum in Suecia, Germania. Italia. — Stat. secundarii videntur *Micropera Pinastri* (Moug.) Sacc. et *Phoma Libertiana* Speg. et Roumeg.

Sect. 3. Phragmosporæ Sacc.

PATELLARIA Wahl. Suec. p. 988 (1826) emend. Sacc. Consp. gen. Disc. p. 14 (Etym. *patella*), *Mycolecidea* Karst. Symb. XXII, p. 26. — Ascomata subsuperficialia, plano-scutellata, nigricantia coriaceo-cornea, tenui-marginata. Asci tereti-clavati; paraphysati, octospori. Sporidia oblonga v. fusoida, 2-pluriseptata, fusca v. fuliginea.

I. Species genuinæ.

1. **Patellaria nigro-virens** Sacc. et Ell. Mich. II, p. 572, F. it. 1409. 3226
— Ascomatibus gregariis, subsuperficialibus, plano-patellaribus, sessilibus, margine tenuissimo vix emergente, nigris, furfure viridulo subconspersis, $\frac{1}{3}$ mm. diam.; ascis crasse clavatis, 40-50 \approx 15-17, brevissime obtuse stipitatis, paraphysibus apice grumosis, atro-olivaceis obvallatis, octosporis, jodi ope immutatis; sporidiis

distichis, oblongo-fusoideis v. subclavatis, 15-20 \approx 6-6,5, 3-septatis, ad septum medium constrictis, fuligineo-olivaceis.

Hab. in ligno quercino aeri diu exposito, Newfield N. J. Amer. bor. (ELLIS).

2. **Patellaria dispersa** W. G. Gerard Torr. Cl. Jun. 1874. — Ascomatibus sparsis, sessilibus, marginatis; ascis tereti-clavatis; sporidiis subpiriformi-clavatis, 4-8-septatis, 5-9-nucleolatis, 35 \approx 15, pallide brunneis. 3227

Hab. in cortice Juniperi virginianæ Poughkeepsie et New Baltimore Amer. bor.

3. **Patellaria subvelata** E. et E. Journ. Mycol. I, p. 1885. p. 152. 3228
— Initio subcutanea, dein superficialis, 0,3 mm. diam., nigricans, margine obscuriore; ascis elongatis, 50-60 \approx 14-16; sporidiis clavato-fusoideis, curvulis, supra latioribus rotundatis, flavidis, 25-30 \approx 3,5-4, endochromate 4-partito; paraphysibus flavidis apice corpuscula (conidia?) subglobosa, minuta, atro-brunnea, disci superficiem efficientia gerentibus.

Hab. in cortice Coniferarum viventium Wash. Terr. W. N. Suksdorf Amer. bor. (SPRAGUE). Ad *Lichenes* accedit.

4. **Patellaria triseptata** (Karst.) Sacc. *Mycolecidea triseptata* Karst. 3229
Symb. XXVI, p. 26. — Ascomatibus gregariis superficialibus, sessilibus patellæformibus planiusculis marginatis, atris, 0,2-0,3 mm. latis, ascis clavatis obtusissimis, 38-40 \approx 10; sporidiis conglobatis, oblongatis, curvulis, 3-septatis, dilute fuligineis vel subchlorinis, 12-16 \approx 4-5; paraphysibus coalitis gelatina hymenea jodo cœrulescente.

Hab. in ligno vetusto arborum frondosarum ad Mustiala Fennicæ.

5. **Patellaria clavispora** (Peck) Sacc. *Tryblidium clavisporum* Peck 3230
35 Rep. p. 143. — Ascomatibus udis suborbicularibus, planis vel leniter convexis, marginatis, 0,7-1 mm. lat., atris, siccis plus minus contractis, hysteriformibus, labiis crassis; ascis clavatis vel cylindræceis, 70-110 longis; sporidiis oblongo-clavatis, confertis v. distichis, coloratis, 22-27 \approx 7-10, 4-septatis.

Hab. in ligno decorticato Salicis rugræ, Albany Amer. bor. — An potius *Tryblidiella*, cui jam adscripta in Add. p. 267?

6. **Patellaria fuliginea** C. et E. Grev. V, p. 91. — Orbicularis, ferruginea, ad marginem obscurior, convexo-plana; ascis clavatis; sporidiis lanceolatis, obtusis, 1-3-septatis, rectis vel curvulis, luteolis 25-30 \approx 8; paraphysibus linearibus, furcatis. 3231

Hab. in caulibus herbarum New Jersey Amer. bor. — Ascoma 0,5 mm. lat. An potius *Dermatella*?

II. Species, ignota fructificatione, dubiæ.

7. **Patellaria melanophæa** Fr. S. M. II, p. 150 (*Pez.*), *P. bicolor* Nees 3232
Syst. p. 257, f. 265 (non Bull.) — Sessilis, sicca, glaberrima, coriacea, plano-patellata, extus margineque cinnamomea, disco atro, plano.

Hab. ad ligna exsiccata quercina et salicina in Germania. — Habitus lichenosus, color *Xylographæ parallelæ*. Sparsa, vix applanata, sed subtus convexa, 0,5 mm. lata; discus opacus, primo concavus, dein planus, marginem æquans.

8. **Patellaria olivaceo-virens** (Schw.) Fr. S. M. II, p. 159, *Pez. olivaceo-virens* Schwein. l. c. n. 1334. — Subcoriacea, olivacea, cupula plana, umbilicata, in stipitem brevem rugosum producta, disco demum æruginoso-pulverulento. 3233

Hab. in truncis Betulæ et Quercus in Carolina Amer. bor. rarior. — Cæspitosa v. sparsa, indurescens, $\frac{1}{4}$ - $\frac{1}{2}$ mm. lata, eleganter olivacea. Stipes incrassatus, obverse conicus, plicis rugosis venosis, olivaceo-badius. Sicca fere nigra.

9. **Patellaria Abbotiana** (Sow.) Sacc. *Peziza* (Patellea) *Abbotiana* 3234
Sowerb. t. 380, f. 8 (*Pez.*) Pers. Eur. p. 511. — Sessilis, sicca, patellata, extus cæsia, disco luteo.

Hab. in Anglia ad ligna (SOWERBY) et in Rossia (WEINMANN). — Sparsa, glabra, 2 mm. lata, disco plano. Forte species anglica lichenosa, sed rossica, teste Fr., optimus fungus. Deest in mycographiis recentioribus Britannicæ.

10. **Patellaria viticola** Pers. M. E. I, p. 309 (*Peziza*), Fr. S. M. II, 3235
p. 154, *Pez. Vitis-viniferæ* Kirchn.? — Sessilis, subcoriacea, crassiuscula; cupulis planiusculis sordide nigris, margine tenui cinctis, disco superficiali rufo-carneo.

Hab. in ramis ramorum Vitis viniferæ et Labruscæ in Germania, Gallia, Bohemia, Amer. bor. — Subiculum tenue, nigrescens, subpulverulentum; cupulæ subseriatæ, regulares, *Ombro-atro-virentis*, præsertim colore, haud absimiles.

11. **Patellaria epiblastematica** Wallr. Fl. crypt. n. 2480, (*Pez. Patellea*). 3236
— Ascomatibus sessilibus glaberrimis subcoriaceis rotundatis confertis minutissimis, primum punctiformibus hemisphæricis, dein patellaribus planis tenuiter marginatis in acervulos parvos dense congestis, bicoloribus, aliis helvolo-stramineis, aliis livido-nigrescentibus opacis.

Hab. ad Peltigeræ caninæ putrescentis superficiem hyaloder-

matinam in Hercynia superior. rarissime (WALLR.). — Stirps tum natalitiis tum morphosi perquam singularis. Prima initia verrucas subtilissimas gregarias stramineas s. liventes sistunt, quæ mox in tubercula neque minus parva hemisphærica concolora succrescunt; ocius jam vertice in discum angustum rotundum, margine conformi tenui cinctum recluduntur eamque formam, aucta aliquantis per magnitudine ad aciculæ capituli molem, patellarem servant et acervulos nudis oculis vix satis conspicuos, tamen ex ascomatibus 40-70 compositos stipato-congestos construunt; coloris mutabilitas mira. Wallr. loc. cit.

12. **Patellaria dimorpha** Wallr. Fl. crypt. n. 2616, *P. olivacea* var. 3237
lentiformis Fr. elench. II, 12. (*Pez. Patellea*). — Ascomatibus primum depresso-convexiusculis discum rotundum cinereo-viridulum convexiusculum, latusculis tenuiter furfuraceis cinereo-olivaceis propexis, limbo pallido marginatis incarceratum monstrantibus eoque veluti ocellatis, dein sensim dilatando applanatis tenuatis discum lutescentem incusum, margine tenui concolore nudo cinctum informantibus, scutellaribus, demum sæpe contractis.

Hab. ad truncos Tiliæ putredine exesos in Thuringia passim (WALLR.) vere. — Ascomata juniora præter basin adnatam ad latuscula magis elevata prominent et disci initia incarcerata ita comprehendunt, ut ille pupulæ instar intra palpebras prominere videatur, dein vero latuscula sensim dilatando reclinant discumque tenuatum helvolum s. lutescentem ex ascis emergentibus tenuiter farinosum, margine tenui concolore cinctum arcte adpressum informant; senilia sæpe confluent, multangula marginibusque crispa evadunt, fatiscunt et compagem internam fibrosam monstrant. Wallr. loc. cit.

13. **Patellaria Verbasi** Schw, Syn. Amer. bor. n. 1958. — Coriacea, 3238
sicca, scutellam lichenis referens, gregaria et sparsa, adpressa, semper applanata, junior parum contracta, margine subplicata, disco parum elevato pulveraceo, pulvere adglutinato nec detergibili; diametro 2-4 mm., sæpe angulata, aterrima.

Hab. ad antiquissimas caules Verbasci, Bethlehem.

14. **Patellaria Rhododendri** Schw. Syn. Amer. bor. n. 1960. — Cupu- 3239
lis sparsis difformibus, fusco-atris, applanato-adpressis, marginatis, margine crenato aut dentatim prominulo, disco nigro pulverulento, subgelatinosa; diametro 1 mm.

Hab. in ramulis Rhododendri, Bethlehem.

15. **Patellaria sphærospora** B. et C. Cooke Disc. U. S. II, pag. 26 3240
(nomen). — In ligno vetusto in Carolina Amer. bor. (CURTIS).
16. **Patellaria recisa** B. et C. Cooke Disc. U. S. II, p. 27. — In New 3241
England Amer. bor. (FROST).

DURELLA Tul. Carp. III, p. 177 (1865) [*Eym. durus*], *Pezizæ et Patellariæ* spec. Auct. — Ascomata scutellata, subsuperficialia, sub-integra, tenui-coriacea, hinc sicca contorta. Asci elongato-clavati, 4-8-spori, paraphysati. Sporidia oblonga, 2-pluriseptata, hyalina, v. flavida, rarissime senio fuscescentia. — A gen. *Lecanidio* ægre distinguendum genus, hinc species in utroque genere quærendæ.

I. *Eu-Durella*. Sporidia hyalina.

1. **Durella compressa** (Pers.) Tul. Carp. III, p. 177, t. XXII, f. 8-14, 3242
Peziza Pers. Syn. p. 670, Fr. Syst. Myc. II, p. 152, *Pez. nigropunctata* Gerard, *Durella macrospora* Fuck. Symb. p. 281, t. VI, f. 22. — Sessilis, innata, tenuis, nigrescens, disco atro, exsiccata compressa conchiformis; ascis clavatis, 60-70 \approx 9, octosporis; sporidiis ellipsoideo-navicularibus, acutiusculis, continuis 2-6-nucleatis dein 3-septatis, hyalinis 15-21 \approx 4; paraphysibus filiformibus furcatis.

Hab. in lignis duris siccis *Quercus*, *Coryli*, *Aceris*, *Rubi* in Suecia, Germania, Britannia, Belgio, Gallia, Amer. bor. — Minima, sparsa vel conferta, atra, opaca, humectata extus sæpe rufescens, subrotunda, elliptica v. angulata, disco homogæneo atro. Stat. conid. et pycnid. noti. Cfr. Tul. loc. cit. et Fuck. loc. cit. — Var. **pachyspora**. Cfr. Penz. Fung. M. Gener. p. 8; ascis 50-55 \approx 12-14; sporidiis oblongis, 3-septatis, 20-22 \approx 5-6; paraphysibus ascum superantibus. In ligno fagineo in Mont. Generoso Ital. bor.

2. **Durella commutata** Fuck. Symb. p. 281, t. VI, f. 23, *Pez. com-* 3243
compressa Pers. e. p., Moug. et Nestl. Exs. n. 568. — Affinis *Dur. compressæ* a qua differt cupulis tenuioribus; ascis multo angustioribus, clavatis, 80 μ . long., octosporis; sporidiis monostichis elongato-obovatis v. subclavatis, rectiusculis, indistincte 1-septatis, 8 \approx 2.

Hab. in ligno duriore sed putrescente *Quercus*, *Coryli* in Rhenogovia, Hungaria. — In forma hungarica sec. Rehm: asci 45 \approx 6; sporidia continua, ovata, superne disticha, 6-8 \approx 3; paraphyses filiformes apice clava fusca crassa terminatæ.

3. **Durella connivens** (Fr.) Rehm Ascom. ill. n. 18 *Patellaria* Fr. 3244
Syst. Myc. II, p. 151, Karst. M. F. I, pag. 234, *Dur. nigrescens*

Rehm Exs. n. 18. — *Gregaria minuta*, sessilis, nigra, orbicularis, disco depresso rufescente, margine tenui, sicca compressa et deformatis; ascis late clavatis, octosporis, stipitatis, 100-105 \approx 12-14; sporidiis distichis oblongo-fusoideis, 5-7-septatis, hyalinis, 27-33 \approx 5-6; paraphysibus filiformibus, ramulosis; hypothecio viridi-brunneo.

Hab. in ligno emortuo sæpe viridi maculato Fraxini, Quercus etc. in Suecia, Germania, Fennia, Britannia, Amer. bor. — Var. **Fuckelii** Sacc. *Lecan. connivens* Fuck. Symb. App. I, p. 42: cupulis in ligno cinerescente gregariis sparsisve, minutis, atro-fuscis, disco humectato pallidiori, siccis plerumque elliptice conniventibus; ascis stipitatis, oblongis, 8-sporis, 116 \approx 16; sporidiis conglobatis, fusiformibus, curvatis, 4-8-guttulatis, obscure septatis, hyalinis, junioribus 32-54 \approx 6; paraphysibus filiformibus. In ligno duro Sambuci ramosæ pr. Hallgarten Rhenogovia.

4. **Durella socialis** (De Not.) Sacc. *Patellaria socialis* De Not. Patell. in Giorn. bot. it. II, 1846, p. 232, nec Hoffm. — Primitus epidermide tecta; cupulis fasciculatim v. in greges lineares transversas erumpentibus, undulatis, sinuosisve, tenuibus, atris, opacis v. nitidulis siccitate corrugatis; sporidiis clavatis, subcurvatis, 9-10-septatis, hyalinis.

Hab. in ramis siccis Ribis rubri pr. Torino Ital. bor.

5. **Durella Lecideola** (Fr.) Rehm Ascom. n. 53, *Peziza Lecideola* Fr. Obs. I, p. 166, t. 4, f. 1, *Patellaria* Fr. Summa p. 151. — Conferta, subsuperficialis, concaviuscula, marginatula, nigra, 0,2-0,4 mm. lat., sicca subcornea, humectata mollior, disco demum pallescente, fuligineo vel obscure olivaceo-viridi; ascis subclavato-elongatis, 50-60 \approx 10-14, obturaculo tenui jodo cœrulescente, 8-sporis; sporidiis distichis, ellipsoideis v. oblongato-ellipsoideis, spurie 3-septatis, incoloribus, 9-16 \approx 4,5-6 (in exempl. hungaricis, sec. Rehm, 15-18 \approx 7-8; paraphysibus filiformibus, gracilibus, apice clavato, fusco.

Hab. ad lignum populinum, betulinum, Cercidis, Tiliæ, Quercus in Suecia, Fennia, Lapponia, Britannia, Germania, Hungaria, Amer. bor. — ***pitya** Sacc. Mich. II, p. 613: ascomatibus in cortice interiore subdealbato gregariis, minutis, patellatis, vix marginatis, 6,2 mm. lat. nigricantibus; ascis tereti-clavulatis, 80-90 \approx 14-18, breve stipitatis, paraphysibus clavulatis obvallatis, octosporis; sporidiis oblique monostichis, oblongo-fusoideis, curvulis, 25-30 \approx 6, spurie nucleato-3-septatis, hyalinis. In cortice int. Pinorum, Fontainebleau Galliæ (THERRY).

6. **Durella Carestiæ** (De Not.) Sacc. *Patellaria* De Not. Comm. I, 3217

p. 373, *Pragmopora macrospora* Bagl. et Carest. in Comm. crittog. ital. II, p. 84 (1864), *Peziza macrospora* Nyl. Obs. pag. 66, Karst. Monogr. Pez. p. 168, *Patellaria* Karst. M. F. I, p. 235, nec *Durella macrospora* Fuck. — Subsparsa, prominula, plana, marginata, margine inæquali (in juvenilibus occludente vel contracto), crassulo, atra, 0,5 mm. lat.; ascis oblongatis vel saccatis, 90-135 \approx 18-34, 4-8-sporis; sporidiis incoloribus (vel subincoloribus aut vetustate dilute nigrescentibus) ellipsoideo-oblongatis vel oblongatis, 5-septatis, 32-36 \approx 10-15; paraphysibus mediocribus, adspersis (non semper bene discretis).

Hab. ad corticem Populi, in Fennia et Italia. — Ascomata sæpe macula mycelica alba insidentia; sed hæc macula vaga nullum characterem thallinum offert. Ascomata circiter 0,25 mm. alt. Discus nigricans, (thalamii pars proxime subjacens nonnihil cœrulescens), hypothecium tenue, nigricans. Sporidia vetustate leviter nigrescunt; sed vegeta incoloria conspiciuntur.

7. **Durella melanochlora** (Somm.) Rehm Ascom. Alp. n. 27, *Pez. melanochlora* (Somm.) Karst. M. F. I, p. 233, *Peziza ovulispora* Karst. Monogr. Pez. p. 167, *P. subcrenulata* Nyl. Obs. p. 64, *Patellaria ovulispora* Karst. Symb. p. 251, *Peziza melanochlora* Somm. Suppl. p. 297. — Conferta vel gregaria, sessilis, superficialis, concaviuscula vel planiuscula, margine elevato crenulato vel ruguloso, virescens, sicca nigra vel nigricans discoque humectato pallecenti-sordido, 0,2-0,4 mm. lat.; ascis clavatis, obtusis, 60-90 \approx 8-12, 8-sporis; sporidiis distichis, ovoideis vel suboblongatis, plerumque spurie 3-septatis, incoloribus, 6-16 \approx 4-6; paraphysibus filiformibus, gracilibus.

Hab. supra lignum vetustum Pini, Betulæ (et Alni?) in Lapponia et Fennia. — In ligno canescente betulino obvenit prope Mustiala varietas hujus, sporidiis minoribus, 6-10 \approx 2, simplicibus cupulisque olivaceo-pallidis, siccis nigricantibus, margine subintegro, minoribus. — ***D. glacialis** Rehm Ascom. Alp. n. 27: minima, solitaria vel gregaria, nigra, margine fere integro, vix perspicuo cincta, fusca parenchymatico-contexta; ascis clavatis, 8-sporis, 36 \approx 9; sporidiis oblongis, 1-4-cellularibus, hyalinis, distichis, 10-12 \approx 3; paraphysibus filiformibus, clava viridula, 4-5 μ . cr. instructis. Ad ramulos siccos Rhododendri ferruginei in alpinis tyrolensibus prope Kühtai (Oetz) et juxta Taschach-Gletscher in valle Piz, c. 2000 m. alt. (DR. REHM). — ***D. amplior** Sacc. Mich. II p. 613, F. it. n. 1218: ascomatibus majusculis, 1-1,3 mm. lat.

- scutellatis, margine elevato crenulato, nigris, disco atro-virente; ascis tereti-clavatis, 30-40 \approx 8-9, bacillari-paraphysatis; sporidiis fusoido-oblongis, 10-12 \approx 4-5, tenuiter 3-septatis, non constrictis, hyalinis (fructificatione jodii ope immutata). In pagina interiore et exteriori corticis emortui Pini, Le Sapey (Isère) Galliæ (THERRY).
8. **Durella nigro-cyanea** (Phill. et Harkn.) Sacc. *Patellaria nigro-cyanea* Phill. et Harkn. Calif. p. 4. — Mediocris, sparsa applanata, marginata, intus cyanea; ascis cylindraceo-clavatis, 75 \approx 15, octosporis; sporidiis oblongis, obtusis 14-16 \approx 3-4, incurvis, 1-3-septatis; paraphysibus..... non visis. 3249
- Hab.* in caulibus emortuis Audibertiæ stachyoidis in California. — A *Durella atro-vinosa* colore et absentia paraphysium differt.
9. **Durella Hoffmanni** Sacc. *Patellaria socialis* Hoffm. et Fr. Icon. Anal. p. 72, t. XVII, f. 4, nec De Not. — Lignatilis, subcoriacea, glabra, opaca, patellæformis, sessilis, atro-brunnea, orbiculata, demum subirregularis, 0,5-0,7 mm. lat., gregaria, approximata; ascis clavatis, stipitatis, bacillari-paraphysatis, 8-sporis; sporidiis subdistichis, fusoidis, curvulis, 4-nucleatis demum 3-septatis, 30 \approx 7, hyalinis. 3250
- Hab.* in cortice ramorum emortuorum *Quercus* pr. Giessen Germaniæ.
10. **Durella corrugata** (C. et P.) Sacc. *Peziza corrugata* C. et Peck 26 Rep. p. 82. — Subgregaria, subglobosa, dein expansa et subplana, atra, margine elevato, fibrillis tenuibus radiantibus matrici affixa; disco corrugato, sicco ad centrum prominente; ascis subclavatis; sporidiis anguste fusoidis, 2-3-nucleatis, 15-20 μ . long., demum probabiliter 3-septatis. 3251
- Hab.* in ligno putri, North Greenbush Amer. bor. — *Durellæ compressæ* affinis.
11. **Durella radio-cincta** (Cooke) Sacc. *Peziza radio-cincta* Cooke Hedw. 1875, p. 84. — Subgregaria, sessilis, ceraceo-sicca, atra, e fibrillis niveis radiantibus enatis; cupula minuta, patellata, margine elevato, integro; disco concavo, $\frac{1}{4}$ - $\frac{1}{2}$ mm. lat.; ascis clavato-cylindraceis; sporidiis biseriatis, fusiformibus, triseptatis, hyalinis, 20-23 \approx 5; paraphysibus numerosis filiformibus. 3252
- Hab.* ad ligna quercina, New Jersey Amer. bor. (ELLIS).
12. **Durella parvula** (Cooke) Sacc. *Patellaria* Cooke Handb. n. 2178. — Minuta, sparsa, nigricans, suberumpens, tenuis, sicca contorta, margine lineari; ascis.....; sporidiis elongato-ellipsoideis, utrinque rotundatis, 3-septatis, hyalinis, 20 μ . long. 3253

Hab. in ramis decorticatis expallentibus, Shere Britanniae.

13. **Durella similis** (W. R. Gerard) Sacc. *Patellaria* W. R. Ger. Torr. 3254
bot. Cl. Jun. 1874. — Ascomatibus coriaceis, sessilibus, levibus, nigris, margine obtusulo, disco concavo; sporidiis ellipsoideis, 3-septatis, nucleatis, hyalinis, 15 = 5.

Hab. in ramis emortuis *Quercus rubrae* in Amer. bor.

14. **Durella Oleæ** Pass. et Beltr. F. Sic. n. 19. — Disciformis, parvula, 3255
sessilis, concava, extus margineque involuto castaneo-fusca, scabrida, disco albido-cinereo, opaco; ascis cylindrico-clavatis, jodo immutatis, 8-sporis; paraphysibus filiformibus stipatis, 75-80 = 8-10; sporidiis distichis vel oblique monostichis, fusiformibus, rectis vel vix curvis, primo varie guttulatis, dein triseptatis vel en doplasmate quadripartito, hyalinis, 18-20 = 5-6.

Hab. in ligno denudato *Oleæ europææ*, Monostalla Siciliae.

15. **Durella nigro-rufa** (Berk.) Sacc. *Excipula nigro-rufa* Berk. Fl. 3256
N. Zeal. p. 202, t. CVI, fig. 7. — Minuta, libera, subglobosa, subcarbonacea, ore inflexo, extus nigra, intus rufa, hymenio subgelatinoso turgido; ascis amplis clavatis, obtusis; sporidiis hyalinis, obovato-oblongis, obliquis subquadriseptatis, 14 = 4.

Hab. in pag. inf. foliorum *Pittospori crassifolii*, Hawke Bay Novæ Zelandiæ (COLENZO).

16. **Durella clavispora** (B. et Br.) Sacc. *Patellaria* B. et Br. Ann. 3257
N. H. n. 774. — Molliuscula, junior subglobosa, demum expansa, subinæqualis, piceo-brunnea; sporidiis elongato-clavatis, 4-6-septatis, 25-35 μ . longis; paraphysibus ramosis, sursum articulos singulos v. plures coloratos gerentibus.

Hab. in ramis emortuis *Ligustri*, Lucknam Wilts Britanniae.

II. *Leptopeziza* Rostr. Sporidia subcolorata.

17. **Durella groenlandica** (Rostr.) Sacc. *Leptopeziza groenlandica* 3258
Rostr. Fung. Groenl. p. 542. — Ascomatibus compressiusculis, rufofuscis, 0,5-1 mm. lat.; ascis cylindræis, breve stipitatis, 110-120 = 16-18, octosporis; sporidiis monostichis, cymbiformibus, triseptatis, loculis intermediis quadrangularibus, ultimis triangularibus, 24-25 = 7-8, flavis.

Hab. in caulibus siccis *Alsines bifloræ* et *Airæ alpinæ* in Groenlandia.

18. **Durella atro-vinosa** (Blox.) Sacc. *Patell. atro-vinosa* Blox. in B. 3259
et Br. Ann. N. H. n. 1078, Curr. Linn. Trans. XXIV, pag. 155, t. XXV, f. 31. — Gregaria; disco minuto orbiculari vel subirre-

gulari, nigricante, distincte marginato, margine vinoso-purpureo; sporidiis subhyalinis, viridulo-tinctis, anguste navicularibus, subcurvis, endochromate tri-partito, 22 μ . long.

Hab. ad truncos, Gopsal Twycross Britanniae. — Ascomata subinde dense congesta.

19. **Durella livida** (B. et Br.) Sacc. *Patellaria* B. et Br. Ann. N. H. 3260 n. 775, *Pat. constipata* Blox. in Cooke Handb. n. 2176. — Gregaria, sæpe congesta, minuta, subhemisphærica, subsessilis, olivaceo-flavida, margine albida, extus minute furfuracea, disco plano; ascis subfusoides, octosporis; sporidiis distichis, tereti-oblongis, obtusis, continuis, demum 3-septatis, leniter constrictis, hyalinis vel flavidis.

Hab. in cortice pineo, Gopsal Britanniae. — Habitus fere lichenosus.

LECANIDION Rabenh. Crypt. Fl. I, p. 342 (1844) nec Massal. (Ety. *lecane* catinus), *Cycledum* Wallr. Fr. crypt. n. 306 ex part., *Patellariæ*, *Patelleæ*, *Pezizæ* sp. Auct. — Ascomata subsuperficialia, plano-scutellata, marginata, coriaceo-cornea, in sicco subimmutata, atra. Asci tereti-clavati, 4-8-spori, paraphysati. Sporidia oblonga, fusoides, clavata, 2-pluri-septata, hyalina. Pycnidia nulla nota. — *Durellæ* peraffine et tunc species in utroque genere quærendæ. Nonnullæ huc relatæ species, in posterum certe removendæ.

1. **Lecanidion atratum** (Hedw.) Rabenh. Crypt. Fl. I, p. 342, Sacc. 3261 F. it. fig. 1372, Pat. Tab. an. f. 72, *Lichen atratus* Hedw. Musc. fr. 2, p. 61, t. 21, f. A, *Pez. patellaria* Pers. Syn. p. 670, Myc. Eur. p. 306, Nees Syst. p. 257, f. 265, *Pez. atrata* Wahl. Ups. p. 466, *Patellaria* Fr. Syst. Myc. II, p. 160, *Opegrapha* et *Ucographa Lecanactis* Mass. *Pragmopora* Körb. — Subcoriaceum, patellæforme, sessile, applanatum, nigrum, margine tumido, disco subpruinato; ascis stipitatis, oblongo-clavatis, antice obtusis, 8-sporis, 102-140 \approx 14; sporidiis farctis, oblongo-subclavatis, curvatis, 7-11-septatis, oculis uniguttulatis, hyalinis, 35-45 \approx 7-10, paraphysibus filiformibus, ramosis, apice clava cœrulea 5 μ . crass. terminatis.

Hab. ad ligna et cortices arborum, fruticum, herbarum atque graminum majorum in Suecia, Germania, Gallia, Italia, Britannia, Belgio, Lusitania, Hungaria, Algeria, Amer. bor., Nova Zelandia et Fuegia. — Scutella *Lecideæ* exacte refert, plus minus gregarium, majus et minus, 0,7-1,5 mm. lat., extus nitens, sed discus opacus; siccum subinde etiam rugosum, compressum et difforme.

2. **Lecanidion concolor** (Fr. et Hoffm.) Sacc. *Patellaria* Fr. et Hoffm. 3262
 Tab. Anal. p. 99, t. XXIII, f. 3. — Exiguum, patellare, sordide nigrum, vix 0,5 mm. lat., margine vix elevato; ascis clavatis; sporidiis distichis, tereti-clavatis, 7-8-guttatis demumque septatis, hyalinis, $40 \approx 10$ (ex icone).
Hab. in ligno putri fagineo par. Giessen Germaniæ. — Ab affini *L. atrato* cupulis multo minoribus, opacis, sporidiis obsoletius septatis differre videtur.
3. **Lecanidion fusco-atrum** Rehm Ascom. n. 464, Mich. II, p. 141, 3263
Durella Rehm Ascom. Ill. n. 464, *Durella atrella* Rehm in Ascom. Ill. n. 574, *Pat. atrata* Cooke Exs. n. 194, nec Auct. — *Lecan. atrato* simillimum, sed margine crassiore cinctum, demum convexum, fusco-atrum vel atrum, extus fuscidulum; ascis octosporis, clavatis, crassis, $100-120 \approx 10-12$; sporidiis fusiformibus, subcurvatis vel rectis, 4-5-cellularibus, hyalinis, $18-28 \approx 3,5-5$ distichis; paraphysibus filiformibus, apice dichotomis, piriformiter septato-clavatis, clava fusca, 6-8 μ . cr.; hypothecio hyalino vel flavidulo, epithecio crasso, fusco, jodi ope apice ascorum valde cœrulescente.
Hab. ad ramulos emortuos quercinos, Newfield, New Jersey et Carolina (ELLIS et RAVENEL) et Britannia (COOKE).
4. **Lecanidion proximum** (B. et Br.) Sacc. *Patellaria* B. et Br. Ann. 3264
 N. H. n. 965, t. XVI, f. 18. — Orbiculare, scutiforme, depressum, leniter immersum, nigrum, disco concolore vel brunneo--nigro; ascis clavatis, octosporis; sporidiis oblongis, utrinque obtusis, curvulis, 4-5-septatis, $17-25 \approx 5-6$; paraphysibus filiformibus, liberis, ramulosis.
Hab. in ligno emortuo *Quercus*, Barking et Shrewsbury Britannicæ. — Habitus *L. atrati* sed sporidia diversa.
5. **Lecanidion atratum** (Karst.) Sacc. *Patellaria* Karst. Rev. p. 149. 3265
 — Prominulum, planum, marginatum, atrum, parvum, 0,5 mm. lat., margine levi; ascis clavatis, apice obtusissimis, $50-60 \approx 12$, octosporis; sporidiis distichis fusoideo-elongatis, rectis, spurie tenuiter 5-7-septatis nucleatisve, hyalinis, $25-30 \approx 6-7$; paraphysibus filiformibus flexuosis, hyalinis, numerosis.
Hab. in ligno pineo vetusto in Fennia meridionali.
6. **Lecanidion anceps** Pass. Diagn. Fung. Nuovi p. 14. — Ascomati- 3266
 bus subcorticalibus erumpentibus, pulvinato-discoideis, margine tenui vix elevato cinctis, solitariis vel subgregariis et tunc varie difformibus, extus atris, intus albidis; ascis oblongo-clavatis, paraphysibus tenuibus æquantibus, apice non incrassatis stipatis, basi

breviter incurve stipitatis, 8-sporis $125 \approx 15$; sporidiis distichis v. oblique monostichis clavatis, initio pluriguttulatis dein 7-9-septatis, guttulis evanidis, hyalinis, $40 \approx 7,5$.

Hab. in ramulis putridis Ligustri vulgaris, Vigheffio pr. Parma Ital. bor. — *Lecanidion atratum* fructificatione appropinquat, sed ascomatum erumpentium forma et paraphysibus haud clavatis diversum.

7. **Lecanidion Loniceræ** (Phill.) Sacc. *Patellaria Loniceræ* Phill. 3267
Disc. p. 364. — Gregarium, minutum, sessile, subhemisphæricum, dein subexpansum, nigrum, disco concavo, fuliginoso, margine incurvo; ascis late clavatis, octosporis; sporidiis elongato-oblongis vel oblongo-fusoideis, 6-7-guttulatis, dein pseudo-6-septatis, rectis vel curvulis, $25-45 \approx 4-7$; paraphysibus filiformibus.

Hab. in ligno putri Loniceræ, Dornaway N. B. Britanniae.

8. **Lecanidion subtectum** (Cooke et Phill.) Sacc. *Patellaria sublecta* 3268
Cooke in Phill. Disc. p. 365. — Sparsum vel cæspitulosum, initio papilliforme, minutum, atrum (sterile), dein lenticulare, lecideoides, immarginatum, atrum, 0,5 mm. lat., molliusculum, fragile; ascis late clavatis, deorsum attenuato-stipitatis, octosporis; sporidiis oblongo-ellipsoideis 3-4-guttatis, dein 1-3-septatis, $20-24 \approx 5-6$; paraphysibus filiformibus.

Hab. in cortice interiore Cisti laurifolii, Kew Garden Britanniae. — Stylosporæ in eodem hymenio elongato-cylindrææ, 5-8-guttulatae, curvæ, in basidiis ascis intermixtis acrogenæ, $30-50 \approx 5$.

9. **Lecanidion ilicicolum** (Cr.) Sacc. *Patellaria ilicicola* Cr. Finist. 3269
p. 46. — Sessile, disciforme, nigricans, convexulum, 1-2 mm. lat., contextu reticulato; ascis clavatis, 8-sporis; sporidiis oblongis, 3-septatis; paraphysibus filiformibus.

Hab. in ligno emortuo Ilicis, Fagi, Rubi, Finistère Galliae.

10. **Lecanidion maurum** (Phill.) Sacc. *Mollisia maura* Phill. in Grev. 3270
IV, p. 122, t. 62, f. 3, *Patellaria maura* Phill. Disc. p. 368. — Sparsum, sessile, primo globosum, dein patellatum, fuligineo-nigricans, margine elevato, crenulato; ascis clavatis, elongatis, deorsum attenuatis; sporidiis anguste fusoides, 5-7-nucleatis, $30-38 \approx 5-6$; paraphysibus sursum curvatis.

Hab. in ligno putri Dinmore, Hereford Britanniae. — Ascoma 1 mm. lat.

11. **Lecanidion indigoticum** (C. et P.) Sacc. *Patellaria indigotica* C. 3271
et P. Peck 25 Rep. p. 98. — Sessile, sparsum v. confertum, subplanum, marginatum, nigrum, disco cyaneo-tincto; ascis subcylin-

draceis; sporidiis inordinatis vel biseriatis, subclavatis, 7-9-septatis, 8-10-guttatis, subhyalinis, 36-50 μ . long.

Hab. in ligno emortuo dejecto, Savannah Amer. bor. — Color hymenii indigoticus sub microscopio observandus.

12. **Lecanidion bicolor** (Karst.) Sacc. *Patellaria bicolor* Karst. Rev. mycol. 1889 p. 205. — Subsparsum, superficiale, sessile, concavum, marginatum, corneum, atrum, siccum contractum, 0,5 mm. lat., disco late ochraceo, adultum totum atrum; ascis clavatis, octosporis, 12 μ . cr.; sporidiis conglobatis elongatis vel clavulato-bacillaribus, utrinque obtusule subattenuatis, curvulis v. flexuosis, hyalinis vel chlorino-hyalinis, sub-7-septatis, 34-55 \approx 5-6; paraphysibus filiformibus ramosis, 1 μ . cr.

Hab. ad corticem vetustum arborum frondosarum, Minas Lafayette Brasilæ (E. WAINIO). — Hymenium jodo vinoso-rubens. Ad *Scutulariam* vergit.

13. **Lecanidion pruinoseum** (Karst.) Sacc. *Patellaria pruinosa* Karst. Hedw. 1889, p. 193. — Patellatum, sessile, margine elevato, obtuso, subinde flexuoso, nigricans, pruina puberula albida obductum, 0,5-1 mm. latum; ascis late clavatis, 90 \approx 15-24, jodo vinose rubentibus, 8-sporis; sporidiis conglobatis, clavulato-bacillaribus, 5-septatis, hyalinis, 35-45 \approx 3-4.

Hab. ad corticem arborum frondosarum vetustum in Minas Lafayette Brasilæ.

14. **Lecanidion antarcticum** Speg. F. Fueg. n. 309. — Cupulis sparsis v. hinc inde laxe gregariis, sessilibus, erumpenti-superficialibus, primo clausis subhysterioideis dein applanato-apertis, subdiscoideis v. ellipticis 0,5-1 mm. atris, glabris, coriacellis, contextu indistincto opaco, crassiuscule submarginatis, in sicco sæpe contractulis v. contortis; ascis cylindraceo-clavatis, antice obtuse rotundatis crasseque tunicatis, postice longiuscule attenuato-pedicellatis p. sp. 100 \approx 14 ped. 10-20 \approx 5, paraphysibus densis filiformibus apice coalescentibus fusciscentibusque obvallatis, octosporis; sporidiis oblique monostichis, clavulatis antice obtusatis, postice attenuato-acutatis, 35-42 \approx 5-6, curvulis, 5-(rarius 7-)septulatis, non constrictis, hyalinis.

Hab. in ramulis emortuis v. languidis Empetri rubri et Lebetanthi americani in Staten island et prope Hope harbour in Clarence island Fuegiæ.

15. **Lecanidion atro-album** (Cooke) Sacc. *Patellaria* Cooke Handb. n. 2168. — Gregarium v. sparsum, minutum, sessile, dein planum,

nigrum, disco albo; sporidiis fusoides, 7-septatis, hyalinis, 30 μ . longis.

Hab. in ramis decorticatis, Shere Britanniaë (CAPRON).

16. **Lecanidion Cratægi** (Phill.) Sacc. *Patellaria* Phill. Grev. XVII, 3276 p. 46. — Sparsum v. cæspitosum, erumpens, hemisphæricum, dein patellare, margine prominulo extusque brunneo-nigrum, intus albidum; disco nigro; ascis cylindraceutis, basi tenuatis, octosporis, 140-160 \approx 10; sporidiis anguste clavatis, sæpe medio ventricosis, plurinucleatis, leniter coloratis, 30-60 \approx 5-6; paraphysibus adhærentibus filiformibus, apice clavatis, brunneis, septatis.

Hab. in ramis Cratægi et Pruni (?) in Scotia (TRAIL) et Gotlandia (ROMELL). — Ascoma 0,5-1 mm. lat. Habitus sæpe cæspitulosus fere *Cenangii*.

17. **Lecanidion Bagnisianum** Sacc. Mich. I, p. 58, F. it. f. 110. — 3277 Cupulis gregariis superficialibus, thallo omnino carentibus, coriaceis, patellaribus, $\frac{1}{4}$ mm. diam., aterrimis, margine paullulum elevato, obtusiusculo; ascis cylindraceuto-clavatis, breve crassiuscule stipitatis, 70 \approx 12, apice rotundatis, paraphysibus sursum coalescentibus fuscisque obvallatis, octosporis; sporidiis distichis oblongo-fusoides, 12 \approx 4 $\frac{1}{2}$, utrinque obtusiusculis, rectis, initio 4-nucleatis, dein 3-septatis, non constrictis, hyalinis.

Hab. in ligno denudato betulino Romæ (C. BAGNIS).

18. **Lecanidion minutissimum** (Phill.) Sacc. *Patellaria minutissima* 3278 Phill. Disc. p. 362. — Gregarium v. sparsum, sessile, siccum compressum, udum expansum, extus nigricanti-brunneum, margine integro, incurvo; disco fuligineo-brunneo; ascis clavatis v. teretibus clavatis, octosporis; sporidiis ellipsoideis, hyalinis 2-3-guttulatis, denique 3-septatis, 6 \approx 3; paraphysibus filiformibus, apice clavulatis.

Hab. in lignis putridis pr. Shrewsbury Britanniaë. — Ascoma 300 μ . lat., ligno subinde semiimmersum.

19. **Lecanidion xylographoides** (De Not.) Sacc. *Patellaria xylographoides* 3279 De Not. Comm. I, p. 373. — Ab affini *Lec. atrato* differt sporidiis dimidio minoribus, 3-septatis, episporio tenuissimo præditis.

Hab. ad palos vetustos in vineis, San Siro supra Genova Italiaë borealis.

20. **Lecanidion pusillum** (Peck) Sacc. *Patellaria pusilla* Peck Bull. 3280 N. Y. St. Mus. n. 2 p. 22. — Minutum, sessile, breve marginatum, nigrum 0,3-1 mm. lat.; disco udo convexo v. plano sicco made-