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STUDIES IN RESUPINATE BASIDIOMYCETES—III[1]

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(With nine Text-figures)

Material of several species, including types specimens, have been studied. The following new genera are described: *Conohypha* (type: *Corticium albocremeum* Höhn. & Litsch.), *Membranomyces* (type: *Corticium spurium* Bourd.), and *Parvobasidium* (type: *Gloeocystidium cretatum* Bourd. & Galz.). Twelve new combinations are proposed.

ATHELOPSIS Oberw. ex Parm.

While studying the species believed to belong to the genus *Athelopsis* Oberw. ex Parm., it was found that on account of the basidial morphology two groups can be separated, viz. species with stalked and cylindrical to narrowly clavate basidia and others with very wide clavate basidia.

Basidia cylindrical.—
Corticium auriculariae (Bourd. & Galz.) Bourd. & Galz.
Corticium baculiferum Bourd. & Galz.
Corticium glaucinum Bourd. & Galz.
Athelopsis hypochnoidea Jülich
Corticium laceratum Litsch.
Corticium gemmiferum subsp. *thymicola* Bourd. & Galz.
Corticium viride (Link) Bres. apud Höhn., sensu auctt.

Basidia broadly clavate.—
Corticium confusum Bourd. & Galz.
Corticium lembosporum Bourd.
Corticium spurium f. *olivaceum* Bourd.
Corticium pausiacum Liberta
Corticium reconditum Jacks.

The first group contains the species that make up the genus *Athelopsis* sensu stricto.

[1] This study was supported by the Netherlands Organization for the Advancement of Pure Research (Z.W.O.).

For the second group of species it was considered necessary to establish a new genus, but in the meanwhile a paper by Larsson & Hjortstam was published in which the genus *Luellia* was proposed for *Corticium reconditum* Jacks. The authors based their genus on two characters, viz. the clavate and pyriform basidia, and the brown coloration of the basal hyphae. The first character is here believed to be the essential one, whereas the last seems to me to be merely of specific importance.

To this genus *Corticium lembosporum* has to be transferred: **Luellia lembospora** (Bourd.) Jülich, *comb. nov.* (basionym: *Corticium lembosporum* Bourd. *in* Revue scient. Bourbonne **23**: 10. 1910). Good descriptions and figures of this species have been published by Liberta (*1962*) and Oberwinkler (*1965*).

The genus *Luellia* comprizes three species:

1. *Luellia furcata* Larss. & Hjortst.
2. *Luellia lembospora* (Bourd.) Jülich (synonym *Corticium confusum* Bourd. & Galz. 1911).
3. *Luellia recondita* (Jacks.) Larss. & Hjortst. (synonyms: *Corticium spurium* Bourd. f. *olivaceum* Bourd. 1922, *Corticium pausiacum* Liberta 1962).

An addition to *Athelopsis* is the following: **Athelopsis subinconspicua** (Litsch.) Jülich, *comb. nov.* (basionym: *Corticium subinconspicuum* Litsch. in Pilát & Lindtner, *in* Bull. Soc. sci. Skopje **18**: 178–179. 1938). (Fig. 1). Identical with this species is *Athelopsis hypochnoidea* Jülich 1971. The specific name 'subinconspicuum' is rather misleading since the basidiocarp of this species is of a yellowish-greenish colour and in most cases very easily seen. But the type specimen of *Corticium subinconspicuum* Litsch. happened to grow on rotten wood of almost the same colour as the basidiocarp, thus suggesting its specific epithet which suggests a *Xenasma* rather than an *Athelopsis*. The description of this species given by Litschauer (l.c.) is fairly adequate except that he observed the spores to be 'subverruculosis, minutissime punctatis usque laevibus'; in fact the spores are always smooth.

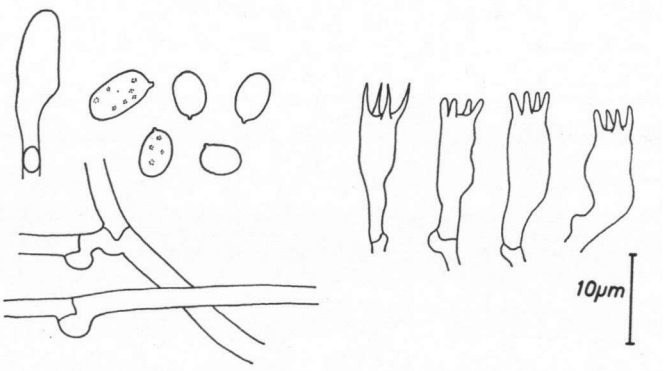

Fig. 1. *Athelopsis subinconspicua*, Macedonia, type.

Basidiocarp resupinate, effused, hypochnoid to soft-pellicular, the margin thinning out. Hymenial surface even, light yellowish with a rather faint greenish tint. Hyphal system monomitic. Hyphae hyaline, rather thin-walled (*c.* 0.3 μm thick), cylindrical, 2–3 μm in diameter, with clamps at all septa, the surface smooth or slightly covered with small granules or crystals. Cystidia lacking. Basidia stalked-cylindrical (= podobasidia), hyaline, thin-walled, 4-spored, with a basal clamp, 13–18×4–5 μm, the sterigmata about 3.5×1 μm, the contents homogeneous or slightly granulose. Spores hyaline, broadly cylindrical to broadly ellipsoidal, thin-walled, smooth, 6–7.5×4–4.5 μm, with distinct apiculus, the contents granulose or slightly guttulate, neither amyloid, dextrinoid, nor cyanophilous. Saprophytic on rotten wood.

MATERIAL STUDIED. — '*Corticium subinconspicuum* Litsch. n. sp. Macedonia: in Fagetis ad silvae limitem montis Luboten (Sar Planina), alt. 1500–1800 m.s.m., solo dolomitico. Matrix: ad ligna mucida. VII. 1937, leg. A. Pilát & V. Lindtner' (W 16529).

TRECHISPORA Karst. emend. Liberta

Of this genus Liberta (1973) has recently made an excellent revision, to which further synonyms and a species may be added:

a. *Odontia microspora* Rick *in* Egatea **18**: 39. 1933. This species is identical with *Trechispora farinacea* (Pers. ex Fr.) Liberta.

MATERIAL STUDIED. — '*Odontia microspora* Rick n. sp. Brazil, Sao Leopoldo, 1930, Rick 91' (type, K).

b. *Odontia serrata* Rick *in* Egatea **17**: 276. 1932. This species, too, is identical with *T. farinacea* (Pers. ex Fr.) Liberta.

MATERIAL STUDIED. — '*Odontia serrata* Rick n. sp. Brazil, Sao Leopoldo, 1930, Rick 130' (type, K).

c. **Trechispora lunata** (Bourd. & Galz.) Jülich, *comb. nov.* (basionym: *Grandinia lunata* Bourd. & Galz., Hym. France 410. 1928. (Fig. 2).

This species belongs to the group of smooth-spored species like *Trechispora amianthina*, *T. byssinella*, *T. confinis*, and *T. mutabilis*. It differs from all of them in having very small lacrymoid to somewhat allantoid spores (3–3.5×1.4–1.5 μm) and a thin-membranaceous, cream-coloured, grandinioid (under a lens somewhat reticulate) basidiocarp; the basidia are like those of *T. byssinella* (Bourd.) Liberta (8–12×3–4 μm), but from that species it differs by its narrower spores and the absence of rhizomorphs.

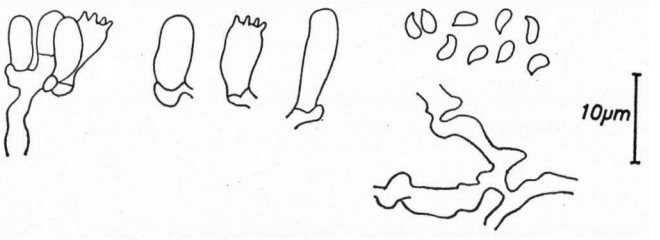

Fig. 2. *Trechispora lunata*, Sweden, lectotype.

MATERIAL STUDIED. — '*Hydnum lunatum* Romell in litt. 6. VI. 1913.', Sweden, Femsjö, 26.9.1890, in herb. Bourdot 23798 (lectotype, PC); Stockholm, 16.11.1913, *Romell*, in herb. Bourdot 23800 (PC).

d. *Corticium aegeritoides* Bourd. & Galz.

Basidiocarp minutely grandinioid, later membranaceous, whitish, rhizomorphs lacking. Hyphal system monomitic. Hyphae rather distinct, hyaline, thin-walled, cylindrical, at some places ampulliform, 1–3 μm in diameter (at the ampulliform swellings up to 6 μm in diameter, clamps present, surface smooth. Cystidia lacking. Basidia small, cylindrical to suburniform, hyaline, thin-walled, 9–11 × 4–5 μm, 4-spored, the sterigmata 3–5 × 0.8–1.0 μm. Spores hyaline, ellipsoidal, thin-walled, warted, 3–4 × 2–2.5 μm, the warts 0.2–0.4 μm long, neither amyloid, dextrinoid, nor cyanophilous. Saprophytic on petioles of ferns.

MATERIAL STUDIED. — France, Aveyron, 'près St. Sernin', 6.1.1910, *A. Galzin 5163* (Bourdot 6950; lectotype, PC).

This species is a typical *Trechispora*. The young very poorly developed state resembles a small *Aegerita* insofar as the granules are separated; they have already developed some basidia with spores. In a later state an effused, membranaceous basidiocarp with granulose-grandinioid hymenial surface is seen. This state differs in no way from *Trechispora farinacea* (Pers. ex Fr.) Liberta, and since the microfeatures are identical, I see no reason to keep *Corticium aegeritoides* apart from *Trechispora farinacea*.

e. *Corticium microsporum* subsp. *hecistosporum* Bourd. & Galz. 195–196. 1928. This subspecies is identical with *Trechispora byssinella* (Bourd.) Liberta.

MATERIAL STUDIED. — France, Allier, Forêt de Dreuille, 'sur Polytrichum', 25.10.1909, *H. Bourdot 6821* (type, PC).

Phanerochaete salmonicolor (Berk. & Br.) Jülich, *comb. nov.*—Fig. 3

Corticium salmonicolor Berk. & Br. *in* J. Linn. Soc. (Bot.) **14**: 71. 1873 (basionym).

Basidiocarp resupinate, effused, membranaceous, separable in small pieces, cracked when dry and exposing an arachnoid subiculum, the margin thinning out, no rhizomorphs present. Hymenial surface even, orange-pink when fresh, whitish to light cream-coloured when dry. Hyphal system monomitic. Hyphae cylindrical, hyaline, smooth, distinct, the basal ones 6–10 μm in diameter and with up to 1.5 μm thick walls, septate, clamps lacking. Cystidia and gloeocystidia lacking. Basidia broadly clavate when young, cylindrical to narrowly clavate when ripe, hyaline, thin-walled, smooth, densely crowded, 35–50 × 5–8 μm, 4-spored, the sterigmata *c.* 4–5 × 1.5 μm, slightly curved inwards, no clamp connection at the base. Spores broadly ellipsoidal, hyaline, thin-walled, smooth, 10–13 × 6–8 μm, with rather large apiculus, neither amyloid, dextrinoid, nor cyanophilous.

IMPERFECT STATE. — *Necator decretus* Massee. Often found together with the perfect state.

SUBSTRATE. — Growing parasitically on various frondose trees and shrubs, causing the economically important 'pink disease'.

DISTRIBUTION. — Known from tropical regions all over the world, also occurring in some southern states of the USA.

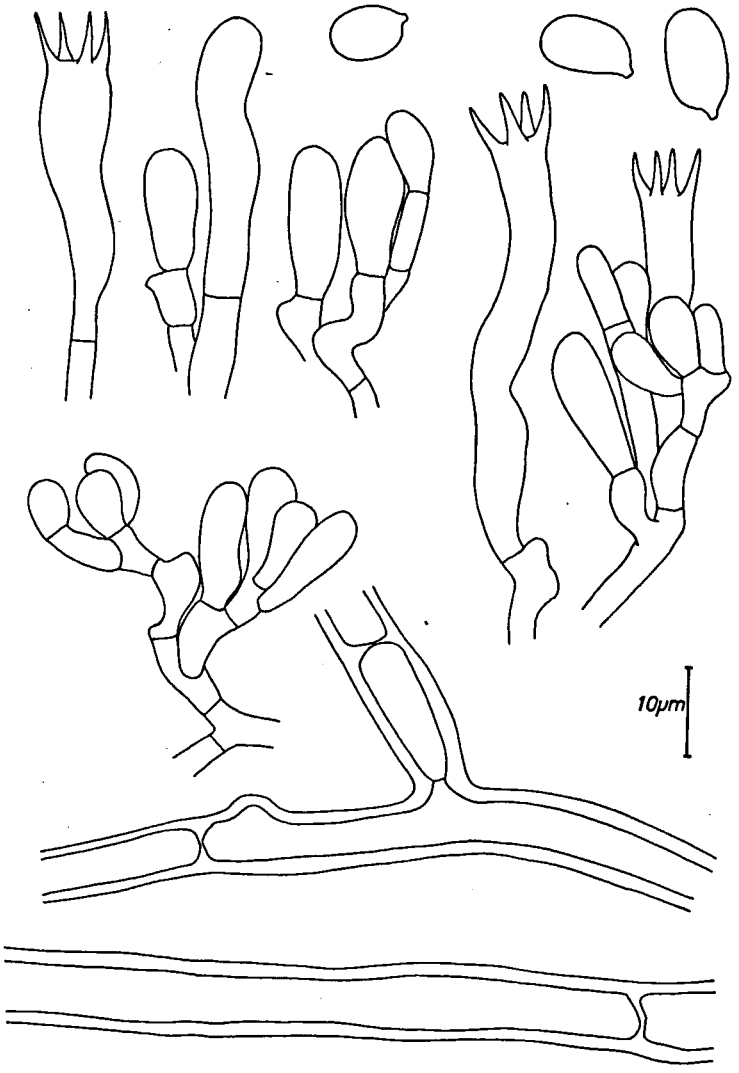

Fig. 3. *Phanerochaete salmonicolor*, Ceylon, type

MATERIAL STUDIED. — *Corticium salmonicolor* Berk. & Br., Ceylon (type, K). — Sierra Leone, Toru, Gaura, 31.10.1955, *C. T. Pyne* (K).

Byssocorticium mollicula (Bourd.) Jülich, *comb. nov.*

Poria mollicula Bourd. *in* Lloyd, Mycol. Writ. **4**: 543. 1916 (basionym). — *Poria terrestris* Bourd. & Galz. 1925.

This rare species with rather soft basidiocarp and poroid hymenial surface shows the same microstructure as *B. atrovirens* but differs from that species by its whitish to ochraceous colour.

Membranomyces Jülich, *gen. nov.*

Carposoma resupinatum, late effusum, firme membranaceum. Hymenium laeve. Systema hypharum monomiticum. Hyphae distinctae, plerumque tenui-tunicatae, efibulatae, *c.* 3–4 μm in diam. Basidia flexuoso-cylindracea vel anguste clavata, *c.* 30–70 μm longa, efibulata, tetraspora. Sporae laeves, ellipsoideae, hyalinae vel leviter flavidae, tenui-tunicatae usque ad tunicis paulo incrassatis, inamyloideae. Typus. — *Corticium spurium* Bourd.

Basidiocarp resupinate, effused, adnate, membranaceous to subceraceous. Hymenial surface even. Hyphal system monomitic. Hyphae distinct, cylindrical, thin- to slightly thick-walled, hyaline, *c.* 3–4 μm in diameter, lacking clamps. Basidia flexuous-cylindrical to narrowly clavate, about 30–50 μm long, 4-spored, lacking a basal clamp. Spores smooth, hyaline to slightly yellowish with age, thin- to slightly thick-walled (*c.* 0.4 μm), inamyloid.

Membranomyces spurius (Bourd.) Jülich, *comb. nov.*—Fig. 4

Corticium spurium Bourd. *in* Rev. scient. Bourbonne **35**: 15. 1922 (basionym). Synonyms: *Corticium delectabile* Jacks; *Clavulicium delectabile* (Jacks.) Hjortst.

Basidiocarp resupinate, effused, adnate, firm-membranaceous to subceraceous; margin indistinct, rhizomorphs lacking. Hymenial surface even, cream-coloured to lemon yellow. Hyphal system monomitic. Hyphae hyaline to slightly yellowish, thin- to slightly thick-walled, cylindrical, 3–4 μm in diameter, lacking clamps, contents homogeneous or somewhat guttulate; the subiculum rather thin, the hyphae mainly vertically arranged. Cystidia and gloeocystidia lacking. Basidia flexuous-cylindrical, often somewhat stalked and widened in the middle with the apical part often slightly narrowed, 35–75 × 6.7–9.6 μm, hyaline to slightly yellowish with age, thin- to somewhat thick-walled when old, lacking a clamp at the base, contents often guttulate, with four large and curved sterigmata *c.* 5–6.7 × 1.6 μm. Spores broadly ellipsoidal, hyaline or slightly yellowish with age, thin- to somewhat thick-walled when old, with prominent apiculus, smooth, 7.4–9.5 × 5.9–7.3 μm, often with numerous small guttules inside, neither amyloid, dextrinoid, nor cyanophilous.

SUBSTRATE. — On wood of coniferous and frondose trees, also in leaf litter on the ground.

MATERIAL STUDIED. — France: Aveyron, Pépisson, .11.1914, *A. Galzin 16830* (H. Bourdot 35226; K). — Aveyron, Pépisson, 22.11.1914, *A Galzin* 16838 (H. Bourdot 29742; PC). — Aveyron, Conques, 16.7.1912, *A. Galzin* 11608 (H. Bourdot 8974; type of *Corticium spurium* Bourd. (K, PC).

Sweden: Uppland, 'Djurö sn, Munkön, i norra delen av kärrets (dalgången) östra skänkel, nära ingången till "ravinen", på tallgrenar p.m.', 23.10.1949, *G. Haglund & R. Rydberg* (S).

Canada: Ontario, West of Maple, 1.10.1938, R. F. Cain (type of *Corticium delectabile* Jacks., TRTC 13684). — loc. cit., 21.9.1950, *Jackson & al.* (TRTC 23271). — loc. cit., 22.9.1940, *R. F. Cain 16432* (TRTC). — loc. cit., 22.9. 1940, *R. F. Cain* (TRTC 16432). —

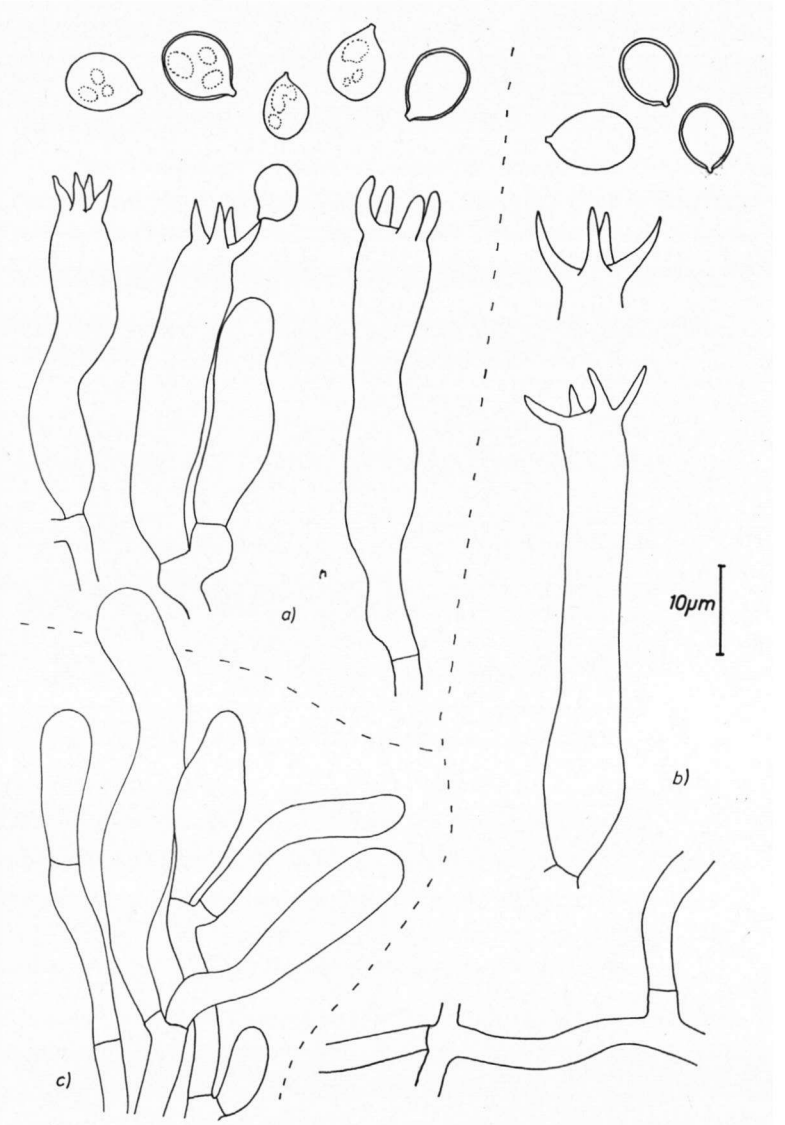

Fig. 4. *Membranomyces spurius*, France. — a. *Bourdot 8974*, type. — b. *Bourdot 29742*. — c. *Bourdot 35226*.

Woods N of Summit Golf Club, N of Richmond Hill, 6.10.1949, *H. S. Jackson* (TRTC 23032). — Don Valley, Toronto, 22.9.1934, *R. F. Cain* (TRTC 8672). — Bear Island, L. Timagami, 1.10.1948, *H. S. Jackson* (TRTC 22556). — Woods S of Aurora, York Co., 10.10.1937, *H. S. Jackson* (TRTC 16722). — Sproule Portage, Lake Opeongo, Algonquin Park, 8.9.1958, *R. F. Cain* (TRTC 33956).

Cristinia gallica (Pilát) Jülich, *comb. nov.*

Radulum mucidum (Pers.) Bourd. & Galz. sensu Bourd. & Galz. *in* Bull. trim. Soc. mycol. Fr. **30**: 247–248. 1914. — *Radulum gallicum* Pilát *in* Mykologia **2**: 54. 1925 (basionym).

Eriksson & Ryvarden (1975) proposed the following new combination: '*Cristinia mucida Erikss.* & Ryv. comb. nov. *Radulum mucidum* Bourd. & Galz., Bull. Soc. Mycol. Fr. 30 p. 247, 1914.' To this the following may be remarked, (i) they omitted to mention the bracket-authors; (ii) they based their combination on a species which had never been named by Bourdot & Galzin. When in their publication of 1914 Bourd. & Galz. made the new combination under *Radulum*, they described a fungus which they identified with Persoon's species; this description was repeated with minor additions in their book of 1928. Since they did not exclude Persoon's type, their account cannot be considered to constitute the description of a new species. Pilát (1925) was aware of the difference between the true *Hydnum mucidum* and Bourdot & Galzin's fungus and he created the nomen novum Radulum gallicum, saying: '*Hydnum mucidum* sensu autorum gallicorum (*Radulum mucidum* (Pers.) Bourdot et Galz., (Hymenomycetes de France no 318. — Bull. de Soc. Myc. de France) a *Acia mucida* (Pers.) Pilát certe diversum. Hanc speciem Gallicam nomino *Radulum Gallicum* Pilát.' There seems to be no earlier name available, at least for the moment, thus the epithet 'gallica' has to be used.

CORONICIUM Erikss. & Ryv.

When Eriksson & Ryvarden established this monotypic genus, they separated it from other genera by the following characters: 'The most conspicuous character of the new genus are the cystidia, with their incrustation which in microscope looks like a golden crown. This together with the thinwalled, indistinct hyphae, mamillate cystidia and the staining in cotton blue of the whole fungus make it characteristic.' Their description of the species *C. gemmiferum* (Bourd. & Galz.) is based on a specimen collected in Denmark by Hauerslev. They found that 'all hyphal walls as well as walls of cystidia, basidia, and spores are stained by cotton-blue.' This, however, is not the case with the type material, which I found to be acyanophilous in all parts. But apart from this, I think cyanophily is not useful as a generic character in the Corticiaceae, and so probably is the said incrustation of the cystidioles. In fact, I would rather stress some other characters of this genus, viz. the suburniform basidia (i.e. constricted in the middle), which are often somewhat stalked, the cystidioles with their apical prolongation and the indistinct, torulose hyphae. If emphasis is laid upon these features, then at least three more species will be found to have their proper place in *Coronicium*. The genus is related to *Hyphoderma*, with which it has the suburniform basidia in common, but differs from that genus by the indistinct and narrower hyphae.

1a. Spores 4.5–5.2 × 2.5–3.0 μm; cystidioles broadly clavate *C. proximum* (Jacks.) Jülich
1b. Spores 6–9 μm long; cystidioles narrowly clavate or fusiform 2
2a. Spores narrowly navicular, 6.5–9 × 2.5–3 μm *C. alboglaucum* (Bourd. & Galz.) Jülich
2b. Spores ellipsoidal or broadly navicular 3
3a. Spores ellipsoidal, 6–8 × 3–4 μm; hymenial surface under a lens homogeneous *C. thymicola* (Bourd. & Galz.) Jülich
3b. Spores broadly ellipsoidal to navicular, 6–9 × 3.5–4.5 μm; hymenial surface under a lens (50×) dotted with small particles of a brownish substance *C. gemmiferum* (Bourd. & Galz.) Erikss. & Ryv.

Coronicium alboglaucum (Bourd. & Galz.) Jülich, *comb. nov.*—Fig. 5

Corticium alboglaucum Bourd. & Galz. *in* Bull. trim. Soc. mycol. Fr. **27**: 251. 1911 (basionym).

Basidiocarp resupinate, adnate, 2–3 cm in diameter, membranaceous, cream-coloured, 50–100 μm thick, slightly thinner towards the margin, rhizomorphs lacking; no differentiation into a hymenial part and a subiculum. Hyphal system monomitic. Hyphae indistinct and mostly collapsed, some distinct, not embedded in a gelatinous matrix, mostly torulose, hyaline, thin-walled to slightly firm-walled (0.2–0.3 μm), 2–3 μm in diameter, with clamps at the septa, surface smooth, contents homogeneous; not amyloid, dextrinoid, or cyanophilous. Adjacent to the substrate is a *c.* 20 μm thick layer of parallel hyphae. Cystidioles irregularly cylindrical to ellipsoidal or subulate to ventricose-subulate, hyaline, thin-walled, with a basal clamp, surface smooth, rather often with a small elongate or subglobose projection at the apex, 15–25 × 3–4 μm. Basidia hyaline, suburniform, often somewhat stalked, thin-walled, with smooth surface, with a basal clamp, 15–23 × 4–6 μm, with four

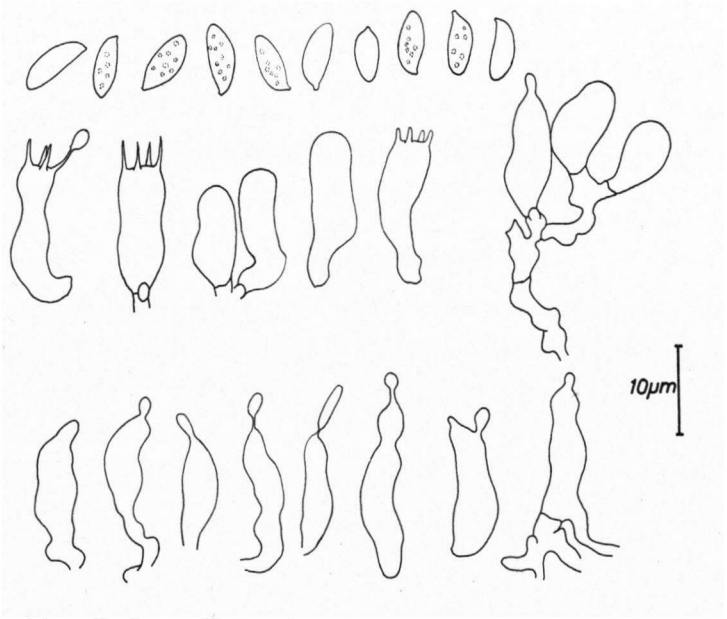

Fig. 5. *Coronicium alboglaucum*, France, type.

slender sterigmata; contents homogeneous. Spores hyaline, oblong-ellipsoidal to subnavicular or subfusiform, smooth, thin-walled, with distinct apiculus, contents with several small guttules, 6.5–9 × 2.5–3 μm, rather often two or four glued together; not amyloid, dextrinoid, or cyanophilous.

SUBSTRATE. — On decayed bark of frondose trees.

DISTRIBUTION. — In Europe known from France and Austria; recorded also from the U.S.A. and Canada (Liberta, 1960).

MATERIAL STUDIED. — France, Allier, St. Priest, 13.7.1910, *Bourdot 7349* (type, PC).

In the type material, it is extremely difficult to find clamps at the septa, since the hyphae are badly collapsed.

Coronicium proximum (Jackson) Jülich, *comb. nov.*—Fig. 6

Corticium proximum Jacks. *in* Canad. J. Res. **28**: 722. 1950 (basionym).

Basidiocarp annual, resupinate, effused up to several cm, up to 50 μm thick, adnate; consistency membranaceous, context homogeneous; margin thinning out, rhizomorphs or hyphal strands lacking. Hymenial surface even, cream-coloured or greyish. Hyphal system monomitic. Hyphae hyaline, indistinct, thin-walled, 1.5–2 μm in diameter, torulose, with clamps, crystals lacking or few. Cystidia of hymenial

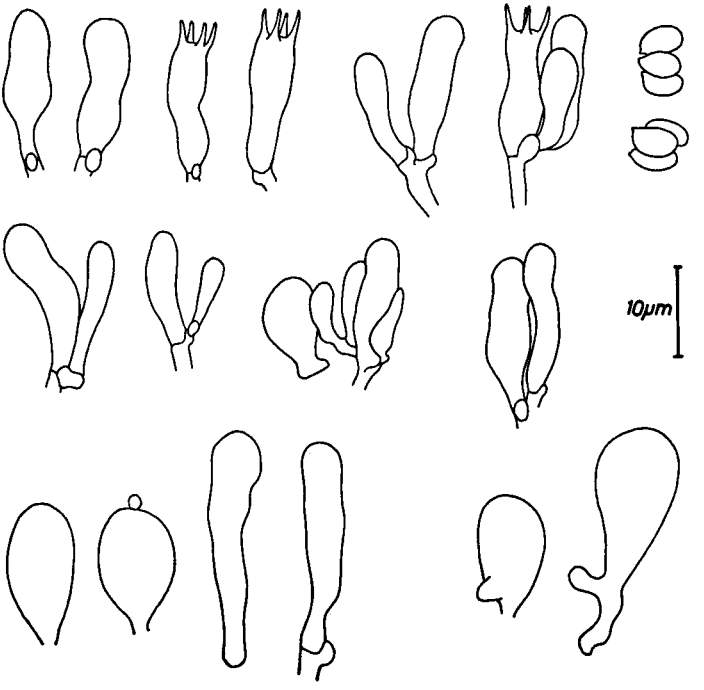

Fig. 6. *Coronicium proximum*, U.S.A., type.

origin. Cystidioles present, hyaline, broadly clavate, ellipsoidal, some with a globose projection at apex, thin-walled, smooth, enclosed or only slightly projecting, with a clamp at the base. Basidia hyaline, suburniform, somewhat stalked, young basidia cylindrical, thin-walled, smooth, 14–18 × 4.2–4.6 μm, with a clamp at the base, contents homogeneous, with four subulate sterigmata *c.* 3 × 1.2 μm. Spores hyaline, thin-walled, smooth, ellipsoidal, adaxially slightly depressed, 4.5–5.2 × 2.5–3 μm, with small apiculus, often 2–4 glued together, contents homogeneous or slightly guttulate, not amyloid, dextrinoid, or cyanophilous. Conidial state lacking.

REACTIONS. — No part of the basidiocarp is amyloid, dextrinoid, or cyanophilous.

MATERIAL STUDIED. — U. S. A., Vermont, Middleburg, *s. dat., E. A. Burt* (TRTC).

Canada, Ontario, Bear Island, Lake Temagami, Temagami Forest Reserve, 21.8.1944, *H. S. Jackson* (TRTC).

Coronicium thymicola (Bourd. & Galz.) Jülich, *comb. nov.*—Fig. 7

Corticium gemmiferum subsp. *thymicola* Bourd. & Galz., Hym. Fr. 211. 1928 (basionym).

Basidiocarp annual, resupinate, effused up to several cm, about 50–130 μm thick, in small pieces separable; consistency membranaceous, context homogeneous; margin thinning out, rhizomorphs or hyphal strands lacking. Hymenial surface even,

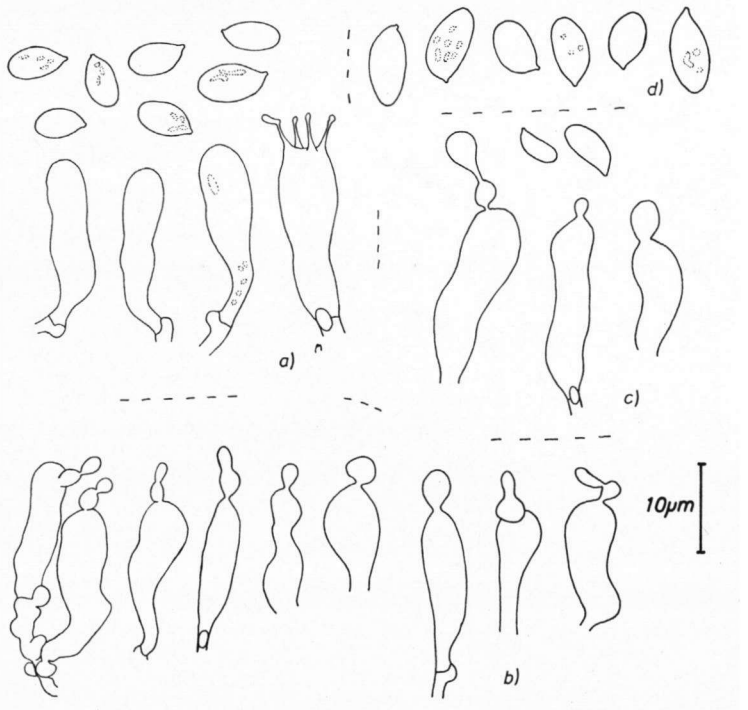

Fig. 7. *Coronicium thymicola*, France. — a. *Bourdot 14188*, lectotype. — b. *Bourdot 14184*. — c. *Bourdot 14187*. — d. *Coronicium gemmiferum*, France, type.

cracked when dry, colour cream to ochraceous. Hyphal system monomitic. Hyphae hyaline, indistinct, thin-walled and *c.* 1.5 μm wide, cylindrical to torulose, with clamps, crystals and amorphic or oily substances between the hyphae. Cystidia etc. lacking. Cystidioles present, hyaline, irregularly clavate with 1–2 apical projections, thin-walled, 15–20 × 4–6 μm, enclosed or slightly projecting, contents homogeneous, with a clamp at the base. Basidia hyaline, clavate, slightly suburniform, often somewhat stalked, thin-walled, 18–20 × 4.5–5.2 μm, with a clamp at the base, contents slightly guttulate, with four subulate sterigmata *c.* 3 × 0.5 μm. Spores hyaline, ellipsoidal, thin-walled, smooth, 6–8 × 3–4 μm, with small apiculus, contents somewhat guttulate, not amyloid, dextrinoid, or cyanophilous. Conidial state lacking.

MATERIAL STUDIED. — France: Aveyron, Navadou (Millau), 'sur Thym', 22.11.1914, *Galzin 16824* (Bourdot 14188; lectotype, PC). — Aveyron, l'Hymen (Millau), 'sur Thym', 8.5.1911, *Galzin 9067–72* (Bourdot 14184, PC). — Aveyron, 'env. de Millau, Pépisson, sur Thym', .5.1911, *Galzin 9282* (Bourdot 14187, PC).

Parvobasidium Jülich, *gen. nov.*

Carposoma resupinatum, effusum, adnatum, membranaceum. Hymenium laeve, cremeum. Systema hypharum monomiticum. Hyphae hyalinae, tenui-tunicatae, fibulatae. Gloeocystidia adsunt, hyalina, clavata. Basidia hyalina, parva, circa 8–12 μm longa, tenui-tunicata, fibulata. Sporae hyalinae, parvae, tenui-tunicatae, laeves, inamyloideae. — Typus: *Gloeocystidium cretatum* Bourd. & Galz.

Basidiocarp resupinate, effused, adnate, membranaceous. Hymenial surface even, cream-coloured. Hyphal system monomitic. Hyphae hyaline, thin-walled, with clamps. Gloeocystidia present, hyaline, clavate. Basidia hyaline, small, about 8–12 μm long, thin-walled, with a basal clamp. Spores hyaline, small, thin-walled, smooth, inamyloid.

Parvobasidium cretatum (Bourd. & Galz.) Jülich, *comb. nov.*—Fig. 8

Gloeocystidium cretatum Bourd. & Galz. *in* Bull. trim. Soc. mycol. Fr. **28**: 371. 1913 (basionym).

Basidiocarp annual, resupinate, effused up to several cm, about 50–250 μm thick, in small pieces separable; consistency membranaceous, context homogeneous; margin thinning out, indeterminate, pruinose, rhizomorphs or hyphal strands lacking. Hymenial surface even, whitish to pale cream-coloured. Hyphal system monomitic. Hyphae hyaline, thin-walled, cylindrical or somewhat torulose, with clamps at all septa, contents slightly guttulate, crystals and oily amorphic material often abundant between the hyphae. Cystidia etc. lacking. Gloeocystidia present in the hymenial and subhymenial layers, hyaline, of irregular shape (clavate, flexuous-cylindrical, fusiform), thin-walled, 17–32 × 5.2–8.9 μm, enclosed or slightly projecting, contents guttulate, with a clamp at the base. Basidia rather short, hyaline, clavate, thin-walled, 8.5–12 × 3.5–4 μm, with a clamp at the base, contents homogeneous, with four subulate sterigmata 3–3.7 × 0.5–0.6 μm. Spores hyaline, oblong-ellipsoidal, thin-walled, smooth, 4–4.5 × 1.8–2.1 μm, with small apiculus, contents homogeneous, not amyloid, dextrinoid, or cyanophilous. Conidial state lacking.

SUBSTRATE. — Growing on putrescent petioles of ferns.

DISTRIBUTION. — Known only from France.

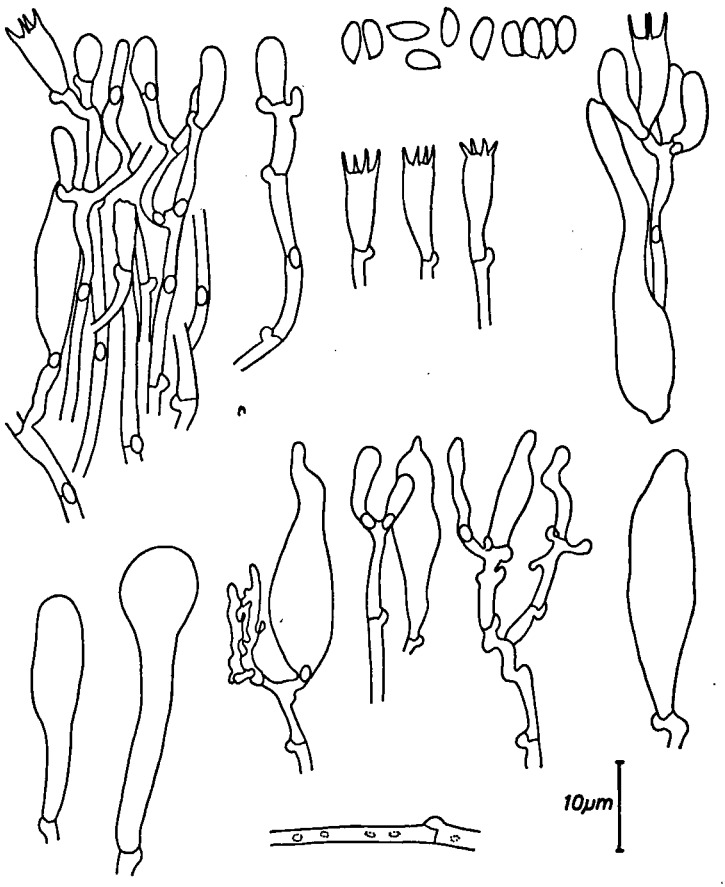

Fig. 8. *Parvobasidium cretatum*, France, type.

MATERIAL STUDIED. — F r a n c e: Aveyron, Barthe, 'sur Fougère mâle', 9.10.1910, *Galzin* 7209 (Bourdot 31670; lectotype, PC). — Aveyron, Bouisson, 'sur Polystichum filix-mas', 5.9.1909, *Galzin* 4606 (Bourdot 7341; PC).

Conohypha Jülich, *gen. nov.*

Carposoma resupinatum, effusum, membranaceum. Hymenium laeve, albidum vel cremeum. Systema hypharum monomiticum. Hyphae hyalinae, tenui-tunicatae, cellulis brevis latisque compositae, fibulatae. Basidia hyalina, circa 30 µm longa, cylindracea, tetraspora, fibulata. Sporae hyalinae, tenui-tunicatae, laeves, inamyloideae. — Typus: *Corticium albocremeum* Höhn. & Litsch.

Basidiocarp effused, resupinate, membranaceous. Hymenial surface even, whitish to cream-coloured. Hyphal system monomitic. Hyphae hyaline, thin-walled,

composed of rather short and broad cells, with clamps. Basidia hyaline, thin-walled, about 30 μm long, cylindrical, with a basal clamp, four-spored. Spores hyaline, thin-walled, smooth, inamyloid.

Conohypha albocremea (Höhn. & Litsch.) Jülich, *comb. nov.*—Fig. 9

Corticium albocremeum Höhn. & Litsch., Wiener Festschr., Wien, 61. 1908 (basionym).

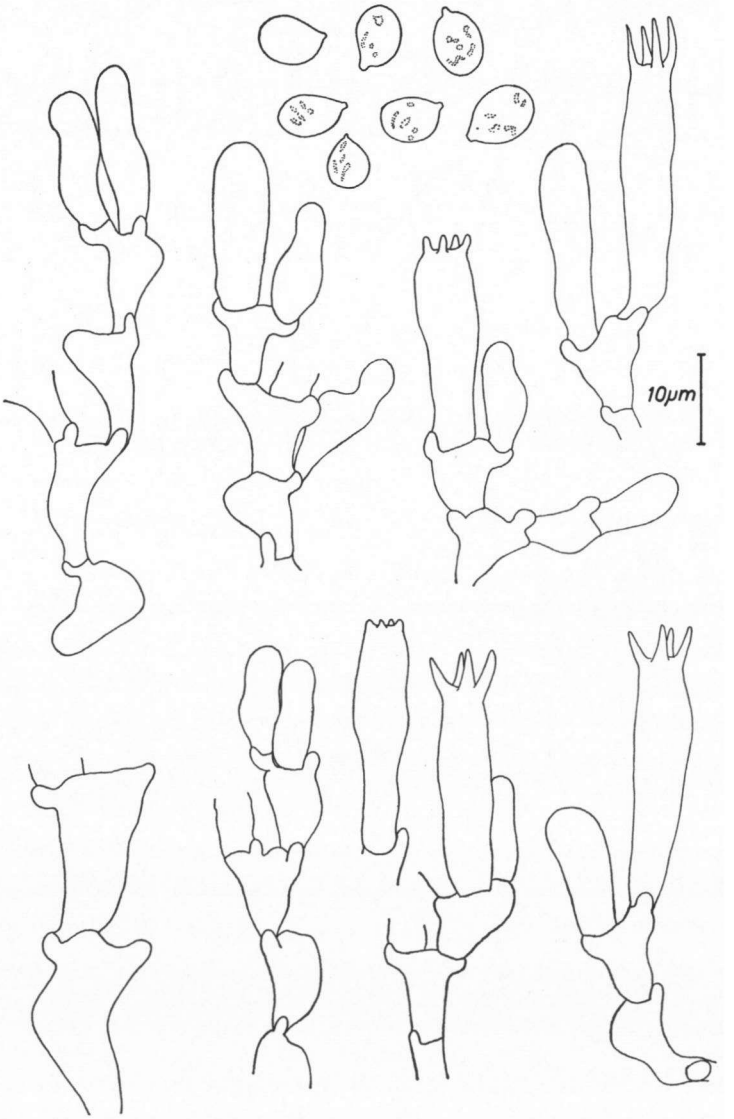

Fig. 9. *Conohypha albocremea*, Austria, type.

Basidiocarp annual, resupinate, loosely adnate, effused up to several cm, about 100 μm thick, in small pieces separable; consistency soft-membranaceous, context homogeneous; rhizomorphs or hyphal strands lacking. Hymenial surface even, cream to ochraceous. Hyphal system monomitic. Hyphae hyaline, composed of rather short and broad cells (*c.* 8–19 × 5–11 μm), thin-walled, inverse-conical, with clamps at all septa, branching from the top of the cells, contents homogeneous or slightly guttulate, elongated crystals present between the hyphae. Cystidia lacking. Basidia hyaline, cylindrical, thin-walled, smooth, 23–30 × 5.5–6 μm, with a clamp at the base, contents slightly guttulate, with four subulate sterigmata 5–7 × 0.7–1 μm. Spores hyaline, broadly ellipsoidal, thin-walled, 6.6–8 × 4.6–5.2 μm, with distinct apiculus, contents slightly guttulate, not amyloid, dextrinoid, or cyanophilous. Conidial state lacking.

REACTIONS. — No part of the basidiocarp is amyloid, dextrinoid, or cyanophilous.

CYTOLOGY. — Hyphae 2-, spores 1-nucleate.

SUBSTRATE. — On wood and bark of coniferous trees.

DISTRIBUTION. — Known from Austria and Sweden; apparently a rare species.

MATERIAL STUDIED. — Austria: Nieder-Österreich, Wienerwald, Sparbach bei Neuweg, 14.7.1902, *F. von Höhnel* (type, S). — Tirol, Schmirn-Tal 'prope St. Jodok in jugo Brenner, m. Aug.' *V. Litschauer* (L).

REFERENCES

BOURDOT, H. & GALZIN, A. (1928). Hyménomycètes de France. Sceaux.

ERIKSSON, J. & RYVARDEN, L. (1975). The Corticiaceae of North Europe. **3**: 288–546.

JÜLICH, W. (1974). The genera of the Hyphodermoideae (Corticiaceae). *In* Persoonia **8**: 59–97.

LARSSON, K.-H. & HJORTSTAM, K. (1974). *Luellia*, a new genus in the Corticiaceae (Basidiomycetes). *In* Svensk bot. Tidskr. **68**: 57–63.

LIBERTA, A. E. (1960). A taxonomic analysis of section *Athele* of the genus *Corticium*. *In* Mycologia **52**: 884–914.

—— (1961). A taxonomic analysis of section *Athele* of the genus *Corticium*. II. *In* Mycologia **53**: 443–450.

—— (1973). The genus *Trechispora* (Basidiomycetes, Corticiaceae). *In* Canad. J. Bot. **51**: 1871–1892.

OBERWINKLER, F. (1965). Primitive Basidiomyceten. *In* Sydowia **19**: 1–72.

PARMASTO, E. (1968b). Conspectus systematis Corticiacearum. Tartu.