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November 2013

Crepidotus Notebook 1

L. R. Hesler

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alabamensis Murr.

CREPIDOTUS HAERENS Physic

Photo

Pileus laterally attached, 10-33 mm. broad, viscid when wet, hygrophanous, white, base white-mycelioid, elsewhere appearing glabrous, margin drying last, finely striatulate. Context white, rubbery; odor and taste mild.

Lamellae narrowly adnate to lateral tubercle, radiating, close, narrow, brownish with an olive tint.

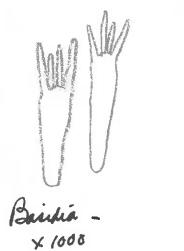
Stipe none.

Spores (6.5) 7-8.5 x 4.5-5 (5.5) μ, ellipsoid, a few sub-amygdaliform, smooth. Basidia 30-42 x 6-7 μ, 4-spored, sterigmata often very long (9-12 μ). Pleurocystidia none; :() Manual: cheilocystidia 27-41 x 2-4 (apex) x 5-8 μ (base), ventricose, fusoid, obclavate, clavate, usually with a prominent neck, (2) frame similar, longer when platines, 60-86 x 5-7μ. clustered; Gill trama subparallel, cells relatively short, 6-12 μ broad. Pileus trama interwoven. Cuticle an ixocutis, hyphae loosely interwoven, the gelatinous zone 90-130 μ thick; Clamp connections none.

no brown Ryphae .

24893

Gepidotus Raeront PK. No. 24893



AMANOD Ch (hymenical) Ch - × (000

Ch (trawel) - × 1000

alabamenus Murr. 24963 CREPIDOTUS HAE

Pileus 1-3 cm. broad, white, hygrophanous, viscid, densely appressed fibrillose, short-striate when wet. Context white, medium thick; odor and taste mild.

Lamellae adnate, close, medium broad, white then "snuff brown," edges even.

Stipe none; pileus attached to a lateral tubercle which is white-strigose.

Spores 6-7.5 x 4.3-5 1, ellipsoid, smooth, color in deposit: "Dresden brown." Pleurocystidia none; cheilocystidia 30-35 x 5-7 µ, ventricose to obclavate, more rarely constricted, more or less appendiculate; or slender-filamentous, 40-50 x 2 µ, and tramal. Gill trama subparallel, hyphae 4-7 µ broad. Pileus trama interwoven. Cuticle an ixocutis, 110-200 µ thick; Gill edges usually gelatinized. **no prown hyphae**.

Alabamennia Muss. Grepidotus Raerens (PK) Raec. No. 24963

and the framal type ah - × 1000

CREPIDOTUS ALABAMENSIS Murr.

(<u>H-25817</u>)

Pileus white, obscurely pruinose (under lens).

Lamellae white, then brownish, medium close, moderately narrow.

Spores 5.5-7.8 x 4-5 μ , ellipsoid, obscurely inequilateral, smooth. Cuticle a gelatinous zone, the surface bearing more or less a turf of erect hyphoid pilocystidia. Clamps none. To brown hyphal.

Gepidotus alabamencis Murr. 35833



CREPIDOTUS ALBATUS sp. nov. (No. 3658)

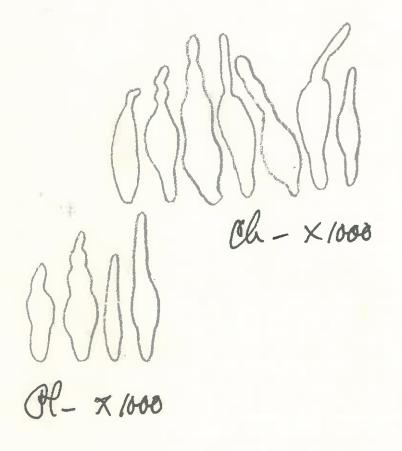
Pileus 3-8 mm broad, mostly dorsally attached, somewhat orbicular, white (buff when dried), downy-villose, whitetomentose at point of attachment, dry, margin even, incurved, Context thin, pallid.

Lamellae narrowly adnate, radiating from a lateral point, white, finally yellowish-brown, edges even to minutely fimbriate (under lens), medium broad, close.

Stipe eccentric, short, inconspicuous (more noticeable in young pilei), then disappearing.

Spores 6-8 (9) x 4-5 μ , ellipsoid, punctate-rough (clearly so when mounted in 2% KOH, only very faintly so in H₂0), yellowish-brown in 2% KOH microscopic mounts. Basidia 18-26 x 5.5-8 μ , 4-spored. Pleurocystidia 24-39 x 5-8 μ , clavate to flask-shaped, usually appendiculate with a conspicuous neck, projecting only slightly, somewhat erratic in occurence, absent in many sections; cheilocystidia 31-45 x 6-10 μ , similar, clustered, conspicuous when present, absent in many sections. Gill trama of irregularly interwoven narrow hyphae. Pileus trama of interwoven hyphae. Cuticle a trichodermium, the hyphae long, numerous, narrow (2-3 μ broad). Clamp connections occasional, amall, and only moderately conspicuous.

Crepidotus albatus sp. nov. No. 3658



CREPIDOTUS ALBIDUS E. & R.

Philadelphia Acad. Nat. Soi. Proc. 1894:322. 1895

Pileus 5-7.5 mm broad, sessile, resupinate, nearly white, glabrous, margin incurved when dry.

Lamellae radiating from a lateral point, pallid, becoming yellowish-brown, broad, not crowded, thin.

Spores 5-7 x 4-5 μ , ellipsoid, smooth. Basidia 27-31 x 5-6 μ , 4-spored. Pleurocystidia none; cheilocystidia 25-35 x 2-5 μ , more or less filementous to cylindric, somewhat flexuous. Pileus trama interwoven. Guticle of repent hyphae, bearing more or less erect, slender, short hyphae. Clamp connections small and rare.

Habit, Habitat, and Distribution - On hardwood, Michigan and Colorado, April-May.

Materials Studied - COLORADO: Bethel, collected at Palmer Lake, March 1911, deposited at N. Y. Botanical Garden Herbasium, marked "Type"; MICHIGAN: Smith 66258 (Kauffman 95), on dead trees, Ann Arbor, collected by A. J. Pieters, May 23, 1894, and marked "Co-Type" by Kauffman; a portion of the type collection, presumably sent from Ann Arbor to Ellis by Pieters, is on deposit at N. Y. Botanical Garden, and another portion is at University of Michigan.

Observations - The material of both the Michigan and Golorado collections is sparse, and not satisfactory for critical study. The description of the spores given above is based on the co-type from Michigan; this material is inadequate for a microscopic study of the pileus and gills. The description of gill and pileus structure above is based on the Bethel collection from Colorado, which is not the type, even though it is so marked.

Although our study of this species is unsatisfactory, we include an account of it for the record, and in the hope it may be found again. It is characterized by its small whitish, glabrous pileus, its short, smooth spores, and the presence of clamp connections.

CREPIDOTUS ALBIDUS E. & E.

Philadelphia Acad. Nat. Sci. Proc. 1894:322. 1895.

Pileus 5-7.5 mm broad, resupinate-sessile, nearly white, glabrous, margin incurved when dry.

Lamellae radiating from a lateral point, pallid becoming yellowish-brown, broad, not crowded, thin,

Spores about 5 x 3.5μ , subinequilaterally elliptical.

Habit, Habitat, and Distribution - On bark of (<u>Tilia</u>?), Ann Arbor, Mich., May, 1994 (A. J. Peiters).

Material Studied - (<u>Note</u>: two collections were sent me on loan fron the N. Y. Bot. Garden: (1) marked "type, I guess," from Ann Arbor, coll. A. J. Peiters, Apr. 23, 1894; it was inadequate for study; (2) Earked "type," from Palmer Lake, Colorado, coll. by E. Bethel, Mch. 1911; but this can hardly be the type since both Kauffman and Murrill aay that the type is at Ann Arbor.)

Observations - The Above description is from the original by Ellis & Everhart (l. c.).

L SAL ALAND CREPIDOTUS ALBIDUS E. & E.

(Collected Apr. 23, 1894, by A. J. Pieters, on logs, Ann Arbor, Mich.)

for the M. M. Bot. forder On the folder this is marked "type." On the packet, it is marked "type, I guess."

The material is wholly inadequate for study.

It can hardly be the type, since Kauffman says the type is at Ann Arbor.

CREPIDOTUS ALBIDUS E. & E.

Type (?)

(Specimen marked type, from Palmer Lake, Colorado, Mch. 1911, coll. by E. Bethel, on <u>Quercus gambellis</u>. Material sparse, and somewhat unsatisfactory for study.)

fron N. Y. Bot. Jarden, and

Spores $5.5-7.5 \ge 4-5 = \mu$, ellipsoid, smooth. ^Basidia 27-31 $\ge 5-6 = \mu$, 4-spored. ^Pleurocystidia none; cheilocystidia more or less filamentous, $25-35 \ge 2-5 = \mu$. Gill trama not distinct enough for study. Pileus trama interwoven. Cuticle a cutis with scattered, more or less erect, slender, short hyphae. Clamp connections small and rare on the tomentum at the base of the pileus.

This can hardly be the type. Both Kauffman and Murrill say the type is from Ann Arbor, Mich., and give the spores $5 \times 3.5 \mu$. Singer (Lilloa 13:62) gives the spores 5-6.8 x $4.8-6 \mu$.

CREPIDOTUS ALABAMENSIS Murr.

Type

(Coll. F. S. Earle, at Palmetto Swamp, on persimmon bark, near Auburn, Ala., Sept. 1, 1899)

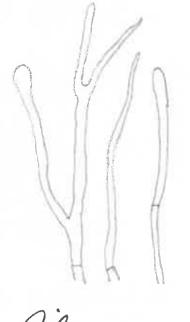
Notes as of Dec. 19, 1962

Spores 6-8.5 x 4-5 μ , ellipsoid, smooth, brown in 2% KOH. Basidia 22-26 x 5-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 37-60 x 6-10 μ , clavate, ventricose, at times irregularlyshaped or constricted, gelatinous. Gill trama subparallel, hyphae 6-12 μ broad. Pileus trama interwoven. Cuticle a thick (175-300 μ) ixocutis comprising about half the flesh of the pileus, of loosely interwoven, gelatinous hyphae. Clamp connections none on the cuticle nor on the villose-tomentum at the base of the pileus. No brownish fibrils (hyphae) found on the pileus.

The material is very sparse.

Grepidotus alabamensis Mivor. Fype

Oh - × 1000



Pilo - × 1000

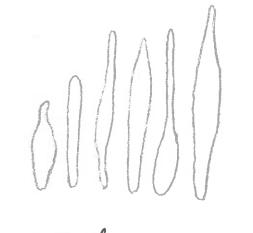
alabamensis Murr. 5388 CREPIDOTUS HAERENS (Pk.

Spores (6) 7-8.5 μ x (4) 4.5-5 μ , ellipsoid, slightly inequilateral, smooth. Basidia 22-28 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia: (1) hymenial, clavate, fusiform, ventricose, bottle-shaped, 30-50 x (3) 5-7 μ ; (2) tramal, 42-55 x 3-6 μ , filamentous, apex often more or less enlarged, gelatinous. Gill trama of rather short, branched cells. Subhymenium a narrow (15-25 μ) zone of more or less parallel hyphae. Cuticle a gelatinous zone, 100-225 μ broad, with some hyphal ends more or less erect; no brown hyphae.

Cf. alabamensis.

Gepidotus haerens (FK.) Acc.

No. 5388



Hymeinial Ch - × 1000

Franal Ch-× 1000

alabamensir Murr.

CREPIDOTUS HAERENS (Pk.) Sacc.

8966

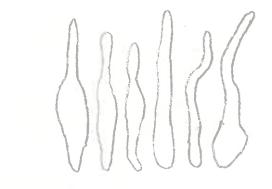
Pileus 1-2 cm broad, sessile, laterally attached, semiorbicular to flabelliform, white, glabrous, whitetomentose at base, viscid, even.

Lamellae radiating from a lateral tubercle, close, medium broad, brown.

Stipe none.

Spores (5.5) 6-8.5 x 4-5 μ , ellipsoid, inequilateral, smooth, brown under microscope. Pleurocystidia none; cheilocystidia: hymenial, 28-55 x 2.5-8 μ , obclavate or ventricose; tramal, 50-62 x 4-5 μ , filamentous. Gill trama of subparallel hyphae. Pileus trama interwoven. Cuticle a gelatinous zone, 65-110 μ thick, with no brown hyphae. Clamp connections none on cuticle, trama or tomentum at the pileus base.

Ocepidotus 8966



Hymenial Ch - × 1000

Franal ch - × 1000

allebamensis Murr.

CREPIDOTUS HAERENS (TR.) Saus

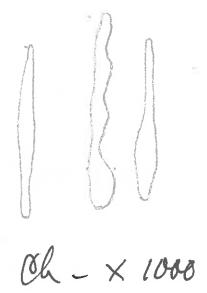
Pileus 1-4.5 cm. broad, very viscid.

Spores 7-8.5 x 4-5.5 μ , ellipsoid, smooth. Pleurocystidia none; cheilocystidia mostly subventricose, often irregular, 32-50 x 4-5 μ . Gill-trama nearly parallel. Pileus trama composed of a gelatinous hyphae throughout the upper (outer) three-fourths.

THE ALLEN AD MANNING

9208

Crepidotur hærens (Fr.) Doce. No. 9208



alabamensis Murr.

12227

CREPIDOTUS HAERENS (Pk.) Sace.

Spores $6.5-8.5 \ge 4-5 \mu$, ellipsoid, smooth. Pleurocystidia none; cheilocystidia flask-shaped to ventricose, $36-45 \ge 2.5-3$ (apex) $\ge 7-8$ (base) μ . Pileus trama interwoven. Cuticle a gelatinous zone, $100-180 \mu$ thick; no brown hyphae.

Pileus glabrous, no brown fibrils.

Pileus whitish, glabrous, viscid.

Lamellae medium broad, close, edges gelatinous.

Spores 6-8 x 4-5 μ , ellipsoid, inequilateral in profile, smooth. Pleurocystidia none; cheilocystidia gelatinous. Gill trama subparallel, hyphae 5-ll μ broad. Pileus trama interwoven. Cuticle a gelatinous zone 110-180 μ thick, surface bearing scattered, colorless hyphae and some pilocystidia. Clamp connections none

CREPIDOTUS ALABAMENSIS Murr. (H-19624)

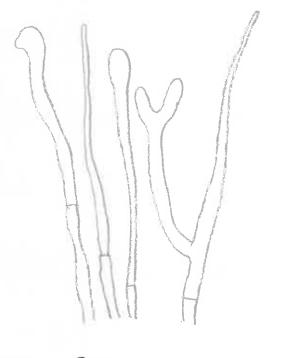
Spores (6.5) 7-8.5 x 5-6 μ , ellipsoid, smooth, brown under microscope. Basidia 23-27 x 5-6 μ , 4-spored. Pleurocystidia none; cheilocystidia 15-40 x 3-8 μ , often gelatinous, cylindric, ventricose, clavate, apices obtuse or appendiculate. Gill trama subparallel, hyphae 5-8 μ broad, cells relatively short. Pileus trama loosely interwoven. Cuticle an ixocutis, 50-80 μ thick, the surface bearing relatively short, colorless, narrow (2-6 μ) hyphae - the terminal elements pilocystidioid - which form more or less of a turf; pilocystidia aciculate, capitate, forked or branched. Clamp connections none (either on epicuticular hyphae or on hyphae at point of attachment of pileus to substratum).

Some gill edges appear more or less gelatinous.

Murrill collected this at Gainesville, Fla., and erroneously identified it as <u>C. mollis</u>.

Capidotus (No. 19624)

MAARDIG Ch- × 1000



Pilo - × 1000

alabamensis Murr.

21871 CREPIDOTUS HAERENS (Pk.) Saco

Spores 6-8 x 4-5 μ , ellipsoid, smooth, Pleurocystidia none; cheilocystidia clustered, mostly flask-shaped to subcylindric or fusoid, often appendiculate, 30-38 x 5-8 μ . Gill-trama subparallel to slightly interwoven. Subhymenium a narrow zone of more or less parallel hyphae. Cuticle an no from toppat. ixocutis 70-170 μ thick: Clamp connections none on epicuticular hyphae nor on tomentose hyphae at base of pileus. Gill edges more or less gelatinous.

alabamensis?

CREPIDOTUS No. 21871

Spores 6-8 x μ -5 μ , ellipsoid, smooth. Pleurocystidia clavate-appendiculate, 30-38 x 6-8 μ , the neck at times forked; cheilocystidia clustered, mostly flask-shaped to subcylindric or fusoid, often appendiculate, 30-38 x 5-8 μ . Gill trama subparallel to slightly interwoven. Subhymenium a narrow zone of more or less parallel hyphae. Cuticle an ixocutis 70-170 μ thick; no brown hyphae. Clamp connections none on epicuticular hyphae nor on tomentose hyphae at base of pileus. Gill edges more or less gelatinous.

alabamenis Murr.

CREPIDOTUS (HAERENS (Pk.) Sace.

Pileus white, viscid, glabrous.

Spores 6-8 x μ .3-5.2 μ , ellipsoid, smooth, "Dresden brown." Pleurocystidia none; cheilocystidia 30-65 x 3-7 μ , cylindric to subfusoid-cylindric or flask-shaped, more or less appendiculate. Gill trama subparallel, hyphae 5-10 μ broad. Pileus trama loosely interwoven, branched. Cuticle an ixocutis, 90-130 μ thick; no brown hyphae. Clamps none on villose hyphae at point of attachment of pileus to substrate.

The gill-edges are gelatinous.

22996

Repidotus Raerens (PK) Jacc. No. 22996

NAMAAA

A Ch (Rymenial)



22996 - Repidotus alabamensis Muor.

NEW SPECIES OF FUNGI-FROM VARIOUS LOCALITIES.

BY J. B. ELLIS AND B. M. EVERHART.

* HYMENOMYCETES.

Crepidotus albidus E. & E.

On bark of (Tilia)? Ann Arbor, Mich., May, 1894 (A. J. Pieters).

Pileus resupinate-sessile, nearly white, glabrous, $\frac{1}{2}-\frac{3}{4}$ cm. across, margin incurved when dry. Lamellæ not crowded, thin, broad for the size of the plant, pallid, becoming yellowish-brown, radiating from a lateral point, spores yellowish-brown, subinequilaterally elliptical, about $5 \times 3\frac{3}{4}\mu$.

Polyporus pachycheiles E. & E.

On the side of a rotten maple (Acer rubrum) stump, Newfield, N. J., Nov. 1893.

Imbricated, small, $1\frac{1}{2}$ -2 cm. wide, 1 cm. long, milk-white at first, margin soon turning yellow, mostly narrowed behind, the pilei connected by a recupinate layer, surface apparently velutinous but not tomentose, hardly depressed behind. Pores minute, 2-3 mm. long, 120-150 μ wide, round or by the splitting of the walls, here and there substitute, margins even, are here the definit. The pileas thin, not over 1 mm. thick and like the pores and the whole plant tough-cartilaginous. Surface of pileus faintly zonate toward the margin, more distinctly so in drying. The pores are nearly as long in front as behind, thus thickening the margin of the pileus, hence the specific name.

Poria inermis E. & E.

On dead shrubs and limbs of various deciduous trees, Newfield, N. J. Received also from Michigan, Canada, Nebraska and Louisiana. Issued in N. A. F., No. 313, as *Polyporus obliquus*, from which it is quite distinct.

Resupinate, adnate, seriate, extending along the limb for six inches or more and about one inch wide, yellowish-brown, 2-4 mm. thick in the middle, margin thin, narrow, light-yellow (when fresh) and closely adnate. Pores small, round, extending down to the underlying wood. Spores ferruginous, sub-globose, $4-5\mu$ diam.

322

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NATURAL SCIENCES OF PHILADELPHIA. 1894.]

Mucronoporus fulvidus E. & E.

On dead limbs of Alnus, Berkeley, Cala., Jan., 1894 (W. C. Blasdale, No. 181).

Resupinate, adnate, tawny-yellow, extending along the limb for 6-8 or more centimeters and 3-4 cm. wide, margin velvety tomentose, narrow, sterile, adnate. Pores short (1 mm. or less), round, extending down to the matrix without any distinct subiculum. Spores hyaline, sub-globose, about 2/2 diam. Spines tolerably abundant, 25-35 x 3-4 μ , rather pale.

Has the aspect of Poria inermis E. & E., but surface of pores more uneven, and spiny within.

Hydnum Washingtonianum E. & E.

On the ground in deep coniferous woods, Tracyton, Kitsap Co., Wash., Dec., 1893 (Adella M. Parker, No. 214).

About 4 cm. high, pale orange, carnose, subviscose. Stipe central, 3 mm. thick, subattenuated below. Pileus about 4 cm. across, to 111 Jan and in the center this globrous wrinkled when dry. Aculei subulate, cylindrical, 3-5 mm. long, pale yellow, nearly white when fresh, decurrent half way down the stem. Spores angularglobose, (white)?, 6-7,4 diam., borne on clavate-cylindrical basidia 20-22 x 64, with 4 erect, siender sporophores about 6/2 long.

From H. repandum, to which it is closely allied, it differs in its decurrent aculei and tougher substance.

fremallodon pusillum E. & E.

On rotten wood, among coniferous trees, Tracyton, Wash., Dec., 1893 (Adella M. Parker, No. 212).

Small, stipitate, gelatinous, white and nearly transparent. Pileus subreniform, membranaceous, 1-12 cm. across, smoky-brown above and sparingly clothed with weak, pale hairs. Teeth not crowded, white, subcompressed, about 1 mm. long, narrowed gradually from the base, with a few obtuse, short, lateral, tuberculiform branches or processes. Spores, ovate-globose, $5-6 \ge 3\frac{1}{2}-4\mu$, consisting of a thin, transparent sack containing a single, large globose nucleus. Stipe lateral, cylindrical. slender, equal, hirto-pubescent, 1 cm. long, 2 mm. thick, smoky-brown.

T. hirneoloides B. & C. is a much coarser, stouter plant, with stipe 18 mm. long, 8 mm. thick at the base.

323

Crepidotus albidus E.+E. from Colorado, martied type (but Kaufman + Mwoill pay & is from Am Arbor)



CREPIDOTUS ALBISSIMUS Murr.

(Type - F 17281)

On hardwood branch, in woods, Gainesville, Fla., coll. & det. Murrill, June 28, 1938.

Pileus 8-12 x 6-8 mm, convex, reniform, dry, silkyfibrillose, very white, unchanging, margin even, file (More, incurved. Context white, unchanging.

Lamellae, adnate, white, whitish when dry, rather broad behind, medium distant, inserted, edges fimbriate.

Spores 5.3-7 x 3.5-4.5 μ , ellipsoid or subovoid, smooth, pale brown. Basidia 22-28 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 30-83 x 4-7 μ , cylindric, slender-clavate, at times subventricose, apices rounded, or capitate, frequently blunt. Gill trama subparallel, hyphae 3-5 μ broad. Pileus trama distinctive: the inner three-fourths or more densely interwoven, the outer one-fourth more loosely organized and pale (suggesting some-gelatinization). Cuticle of several layers of repent hyphae, bearing a turf of slender (2.5-5 μ), colorless hyphae, the terminal elements in some instances as more or less clavate pilocystidia. Clamp connections present.

CREPIDOTUS ALBISSIMUS Murrill

Mycologia 35:530. 1943

"Pileus reniform, convex, attached by a tubercle, gregarious, 8-2 x 6-8 mm.; surface dry, smooth, silkyfibrillose, very white and unchanging; margin entire, even, fibrillose, incurved; context white, unchanging; lamellae adnate, rather broad behind, medium distant, inserted, fimbriate on the edges, white, whitish when dry; spores ellipsoid, smooth, nonguttulate, about 5-7 x $3-4 \mu$.

"Type collected by W. A. Murrill on a dead hardwood branch in a high hammock at Gainesville, Fla., June 28, 1938 (F 17281). A striking pure-white species which does not become discolored on drying.

"According to Singer, 'Cuticle of repent, filamentous, thin hyphae with clamp connections; cystidia none; cheilocystidia scattered, subfilamentous, hyaline, $4-5 \mu$ broad; basidia $24-30 \times 6-7 \mu$; spores brownish, smooth, with simple, rather thin wall, $6.8-7.3 \times 4-4.7 \mu$."

Geptotus albissimus Murr. Ch-x 1000 Furf Cuticle Foosely organized Ţ Deusely

Agoricas (Crepitotus) alveolus Parch. F. Ep. p. 210.

Note below a photo of p. 291, Jour term Soo. 10: 1868: Fungi Culannis, Berkeler, M.J. and M.A. Chartis. Report it from U.S.+ Europe.

71. A. (CREPIDOTUS) ALVEOLUS, Lasch. Fr. Ep. p. 210. (37.) On dead wood. Hab. United States, Europe.



Singer (Agar.) places This with Those species lacking clamps.

CREPIDOTUS AMARUS Murr. Mycologia 35:430. 1943

Pileus 5-8 mm broad, convex, not resupinate at first, reniform or subcircular, uniformly white, unchanging, pulverulent, margin at times slightly striate. Context thin, white; taste very bitter at once.

Lamellae adnexed, broad at the base, distant, inserted, whitish, becoming fulvous, edges beaded, fimbriate.

Stipe always present, eccentric, short, slender, curved, white.

Spores 6-8.5 x 5-6 μ , ellipsoid to ovoid, equilateral, wall thick, smooth. Basidia 18-24 x 4-5 μ , 4-spored. Pleurocystidia none; cheilocystidia 33-48 x 3-7 μ , clavate to cylindric, more or less subcapitate, base at times enlarged, often crooked. Gill trama slightly interwoven, hyphae 3-4 μ broad. Pileus trama interwoven. Cuticle of repent hyphae, bearing scattered to numerous (rarely a turf) pilocystidia, 35-55 x 2.5-4 μ , filamentous, often **source**, **function** apices at times forked. Clamp connections present.

The description of macroscopic characters is from Murrill; that of microscopic characters is based on a study of the type.

The type on dead grape-vine, Gainesville, Florida, June 28, 1938, No. F 17226.

CREPIDOTUS AMARUS Murrill Mycologia 35:430-431. 1943

"Pileus reniform or subcircular, convex, not resupinate at first, gregarious, 5-8 mm. broad; surface uniformly white, unchanging, pulverulent, margin entire, slightly striate at times; context thin, white, very bitter at once; lamellae adnexed, broad at the base, distant, inserted, whitish with beaded, fimbriate edge, becoming fulvous with white edge; spores ellipsoid or ovoid, smooth, pale yellowish-brown, many uniguttulate, 5-7 x 4-5 μ ; stipe always present, eccentric, short, slender, curved, white.

Habitat and Distribution. - On dead grapevine, Florida, June.

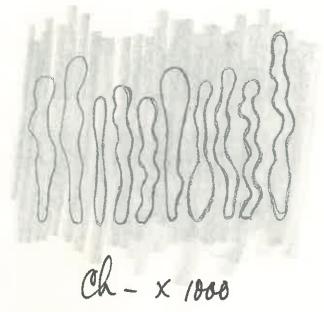
<u>Discussion</u>. - Murrill says it is noteworthy because of its small size, its bitter taste, and its small, curved stipe.

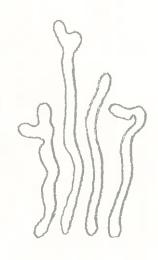
Singer (Lilloa 13:63) says spores of the type are 6.5-7.3 (8.3) x 5.5-6.3 (6.6) μ , smooth; <u>cheilocystidia</u> claviculate, 32-54 x 4-5.7 μ . With <u>clamps</u>. <u>Epicutis</u> of repent hyphae, 3.3-3.6 μ broad.

Oh. (adapted from Singer)

wei -

Geophotus amarius Miver. Fype





Pilo - × 1000

CREPIDOTUS AMYGDALOSPORUS Kuhner (H-25540)

on hardwood (maple), near Cherokee, N. C., June 7, 1963

Pileus 5-25 mm broad, conchate, finally expanded fanshaped, semi-orbicular, white, densely white villose or silky. Context white, thin.

Lamellae white, finally tinged brownish, subdistant, broad, many lamellulae, edges ventricose.

Stipe eccentric, 1 mm x 0.3 mm, white, disappearing.

Spores 7-9 (10) x 4-5.5 μ , ellipsoid to ovoid, slightly or not at all inequilateral in profile, obscurely punctate, yellowish brown in 2 % KOH (spore print failed), thin walled. Basidia 24-30 x 6-7 (8) μ , 4-spored. Pleurocystidia none; μ_3 cheilocystidia 21-49 x 4-10 μ , filamentous, clavate, obclavate, slightly ventricose, at times capitate, a few flexuous. Gill bama slightly interwoven, hyphae 4-7 μ broad. Pileus trama

interwoven. Cuticle of repent hyphae, bearing a turf of colorless hyphae, 2-3 μ broad. Clamp connect ions present, few, small.

Orepidotus H- 25540 amygdalosforus

DOBONRAM

统

Ch- × 1000

CREPIDOTUS AMYGDALOSPORUS Kühner

On fallen dead branch of deciduous tree, Amsterdam, Netherlands, leg, & det. E. L. v. Waveren, Dec. 8, 1960. (Specimen borrowed from future, And studied Nov. 1963.)

(Notes by Bas)

Cap more or less 20 mm broad and 18 mm long, fan-shaped, buffy and felted above. Külner + Rom. says it is pure white.

Lamellae brownish buff, without pink.

Spores 8-9.8(-11) x 4.7-6.3 µ, ellipsoid, subamygdaliform.

(Notes by Hesler)

Spores 7-9(10) x 4.5-5(5.5) μ , ellipsoid, inequilateral in profile, obscurely punctate, pale clay color in deposit. Basidia 24-30 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 25-48 x 5-10 μ , bottle-shaped, more or less cylindric and constricted, ventricose, apices at times capitate or with a lateral knob, or clavate. Gill trama subparallel or slightly interwoven, hyphae 5-14 μ broad. Pileus trama interwoven. Cuticle undifferentiated, the surface bearing scattered, colorless hyphae, the terminal elements occasionally cystidioid. Clamp connections present.

This should be compared with: (1) <u>Resinosae</u>, <u>Sm-50942</u>; (2) <u>Crepidotellae</u>, <u>Sm-29546</u> and <u>Sm-49768</u>.

Near C. subtilis P. D. Orton (T.B.M.S. 43: 2: 221, 1960).

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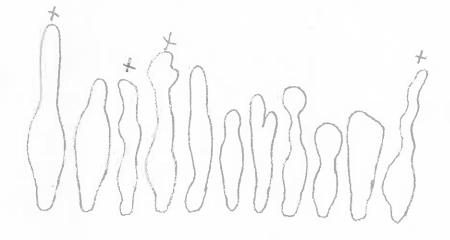
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Near C. subtilis P. D. Orton (T.B.M.S. 43: 2: 221. 1960).

Gepidotus amygdalosporus Külner (leg.-det. E. v. Waveren, Leiden, Dec 8, 1960)





CREPIDOTUS ANTILLARUM (Pat. apud Dussy) Singer Lilloa 13:62. 1947.

<u>Crepidotus cinchonensis</u> Murr., Mycologia 5:30. 1913. Tremellopsis antillarum Pat. apud Duss,

Pileus reaching 2 cm broad, convex to plane, reniform to orbicular, dull watery-white, drying cinnamon buff, pulverulent to nearly glabrous, base sometimes strigose, attached by a lateral or eccentric point, or by the vertex and appearing resupinate when growing on the lower side of a log or trunk, dry, margin striate. Context thin, soft.

Lamellae radiating from a lateral or eccentric point, dull watery white, becoming subfulvous, thin, crowded, ventricose, broad in the middle.

Stipe none.

Spores 7.5 - 10.5 x 5-7 μ , mostly 8 -9 x 5 - 5.5 μ , ellipsoid, smooth dark clay color. Basidia 20-38 x 6-8(9) μ ,

2-4-spored. Pleurocystidia none; cheilocystidia 25-50 x 5-9 μ , somewhat variable: ventricose, clavate, often more or less constricted, and at times subcapitate, many collapsed against

the gill edge. Gill trama subparallel, hyphae $4-8 \mu$ broad. Pileus trama interwoven. Cuticle of repent hyphae, with or withput erect, scattered, colorless, straight, septate hyphae. Clamp connections present on the epicuticular hyphae, and the tomentum at the base of the pileus.

Habit, Habitat, and Distribution - On dead wood of decidous trees, Tropical America, and including South Florida.(Singer, 1947).

Material Studied - JAMAICA: Murrill 610, the type of C. cinchonensis, from Cinchona, Dec. 25 - Jan. 8, 1908-09/

Observations - The description of microspopic characters above is based on a study of the type of <u>C</u>. <u>cinchonensis</u> Murr.

Patouillard originally described this species as <u>Tremellopsis antillarum</u> (probably in Fl. Crypt. Fr., 1904). Singer (1947), following a suggestion by Donk, and after studying Patouillard's and Murrill's types, proposed the new combination, <u>C. antillarum</u>.

Singer (1947), describing the microscopic characters says the pileus trama is subgelatinous and that the hyphae gelatinize slightly in the manner of the boketi, with thin and thick hyphae side by side

CREPIDOTUS ANTILLARUM (Pat.) Singer

[=Tremellopsis antillarum Pat.=C. cinchonensis Murr.]

(Type, from Patouillard Herbarium, No. 224, Guadeloupe; from Farlow Herbarium)

Spores 7-9 x 5-6 μ , ellipsoid, some slightly sub-amydaliform, smooth. Clamp connections found on the hyphae of the pileus trama. No sections were made, so that other observations were not possible.

A second collection, No. Fl472, from the Farlow Herbarium, by Singer is labelled <u>C</u>. antillarum (Pat.) Singer f. <u>bisporus</u>, on frondose log in tropical hammock, Dade Co., Florida, Nov. 9, 1942.

On examination, the material was found too sparse for study

CREPIDOTUS CINCHONENSIS Murr. = antillarum

Type

(No. 610, collected by W. A. Murrill & Edna L. Murrill, Dec. 25-Jan. 8, 1908-9, Cinchona, Jamaica)

Spores 7.5-10 x 5-7 μ , mostly 8-9 x 5-5.5 μ , ellipsoid, smooth. Basidia 26-38 x 6-8 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 25-50 x 5-9 μ , somewhat variable: ventricose, clavate, often more or less constricted, and at times subcapitate, many (most?) collapsed against the gill edge. Gill trama subparallel, hyphae 4-8 μ broad. Pileus trama interwoven. Cuticle a cutis, hyphae repent, with or without erect, scattered, colorless, septate hyphae. Clamp connections present on the epicuticular hyphae and the tomentum at the base of the pileus.

Singer (Lilloa 13:61-62) discusses this species, and concludes that it is the same as <u>Tremellopsis antillarum</u> //Pat. apud Duss/, which Donk called an agaric. Singer studied Murrill's type, collected it in South Florida, and proposed (p. 62): <u>Crepidotus antillarum</u> (Pat. apud Duss) Singer. comb. nov. (<u>Crepidotus cinchonensis Murr.</u>).

In his description of Murrill's type, he says that the pileus trama is rather thin, subgelatinous (not truly gelatinous in the manner of <u>C</u>. <u>mollis</u> or <u>C</u>. <u>uber</u> but the hyphae all slightly gelatinizing in the manner of the <u>boleti</u>), with thin and thick hyphae side by side. (<u>Note</u>: In my observations I was unable to observe any gelatinization such as Singer describes.-L.R.H.)

Grepidotus cinchonencis Muvor. Jeppe

Mandal Ch - × 1000

CREPIDOTUS CINCHONENSIS Murr.

(Coll. by Murrill, No. 686, Morce's Gap, Jamaica, Dec. 29, 30, Jan. 2, 1908-9)

This is not <u>C</u>. <u>cinchonensis</u>! It has a broad ixocutis, typical of <u>C</u>. <u>mollis</u>. But, the hyphae have clamp connections which would seem to exclude it from <u>mollis</u>.

CREPIDOTUS APPALACHIANENSIS sp. nov. (No. 12264)

Pileus 1.5-2.5 cm broad, whitish, glabrous, or (under lens) a few scattered brownish fibrils, flabelliform, margin even.

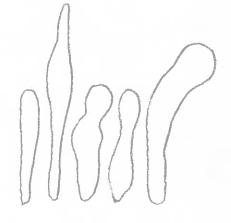
Lamellae close, broad, white then brownish.

Stipe none.

Spores 5-6.5 (7). μ diameter, globose, punctate, double-walled, the outer wall darker. Basidia 19-25 x 6.5-8 μ , 2-4-spored. Pleurocystidia 25-42 x 6-9 μ , fusoid, ventricose, at times subcylindric with a contraction toward the middle, apices more or dess acute, at times mucronate or shortappendiculate; cheilocystidia 30-52 x 5-10 μ , clavate, ventricose, at times subcapitate. Gill trama subparallel, hyphae 4-8 μ broad. Pibeus trama interwoven. Cuticle repent, with a few scattered, brown, incrusted hyphae. Clamp connections rare on the cuticular hyphae.

Gepidatus No. 12264 appalachianensis

MMM



PP- × 1000

Ch - × 1000

CREPIDOTUS APPALACHIANENSIS sp. nov. (H-17492)

Pileus 1.5-3 cm broad, sessile, whitish, flabelliform or reniform, appearing glabrous to pubescent, or with some brownish fibrils, margin stritulate.

Lamellae white then brown, broad, close.

Spores 5-6 (6.5) μ in diameter, punctate, wall doubles the exosporium darker and thicker. Pleurocystidia 30-45 x 5-8 μ , cylindric to subclavate, at times curved or crooked; cheilocystidia 24-40 x 3-6 μ , cylindric to clavate. Gill trama subparallel, hyphae 5-8 μ broad. Pileus trama very loosely interwoven. Cuticle an opaque or dingy zone of 4-5 layers of repent hyphae, bearing a turg of hyphae of two types: (a) colorless, 4-8 μ broad, the terminal elements cystidioid; (b) brown, 7-10 μ broad at tymes, with incrustations. Clamp connections on the epicuticular hyphae.

Gepidotus H-17492 appalachianensis



Pl-x 1000

Ch- × 1000

CREPIDOTUS APPALACHIANENSIS sp. nov. (No. 18679, Type)

Pileus 0.8-2.5 cm broad, convex to sub-conchate, pallid to "chamois," brownish-fibrillose to squamulose, margin even. Context thin, white.

Lamellae radiating, close, medium broad to broad (4-6 mm), whitish then pinkish-buff, finally brownish, edges faintly fimbriate.

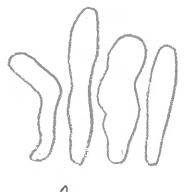
Stipe none; pileus laterally attached, white villosestrigose at point of attachment.

Spores 4.5-6 (7) μ diameter, globose, more rarely subglobose, minutely punctate, browm under microscope. Baáàdia 28-34 x 5-7 μ , 4-spored. Pleurocystidia 27-40 (60) x 3-7 μ , obclavate, ventricose, flask-shaped, cylindric, or cylindricclavate, often tapering above or appendiculate, projecting only slightly, and inconspicuous; cheilocystidia 28-48 x 4-10 μ , clavate, at times more or less constricted. Gill trama subparallel, hyphae broad (5-12 μ). Pilœus trama interwoven. Cuticle repent, bearing numerous scattered (clustered in squamules), coloràdas erect hyphae, at times septate, the terminal elements as pilocystidia. The scales are compaosed of clusters of brown, spirally or ring-like incrusted hyphae. Clamp connections present on the colorless epicuticular hyphae. Lactifers present in the pileus and gill trama.

No. 18679 fulvifibrilla sur Mart. appalachianensis sp. nov. Crepidotus

- Fype

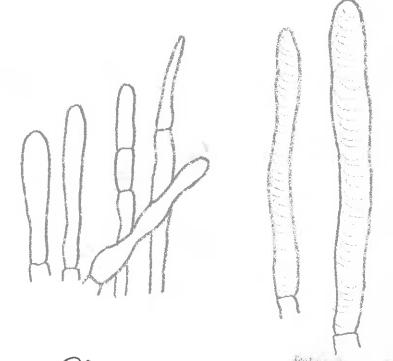
MAMMA SIM H- × 1000



Oh- × 1000

Elements from

provon fibiliose scale



Jilo - × 1000 (colorlesi)

appalachianensis sp. not. CREPIDOTUS H-21383

Pileus 1.5-3 cm broad, cuneate to flabelliform, pale yellowish, with fibrillose, tuft-like scales.

Lamellae radiating from base, close, medium broad, white then reddish-cinnamon (dried), edges more or less fimbriate.

Spores 5-7 μ , globose, few subovoid, rough. Basidia 26-31 x 6-7 μ , 4-spored. Pleurocystidia fusoid or clavate, appendiculate, 32-42 x 6-7 μ ; cheilocystidia 20-35 x 5-8 μ , clavate, ventricose. Gill trama subparallel or slightly interwoven, hyphae 5-8 μ broad. Pileus trama very loosely interwoven of broad hyphae (6-15 μ). Cuticle of 4-5 layers of dingy hyphae with scattered hyphae of two types: (a) brown, some incrusted, 7-12 μ broad; (b) colorless, 8-20 μ broad. (Cuticle and pileus trama very similar to that of <u>No. 17492</u>.) Clamp connections on the colorless epicuticular hyphae.

Gepidotus H-21383







21383 - Grepidotus nophrodex (B. C.) Sace. appalachianensis

(Pilei water-soaked, + fibrillose-scales are matted down + do not show.)

CREPIDOTUS No. 21441 (cf. 18670)

Pileus 1-2.5 cm. broad, semi-orbicular to flabelliform, white, with brownish fibrillose squamules, not viscid, margin even. Context whitish, rather thin.

Lamellae radiating from a lateral point, white then buff to brownish, medium broad, close, edges fimbriate.

Stipe none.

Spores 4.5-6 µ, globose, punctate. Basidia 21-33 x 6-8 µ, 4-spored. Pleurocystidia 25-53 x 4-8 µ, ventricose or bottleshaped with a slender neck, or subfusoid-cylindric, more rarely forked; cheilocystidia clavate, at times subcapitate, 25-34 x 6-7 μ . Gill-trama subparallel, hyphae 5-10 μ broad. Cuticle a trichodermium, with some colorless, more or less erect hyphae, and scattered fibrillose scales composed of brown hyphae, some of which are incrusted. Clamp connections present on the epicuticular hyphae.

Cepidotus appalachianensis No. 21441

AMAAAAA

PP- × 1000

RANP

Ch - × 1000

CREPIDOTUS APPALACHIANENSIS sp. nov. (H-21451)

Pileus hygrophanous, white (dry), watery -brownish (wet), fibrillose, margin striate (wet), even (dry). Context thin, white, soft; odor mild, taste mild, soon bitter.

Lamellae decurrent, radiating from lateral point, close, linear, rather narrow, whitish then brownish, edges fimbriate.

Stipe none.

Spores 6-7 x 5-6 μ , globose to subglobose, brownieh, punctate. Pleurocystidia 34-43 x 7-9 μ , ventricose or bottleshaped with a slender neck, or more or less clavate, apex acute; cheilocystidia 25-45 x 5-8 μ , ventricose, cylindric, rarely subcapitate. Cuticle a trichodermium, most hyphae colorless, but with a few hyphae, in tufts, brownish; a few of both colorless and brown hyphae incrusted. Clamp connections present on epicuticular hyphae.

Gepidolus No. 21451 appalachianensis

Ch - × 1000

Pl- × 1000

appalachianensis CREPIDOTUS

Photo

Pileus 10-47 mm., applanate, flabelliform, moist, pallid, densely tawny to dark brown fibrillose scaly, margin fibrillose, base white-strigose. Context white, thin; odor mild, taste soon astringent-bitter.

Lamellae narrowly attached to a lateral tubercle, radiating, white then brownish, narrow to medium broad, ventricose, close, many short, edges nearly even.

Stipe none; pileus attached laterally by a tubercle. (7-6) Spores $4.5-5.5\mu$ diameter, globose, **Write Spores 353.47** finely punctate, brown. Basidia 26-32 x 6-7 μ , 4-spored (rarely 2-spored). Pleurocystidia 33-46 x 6-9 μ , ventricose with a neck, the neck occasionally constricted; cheilocystidia 24-36 x 6-9 μ , clavate, few, often projecting only slightly. Gill trama subparallel, hyphae 6-ll μ broad. Fileus trama interwoven. Cuticle repent, but with clusters of brown, septate, incrusted hyphae forming the fibrillose scales, and scattered colorless hyphae. Clamp connections present on the epicuticular hyphae, and the villose tomentum at the base of the pileus; and occasional on the brown scale hyphae. Lactifers in the pileus trama.

Gefidetus Justific Alexan Merry. No. 24851 (7m PP- × 1000: nh_ Epicuticular scales hyphae - × 1000

war. globigera (Berk) it

CREPIDOTUS APPLANATUS (Pers. ex Fr.) Kummer Der Fuhrer in die Pilze, p. 74. 1871

Agaricus applanatus Pers., Obs. Myc. 1:8. 1796. Agaricus applanatus Pers. ex Fr., Epicr. Myc., p. 210. 1836.

Pileus 1-4 cm. broad, flabelliform, reniform, semi-orbicular to cuneate, convex, then plane, white, hygrophanous, darker when wet, glabrous, usually tomentose behind, margin striatulate when wet, even when dry. Context thin, white; odor and taste mild (in No. 24852, odor slightly pungent, taste somewhat astringent).

Lamellae narrowly adnate-decurrent, white then pale brownish, crowded, very narrow, edges fimbriate or nearly even.

Stipe none or rare, or with only a stipe-like prolongated base (in No. 21902, there is a lateral stipe 3-5 mm x 2-3 mm).

Spores (4)4.5-6 (7) μ , globose, subglobose, or at times somewhat ovoid, finely punctate, brown. Basidia 20-27 x (4) 5-7 μ , μ -spored. Pleurocystidia none; cheilocystidia somewhat variable in size and shape (from collection to collection), (18) 30-46 x 5-12 μ , clavate, ventricose with a tapering apex (more or less appendiculate), cylindric, at times slightly constricted and subcapitate. Gill trama subparallel, hyphae 4-15 μ broad. Pileus trama interwoven. Cuticle a cutis, often with scattered, short, erect or semi-erect, colorless hyphae, Clamp connections on the hyphae, comprising the villose tomentum at the base of the pileus. Habit, habitat, and distribution. - On logs of deciduous, more rarely coniferous, trees, in North America, Europe, June-August.

<u>Material studied</u>. - NEW YORK: Hesler 9034; NORTH CAROLINA: Hesler 5115, 21902, 22080, 23088, 23089, 24907; TENNESSEE: S. A. Cain 16336; Hesler 3673, 5009, 8099, 8934, 16336, 21400, 24852.

<u>Observations</u>. - In the absence of a type, Singer (1947) suggests the typification of Josserand's specimen as lectotypical material. Josserand (1937) concludes that <u>C</u>. <u>applanatus</u> sensu Quelét, and sensu Rea is really <u>C</u>. <u>fragilis</u> Joss. Among other differences, the spores of <u>C</u>. <u>fragilis</u> are ellipsoid. It is close to <u>C</u>. <u>fulvifibrillosus</u> Murr, in which the pileus is conspicuously brownish fibrillose-scaly.

Agaricus (Viepidotus) globigera B. Jour. finn. Soc. 13:158. 1873?

Photostat of original description:

28. A. (CREPIDOTUS) GLOBIGERA, B. Pileo flabelliformi v. reniformi basi attenuato, molli, glabro; lamellis tenuibus ochraceis, sporis globosis.

Wangaratta. About an inch long and wide. Spores 00025 in diameter; different from any thing I have seen in the subgenus.



CREPIDOTUS APPLANATUS sensu Josserand

Bull. Soc. Myc. de France 53:221. 1937

(translated by M.H.)

Pileus 15-40 mm., as broad and sometimes broader than long, spathulate-reniform-auriculate, plane, hygrophanous, non-viscid, merely lubricous and smooth to the touch; for a long time ivory-white, then hyaline-isabelle, dingy isabellegrayish; ponetimes even ochraceous when dry; glabrous. Margin thin, sub-incurved in very young stage, then merely rounded; regularly or moderately sinuate; opaque, faintly striate (wet). Cuticle poorly differentiated.

Flesh thin, soft, white when dry, then isabelle (wet), with no gelatinous zone.

Lamellae very close, very unequal: 5-11 lamellulae; however modely with very rare forking; a few broad or moderately broad, thin, attenuated toward the margin, adnate behind or rounded-free; a little soft, for a moderately long time white, then argillaceous-rusty (ochraceous when dry). Edges entire, concolorous.

Stipe at first central only when very young (1 mm. in diameter), then lateral and reduced a bit: $2-5 \times 2-5 \text{ mm.}$, white or dingy ivory, hispid.

Spores in deposit: dull-ochraceous (darker than the lamellae)

Basidia 4-spored, small, 22-27 x 6-8 μ , with small sterigmata.

Spores exactly round, $4.8-6 \mu$, punctate with (by) fine warts, delicate but very definite; one counts 25-35 (warts) on the hemispore; an apiculus on the upper surface; no hilar plage.

Pleurocystidia none.

Cheilocystidia moderately numerous, variable, but always common; obtuse, slightly swollen here and there, sometimes slightly capitate; claviculate, etc., 32-40 x 8-10 µ.

Trama of the middle-zone (medistrate) filamentous, of hyphae 4-12 μ broad, sub-regular, delicate, slightly undulating. Subhymenium cellular.

Cuticle of the pileus filamentous, of slender hyphae, 4-10 μ broad, interwoven (but) with a certain radial arrangement; a few (hyphae with) free ends, very slightly capitate, scarcely erect.

Odor and taste rather slightly agreeable, but faint.

Habitat and Distribution. - On dead and decaying trunks of <u>Pinus</u> and <u>Fagus</u>. Grande Chartreuse (Isère), 21-8-1934, in company with MM. R. Kühner and J. Boursier. - Fountainebleau (Seine-et-Marne), 19-10-1934. - All around Plombieres (Vosges), in August and September, 1935.

CREPIDOTUS APPLANATUS Sensu Josserand

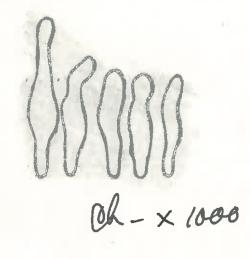
(U.T.-25188)

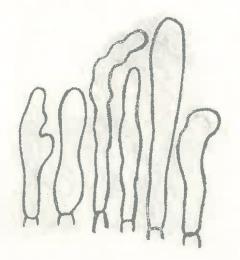
Spores $\mu.3-5.5 \ge 4.3-5.5 \mu$, globose to subglobose, punctate. Basidia 20-28 x 5-6 μ , μ -spored. Pleurocystidia none; cheilocystidia 26- $25 \ge 4$ μ , cylindric, clavate, at times subfusoid, faintly capitate or with a neck. Gill trama subparallel, hyphae 5-8 μ broad. Pileus trama interwoven. Cuticle repent with 33-56 \times 5-9 μ , and scattered colorless pilocystidia which are clavate, subfusoidcylindric, strangulate-cylindric, or irregular. Clamp connections present on the epicuticular hyphae.

The difference, if any, between this and some (all?) of our American collections is in the range in size and variability of shape of the cheilocystidia.

Josserand (Bull. Soc. Myc. Fr. 53:218-221. 1937) studied <u>C. applanatus</u>, and concluded that the concept of Persoon, Fries, Kersten, Kauffman, and Bresadola is correct; and that of Quelet and of Rea is what Josserand describes as a new species, <u>C. fragilis</u>. His description and drawings seem to agree very well with American collections: cheilocystidia 32-40 x 8-10 µ, clavate, more or less constricted, ventricose. He reports pilocystidia (but does not call them by that name) as slightly capitate.

Grepidotus applanatus <u>sensu</u> Josserand U-T 25188 (from Josserand)





Pilocystidia - × 1000

CREPIDOTUS APPLANATUS (Fr.) Kummer 3673

Pileus 10-16 mm. broad, dimidiate, cuneate, or semiorbicular, white, glabrous, hygrophanous, moist, not viscid, at times prolonged laterally into a stipe-base. Context white; odor and taste mild, agreeable.

Lamellae decurrent, white then brownish, narrow, close, edges slightly fimbriate.

Stipe none.

Spores 4-5 μ diam., globose, distinctly punctate, brown under 'scope. Basidia 20-26 x 4-5 μ , 4-spored. Pleurocystidia none; cheilocystidia 20-35 x 6-8 μ , variable: clavate, ventricose and apex tapering or appendiculate. Gill trama subparallel, hyphae 4-13 μ broad. Pileus trama interwoven. Cuticle a cutis, with a few scattered, more or less erect, short, colorless hyphae.

See: Josserand, Bull. Soc. Myc. Fr. 53:221. 1937. A full description.

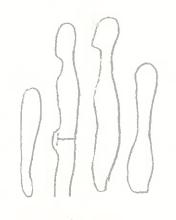
5115 CREPIDOTUS APPLANATUS (Fr.) Kummer

Spores 4.5 5.5 μ , globose, punctate. Basidia 20-24 x 5-6 μ , 4-spored. Pleurocystidia none; cheilocystidia clavate, subventricose, rarely sub-capitate, 18-37 x 5-8 μ . Cuticle of repent hyphae, with scattered pilocystidia, 28-45 x 5-8 μ , clavate, subventricose, at times subcapitate. Clamp connections present.

Ocepidotus applanatus (7r.) Kummer 16.5115

DPDDDDD

Ch - × 1000



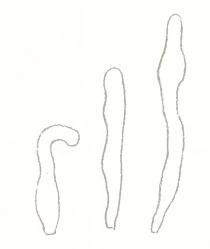
Pilo - × 1000

8099 CREPIDOTUS APPLANATUS (Fr.) Kummer

Spores $4.5-5.5 \mu$, broad, globose, rough. Pleurocystidia none; cheilocystédia clustered, clavate, subventricose, at times subcapitate, 27-44 x 5-12 μ . Gill trama subparallel. Cuticle of repent hyphae, bearing scattered more or less hyphoid pilocystidia, 35-60 x 5-7 μ . Clamp connections present.

Crepidotus applanatus (7r.) tummer 16. 8099

DDDDDDDDD Ch-x1000



CREPIDOTUS APPLANATUS (Fr.) Kummer

Spores $4.5-5.5 \mu$, globose, a few sub-ovoid, punctate. Basidia 20-24 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia clavate-subcapitate, ventricose, 30-43 x 6-12 μ . Gill trama subparallel. Pileus trama interwoven. Cuticle of repent hyphae, with sparsely scattered pilocystidia, 27-35 x 6-9 μ , clavate, ventricose. Clamp connections present.

9034

Grepidotus applanatus (7r.) Kummer var. (H-9309034) applanatus



DRMAR Pilo - × 1000

CREPIDOTUS APPLANATUS (Fr.) Kummer Phome (<u>H-21400</u>)

Spores 4.3-5 μ_{*} rarely (less than 1%) up to 6 μ_{*} globose, punctate. All other microscopic characters typical.



Gepidotus applanatus (Fr.) Kummer var. applanatus - X about 4/3

CREPIDOTUS APPLANATUS (Fr.) Kummer Yar Malaudau (<u>H-219</u>02)

Spores $\mu_{*}2-5 \mu_{*}$ globose, punctate. All other

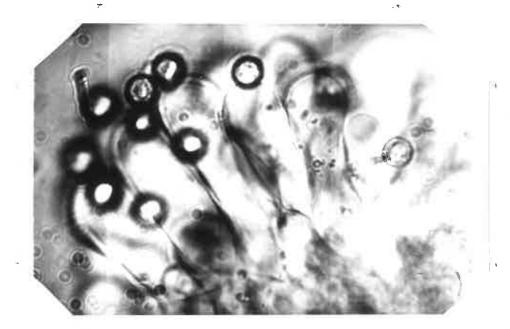
characters typical.

Spores 4-5 µ, globose, punctate. Cheilocystidia and other microscopic characters typical.



Gepidotus applanatus (Fr.) Lummer var. applanatus

- x about 56



a,

Crepidotus applanatus (Fr.) Kummer -Cheilocystidia from No. 22080

.

CREPIDOTUS APPLANATUS (Fr.) Kummer Wor applaudus (<u>H-23089</u>)

Spores $4.2-5.3 \mu$, globose, punctate. All microscopic characters typical; cheilocystidia 30-40 x 5-9 μ . Pilocystidia 28-50 x 5-7 μ . Clamps present.

gati Afflawalus Kummer

24852 CREPIDOTUS APPLANATUS (Fr.) Kumme

Photo

Pileus 1-3 cm., flabelliform, white, hygrophanous, glabrous except the white-fibrillose base, margin faintly striatulate. Context extremely thin, white; odor slightly pungent, taste somewhat astringent.

Lamellae decurrent, radiating from a lateral tubercle, close, narrow, linear, many short, edges denticulate.

Stipe none; attached by a lateral tubercle.

Spores (4) 4.5-5.5 μ diam., globose, finely punctate, brown under'scope. Basidia 24-27 x 6-7 μ , 4-spored. Pleuro-25-44 × 6-12 μ , cystidia none; cheilocystidia clustered, clavate, often mere or less constricted to bottle-shaped or ventricose. Gill trama subparallel, hyphae 5-9 μ broad. Pileus trama interwoven. Cuticle repent. Clamp connections present on villose-tomentum at the base of the pileus.

Gepidatus applanatus (7.) Kummer No. 24852

RADAD

Ch - × 1000

24907 CREPIDOTUS APPLANATUS (Fr.) Kummer P

Photo

Pileus 10-22 mm. broad, hygrophanous, white applanate, glabrous but appearing appressed fibrillose, base villosestrigose, striatulate. Context whitish, thin; odor mild, taste becoming slightly acidulous-sub-bitter.

Lamellae radiating from a lateral tubercle, white, then marrow in front, behind of toward the bare, flesh, close, rather broad, many lamellulae.

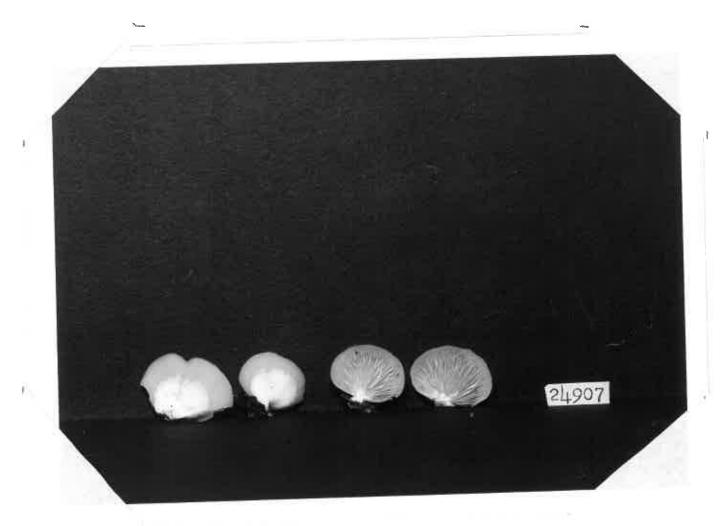
Stipe none; pileus laterally attached by a tubercle which is more or less densely villose-strigose.

Spores 5- $\frac{1}{2}$ x 4.8- $\frac{1}{2}$ μ , globose, at times slightly ovoid or subglobose, minutely punctate, brown. Pleurocystidia none; cheilocystidia 28-46 x 7-8 μ , clavate to broadly subcylindric, often slightly constricted and faintly subcapitate. Gill trama subparallel, hyphae 5-ll μ broad. Pileus trama interwoven. Cuticle of repent hyphae, with occasional more or less erect scattered hyphae. Lactifers in the pileus trama. Clamp connections on the tomentum at the base of the films:

Gresidotus applanatus (Fr.) Rummer var, globigera No. 24907

Ungo

Ch-×1000



Répidotus applanatus var. globigeralBert.)Eace.

CREPIDOTUS AQUOSUS Murr.

Type (Earle No. 293)

(coll. by Earle, Oct. 30, 1902, on a decayed log, Rose Hill, Jamaica.)

Spores 4.5-7 µ, in diameter, globose, faintly punctate, brown on 2% KOH. Basidia unsuit ble for study. Pleurocystidia none; cheilocystidia none found. Pileus trama interwoven. Cutivle a cutis, with a few more or less erect, scattered, short, colorless hyphae. Clamp connections present on the epicuticular hyphae and on the tomentum at the base of the pileus .

The material is very sparse, and , except for the spores, is unsatisfactory for study. It was extremely difficult to slice the tissue; thus I did not observe the gill trama structure nor did I find cheilocystidia (Smith did not see cheilocystidia).

Singer (Lilloa 13:65) says this is the same as \underline{C} . cuneiformis Pat., which has priority

CREPIDOTUS AQUOSUS Murr.

Mycologia 5:30. 1913

Fileus 1-2.5 cm broad, sessile, watery-brown, resupinate, reniform, expanded at maturity, glabrous or subglabrous, margin deeply sulcate. Context thin, soft, and watery.

Lamellas subcrowded, rather broad, dark-ochraceous or subfulvous.

Spores 4.5-7 µ in diameter, globose, faintly punctate, brown in 2% KOH. Pleurocysticia none; cheilocysticia none. Pileus trama interwoven. Cuticle of repent hyphas with a few more or less erect, scattored, short, colorless hyphas. Clamp connections present on the epicuticular hyphas and on the tomentum at the base of the pileus.

Habit, Habitat, and Distribution - On log, Jamaica, October.

Material Studied - JAMAICA: Earle, type from Rose Hill, Oct. 30, 1902.

Observations - This differs from <u>cuneiformis</u> in the organization of the cuticle, in its lack of cheilocystidia, and in its deeply sulcate margin. The basidia were unsuitable for study.



Pileus whitish, densely covered by brownish fibrils, incurved.

Lamellae radiating, yellowish of first, Then brownish,

Stipe none; pileus attached by a tubercle.

Spores 5-6 (7) μ , globose, minutely punctate. Basidia 27-31 x 5-7 μ , 4-spored. Pleurocystidia ventricose, apices more or less tapering, 35-43 x 6-9 μ ; cheilocystidia 33-46 x 5-8 μ , cylindric to clavate, at times more or less ventricose. Hyphae of the fibrillose scales brown and incrusted.

Grepidetus futrifibullour Maror. Avereifolius No. 24912

M) Pl- × 1000



CREPIDOTUS AUREIFOLIUS sp. nov.

On log of deciduous tree, Cades Cove, July 22, 1963.

(No. 25732)

Pileus white to pale yellowish, dry, with scattered brownish, fibrillose, tuft-like scales, margin short-striate.

Lamellae close, medium broad, yellowish to orangeyellowish.

Spores 5.5-6.5 μ , globose, punctate. Basidia 27-33 x 7-8 μ , 2-4-spored. Pleurocystidia 32-40 x 6-8 μ , clavate or ventricose, appendiculate. Cheilocystidia 39-46 x 5-8 μ , clavate orcylindric or subventricose. Gill trama subparallel, hyphae 5-8 μ broad. Pileus trama interwoven. Cuticle of repent hyphae, bearing clusters of brown, incrusted hyphae, 6-15 μ broad. Clamp connections present.

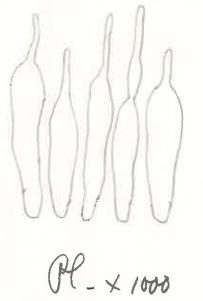
Gepidotus A-25732 aureifolius

0000000000

Ch-× 1000

PP- × 1000

Crepidotus rear aureifolins 16. 26245





Ch- × 1000

CREPIDOTUS BETULAE Murr.

Type

(On fallen twigs of <u>Betula</u> <u>lenta</u> in N. Y. Bot. Garden, June 16, 1902, by E. S. Earle, No. 241.)

Spores $(5.5)6.6-8.5 \ge 4-5 = \mu$, ellipsoid, smooth. Basidia 18-26 $\ge 5-7 = \mu$, 2-4-spored. Pleurocystidia none; cheilocystidia 33-65 $\ge 4-10 = \mu$, cylindric, clavate, flaskshaped, to ventricose. Gill trama subparallel, often with a brownish mediostrate, hyphae 5-7 μ broad. Pileus trama interwoven. Cuticle an ixocutis, a zone, 100-160 μ thick, of loosely interwoven, slender, gelatinous hyphae, bearing scattered, slender, colorless hyphae, the innermost zone a distinct hypodermium. Clamp connections on the epicuticular hyphae and on the tomentum at the base of the pileus.

Although Murrill (N. A. Flora 10:151) says the pileus is dry, sections in KOH show a distinct gelatinous zone.

GREPIDOTUS BETULAE Murr. North Amer. Flora 10:151. 1917

Pileus (2)10-24 mm broad, sessile, pure white, suborbicular or reniform, dimidiate, villose with felted hairs, glabrous toward the margin with age, margin entire. Context rather thick, fleshy.

Lamellas rounded behind, pure white, at length colored by the spores, crowded, medium broad to broad, plane, edges at times gelatinous.

Spores 6-8.5 x 4-5 μ , ellipsoid, slightly inequilatoral in profile, smooth. Basidia 20-27 x 5-7 μ , 2-4-spored. Fleurocystidia none; cheilocystidia 33-65(125) x 4-10 μ , cylindric, clavate, flaskshaped, to ventricose, often tramal in origin. Gill trama subparallel, often with a brownish medicatrate and a gelatinous subhymenium, hyphae 3-7 μ broad. Pileus trama interwoven. Guticle a gelatinous zone, 100-160 μ thick, of loosely interwoven, slender hyphae, bearing scattered, slender, colorless, erect hyphae, the innermost zone a distinct hypodermium. Clamp connections on the epicuticular hyphae and on the tomentum at the base of the pileus.

Habit, Habitat, and Distribution - On dead wood of birch, alder, beech, and other deciduous trees, New York, Vieginia, Tennessee, and Michigan, June-July.

Materials Studied - MICHIGAN: Smith 66940; NEW YORK: Earle 241, the type, from N. Y. Botanical Garden, New York City, June 16, 1902; TENNESSEE: Hesler 7874.

Observations - Although Murrill (1917) says the pileus is dry, there is a distinct gelatinous, outicular zone.

Grepidøtus betulæ Murr. Fype Ch - × 1000

7874 CREPIDOTUS BETULAE Murr.

Pileus 2-14 mm. broad, resupinate then reflexed, white, attached laterally or dorsally, orbicular to conchate, tomentose. Context medium thin; odor and taste not recorded.

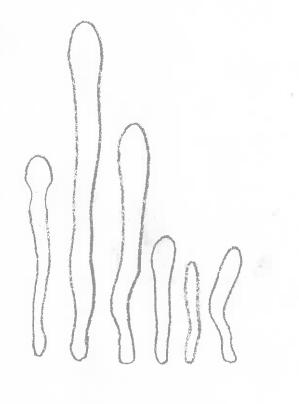
Lamellae radiating from a lateral point, subdistant, medium broad, white then pinkish, edges fimbriate.

Stipe none, or very short and then eccentric.

Spores 6-8 (9) x 3.8-4.5 μ , ellipsoid, slightly inequilateral in side view, smooth, medium pale brown in 2% KOH. Basidia 21-30 x 5-6 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 27-88 x 3-8 μ , clavate to cylindric-clavate. Gill trama subparallel, hyphae 3-5 μ broad. Pileus trama interwoven. Cuticle a gelatinous zone, 160-200 μ thick, hyphae narrow and loosely interwoven, the zone bearing a trichodermium of long, slender, colorless hyphae. Hypodermium distinct. Clamp connections present on the trichodermial hyphae.

This agrees very well with the type.

betulae Murr. Crepidotus, No. 7874



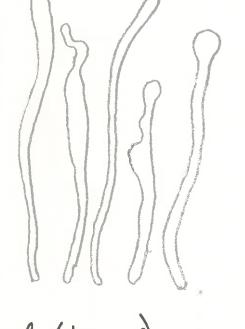
Ch-× 1000



Spores 6-8 x μ - μ .5 μ , ellipsoid, inequilateral, smooth. Pleurocystidia none; cheilocystidia tramal: 54-78 x 3-8 μ , more or less filamentous, at times capitate, gelatinous; no hymenial cheilocystidia found. Gill trama subparallel, hyphae 5-10 μ broad. Pileus trama interwoven, branched. Cuticle a gelatinous zone, 140-250 μ thick, the surface with scattered, long, colorless hyphae, 2-3 μ broad. Clamp connections present.

This is suggestive of <u>haerens</u>, but has clamps and colorly, Cf. <u>Sm-20398</u>.

Crepidotus H- 20785 fetulae



ch (tramal) - × 1000

Verauta

CREPIDOTUS BICOLOR Murr.

Type

(Collected by Morton E. Peck, British Honduras, 1906)

Spores 7-8 x 5-6 μ , broadly ellipsoid, smooth, conspicuously thick (double) walled, reddish-brown to rusty-brown under the scope (in 2% KOH). Basidia 19-30 x 5-7 μ , 2-4-spored, mostly 4-spored. Pleurocystidia none; cheilocystidia 23-46 x 3.5-6 μ , clustered, cylindric to slender-clavate, often irregular to slightly constricted. Gill trama undulating subparalle, hyphae 3-6 μ broad. Pileus trama interwoven. Cuticle a cutis, the surface hyphae forming a narrow, conspicuous zone which is rusty-brown. Clamp connections none.

Crepcetotus bicolor Murr. Fype

Ch- × 1000



CREPIDOTUS brunneus op. nor.

On Hardwood log, McLean Co., Illinois Leg. W. B. Cooke, (No. 35272), Aug. 13, 1965.

Notes by Cooke

Pileus 2-2.5 cm broad, brown, powdery, strongly mbricate.

Notes by Hesler

Lamellae medium broad, close or subclose.

Stipe none.

Spores $(5.5)6-8.5(9) \ge 4.5-5.5 \ \mu$, ellipsoid, smooth, germ pore none. Pleurocystidia none; cheilocystidia 30-38 $\ge 7-11 \ \mu$, flask shaped, neck more or less long, at times subcapitate, or forked, sometimes tramal, gelatinous. Gill trama and pileus trama similat: of irregularly shaped and branched hyphae. Cuticle of repent hyphae. Clamp connections none.

Crepidotus brunneus sp. nov.

Pileus6-12 mm broad, sessile, often imbricate, slightly viscid, near "buffy brown", tinged olivaceous, short-tomentose, margin plicate-striate. Lamellae radiating from a tubercle, pallid brown then dark brown, close, broad, edges(margins) gelatinous. Spores 6-8.5 x 45 4.5-5.5µ, ellipsoid, smooth. Basidia 24-28 x 6-7µ, 4-spored. Pleurocystidia none; cheilocystidia 27-50 x 6-12µ, flaskshaped with a slender neck, rarely forked. Pileus cuticle an ixocutis. Clamp connections none. Specimen typicum in Herb. Univ. Tenn., lectum W.B.Cooke, McLean County, Illinois, August 13, 1965, No. 29529(TENN).

Pilcus 6-12 mm latus, sessilio, sache imbricatus, leviter viscidus, paone "biffy beam", colore olivacco tinctus, breviter tomentosus, margine plicato- striaters. Lamellac e tuberculo, radiantes, pallido - brunneac deinde pusco-burnieae, confeiter, latae, marginibus gelatinosae. Sporae 6-8,5 × 4.5- 5.5 pc, ellipsoideae, leves . Basidian 24-28 × 6-7 p., tetra-sporae. Pleurocystichia desunt; cheilorystichia 27-50 × 6-12 p. gracile ampullacea, quelline montion, peraro foreata. Pilei inticula ixocutio « Fibulatão desunt. Specimentypicum in Hect. Univ. Tenny, lecture W.B. Cooke, Mc Lean County, Ollimpic, august 13, 1965, No. 29529 (TENN).

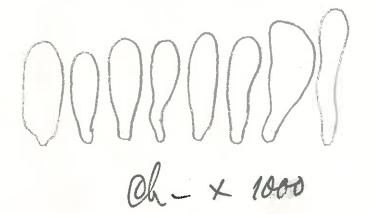
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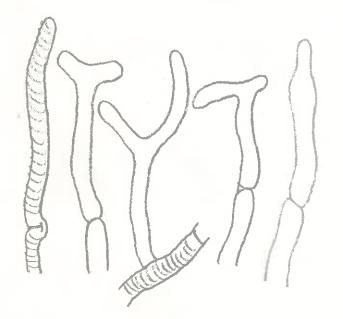
Crepidotus brunneus sp. nov. 29529



H-26080

Orepidotus calolopia





Cuticular brownish monuted Riphae - × 1000

Chipatetellas

(<u>H-26098</u>)

Leg. & det. W. T. Reijnders, Holland, on Salix, Oct. 31, 1954. (Same as Sm-66267, sphaerosporus, from Josserand)

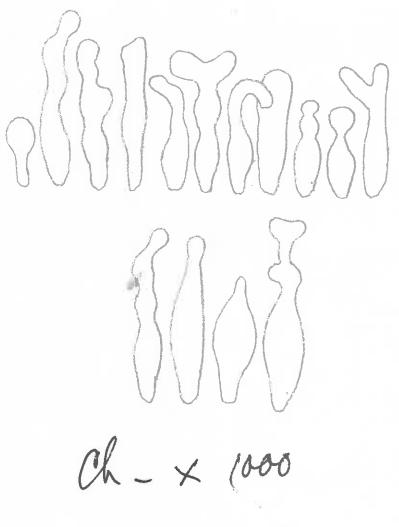
Pileus (7)11-17 x 8-13 mm, white, densely felted, tomentose, rather convex, without stem.

Lamellae rather distant, 5-6 with 3-12 small gills between each pair, up to 2 mm wide, pallid at first, then buff; edge entire.

Spores 7-9(10) x 5.5-7(7.5) μ , broadly ellipsoid to subglobose or subovoid, some more or less flat-sided, punctate_to echinulate, brownish. Basidia 18-24 x 4-5 μ . Pleurocystidia nome; cheilocystidia 18-50 x 6-12 μ , versiform: clavate, cylindric, ventricose, at times with a neck (smooth or constricted), sometimes capitate, or forked or crooked. Gill trama interwoven, hyphae 4-6(8) μ broad. Pileus trama interwoven. Cuticle of repent hyphae, bearing scattered to gregarious, colorless straight hyphae, 2.5-5 μ broad. Clamp connections present.

This is related to <u>submollis</u> which has slightly different spores, longer in relation to breadth, and shorter, less conspicuous ornamentations, narrower and less contorted cheilocystidia, close gills. It is very close to <u>Sm-49808</u> (<u>submollis</u>), and seems almost identical with Sm-<u>50880</u>, except that <u>cesatii</u> has broadly ellipsoid spores with rounded ends, whereas <u>submollis</u> are slightly more slender and less conspicuously punctate. In <u>mollis</u>, the pileus-turf is more fully developed than in cesatii.

Gepidetus ceratii (Rab.) Sace. (H-26098) (from Bas, Holland)



Pilat No. 487965, leg. and det. Pilat, Czechoslavakia, in mixed <u>Abies alba, Picea excelsa, Fagus silvatica</u>, on <u>P. excelsa</u>, Aug. 1937.

× 5-74.

Spores (6)7-8.5 broadly ellipsoid, punctateechinulate. Basidia 25-32 x 6-8 μ, 4-spored. Pleurocystidia none; cheilocystidia 28-43 x 6-7 μ, cylindric to clavate or subventricose, apices knobbed or irregularly branched. Gill trama subparallel, hyphae 6-12 μ broad. Pileus trama interwoven. Cuticle variable: at times distinct and repent, or not sharply differentiated, the surface bearing a turf of colorless, more or less erect hyphae, 3-4.5 (6) μ broad. Clamp connections present.

Pilat No. 487965, leg. and det. Pilat, Czechoslavakia, in mixed <u>Abies alba</u>, <u>Picea excelsa</u>, <u>Fagus silvatica</u>, on <u>P. excelsa</u>, Aug. 1937.

Spores (6)7-8.5 μ, broadly ellipsoid, punctateechinulate. Basidia 25-32 x 6-8 μ, μ-spored. Pleurocystidia none; cheilocystidia 28-μ3 x 6-7 μ, cylindric to clavate or subventricose, apices knobbed or irregularly branched. Gill trama subparallel, hyphae 6-12 μ broad. Pileus trama interwoven. Cuticle variable: at times distinct and repent, or not sharply differentiated, the surface bearing a turg of colorless, more or less erect hyphae, 3-4.5 (6) μ broad. Clamp connections present.

Agarius (repidotus) cacaophyllus B. r.C. Jour. Finn. Soc. 10: 291. 1868

Photo J original description :

73*. A. (CREPIDOTUS) CACAOPHYLLUS, B. & C. (807.) Pileo excentrico subreniformi luteolo squamoso, marginem versus tomentoso; stipite brevi; lamellis adnexis, postice attenuatis fuscis distantibus. On dead wood. Pileus ½ inch across; stem 2 lines high, 1 line thick. Gills chocolate-brown. Spores ochraceous.

<u>Grépidotus cacaophyllus (B+C)</u> Aaco, Syll. Jung. 5: 883. 1887.

CREPIDOTUS CACAOPHYLLUS (B.& C.) Sacc.

Syll. Fung. 5:883. 1887

Agaricus cacaophyllus B. & C., Jour. Linn. Soc. 10:291. 1868.

Singer (Lilloa 13:83. 1947) says he has published on a portion of the type collection (in Lloydia 9:130-131. 1946) preserved at the Curtis Herbarium. He thinks it is not at all a <u>Crepidotus</u>, but probably an inhibited form of <u>Gymnopilus</u>. We have not seen the type. CREPIDOTUS CACAOPHYLLUS (B.& C.) Sacc.

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Pilat No. 23457, det. Pilat, Sobeslav-Blata, Czechoslovakia, June, 1932.

Spores 6.5-9.5 x 5.5-7.5 μ . Otherwise as in No.487965.

-ec. -

CREPIDOTUS CESATII Rab. var. GOTHOBURGENSIS Pilat Monogr. europ. du genre Crepidotus, p.63. 1948.

TYPE VARIETY

On live trunks of cultivated Lonicera tatarica, Västergötland: Göteborg, Aug. 1937

Spores 6.5-9 x 5-7 μ , broadly ellipsoid, pale brown, closely resembling those of the <u>species</u>, punctate-echinulate. Basidia 23-29 x 6-8 μ , μ -spored. Pleurocystidia none; cheilocystidia 26-42 x 5-7 μ , slender, cylindric or clavate, at times more or less constricted, rarely and slightly forked and knobbed. Gill trama undulating subparallel, hyphae 4-6 μ broad. Pileus trama interwoven. Cuticle of repent hyphae, bearing a turf of colorless hyphae, 3-5 μ .

CREPIDOTUS CESATII Rab. var. GOTHOBURGENSIS Pilat

Monogr. europ. du genre Crepidotus, p.63. 1948.

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Crepidotus cesatii var. gothoburgensis Filat Fype

BUNKAR

Ch - × 1000

CREPIDOTUS CESATII Rab.

Pilat No. 488570, det. Pilat, Czechóslovakia, Carpatorossia, Aug. 1937.

-lte

Spores 6.5-8.5 x 5-6 μ ; basidia 24-30 x 5.5-7 μ , 2-4-spored. Otherwise as in No. 487965.

CREPIDOTUS CESATII Rab.

÷5.,

Pilat No. 488570, det. Pilat, Czechoslovakia, Carpatorossia, Aug. 1937.

ъc,

Spores 6.5-8.5 x 5-6 μ ; basidia 24-30 x 5.5-7 μ , 2-4-spored. Otherwise as in No. 487965.

Pilat No. 23173, det. Pilat, Czechoslovakia, Aug.1935, on <u>Picea</u> and <u>Abies</u> (labelled <u>C. sphaerosporus</u> Pat.; filed as <u>C. cesatii</u>)

Spores 7-9.5 x 5-7 μ ; otherwise as in No. 487965.

net.

Pilat No. 23456, det. Pilat (as <u>C. carpaticus</u> Pilat, but filed as <u>C. cesatii</u>), on <u>Fagus silvatica</u> among moss, Carpatorossia, July 1932.

Spores 8.5-10 x 5,5-7 µ; otherwise as in No. 487965.

sely

Pilat No. 23173, det. Pilat, Czechoslovakia, Aug.1935, on <u>Picea</u> and <u>Abies</u> (labelled <u>C. sphaerosporus</u> Pat.; filed as <u>C. cesatii</u>)

Spores 7-9.5 x 5-7 µ; otherwise as in No. 487965.

AL,

Pilat No. 23456, det. Pilat (as <u>C. carpaticus</u> Pilat, but filed as <u>C. cesatii</u>), on <u>Fagus silvatica</u> among moss, Carpatorossia, July 1932.

Spores 8.5-10 x 5,5-7 μ ; otherwise as in No. 487965.

AC.

filat No. 23457, det. Pilat, Sobeslav-Blata, Czechoslovakia, June, 1932.

Spores 6.5-9.5 x 5.5-7.5 µ. Otherwise as in No.487965.

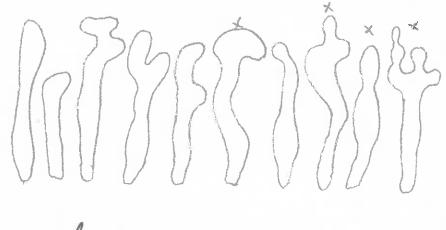
×C.

Pilat No. 487852, det. Pilat, Czechoslovakia, Aug. 1937.

Spores 6.5-8.5 x 5.5-7 μ . Otherwise as in No. 487965.

*2,

Pilat No. 487965





Pilat No. 487852, det. Pilat, Czechoslovakia, Aug.1937.

Spores 6.5-8.5 x 5.5-7 µ. Otherwise as in No. 487965.

Pilat No. 149096, det. Vacek, Moravia, Dec. 24, 1946 (det. as <u>Dochmiopus sphaerosporus</u> Pat. <u>sensu</u> Konr. and Maubl.).

Spores 8-10 x 4.5-6 µ; otherwise as in No. 487965.

A.G.

Pilat No. 149096, det. Vacek, Moravia, Dec. 24, 1946 (det. as <u>Dochmiopus</u> sphaerosporus Pat. <u>sensu</u> Konr. and Maubl.).

Spores 8-10 x 4.5-6 µ; otherwise as in No. 487965.

40.

CREPIDOTUS CINNABARINUS Pk. Torrey Bot. Club Bull. 22:489. 1895.

Pileus 5-15 mm broad, sessile or subsessile, scarlet to cinnabar-red, minutely tomentose or pulverulent, glabrescent, resupinate or reflexed, margin even. Context thin,

Lamellae sinuate, reddish-flacculent on the fimbriate edges, brownish when dried, medium broad, subdistant.

Stipe none, or short (1-2 mm), lgteral, reddishtomentose.

Spores 7-9 (10) x 5-6 μ , ellipsoid to ovoid, more rarely subglobose, punctate, yellowish-brown (under the microscope). Basidia 25-32 x 7-8 μ , 2- μ -spored. Pleurocystidia none; cheilocystidia 3 μ -63 x 5-10 μ , clustered, fusoid, bottle-shaped, clavate, or cylindric, at times extending up the sides to a distance of 100 μ . Gill trama subparallel. Cuticle bearing long (150-350 μ) hyphae, forming a turf.

Habit, Habitat, and Distribution - On bass-wood and poplar, Michigan, Ohio, and Alabama; also Denmark (Møller 1946).

Material Studied - MICHIGAN: Peck's type, from Ann Arbor, Sept. 24, 1894, leg. L. N. Johnson.

41²4 -

Observations - Singer (Lilloa 13:68) says the spores sometimes have a suprahilar depression but usually with a distinct suprahilar applanation. Its bright red color is distinctive. The type material is sparse.

The description of microscopic characters above is based on a study of the type.

Crepedotus cinnabarinus PK. Jype 「「「「「「「「」」」 Ch - × 1000

CREPIDOTUS CINNABARINUS Pk.

(Mich. Herb.-1847)

Labelled "Co-Type." On logs, Ann Arbor, Mich., leg. L. N. Johnson, Sept. 24, 1894.

м¢_л.

In agreement with the Type.

1

Singer pays = uber

CREPIDOTUS CITRI Pat.

Bull. Soc. Myc. Fr. 18:172. 1902.

Pileus 2-5 mm. broad, resupinate to subsessile, orbicular, convex, indented-reniform behind, russet-white, smooth, glabrous, neither striate nor incised. Context thin, soft.

Lamellae radiating from an eccentric point, ochraceous, broad or medium-broad, distant to subdistant.

Stipe inconspicuous, eccentric, white, inserted at the center of a delicate, white, mycelial tuft.

Spores 6-7 (8) x 5-5.5 (6) μ , mostly ovoid, or more or less ellipsoid, thick (double)-walled, brown, smooth. Basidia 15-23 x 6-7 (9) μ , μ -spored. Pleurocystidia none; cheilocystidia none found. Gill trama subparallel, hyphae 3-6 μ broad. Pileus trama and cuticle structure not determined. Clamp connections none on cuticular hyphae and on the tomentum at the pileus-base.

Habit, habitat, and distribution. - Scattered on dying bark of Citrus, Guadeloupe and Martinique.

Material studied. - GUADELOUPE: Patouillard, the type, No. 49 (387), Camp Jacob.

Observations. - Singer (1947) concludes that this is a synonym of <u>C</u>. <u>uber</u>. Matrial of The type was indequate for study of the cutcle + pileut trama. Murrill (1917:154) says the gills are narrow, but in the type they are broad or medium broad.

14. A

The description of microscopic characters above is based on a study of the type.

CREPIDOTUS CITRI Pat.

(Type, from Patouillard Herb., from Farlow Herbarium, collected on citrus bark, at Camp Jacob, Guadeloupe. Numbers 49 and 387 are on the packet.)

Spores 6-7 (8) x 5-5.5 (6) μ , mostly ovoid, or more or less ellipsoid, thick (double)-walled, brown, smooth. Basidia 15-23 x 6-7 (9) μ , μ -spored. Pleurocystidia none; cheilocystidia none found. Gill trama subparallel, hyphae 3-6 μ broad. Pileus trama and cuticle structure not determined. Clamp connections none on cuticular hyphae and on the tomentum at the pileus-base.

The Patouillard collection consists of some 10 or 12 carpophores which appear flattened by pressure. The pileus is dorsally attached, the gills broad and subdistant to distant. Sections of the pileus were unsatisfactory for a study of the pileus trama and cuticle.

Singer (1947) says that the data he gathered through examination of the type seem to make it a synonym of C. uber.

Pilát (1950: 219) says the spores of the type at Paris are 7.5-85 × 5.5-6.8µ, globose to globose ovoid, smooth, observely ferruginous. Singer (1947) gives the spores 7-82 × 5.5-6.8µ, + the hyphae without clamp connections; and thinks it a synonym of C. uber.

CREPIDOTUS CROCEITINCTUS Pk. 6 New York State Mus. Ann. Rept. 39:72. 1887

Pileus 1-2.5 cm. broad, convex or nearly plane, yellowish, ("light ochraceous-buff," the dorsal part often "ochraceous tawny," according to Singer, 1947), glabrous, (velvety behind, according to Singer, 1947), base sometimes white-villose, moist, sessile.

Lamellae rounded behind, whitish, becoming dull saffron-

Stipe none.

Spores 5.5-7 x 4.5-5 μ , ovoid, in end view 6-angled, punctate, rusty brown under the microscope. Basidia 23-32 x 5-6 μ , 4-spored. Pleurocystidia none; cheilocystidia 28-33 x 6-9 μ , clavate to cylindric-subcapitate. Gill trema subparallel. Pileus trama interwoven. Cuticle more or less a cutis, but with scattered more or less erect short hyphae (approaching a trichodermium at the base). Clamp connections on the hyphae at the point of attachment, and more rarely on the cuticular hyphae.

Habit, habitat, and distribution. - On deal wood of hardwoods, New York south to Florida (Singer, 1947).

Material studied. - NEW YORK: Peck, the type (see Observations, below).

Observations. - In his original description, Peck (1887) states that his material was collected in the Adirondack Mountains, and at Day, Saratoga County. In his herbarium at Albany, there are two packets, marked as follows: (1) labelled "Type No. 1," from Adirondack Mts., no date; (2) labelled "Type No. 2," from Day, Saratoga County, July. The word "Type" is not in Peck's hand-writing. The two collections are identical. The description of microscopic characters above is from a study of "Type No. 1."

Singer (1947) reports that the spores have a very small suprahilar depression or a large suprahilar applanation.

This species is **construction** <u>C</u>. <u>crocophyllus</u> (Berk.) Sacc. which has globose spores, the gills more deeply reddishorange, and the pileus fibrillose-scaly.

CREPIDOTUS CROCEITINCTUS Pk.

Type

(Two packets were sent by Stanley J. Smith: (1) labelled Type No. 1, from Adirondack Mts., no date; (2) labelled Type No. 2, from Day, Saratoga Co., no date. In Peck's description: Rept. 39:72. 1877, he states: "Adirondack mountains and Day, Saratoga county. July." Microscopically, the two collections are identical. Notes below are based on Type No. 1.)

Spores 5.5-7 x $4.5-5 \mu$, ovoid, punctate, rusty brown under the macroscope. Basidia 23-32 x 5-6 μ , 4-spored. Pleurocystidia none; cheilocystidia 28-33 x 6-9 μ , clavate to cylindric-subcapitate. Gill trama subparallel. Pileus trama interwoven. Cuticle more or less a cutis, but with scattered more or less erect short hyphae (approaching a trichodermium at the base). Clamp connections on the hyphae at the point of attachment, and more rarely on the cuticular hyphae.

Singer (Lilloa 13:69) says the spores have a small suprahilar depression or a large suprahilar applanation, and that some of the spores, in end view, are 6-angled, the angles very strongly rounded. I could not make out the depression or the applanation, but did confirm the slight angles in end-view.

Crepidotus croceotinctus PK. Fype MM Ch - × 1000

CREPIDOTUS CROCEITINCTUS

(H-9407)

On deciduous wood, Montvale Springs, Aug. 30, 1936.

Pileus more or less resupinate to shelving, buff colored, villose, the fibrils at times pale brownish.

Lamellae medium broad, nearly close, buff or yellowish.

Spores 5.4-6.3 x 4-4.5 (4.8) μ , ellipsoid or ovoid, punctate or more or less echinulate. Pleurocystidia none; one cheilocystidia 18-36 x 4-10 μ , clavate to ventricose, at times subcapitate. Gill trama subparallel, hyphae 3-6 μ broad. Pileus trama densely interwoven. Cuticle not sharply differentiated, or of repent hyphae, bearing a turf of hyphae, 4-7 μ broad, many of which are colorless, others a dilute brown, either type may be incrusted; the terminal elements, at times, as clavate pilocystidia. Clamp connections present.

Gepidatus crocophyllus (Bet) Sace. (H-9407)

0200

CREPIDOTUS CROCEITINCTUS Pk.

(H-14171)

Pileus 5-10 mm broad, resupinate and dorsally attached to shelving and laterally attached, pale-brownish, glabrous in front, villose behind, margin striate (dried material). Context thin.

Lamellae radiating from an eccentric point, brown (young lamellae not seen, probably pallid or yellowish), broad or medium broad, medium-close or sub-distant, edges even.

Stipe none.

Spores 5-7 x 4.5-5.5 μ , ovoid, some subglobose or subovoid, conspicuously punctate, pale to medium brown (under microscope). Pleurocystidia none; cheilocystidia 18-41 (76) x 6-11 μ , clavate or clavate-vesiculose and appendiculate, or ventricose to bottle-shaped, more rarely short-vesiculose, inconspicuous. Gill trama subparallel to slightly interwoven. Pileus trama interwoven. Cuticle a narrow, more or less compact zone of brown, repent hyphae bearing a distinct trichodermium of erect, colorless hyphae. Epicuticular hyphae with clamp connections.

The spores are typical for croceitinctus.

crocertinetus PK. Cropidotus, No. 14171

San Ba Ch - × 1000

Inchodermum (colorless) Repent cuticular hypere (brown) Pileur traina

Againens (Geoperatur) <u>crocaphyllur</u>, #. pp. Fordon Jour of Botany 6: 313 1847 Original Description

113. A. (Crepidotus) crocophyllus, n. sp.; pileo sessili subflabelliformi ochraceo-fusco adpresse squamoso; lamellis au-

On a dead trunk. Waynesville, Ohio. Sept. 5, 1844. T. G. Lea, Esq. VOL. VI.

AA

1.313

314

DECADES OF FUNGI.

Pileus scarce 1 an inch long, flabelliform, convex, ochraceous-brown, clothed with minute adpressed scales. Stem none. Gills rather broad, rounded behind, bright buff. Spores subglobose, of a pale ochre-yellow.

I do not know any species with which this can be compared. Agaricus croceo-lamellatus, Let., is, I believe, the same with Paxillus Panuoides. The only resemblance, however, is in the colour of the gills. It is perhaps most like Ag. mollis, but besides the difference in the colour of the gills, the spores are smaller and of another form. It is not, I believe, resupinate in any stage of growth.

Syll. Fung. 5:886. 1887.

<u>Agaricus (Crepidotus) crocophyllus</u> Berk., London Jour. Bot. 6:313. 1847.

Pileus scarcely 12 mm broad, sessile, not at first resupinate, convex, subflabelliform, ochraceous-brown, clothed with brownish minute, appressed fibrillose scales.

Lamellae rounded behind, rather broad, crowded, orange. (Bright buff in original description.)

Stipe none.

Spores 5.3-6 x $4.5-5.5 \mu$, globose or ovoid, slightly punctate, wall medium thick, many slightly flat-sided, pale brownish. Basidia 26-32 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 28-47 x 5-7 μ , clavate to subventricose. Gill trama subparallel, hyphae 4-7 μ broad. Pileus trama interwoven, at times more or less vesiculose. Cuticle of repent hyphae, bearing long (75-150 μ or more, 7-12 μ broad), brown, septate hyphae which form a trichodermium, a few incrusted. Clamp connections present on the brownish epicuticular hyphae and on the colorless hyphae of the pileus trama.

Type specimen, from Kew, collected at Waynesville, Ohio, T. G. Lea. Sept. 5, 1844.

Spores 5.3-6 x 4.5-5.5 μ , globose or ovoid, slightly punctate, wall medium thick, many slightly flat-sided, pale brownish. Basidia 26-32 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 28-47 x 5-7 μ , clavate to subventricose. Gill trama subparallel, hyphae 4-7 μ broad. Pileus trama interwoven. Cuticle of repent hyphae, bearing long (75-150 μ or more, 7-12 μ broad), brown, septate hyphae which form a trichodermium, a few incrusted. Clamp connections present on the brownish epicuticular hyphae and on the colorless hyphae of the pileus trama.

Kauffman describes a depression or a cavity om one side; I found nothing of this kind in the type.

Pilat (1950:220) gives the spores of the type 5.8-6 μ , globose, subtly verrucose-punctate. He suggests that it is a small, juvenile form of <u>C</u>. applanatus (Pers. ex Fr.) Quel.

Grepidotus crocophyllus Berk. Aacc. Type

 $\left(\right) \right) \right) \right) \right) \left(\right) \left(\right) \left(\right) \right) \left(\left) \left(\right) \left(\left(\right) \left(\right) \left(\right) \left(\right) \left(\left(\right) \left(\right) \left(\right) \left(\right) \left(\left(\right) \left(\left(\right) \left(\right) \left(\left(\right) \left$

Ch - × 1000

Spores 5-6 μ broad, globose, punctate. Pleurocystidia none; cheilocystidia ventricose, 22-28 x 4-5 μ . Gill-trama subparallel. Tomentose-scales on pileus composed of brownish hyphae with clamps and spiral markings (incrustations).

Ale.

Spores 5-6.5 μ , globose, rough. Pleurocystidia none; cheilocystidia clavate or ventricose, 30-38 x 5-7 μ . Gilltrama subparallel.

1

Crepedotus orscopphyllus (Bert.) Dace.

No. 10795

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Ch - × 1000

12539

(Smith called This dorsalis)

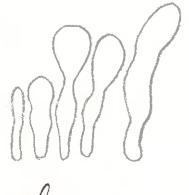
Pileus 1-2.5 cm. broad, sub-orbicular, yellowish-tawny, drying "ochraceous buff" to "pale yellow-orange," at times fading, with numerous fibrillose scales, margin even. Context thin.

Lamellae radiating, close, broad, yellowish becoming ochraceous-fuscous, edges fimbriate.

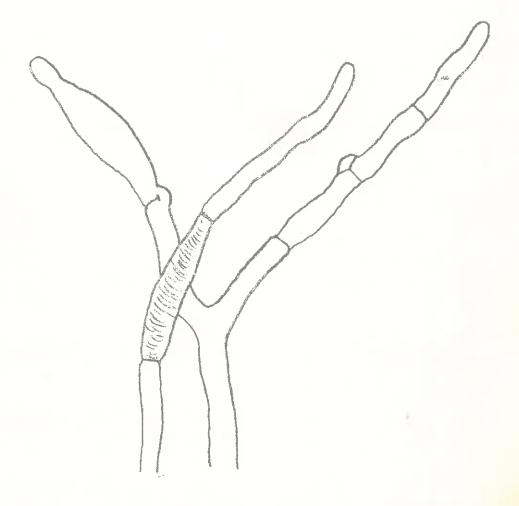
Stipe none, laterally sessile.

Spores 5-6 μ , globose, faintly rough. Pleurocystidia none; cheilocystidia conspicuous, more or less versiform: cylindric, clavate, at times sub-capitate, 35-52 x 5-6 (10) μ . Gill*trama subparallel. Cuticle a trichodermium of brownish, septate, often branched hyphae, some elements of which are incrusted.

Grapidotus crocophyllus (Bert.) Sace. No. 12539



Ch - × 1000



Fichodermial Ryphae -× 160-0

Spores 4.5-6 (7) μ , globose or subovoid, faintly rough, "buckthorn brown" in mass. Pleurocystidia none; cheilocystidia clavate to irregular, 17-30 x 4-7 μ . Gill-trama interwoven. Cuticle a trichodermium as in 12539.

Ale .

CREPIDOTUS CUNEIFORMIS Pat. Bull. Soc. Myc. Fr. 18:173. 1902

Pileus 5-15 mm broad, sessile, reniform to flabelliform, base cuncate, pale brown, glabrous, dry, margin striatulate when wet. Context soft, watery; taste mild.

Lamellas radiating, broad, close, at first pallid, then brownish, edges corrulate.

Spores 5.4-7 μ in diameter, globose or subglobose, finaly punctate, brown in 2% KOH. Basidia 20-24 x 7-8 μ , 4-spored. Fleurocystidia none; cheilocystidia 20-40 x 7-13 μ , clavate, few, collapsed against the edges, inconspicuous. Gill trama subparallel, hyphae 5-7 μ broad. Fileus trama interwoven. Cuticle composed of a sone of three to five layers of repent hyphae, 5-7 μ broad, with occasional erect colorless hyphae.

Habit, Habitat, and Distribution - On hardwood logs, Guadeloupe, Michigan, and Texas, June-July.

Material Studied - GUADELOUPE: Patouillard, No.31 (405), type, deposited in the Herbarium at Harvard University; MICHIGAN: Smith 41548, 49609, 49625, 49641, 63673; TEXAS: Thiers 1885.

Observations - The description of microscopic characters above is based on a study of the type. The Michigan and Texas collections showed areas of erect hyphae which formed a turf, the terminal elements of which were pilocystidia. The multi-layered cuticle is characteristic, along with spore-size, and the shape of the cheilocystidia.

CREPIDOTUS CUNEIFORMIS Pat.

(Type, from Patouillard Herbarium at Farlow Herb., collected on dead wood, Guadeloupe. Numbers 31 and 405 on the packet.)

Spores 5.4-7 µ, globose or subglobose, finely punctate, **A 2% KOH**. brown Basidia 20-24 x 7-8 µ. Pleurocystidia none; cheilo **r realizers**, cystidia 28-40 x 7-13 µ, clavate few, collapsed against the edges, inconspicuous. Gill trama subparallel, hyphae 5-7 µ broad. Pileus trama interwoven. Cuticle a cutis, composed of a layer of three to five repent hyphae, 5-7 µ broad. Clamp connections few, inconspicuous on the cuticular hyphae.

Singer (1947) concludes that C. aquosus Murr. is the same.

. Aller

Crepidotus anneiformis Pat. Jype Ch - × 1000 Contraction of the local division of the loc Portion of Cutis _ × 1000

CREPIDOTUS CYSTIDIOSUS sp. nov.

(H-4331)

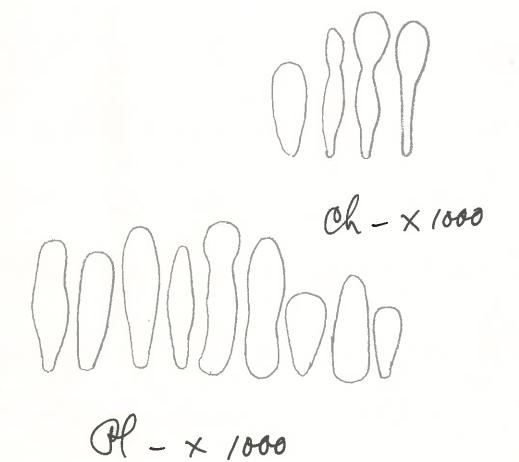
Pileus white, glabrous.

Lamellae close. broad.

Spores 5-7.5 μ , globose, punctate. Basidia 26-32 x 5-6 μ , μ -spored. Pleurocystidia 20- μ 0 x 7-ll μ , clavate, sunventricose, at times cylindriv-capitate; cheilocystidia 2 μ -36 x 5-10 μ , clavate, at times more or less constricted and capitate. Gill trama subparallel, hyphae 5-9 μ broad. Pileus trama interwoven, often vesiculose. Cuticle of several layers of repent dingy hyphae. Clamp connections present.

Crepitotus approver (B, C) sace.

16. 4331



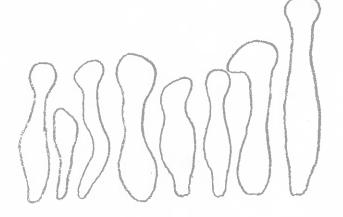
CREPIDOTUS CYSTIDIOSUS sp. nov. (H-5116)

Spores 5-7.5 μ , globose, faintly punctate. Pleupocystidia 28-35 x 8-10 μ , clavate, more or less capitate; cheilocystidia (24) 33-50 x 5-10 μ apex) x 7-11 (base) μ , dumb-bell, ventricose, flask-shaped, usually more or less capitate, base usually broadened. Gill trama subparallel, hyphae broad, 6-12 μ . Cuticle repent, hyphae dingy to colorless; no erect hyphae. Clamps present.

ALC -

Same am H-4331.

Crepidotus approdes (B+O) Sacc. No. 5116



Ch- × 1000



CREPIDOTUS CYSTIDIOSUS sp. nov.

(H-**1**8184)

Pileus white when fresh, glabrous.

Spores 6-7.5 μ in diameter, globose or subglobose, slightly punctate. Pleurocystidia 27-43 x 5-9 μ , clavate, obclavate, fusoid; cheilocystidia 22-38 x 4-7 μ , ventricose, clavate, at times more or less capitate, or bottle-shaped with a neck. Gill trama subparallel, hyphae 5-10 μ broad. Cuticle of repent hyphae; no erect hyphae. Clamp connections on the cuticular hyphae.

Gefiddus applieder (B+C) Acer. No. 18184 (from Douglastate Mich)

MAR

Ch-× 1000

RMMR-× 1000

CREPIDOTUS CYSTIDIOSUS sp. nov. (H-19157)

Pileus 1-2 cm broad, white, hygrophanous, margin even when dry, striatulate when wet. Context thin, white, soft, subgelatinous to feel; odor miad, taste soon becoming bitter and agtrigent.

Lamellae narrowly adnate, broad, mearly close, white becoming pale cream, edges fimbriate.

Stipe none.

Spores 5.5-7 μ , globose, minutely echinulate. Pleurocystidia 32-43 x 6-9 μ , clavate-appendiculate; cheilocystidia clavate, ventricose, dumb-bell, 25-50 x 6-8 μ . Gill trama of subparallel hyphae, 4-11 μ broad. Pileus trama interwoven. Cuticle repent; no erect hyphae found. Clamp connections present on the cuticular hyphae.

Crepidotius supporter (B-C) face No. 19157 BANG (Pl-x 1000 BARAD Ch - × 1000

CREPIDOTUS CYSTIDIOSUS sp. nov. (No. 24946)

Pileus 3-6 cm broad, applanate, hygrophanous, white when dry, quickly watery-brown when wet, glabrous, striate. Context white; odor mild, taste fungoid.

Lamellae adnate, broad to medium broad, close to subdistant, "sayal brown," edges even, thin.

Stipe none; pileus laterally attached by a white tubercyle, with a villose tomentum.

Spores in deposit: "sayal brown" with a slight olive tinge; spores globose, 5-7 μ diameter, minutely punctate. Basidia 22-26 x 5-7 μ , 2-4-spored. Pleurocystidia 26-40 x 4-8 μ , clavate te ventricose; cheilocystidia 24-35 x 5-7 μ , clavate (a few appeared to be collapsed against the gill edges). Gill trama subparallel, hyphae 5-9 μ broad. Pileus trama very loosely interwoven. Cuticle of repent hyphae, some of the surface, colorless hyphae not incrusted. Clamp connections on the cuticular hyphae and on the tomentum at the base of the pileus.

Prepidotus mertidiosus No. 24946 Cyptidiosus

00000000 Pl- × 1000

Ch-× 1000-

H-25528

CREPIDOTUS H-25528

on oak log, Kepart Prong, June 7, 1963.

Pileus 1.5-5 cm. broad, white, hygrophanous, watery brown when wet, fan-shaped to semi-orbicular, glabrous, tomentose at base, striate. Context white; odor fungoid, taste mild then slightly bitter.

Lamellae white then brownish, broad, ventricose, close.

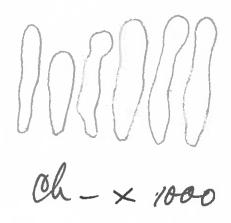
Stipe none; attached by a prominent tubercle.

Spores 5-7 μ , globose, punctate. ^Basidia 28-34 x 6-7 μ , 2-4-spored. Pleurocystidia 33-40 x 5-8 μ , obclavate or ventricose, scattered; cheilocystidia 20-34 x 5-8 μ , clavate or subvextricose. Gill trama subparallel to slightly interwoven, hyphae 5-10 μ broad. Pileus trama interwoven. ^Cuticle of repent hyphae, with rare, widely scattered pilocystidia, 28-42 x 5-6 μ , more or less cylindric or filamentous, at times subcapitate. ^Clamp connections present.

Some of Note Deegan-81.

Propidotus H-25528 Cystidiouus

H-× 1000



Pilo - × 1000

ciptidiosus M. nor.

AL.

CREPIDOTUS No.25811

On oak stump, near LeConte, Aug. 5, 1963.

Pileus white, hygrophanous, striatulate. Context thin, whitish; odor slight, taste soon bitterish.

Lamellae close, broad, white, then brownish.

Spores 5-7 μ , globose, punctate. Pleurocystidia 26-34 x 7-9 μ , clavate to subfusoid; cheilocystidia 22-30 x 4-6 μ , subventricose, clavate. Gill trama interwovenvesiculose, hyphae 5-12 μ . Pileus trama loosely interwoven. Cuticle of repent hyphae, bearing scattered pilocystidia. Clamp connections present.

PHAEOMARASMIUS DISTANS (Pk.) Singer

Lillon 13:83, 1947

Crepidotus distans Pk., N.Y. State Museum Ann. Rept. 44:132. 1892.

Pileus 4-8 mm broad, convex, tawny, minutely pubescent, margin distantly sulcate-striate.

Lamellas adnate, concolorous with the pileus, broad, very distant.

Stipe eccentric, reddish-brown, minute, about 2 mm long.

Spores 10-14 x 7-9 μ , ellipsoid, smooth, with a callus at the apex, rusty colored, with a thick double wall. Basidia 27-30 x 7-9 μ , 4-spored. Pleurocystidia none; cheilocystidia 50-64 x 5-12 μ , cylindric, hair-like bulbous, usually wavy-constricted. Gill trama interwoven. Cuticle bearing dense, brown, septate, at times branched hyphae 4-6 μ broad, with ridge-like incrustations, hyphae forming a trichodermium. Clamp connections present.

Habit, Habitat, and Distribution - On bark of <u>Grataegus</u> tomentosa, New York, September.

Material Studied - NEW YORK: Peck, type of <u>Grepidotus</u> <u>distans</u>, collected by Peck, at Carrollton, September.

Observations - Singer (1947), after studying the type of <u>G. distans</u>, proposed the new combination <u>Phaeomarasmius distans</u> (Pk.) Sing. His move is justifiable on the grounds that this species has smooth spores with a callus but no germ-pore, and a trichodermial epicutis of brown pigmented, incrusted hyphe on the pileus surface.

CREPIDOTUS DISTANS Pk.

Type

Spores 10-14 x 7-9 μ , ellipsoid, smooth, with a callus at the apex, rusty colored, with a thick double wall. Basidia 27-30 x 7-9 μ , 4-spored. Pleurocystidia none; cheilocystidia 50-64 x 5-12 μ , cylindric, hair-like bulbous, usually wavy-constricted. Gill trama interwoven. Cuticle bearing dense, brown, septate, at times branched hyphae 4-6 μ broad, with ridge-like incrustation, hyphae forming a trichodermium. Clamp connections present on the epicuticular hyphae.

Singer proposes <u>Phaeomarasmius</u> distans (Pk.) Singer (Lilloa 13:83).

Fype collected on bark of thom, <u>Crataegus</u> tomentosa, at Carrollton, N.Y., Rept.

Crepidotus distans PK. Zype 0 R- × 1000 There will be the Epicuticular hypha × 1000

Erocophyllion

45

CREPIDOTUS DORSALIS (Pk.) Sacc. Syll. Fung. 5:883. 1887

Agaricus (Crepidotus) dorsalis Pk., N. Y. State Mus. Nat. Hist. Ann. Rept. 24:69. 1872.

Pileus 1.5-3 cm. broad, sessile, dimidiate or subreniform, flat or slightly depressed behind, reddish-yellow, slightly fibrillose-tomentose, at times fibrillose-scaly, distinctly tomentose at the point of attachment, margin decurved, slightly striate. Context fleshy.

Lamellae rounded behind, subemarginate, close, broad, ventricose, yellowish, becoming brownish-ochraceous or subferruginous.

Stipe none.

Spores 5.5-7 μ , globose, punctate, brown under 'scope, a few faintly 5-6-sided when observed from the end-view. Basidia 25-28 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 32-42 x 3-7 (10) μ , cylindric to clavate, at times constricted and more or less capitate. Gill trama undulating subparallel. Pileus trama of interwoven hyphae. Cuticle usually a trichodermium, the surface bearing long, pale brown, septate hyphae, which may be incrusted, often branched, usually in bundles which form the fibrillose scales, and also colorless hyphae. Clamp connections present on the hyphae at the point of attachment and on the epicuticular hyphae.

Aller

<u>Observations</u>. - Pilat (1948) lists several species as synonyms of <u>C</u>. <u>applanatus</u> (Pers. ex Fr.) Karsten; and regards <u>globiger</u> Berk., <u>fulvifibrillosus</u> Murr., and <u>crocophyllus</u> Berk. as varieties of <u>applanatus</u>. CREPIDOTUS DORSALIS (Pk.) Sacc.

Type (from Grieg, N. Y., Sept.)

Spores 5.5-7 μ , globose, punctate, brown under 'scope, a few faintly 5-6-sided when observed from the end-view. Basidia 25-28 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 32-42 x 3-7 (10) μ , cylindric to clavate, at times constricted and more or less capitate. Gill trama undulating subparallel. Pileus trama of interwoven hyphae. Cuticle usually a trichodermium, the surface pele brown, bearing long, septate hyphae, which may be incrusted, often branched, usually in bundles which form the fibrillose scales, Clamp connections present on the hyphae at the point of attachment and on the epicuticular hyphae (oth frown + Colorles).

In the type, the gills are broad + close or crowded.

Ocepidatus dorsalis (PK.) Sace. Fype

Ch-×1000



Crepidotus dorsalis Pk. - Spores of type

CREPIDOTUS DUSSII Pat. Bull. Soc. Myc. Fr. 18:173. 1902. Maile, Pileus 3-5 mm. broad, convex, orbicular, indented behind, slightly viscid, glabrous, chrome-yellow, not striate; red present.

Lamellae broad, distant, inserted, brownish-yellow.

Mit Aora

Spores 6-8 x 4.5-5.5 µ, ellipsoid, thick, Xdouble X-walled, subfusoid, subcapitate to appendiculate, spathulate, ampullaceous (flask-shaped). Gill trama interwoven. Cuticle a Matrichodopmium), more or less 50 μ thick, the hyphae 3-5 μ broad and imbedded in a gelatinous matrix, resting on an hypodermium more or bess 20 µ thick. Clamp connections few and inconspicuous on the epicuticular hyphae.

Habit, habitat, and distribution, - On dead wood, Guadeloupe.

Material studied. - GUADELOUPE: Patouillard, the type, collected at Baines-Jaunes.

Observations. - The description of microscopic characters above is based on a study of the type.

Singer & Smith (Mycol. 38:521. 1946) have published this as Pleuroflammula.

CREPIDOTUS DUSSII Pat.

[=Pleuroflammula dussii (Pat.) Singer]

Type, from Patouillard Herb., at Farlow Herb., collected at Baines-Jaunes, Guadeloupe, on dead wood. Numbers 25 and 411 on the packet.)

Spores 6-8 x $4.5-5.5 \mu$, ellipsoid, thick (double)-walled, smooth, brown, germ-pore noted. Pleurocystidia none; cheilocystidia 22-52 x 5-10 μ , variable: subcylindric, ventricose, subfusoid, subcapitate to appendiculate, spathulate, ampullaceous (flash-sheped). Gill trama not well-observed (the sections not adequate). Pileus trama interwoven. Cuticle an ixocutis (or ixotrichodermium), more or less 50 μ thick, the hyphae 3-5 μ broad and imbedded in a gelatinous matrix, resting on an hypodermium more or less 20 μ thick. Clamp connections faw and inconspicuous on the epicuticular hyphae.

This was made the <u>species typica</u>, and was transferred to the genus <u>Pleuroflammula</u> by Singer. He proposed <u>Pleuroflammula</u> <u>dussii</u> (Pat.) Singer (Specific Singer & Smith: Mycologia 38:521. 1946). In his Agar. 2nd ed., p. 559, Singer characterizes the genus <u>Pleuroflammula</u> as non-viscid, but the type shows a distinct gelatinous, cuticular zone.

Crepidotus durin Pat. (= Revollammala dusin (Pat.) Fing.)

(BRADDAM)

Ch - × 1000

Ixoentris (or ixotristo deminium? Hypodermun

Cuticle - × 1000