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November 2013

Crepidotus Notebook 2

L. R. Hesler

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CREPIDOTUS ECCENTRICUS Murr.

Type

Spores 5.3-6 x 4-5 μ , ellipsoid, smooth, with a colorless plage. Basidia 17-24 x 5-6 μ . Pleurocystidia none; cheilocystidia cylindric, few, 30-35 x 2-4 μ . Gill trama subparallel. Pileus trama interwoven. Cuticle a cutis, not greatly differentiated, with a few, scattered, colorless, more or less erect hyphae. Clamp connections on the epicuticular hyphae.

Material too sparse for satisfactory study.

Crepidulus eccentricus Murr.

Type



Ch - x 1000

CREPIDOTUS ELLIPSOIDEUS sp. nov.

(No. 8083)

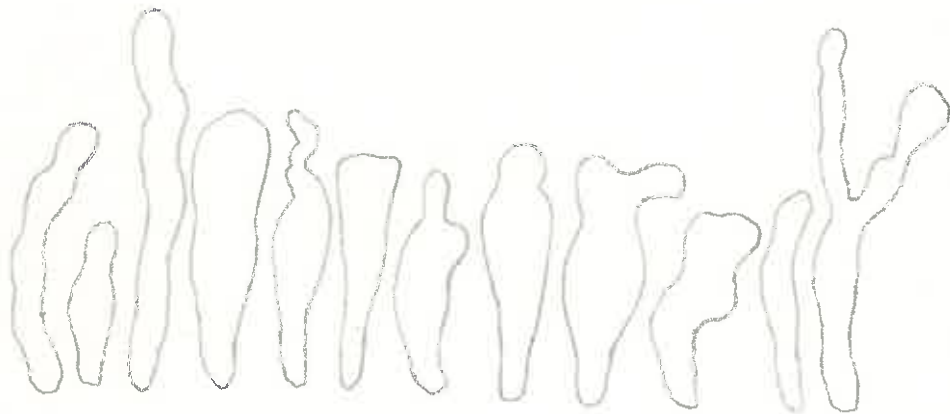
Pileus 0.8 - 1.5 cm broad, white, villose, dry.

Lamellae radiating, white then brownish, close, broad.

Stipe none.

Spores 6-8 x 4-4.5 μ , ellipsoid, inequilateral in profile, punctate, in 2% KOH. Basidia 26-33 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 22-51 x 4-12 μ , clavate, cylindric, ventricose, at times branched or forked. Gill trama undulating subparallel or slightly interwoven, hyphae 4-10 μ broad. Pileus trama loosely interwoven. Cuticle not sharply differentiated, the surface bearing a turf of tangled, colorless, crooked, or coiled hyphae, 2.5-7 μ broad. Clamp connections present.

Oreodotus ellipsoideus
H-8083



Ch - x 1000



Orepidotus ellipsoides sp. nov.
(Miller-1051, Type)

ellipsoideus sp. nov.
CREPIDOTUS No. 12778

On hardwood fallen limb, Cedar Cove, June 8 - 57

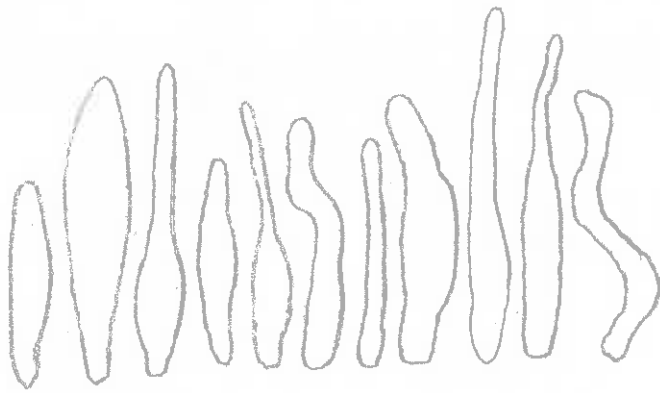
Pileus 2-4 mm broad, resupinate, attached dorsally, white or whitish, fibrillose. Context thin, whitish.

Lamellae radiating from an eccentric point, rather broad, close, brown, edges fimbriate.

Stipe none.

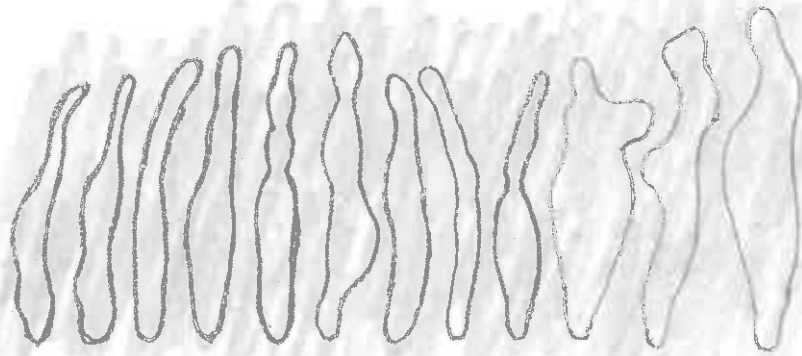
Spores (5.5) 6-8 x 4-5 (6) μ , ellipsoid, inequilateral in profile, punctate. Pleurocystidia none; cheilocystidia 22-48 x 3-10 μ , variable: clavate, fusoid, ventricose, bottle-shaped and with a slender neck. Gill trama subparallel, hyphae 2-5 μ broad. Pileus trama interwoven. Cuticle of repent hyphae, bearing a turf of tangled, colorless, crooked or coiled hyphae, 2.5-5 μ broad. Clamp connections present.

Pepidotus ellipsoidens
No. 12478



Ch - x 1000

Gepidostus No. 14709
epibryus



Ch - x 1000

epibryus (Fr.) Quel.

CREPIDOTUS No. 22579

On dogwood bark, Mt. LeConte, Coll. Hesler, June 4, 1957.

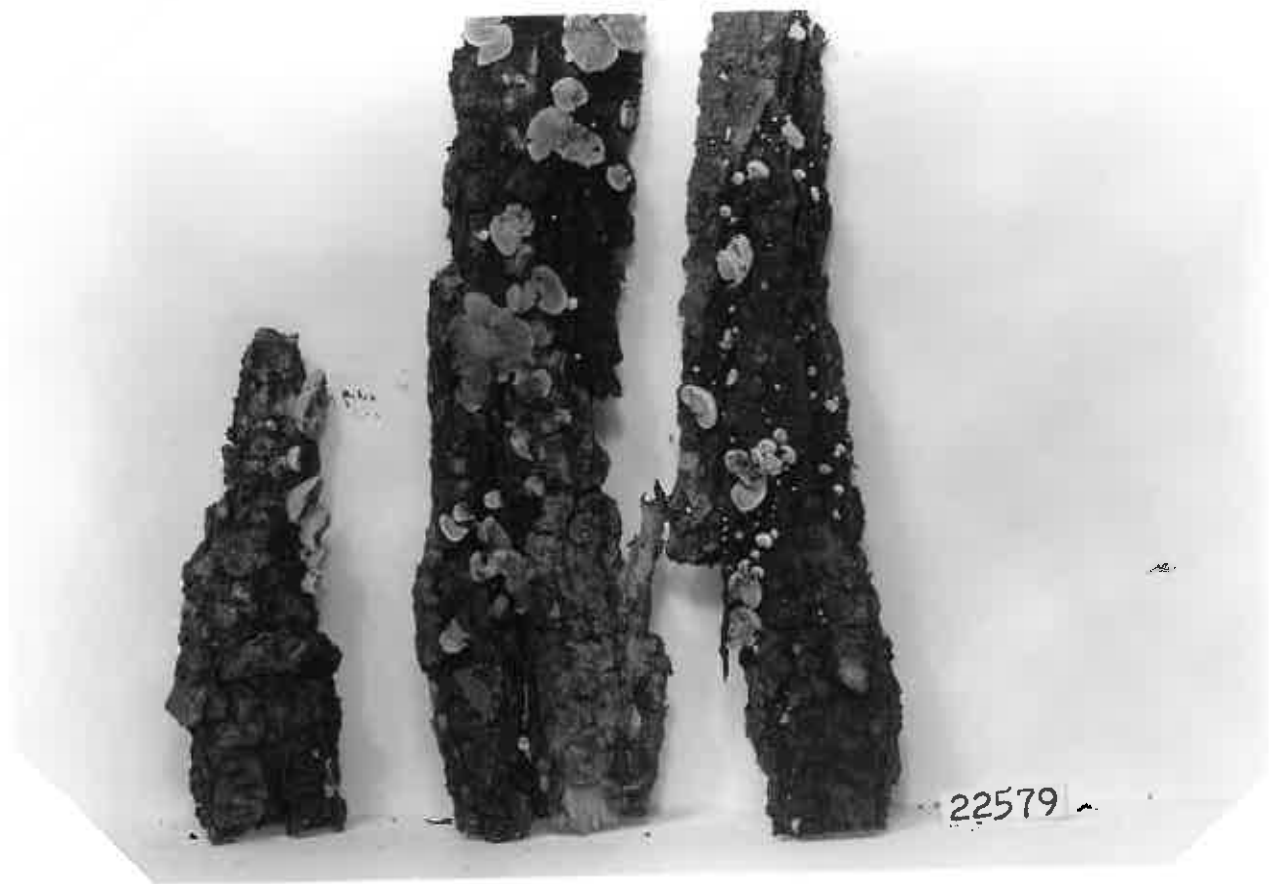
Pileus 5-12 mm. broad, white, villose, attached dorsally to somewhat laterally, margin even, incurved. Context watery white, thin; odor and taste mild.

Lamellae radiating from an eccentric point, subdistant, medium broad, ventricose, white, soon "sage brown," edges fimbriate.

Stipe none, or a temporary one on lower side of pileus, 0.5 mm. x .03 mm.

Spores 8.5-11 x 4-5.5 μ , wrinkled-rough, ~~subglobose~~ ^{ellipsoid,} inequilateral in profile. Pleurocystidia none; cheilocystidia clustered, cylindric or hair like, to ~~ventricose~~ ^{slender} ~~ventricose~~ ^{ventricose}, 25-40 x 2.5-6 μ . Cuticle repent, bearing a turf of colorless hyphae, some of which are crooked or coiled. Clamp connections present.

This was at first called versutus, but it is not that.



Opeidotus epibryus (Fr.) Quél. sensu Pilát

CREPIDOTUS EPIBRYUS (Fr.) Quel.

(H-17709)

Pileus 2-4 mm broad, sub-orbicular to diamidiate, white then "cinnamon buff," somewhat fibrillose, glabrescent, point of attachment villose, sessile or at times short-stipitate, margin incurved and striate. Context thin, pallid.

Lamellae radiating from an eccentric or lateral point, or from stipe when present, subdistant, broad, brownish, edges white-fimbriate.

Stipe none or very short and disappearing.

Spores (7) 8-10 x 5-6 μ , ellipsoid, punctate, pale brown under microscope. Basidia 28-32 x 5-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 27-41 x 3-11 μ , clustered, ventricose to cylindric, at times nodulose-constricted, often appendiculate, apices more rarely forked. Gill trama more or less undulating subparallel, hyphae 3-5 μ broad. Pileus trama interwoven. Cuticle of repent hyphae which are not differentiated from the trama; bearing a turf of long or short, slender (2.5-4 μ), colorless hyphae, which on the surface are straight or somewhat crooked, and on the margin coiled and crooked. Clamp connections on the epicuticular hyphae.

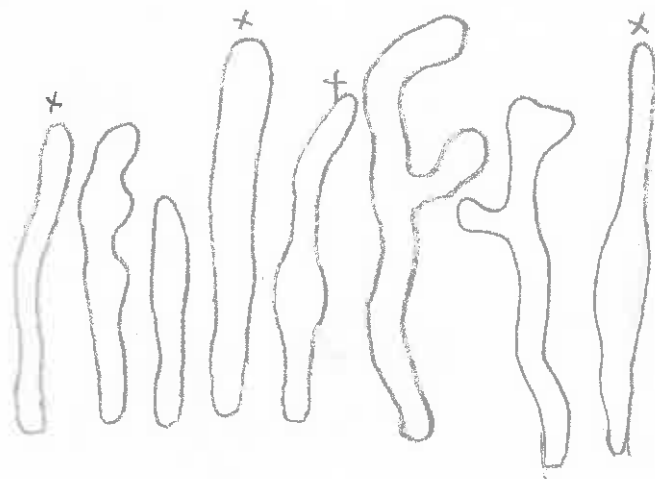
CREPIDOTUS EPIBRYUS (Fr.) Quel.

From Herb. Krypto. Musei Nationalis Prague,
No. 197706, leg. Z. Pouzar, det. A. Pilat, July
16, 1953, on dead branches of Cornus, near Prague.

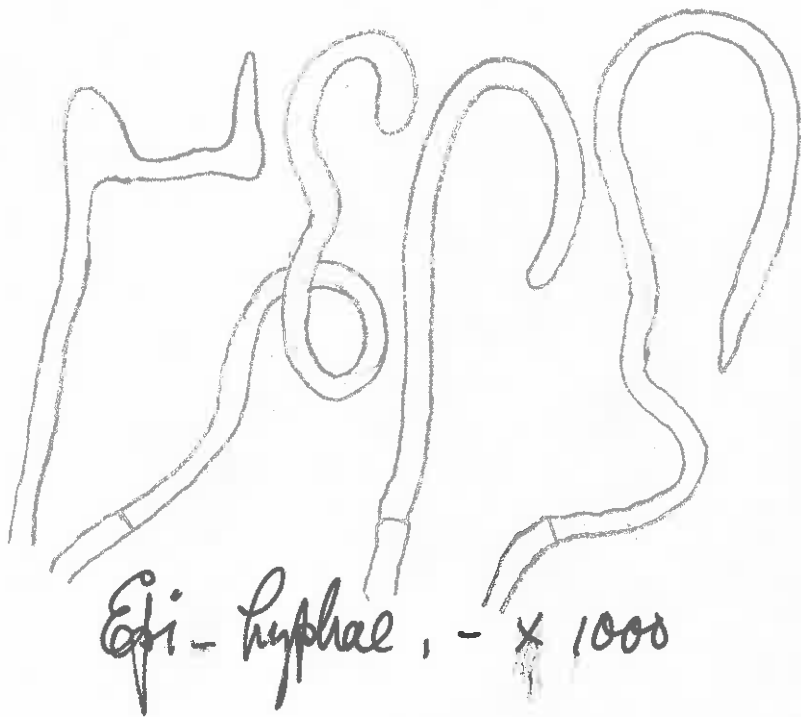
Spores 7-9(9.5) x 4.5-5.5 μ , ellipsoid, somewhat inequilateral in profile, rough-wrinkled or subverrucose. Basidia 24-30 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 30-50 x 4-7 μ , cylindric, subclavate, ventricose, at times faintly constricted. Gill trama subparallel, hyphae 3-6 μ broad. Pileus trama interwoven. Cuticle not sharply differentiated, the surface bearing a turf of colorless hyphae, 4-7 μ broad, the upper portions at times crooked and coiled. Clamp connections present.

Geopidotus epibryus (Fr.) Quel.

Pilat No. 197706



Ch - x 1000



Epi-hyphae, - x 1000

CREPIDOTUS EPIBRYUS (Fr.) Quel.

Pilat No. 149032, leg. and det. by C. G. Lloyd as C. herbarum, re-det. by Pilat as C. epibryus (Fr.) Quel. sensu Romagnesi. Coll. in North America (place and date not given).

Spores 7.5-9.5 x 4.5-5.5 μ ; otherwise as in Pilat No. 197706.

CREPIDOTUS EPIBRYUS (Fr.) Quel.

Pilat No. 489592, det. Pilat, Macedonia, on Rhamnus fallax, Aug. 1937.

Spores 7-9.5 x 4.5-5.5(6) μ , ellipsoid, inequilateral in profile, rough-wrinkled or subverrucose.
Epicuticular hyphae coiled and crooked.
Material insufficient for sectioning.

CREPIDOTUS EPIBRYUS (Fr.) Quel.

Pilat No. 489568, det. Pilat, Macedonia, Aug. 1937.

Spores 7.5-10 x 4.5-5.5(6) μ , ellipsoid, inequilateral in profile, wrinkled-sibverrucose.
Other characters as in 197706.

CREPIDOTUS EPIBRYUS (Fr.) Quel.

Pilat No. 147345, det. Pilat, from Bohemia, July 1939.

Spores 7-9.5 x 4.5-5.5 μ , wrinkled-subverrucose.
Other characters as in 197706.

CREPIDOTUS EPIBRYUS (FR.) Quel.

Pilat No. 489588, det. Pilat, Macedonia, Aug. 1937.

Spores 7-9 x 4.5-5.5(6) μ , ellipsoid, inequilateral, wrinkled-subverrucose.
Other characters as in 197706.

CREPIDOTUS (Fr.) Quel.

Pilat No. 23401, det. Pilat, Carpatorossia~~s~~, on
Cornus mas, July 1933.

Spores 7.5-10 x 4.5-5.5(6) μ , wrinkled-subverrucose.
Other characters as in 197706.

CREPIDOTUS EPIBRYUS (Fr.) Quel.

Pilat No. 490535, det. Pilat, from Bohemia,
July 22, 1937.

Spores 7-9 x 4.5-5.3 μ , obscurely wrinkled-rough.
Otherwise as in No. 197706.

CREPIDOTUS EPIBRYUS (Fr.) Quel. sensu
Romagnesi.

Pilat No. 23472, det. Pilat, Flore SSSR, Ucraina
Transcarpatica, July 1929.

Spores 7-9 x 4.5-5.5 μ , wrinkled-rough; otherwise
as in no. 197706.

CREPIDOTUS EPIBRYUS (Fr.) Quel.

Pilat No. 23404, det. Pilat, in mixed Abies and
Fagus woods, Czechoslovakia, Aug. 1934.

Spores 7-9 x 4.5-5.5 μ ; otherwise as in No. 197706.

CREPIDOTUS EPIBRYUS (Fr.) Quel.

Pilat No. 197708, Bohemia, det. Tourar(?), Sept.
25, 1952.

Spores 7.5-9.5 x 4.5-5 μ ; otherwise as in No. 197706.

CREPIDOTUS EPIBRYUS (Fr.) Quel.

Pilat No. 149031, det. Pilat, Lusitanica (no date).

Spores 7-9 x 4.5-5 μ ; otherwise as in No. 197706.

CREPIDOTUS EPIBRYUS (Fr.) Quel.

Pilat No. 23405, det. Pilat, Czechoslovakia, Aug. 1934.

Spores 7-9 x 4.5-5.5 μ ; otherwise as in No. 197706.

CREPIDOTUS EPIBREUS (Fr.) Quel.

Pilat No. 489525, det. Pilat, on mixed wood,
Macedonia, Aug. 1937.

Spores 7.5-9 x 5.5-5.5(6) μ ; otherwise as in No. 197706.

~~CREPIDOTUS EPIBRYUS (Fr.) Quel.~~

~~Pilat No. 197706, duplicate, det. Pilat, on dead
branches of Cornus, July 16, 1953.~~

~~Spores 7-9 x 4.5-5 μ ; otherwise as in other collections
of same number.~~

3
CREPIDOTUS (cf. epibryus)

From Bas, leg. J.B. Jansen, Province Noord Brabant,
Netherlands, Dec. 4, 1954, on mosses.

Spores 7-10 x 4-5.5 μ , ellipsoid, mostly somewhat narrowed at one end, slightly inequilateral, punctate. Basidia 24-28 x 5-6 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 28-54 x 5-7 μ , cylindric to slightly ventricose. Gill trama slightly interwoven. Pileus trama interwoven, in some sections somewhat duplex, the lower half densely interwoven, the upper half loosely interwoven. Cuticle not differentiated, the surface at times bearing a slight turf of colorless hyphae, 4-6 μ broad. Clamp connections present.

Pilát gives the cheilocystidia as 40-50 x 7.5-13 μ , and the basidia 30-35 x 8-10 μ . This may not be C. epibryus.

CREPIDOTUS (cf. epibryus)

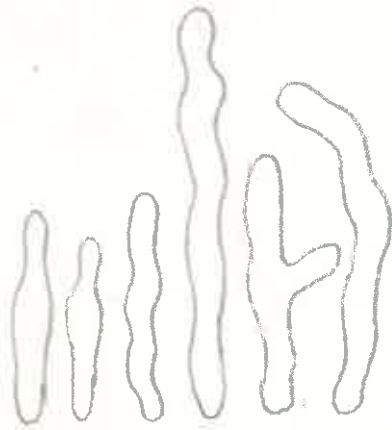
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Spores 7-10 x 4-5.5 μ , ellipsoid, mostly somewhat narrowed at one end, slightly inequilateral, punctate. Basidia 24-28 x 5-6 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 28-54 x 5-7 μ , cylindric to slightly ventricose. Gill trama slightly interwoven. Pileus trama interwoven, in some sections somewhat duplex, the lower half densely interwoven, the upper half loosely interwoven. Cuticle not differentiated, the surface at times bearing a slight turf of colorless hyphae, 4-6 μ broad. Clamp connections present.

Pilat gives the cheilocystidia as 40-50 x 7.5-13 μ , and the basidia 30-35 x 8-10 μ . This may not be C. epibryus.

Crepidostus (epibryus) (Fr.) Quél. ?

(from Bas, leg. P. B. Jansen, Province
of Noord Brabant, Netherlands, Dec. 4, 1954,
on mosses)



Ch - x 1000

PLEUROPLAMMULA FLAMMEA (Murr.) Singer

apud Singer + Smith, Mycologia 38: 522. 1946.

Crepidotus flammeus Murr., North Amer. Flora 10:153. 1917.

Pileus 8-20 mm broad, stipitate or sessile, convex, yellowish when young, in age becoming "ochraceous-tawny" to reddish-orange or rusty-orange, dry, tomentose-squamulose, margin at first appendiculate, even when dry, somewhat striate when wet. Context yellowish; odor mild, taste bitter.

Lamellae adnate, broad, subdistant, at first "colonial buff" then rusty brown, edges whitish-crenulate.

Stipe when present 1.5-3 mm x 0.5-0.7 mm, minutely velvety, lateral, often almost none, or entirely absent. Veil present, at first fibrillose-powdery, finally as remnants on the stipe and pileus margin.

Spores in deposit: "cinnamon brown" to "Dresden brown"; spores 6.5-8(9) x 4.5-6(7) μ , broadly ellipsoid to sub-ovoid, thick-walled, smooth. Gill trama subparallel, 3-6(10) μ broad. Pleurocystidia none; cheilocystidia clustered, cylindric to clavate, usually more or less subcapitate, at times flexuous, 22-56 x 4-8 μ . Cuticle a distinct, thin zone of repent, narrow hyphae, bearing numerous scales composed of erect, narrow (2-5 μ) brown, septate hyphae, some of which are incrustated. Clamp connections present.

Habit, Habitat, and Distribution - On hardwood logs and fallen, dead twigs, Virginia, North Carolina, and Tennessee, June - August.

Materials Studied - NORTH CAROLINA: Hesler 5117, 9247, 12782; TENNESSEE: Hesler 3655, 4100, 18678; VIRGINIA: Merrill 221, type, from Crabbottom, July 17-21, 1904.

Observations - This species, although resembling a Crepidotus and originally described under that genus, has been transferred to Pleuroflamula, primarily because of its veil.

CREPIDOTUS FLAMMEUS Murr.

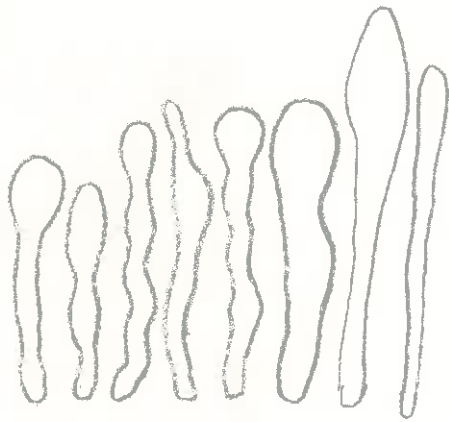
Pleuroflammeus

Type

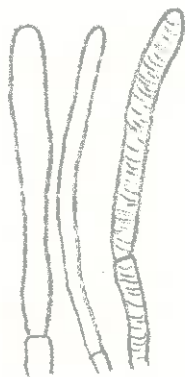
(Coll. by Murrill, No. 221, on dead, deciduous wood, Crabbottom, Va., July 17-21, 1904.)

Spores 6-8 x 5-6 μ , ellipsoid, often short-ellipsoid or subovoid, smooth, brown, double-walled. Basidia 27-33 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 28-53 x 4-8 μ , mostly cylindric, often more or less capitate, some irregularly clavate and slightly constricted, in clusters. Gill trama subparallel, hyphae 3-6 (10) μ broad. Pileus trama interwoven. Cuticle a distinct thin zone of repent, narrow hyphae, bearing numerous scales composed of erect narrow (2-5 μ), brown, septate hyphae, some of which are incrusted. Clamp connections present on the epicuticular hyphae and in the pileus trama.

Crepidotus flammeus Murr.
Type



ch - x 1000



Hyphae comprising scale - x 1000
(Some are incrustated)

3655

CREPIDOTUS FLAMMEUS Murrill

Pleuroflammula flammea (Murr.) Singer. Lilloa 22:521. 1949.

Pileus 8-12 mm. broad, convex, reddish-orange, squamulose, sessile. Context yellowish; taste bitter.

Lamellae adnate, broad, subdistant, brown, edge whitish-fimbriate.

Stipe none.

Spores 6.5-9 x 5-6.5 μ , broadly ellipsoidal to ovoid, smooth, brown under 'scope. Agrees with Type.

4100

CREPIDOTUS FLAMMEUS Murr.

Stipe short (1-2 mm.), eccentric, to nearly lateral.
Veil present in young carpophores: fibrillose-powdery, leaving remnants on the pileus-margin and on the stipe.

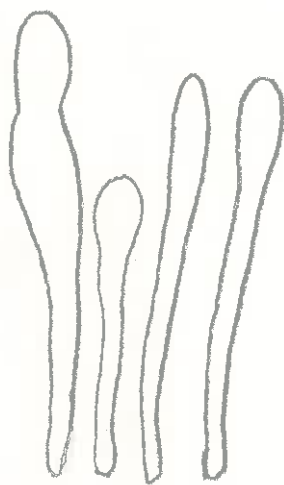
Spores (6.5) 7-8 x 5-6 μ , ellipsoid, thick-walled, smooth. Pleurocystidia none; cheilocystidia cylindric to clavate-subcapitate, 38-51 x 4-7 μ .

5117

CREPIDOTUS FLAMMEUS Murr.

Spores 7-8 (9) x 5-6 μ , ellipsoid, thick-walled, smooth.
Pleurocystidia none; cheilocystidia cylindric to clavate-
subcapitate, 37-55 x 4-8 μ .

Grepidotus flammeus Murr.
No. 5117



Ch - x 1000

Pileus 5-15 mm. broad, convex, orbicular to dimidiate, sessile or short-stipitate, at times dorsally attached, reddish-brown to red, tomentose, appressed-scaly, not viscid, not hygrophanous, margin incurved, striate (moist). Context medium thin, firm; odor and taste mild.

Lamellae radiating from stipe or an eccentric point, some short, rather broad, subdistant, white then brown, edges fimbriate-ciliate.

Stipe none or very short, often tubercle-like, eccentric when present. Veil remnants on stipe and pileus-margin.

Spores 6.5-8 (9) x 5-6 (7) μ , broadly ellipsoidal to somewhat ovoidal, smooth, brown under 'scope. Pleurocystidia none; cheilocystidia clavate, subcapitate hyaline, 22-42 x 5-7 μ .

12782

CREPIDOTUS FLAMMEUS Murr.

Stipe sub-lateral, 1.5-2 mm. x 0.5 mm., present on some carpophores. Veil remnants on pileus-margin and stipe.

Spores 7-8 x 4.5-6 μ , ellipsoid, smooth, thick-walled. Pleurocystidia none; cheilocystidia 32-50 x 4-8 μ , cylindric to subcapitate-clavate, clustered.

18678

CREPIDOTUS FLAMMEUS Murrill

Pileus 8-20 mm. broad, convex, yellowish when young, in age becoming "ochraceous-tawny" to rusty-orange, tomentose-squamulose, margin appendiculate, even. Context yellowish; odor mild, taste bitter.

Lamellae adnate, broad, close to subdistant, at first "colonial buff" then rusty brown, edges whitish-crenulate.

Stipe none, or short, and then 2-3 mm. x 0.5 mm., minutely velvety.

Spores 6.5-8 x 4-5.5 μ , broadly ellipsoid to sub-ovoid, thick-walled, smooth, "cinnamon brown" in mass. Pleurocystidia none; cheilocystidia clustered, cylindric-clavate to subcapitate, 25-56 x 5-8 μ .

Agrees with the Type very well.

MELANOTUS FLAVOLIVENS (B. & C.) Sing.

Lloydia 9:130. 1946

Agaricus (Crepidotus) flavolivens B. & C., Proc. Amer. Acad.
Arts & Sci. 4:117. 1858.

Crepidotus flavolivens (B. & C.) Sacc., Syll. Fung. 5:887. 1887.

(Translation from Pilát, 1950: 221)

Pileus 5 mm broad, rounded-protracted, surface subtly
adpressed-tomentose, white or sublutescens.

Lamellae close, brownish, tinged reddish-violet.

Stipe eccentric or lateral, 1.5 mm long, distinctly curved.

Spores 6-7 x 5-5.2 μ , ellipsoid, smooth, with a distinct
germ-pore, brownish, tinged purplish-violaceous.

"Est Melanotus musaecola (B. & C.) Singer."

CREPIDOTUS FLAVOLIVENS (B. & C.) Sacc.

Agaricus (Crepidotus) flavo-livens B. & C., Amer. Acad. Arts & Sci. Proc. 4: 117. 1858 or 1860 ?

The type, borrowed from the Kew Herbarium, examined Feb. 7, 1963, is labelled "Type specimen" from Bonin Isles. There is one carposhore in the packet. It is spatulate-cuneate, 5 mm broad, and the gills are reddish-brown. Because of the scarcity of the material, a microscopic study was not undertaken.

Singer places this in Melanotus (Lloydia 9:130. 1946).

Pilat (1950:221) studied the type at Kew. He gives the spores 6-7 x 5-5.2 μ , germ-pore distinct, ferruginous- fuscous tinted purplish-violaceous, the lamellae fuscous tinted rubro-violaceous. He states that it is Melanotus muscaeicola (B. & C.) Singer (see Singer: Lloydia 9:130. 1946).

Original Description (translation):

Pileus flabelliform, yellowish, pulverulent,

Stipe none.

Lamellae narrow, purplish, white.

On dead wood, Bonin Isles.

MELANOTUS FLAVOLIVENS (B. & C.) Sing.

Lloydia 9:130. 1946

Agaricus (Crepidotus) flavolivens B. & C., Proc. Amer. Acad.
Arts & Sci. 4:117. 1858.

Crepidotus flavolivens (B. & C.) Sacc., Syll. Fung. 5:887. 1887.

(Translation from Pilát, 1950: 221)

Pileus 5 mm broad, rounded-protracted, surface subtly
adpressed-tomentose, white or sublutescens.

Lamellae close, brownish, tinged reddish-violet.

Stipe eccentric or lateral, 1.5 mm long, distinctly curved.

Spores 6-7 x 5-5.2 μ , ellipsoid, smooth, with a distinct
germ-pore, brownish, tinged purplish-violaceous.

"Est Melanotus musaecola (B. & C.) Singer."

CREPIDOTUS FRAGILIS Jossierand

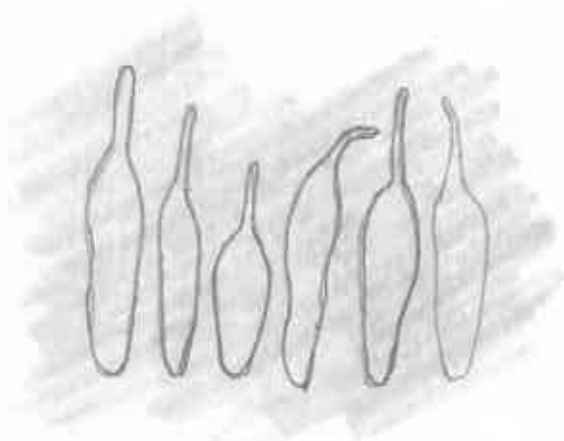
Leg. Bas (Leiden), from Doubs, France, Oct. 3, 1956.

(H-26099)

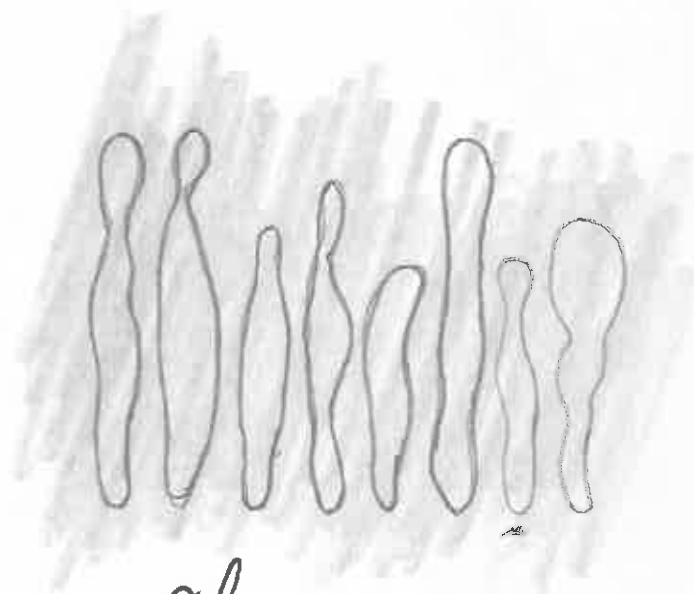
Spores 7-9(10) x 4.5-6 μ , ellipsoid to unsymmetrically ovoid, often bluntly papillate, smooth. Basidia 27-33 x 6-8 μ , 4-spored. Pleurocystidia 28-40 x 5-8 μ , clavate-appendiculate, at times numerous; cheilocystidia 33-50 x 5-8 μ , clustered, cylindric, often slightly flexuous or constricted, often subfusoid, capitate. Gill trama subparallel, hyphae 4-7 μ broad. Pileus trama interwoven. Cuticle repent, bearing a turf, thin or more or less dense, of colorless hyphae, 2.5-7 μ broad, the terminal elements often cylindric-clavate~~x~~ pilocystidia. Clamp connections present.

Crepidotus fragilis Joss.

(H-26099) (from Bas, France)



Pl - x 1000



Ch - x 1000

CREPIDOTUS FRAXINICOLA Murr.

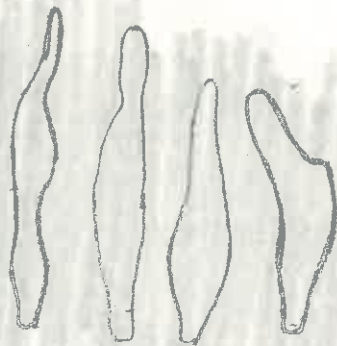
Type

(Coll. on dead ash trunk, by F. S. Earle, No. 1507, West Park, N. Y., July 21, 1903.)

Spores (6) 7-8 x (4) 4.5-5.5 μ , ellipsoid, slightly inequilateral in profile, smooth. Basidia 24-32 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 30-76 x 3.5-6 μ , slender, clavate-cylindric, to bottle-shaped, clustered; long (75 μ more or less) when gill-edge is gelatinous and the origin of the cheilocystidia is tramal. Gill trama subparallel to slightly interwoven, hyphae 4-6 μ broad. Gill edges often gelatinous. Pileus trama interwoven. Cuticle an ixocutis, the zone 100-220 μ thick. The surface of the cuticle bears hyphae some of which are brownish and form scales, and not incrustated, but most of these surface hyphae are colorless. Hypodermium distinct. Clamp connections none.

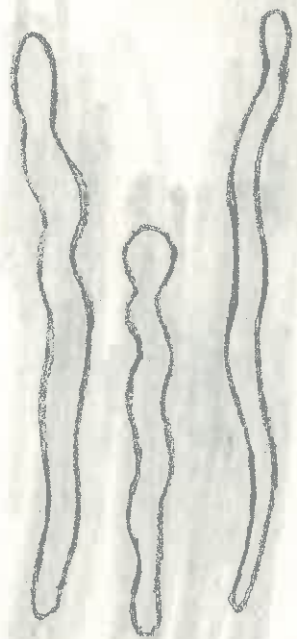
Orepidotus fraxinicola Murr.

Type

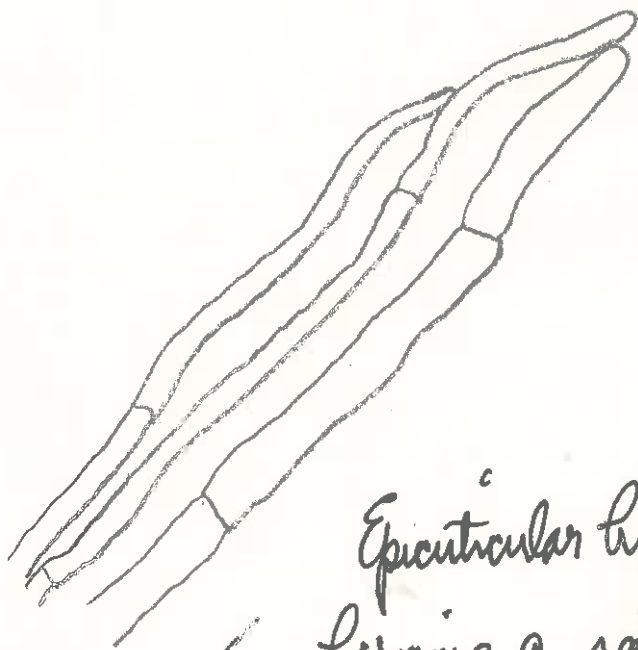


Regular type

Ch - x 1000



Frenal type



Epicuticular hyphae
forming a scale - x 1000

No. 25592

CREPIDOTUS FRAXINICOLA Murr.

On oak log, Timberlake Rd. (Hesler's), June 23, 1963

Pileus hygrophanous, white when dry, watery brown when wet, rubbery-viscid, glabrous, striatulate.

Lamellae white, then brown, medium close, narrow.

Spores 6-8 x 4.5-5.3 μ , ellipsoid, smooth. Pleurocystidia none; cheilocystidia typical. Cuticle a gelatinous zone, bearing both colorless and brown, non-incrusted hyphae. Clamp connections none.

Fraxinicola Murr.

CREPIDOTUS H-25733

On maple trunk, Cades Cove, July 22, 1963.

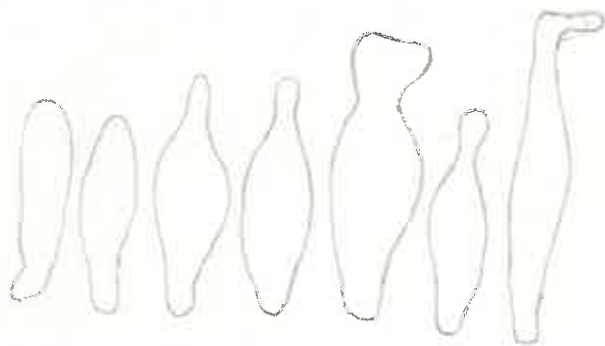
Pileus 5-8 mm broad, fan-shaped to orbicular, dull white, pruinose or villose, with a few obscure brownish fibrils, margin even. Context white, medium thin.

Lamellae narrow, medium close, olive-brown, the edges brown, at times gelatinous.

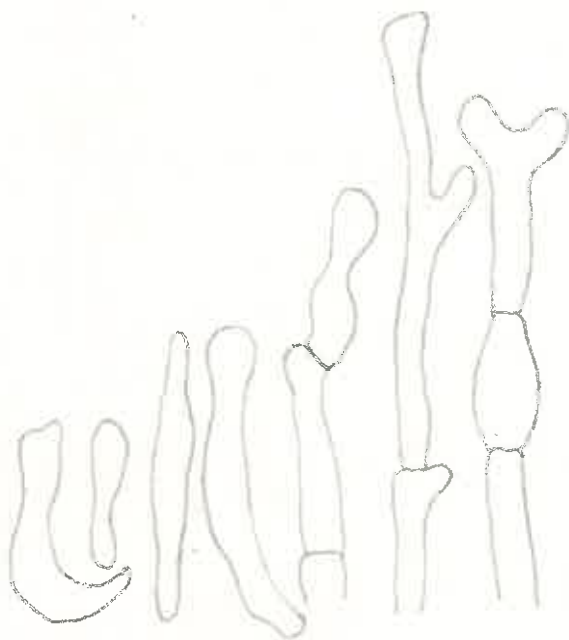
Spores 6-8 x 4-5 μ , ellipsoid, inequilateral, smooth. Basidia 23-30 x 6-7 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 25-43 x 7-13 μ , ventricose or fusoid, apices rounded, acute, appendiculate or capitate, colorless, or often filled with a brown pigment, the wall often thick; at times the cheilocystidia are gelatinous and elongate. Gill trama subparallel, hyphae 2.5-4 μ broad. Pileus trama interwoven. Cuticle a colorless gelatinous zone, 100-150 μ thick, the surface bearing versiform, colorless pilocystidia and, at scattered intervals, brown, non-incrusted hyphae. Clamp connections none.

@
~~Murr~~ fraxinicola.

Grepidotus H-25733
fraxinicola



Ch - x 1000 (mostly with brown pigment)



Pilo - x 1000
(colorless)

crepidotus
CREPIDOTUS FULVIFIBRILLOSUS Murr.

North Amer. Flora 10:153. 1917

Crepidotus applanatus var. fulvifibrillosus (Murr.) Pilát,
Monogr. Crepidotus, Atlas Champ. Eur. 6:3-84. 1948.

Pileus 1-4.7 cm. broad, white or with a dull whitish ground, conchate, semiorbicular to flabelliform, with numerous brown fibrils and fibrillose scales, moist, not viscid, margin thin, even when dry, striatulate when wet. Context white, thin; odor mild, taste mild becoming astringent-bitter.

Lamellae radiating from a lateral point, more or less decurrent, narrow to moderately narrow, somewhat ventricose, close, white then brownish from the spores, edges at times fimbriate.

Stipe none; pileus attached by a tubercle which is more or less strigose.

Spores 4.5-6 μ in diameter, globose, punctate. Basidia 22-27 x 5-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 25-39 x 5-8 μ , clavate, at times subventricose below the middle. Gill trama narrow (gills thin), hyphae subparallel, 4.5-8 μ broad. Pileus trama interwoven. Cuticle of repent hyphae the surface bearing two types of hyphae: (1) scattered, more or less erect, slender (3-6 μ broad), colorless hyphae forming more or less of a trichodermium; (2) fuscous hyphae ~~not incrustad~~ *only rarely and faintly incrustad* in bundles, 4-12 μ broad, forming scales. Clamp connections present on the tomentum at the point of attachment of the pileus, and on the epicuticular hyphae.

*at times rarely & obscurely incrustad,
or again more frequently &
distinctly incrustad.*

Habit, habitat, and distribution. - On logs, Virginia, Tennessee, and Florida, July.

Material studied. - FLORIDA: Hesler 24441, 24451; TENNESSEE: Hesler 24851; VIRGINIA: Murrill 104, the type, from Falls Church, July 2-6, 1904.

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

This species is closely related to C. applanatus. In fact, Singer (1947) says it is identical with C. applanatus except for the scales; and that it is to C. applanatus exactly what C. calolepis is to C. alveolus. In both cases, Singer says, further observations must establish the specific value of the scales. Pilát (1948) treats it as a variety of C. applanatus.

We have a collection (Tennessee No. 24912) which has pleurocystidia, and yellowish gills; otherwise it appears to be C. fulvifibrillosus. This may prove to be a variety or a different species, or it may be C. crocophyllus.

Usually, fulvifibrillosus has narrow gills; those of crocophyllus (= dorsalis) are \pm broad

CREPIDOTUS FULVIFIBRILLOSUS Murr.

Type

(No. 104, coll. by Murrill, July 2-6, 1904, in deciduous woods, on dead oak stump, Falls Church, Virginia.)

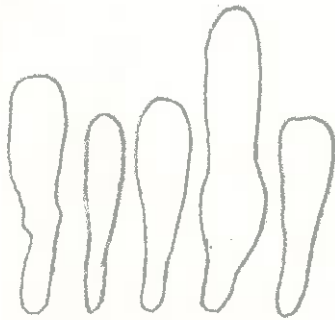
Spores 4.5-6 μ in diameter, globose, punctate. Basidia 22-27 x 5-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 25-39 x 5-8 μ , clavate, at times subventricose below the middle. Gill trama narrow (gills thin), hyphae subparallel, 4.5-8 μ broad. Pileus trama interwoven. Cuticle of repent hyphae the surface bearing two types of hyphae: (1) scattered, more or less erect, slender (3-6 μ broad), colorless hyphae forming more or less of a trichodermium; (2) fuscous hyphae ~~with~~
~~intertwined~~ in bundles, 4-12 μ broad, forming scales, Clamp connections present on the tomentum at the point of attachment of the pileus, and on the epicuticular hyphae.

The gills are 1-2 mm. broad, and close—a character which (according to some authors) separates both C. fulvifibrillosus and C. applanatus from C. crocophyllus, C. cuneiformis, C. quitensis, and C. nephrodes.

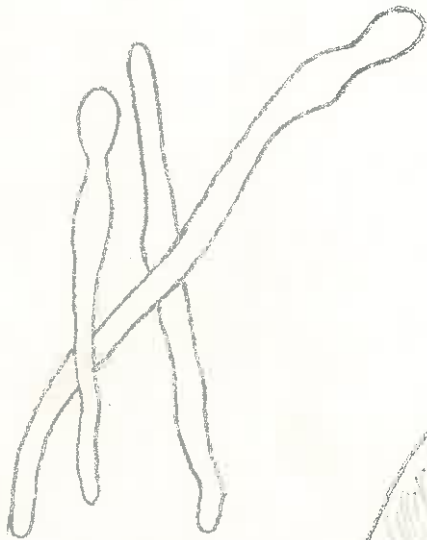
Observations.- Singer (Lilloa 13:72, 1947) says that this is the same as C. applanatus except for the scales.

very rarely ~~to the~~ ^{to the} ~~very~~ ^{very} ~~greatly~~ ^{greatly} ~~increased~~ ^{increased}.

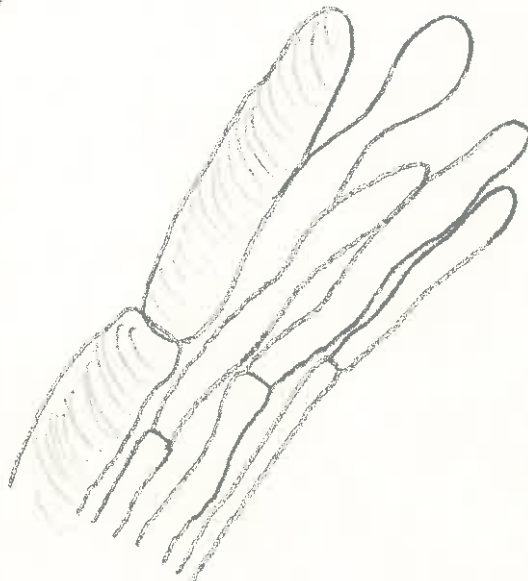
Grepidotus fulvifibrillosus Murv.
Type



Ch - x 1000



Epicuticular hyphae
x 1000



Hyphae of a scale - x 1000

5118

CREPIDOTUS FULVIFIBRILLOSUS Murr.

Spores 5-7 μ , globose, rough. Pleurocystidia none; cheilocystidia few, clavate or ventricose, 30 x 6-7 μ . Gill-trama subparallel. Pileus trama interwoven. Cuticle repent, with scattered clusters of both brown and colorless hyphae (scales), both types incrusted. Clamp connections present on both colorless and brown hyphae.

In this collections, the epicuticular (scale) hyphae are distinctly incrusted.

PYRROGLOSSUM HEPATIZON (Berk) Dennis

Agaricus (Crepidotus) hepatizon Berk. apud² Hooker, London
Jour. Bot. 6 : 486. 1847.

Crepidotus hepatizon (Berk,) Sacc., Syll. Fung. 5:879,
1887.

Pileus 1.5 -2.5 cm. broad, generally eccentric,
somewhat convex to subplano-umbilicate, fuscous.

Lamellae ferruginous, very close.

Stipe subcentral to eccentric, 1.5-2 cm. long,
about 5 mm. thick, cylindric, surface rough (partial
veil fragments?).

Spores 4.6-5.5 x 2.8-4 μ , more or less ellipsoid ~
to ovoid, slightly inequilateral in profile, rough-warty,
dark-brown, wall thick. Cheilocystidia not observed.
Gill trama undulating-parallel, hyphae 3-6 μ broad.
Pileus trama interwoven. Cuticle of repent hyphae, of
several layers (5-6). Clamp connections present.

Habit, Habitat, and Distribution --

Material studied -- CEYLON: Type, No. 52, deposited
at Kew.

Observations -- The spores and the stipe agree
closely with those of P. pyrrhus.

CREPIDOTUS HERBARUM (Pk.) Sacc.

TYPE

Peck's type, from North Greenbush, New York.

Spores 6-8.5 x 3-3.6 μ , sub-lanceolate to somewhat ellipsoid or subovoid, or pip-shaped, smooth, thick-walled, colorless to pale yellowish in 2% KOH. Pleurocystidia none; cheilocystidia 23-42 x 4-6 μ , clavate to cylindric, at times more or less constricted. Pileus trama interwoven. Cuticle repent, bearing a more or less erect, tangled trichodermium. Clamp connections none (except on the hyphae at the point of attachment).

In the type, all carpophores are resupinate, and unsatisfactory for sectioning.

CREPIDOTUS HERBARUM (Pk.) Sacc.

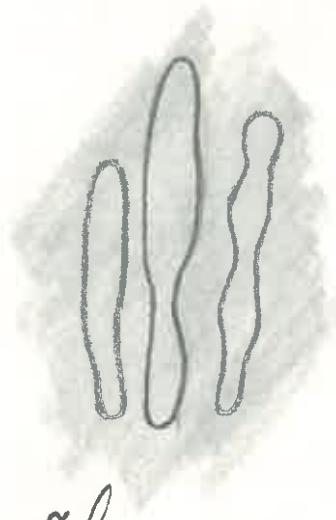
TYPE

Peck's type, from North Greenbush, New York.

Spores 6-8.5 x 3-3.6 μ , sub-lanceolate to somewhat ellipsoid or subovoid, or pip-shaped, smooth, thick-walled, colorless to pale yellowish in 2% KOH. Pleurocystidia none; cheilocystidia 23-42 x 4-6 μ , clavate to cylindric, at times more or less constricted. Pileus trama interwoven. Cuticle repent, bearing a more or less erect, tangled trichodermium. Clamp connections none (except on the hyphae at the point of attachment).

In the type, all carpophores are resupinate, and unsatisfactory for sectioning.

Crepidula herbarum (OK) Sacc
Type



Ch - x 1000

25059

CREPIDOTUS FULVIFIBRILLOSUS Murr.

PHOTO

On oak log, Hesler's woods, Knoxville, June 2, 1963.

Pileus 2-4 cm broad, semiorbicular, whitish but densely brownish fibrillose, fibrils at times form scales, somewhat hygrophanous, margin faintly striate. Context white, thin; odor slight, taste soon bitter.

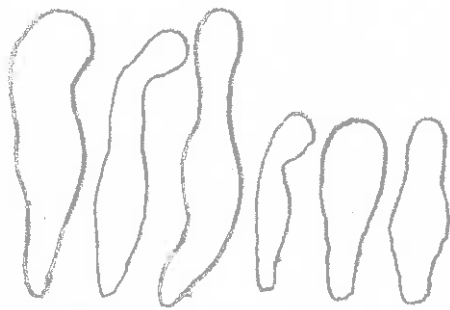
Lamellae radiating from a lateral point, close, narrow, abruptly narrowed in front, rounded behind.

Stipe none, attached by a white-tomentose tubercle.

Spores 5-7 μ , globose, punctate, in deposit: "Dresden brown". Basidia 22-28 x 5-7 (8) μ , 2-4-spored. Pleurocystidia none; cheilocystidia 23-38 x 4-10 μ , clavate, ventricose. Gill trama subparallel, hyphae 5-10 μ broad. Pileus trama interwoven, hyphae 8-15 μ broad. Cuticle of repent hyphae, bearing a tangled turf of long, septate hyphae, some colorless, others brown, both types may be incrusted. Clamp connections present.

~~Gf. closely with dorsalis.~~

Pepidotus fulvifimbriatus Murr.
(H-25059)



Ch. x 1000

CREPIDOTUS FULVIFIBRILLOSUS Murr.

(H-25675)

Pileus white, white-villose, but also with scattered inconspicuous pale brownish fibrils, striate.

Lamellae close, medium broad.

Spores 5-6.5 (7.5) μ , globose, punctate. Basidia 24-28 x 5-7 μ , 4-spored. Pleurocystidia none; cheilocystidia usual. Epicuticular hyphae colorless to very pale brownish hyphae, rarely with incrustations, clamps present.

CREPIDOTUS FUMOSIFOLIUS Murr.

Melanotus

Type

Type collected by Earle, No. 292, from Rose Hill, Jamaica, on log, Oct. 30, 1902.

Spores 5.5-7 x 4.5-5 μ , ellipsoid or sub-lenticular, smooth, with a germ-pore. Pleurocystidia none; cheilocystidia 36-42 x ³⁻⁴ ~~4~~ μ , cylindric, collapsed against the gill-edge (not conspicuous). Gill trama undulating subparallel, hyphae narrow. Pileus trama interwoven. Cuticle ~~of repent hyphae.~~ ^{of repent hyphae.} Clamp connections on the hyphae of the pileus trama.

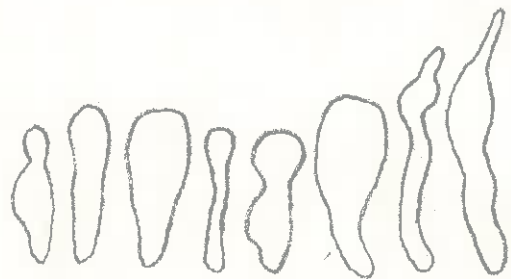
This is placed in the genus Melanotus by Singer (Agar. 2nd ed., p. 548), and by Pilat (Trans. Brit. Myc. Soc. 33:240), because of its dark fuscous to purplish lamellae, its ferruginous to purplish-violet spores, each with a germ-pore.

Grepidotus fumosifolius Murr.
Type

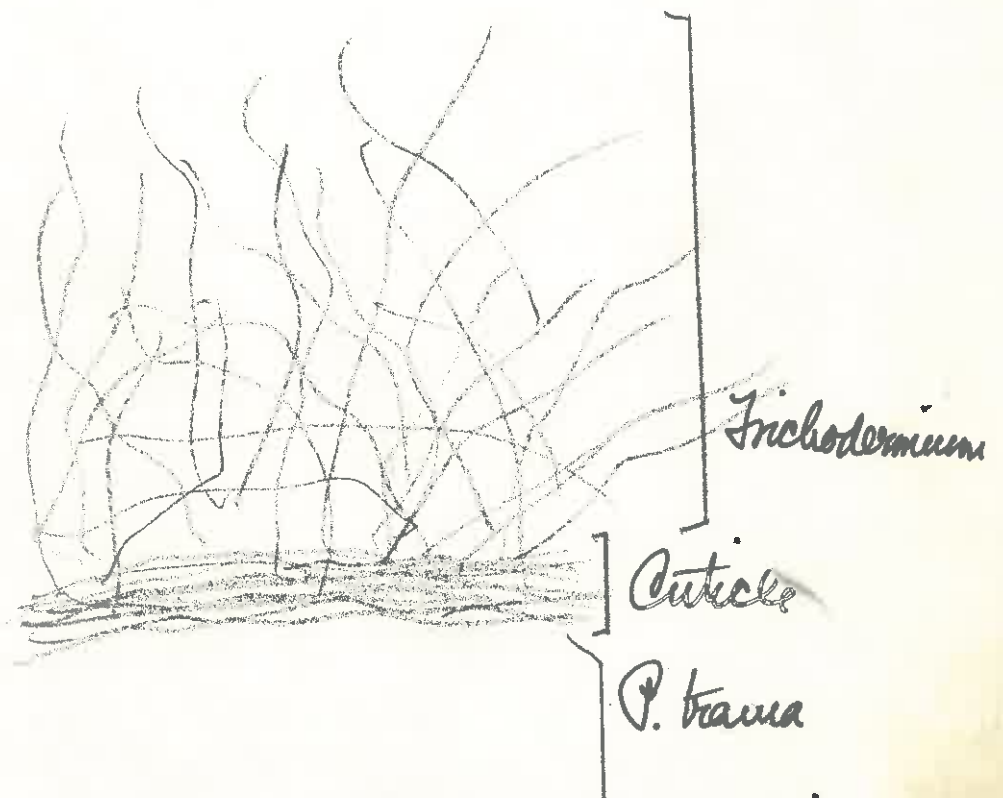


Ch - x 1000

Aepidotus harperi Sniger
Type



Ch - x 1000



Cuticle - diagrammatic

CREPIDOTUS HAUSTELLARIS

Pilat No. 149016. No other data.

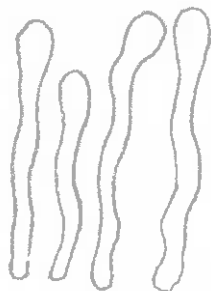
Spores 7-9 x 5-6 μ , smooth. Pleurocystidia 27-36 x 4-7 (base) x 4-8 μ (apex), clavate to sub-cylindric with a tapering apex; cheilocystidia 28-37 x 3-5 μ , more or less filamentous, apices usually sub-capitate. Cuticle repent with more or less erect colorless to pale brownish hyphae which are pilocystidia, filamentous, subcapitate, similar to cheilocystidia. Clamps present.

Gegidostus kaustellaris

Pilat No. 149016



Pl - x 1000



Ch - x 1000



Pilo - x 1000

CREPIDOTUS HAUSTELLARIS

On Sambucus nigra, Germany, leg. J. Sponheimer, det. Pilat,
ex-herb. Prague, No. 149015.

Agrees with No. 149016.

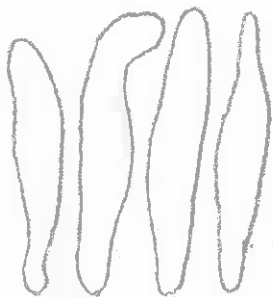
CREPIDOTUS HAUSTELLARIS (Fr.) Quel.

from Herb. Kryptogamologicum Musei Nat. Prague,
No. 149022, leg. Italy, Oct. 1896, det. A. Pilat.

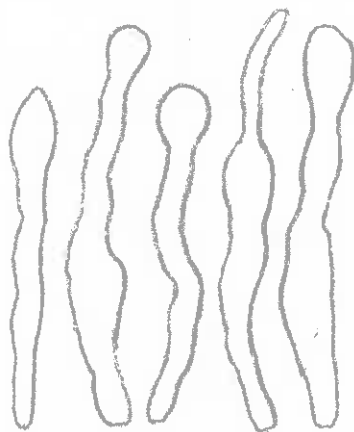
Spores 7.5-9 x 5-6 (6.5) μ , ellipsoid to ovoid, slightly inequilateral in profile, smooth, brown. Basidia 25-33 x 6-8 μ , 2-4-spored. Pleurocystidia 32-39 x 6-8 μ , subclavate to fusoid-ventricose, few, inconspicuous; cheilocystidia 42-54 x 5-8 μ , cylindric and more or less capitate, at times clavate or ventricose with a slender neck. Gill trama interwoven, hyphae 5-12 μ broad. Pileus trama interwoven. Cuticle with scattered, erect, rod-like, colorless hyphae, 20-43 x 1.5-3.5 μ , and brown, incrusting hyphae. Clamp connections present on the epicuticular, brown hyphae.

No. 193914, from Germany, labelled Naucoria effugiens Quel., is the same (C. haustellaris).

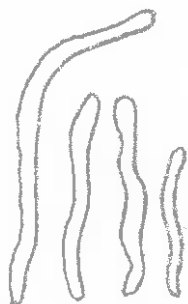
Crepidotus haustellaris (Fr.) Quél.
 No. 149022, Prague Museum - Pilát.



Ph - x 1000



Ch - x 1000



Epicuticular rod-like
 hyphae - x 1000



Inoculated hypha
 (epicutis)

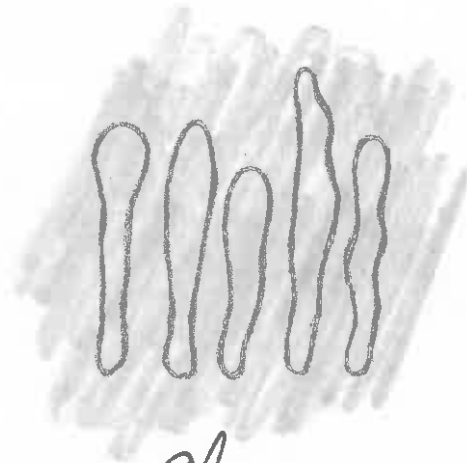
Pileus 8-22 mm. broad, whitish, felted tomentose with white hairs, orbicular to reniform, margin incurved, almost or quite sessile. Context white.

Lamellae pallid turning to watery brownish-ochraceous.

Spores 6.5-8 x ^{3.7}~~3-4~~ μ , pip-shaped, inequilateral in profile, smooth, pale yellow under 'scope, ochraceous in mass (acc. to Ruby Rice). Pleurocystidia none; cheilocystidia clustered, clavate or subcylindric, 32-40 x 5-6 μ , conspicuous in most sections. Gill trama undulating subparallel to more or less interwoven. Epicutis of dense slender (2-4 μ) more or less erect hyphae which form the villose surface. Pileus trama interwoven, hyphae 3-4 μ broad. Clamp connections present only on the hyphae at the point of attachment, none on the epicuticular hyphae.

Grapidostus herbarum

No. 3656



Ch - x 1000

CREPIDOTUS HERBARUM var. CORTICALIS Pk.

from Lyndonville, N. Y., on fallen branches
in woods, coll. C. E. Fairman, Sept. 1900.

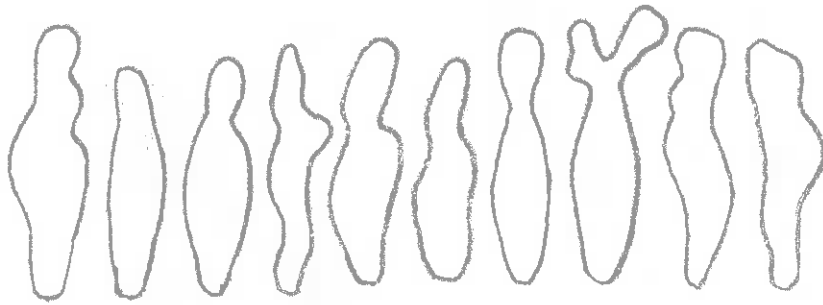
Spores 7-8 x 4.5-5.5 μ , ellipsoid, smooth, yellowish.
Basidia 28-34 (40) x 7-8 μ , 4-spored, more rarely 2-spored.
Pleurocystidia none; cheilocystidia 28-35 x 7-10 μ ,
subcylindric, more often flask-shaped or none-pin-shaped,
more or less appendiculate, the neck occasionally forked.
Gill trama undulating subparallel. Pileus trama interwoven.
Cuticle a trichodermium, the hyphae loosely tangled, long.
Clamp connections moderately common on epicuticular hyphae.

This is similar to C. herbarum (the type), but ~~the~~
differing chiefly in the presence of clamp connections, and
slightly broader cheilocystidia which are none-pin-shaped.

We have been unable to find that this variety was ever
published.

Orepidotus herbarum PK. var. *corticola*^{alis}

Type



Ch - x 1000

CREPIDOTUS HYGROPHANUS Murr.

North. Amer. Flora. 10:150. 1917.

Pileus 1-2 cm broad, sessile, dimidiate, convex-plane, hygrophanous, whitish, becoming nearly fulvous on drying, glabrous, minutely striate over the lamellae, more conspicuously striate when dried. Context soft, fleshy; taste mild.

Lamellae broad, close, thin, entire.

Stipe none, pileus attached by a white turf of mycelium.

Spores 5-6 (7) μ , globose, more rarely slightly subglobose, punctate. Basidia 24-28 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 28-48 x 5-10 μ , clavate, at times somewhat ventricose and capitate, more rarely slightly constricted. Gill trama subparallel, hyphae 4-7 μ broad, Pileus trama interwoven. Cuticle repent, often of several layers of hyphae, at times some erect hyphae. Clamp connections on the epicuticular hyphae.

Habit, Habitat, and Distribution - On rotten beech log, New York, July.

Material Studied - NEW YORK: Murrill 236, the type, from Lake Placid, July 17-29, 1912.

Observations - Singer (1947) regards this as a small form of C. nephtodes (B. & C.) Sacc. The description above of microscopic characters is based on a study of the type.

CREPIDOTUS HYGROPHANUS Murr.

Type

(Coll. by Murrill, No. 236, on rotten beech log,
Lake Placid, N. Y., July 17-29, 1912.)

Spores 5-6 (7) x 5-6 μ , globose, more rarely slightly
subglobose, punctate. Basidia 24-28 x 6-7 μ , 4-spored.
Pleurocystidia none; cheilocystidia 28-48 x 5-10 μ , clavate,
at times somewhat ventricose and capitate, more rarely slightly
constricted. Gill trama subparallel, ^{hyphae 4-6 μ broad.} Pileus trama interwoven.
Cuticle a cutis. Clamp connections on the tomentum at the
pileus base, and on epicuticular hyphae.

Singer (Lilloa 13:72) says this is a small form of
C. nephrodes (B. & C.) Sacc.

Crepidotus hygrophandus Murr.
Type



Ch - x 1000

26080

CREPIDOTUS KAUFFMANII Hes. & Sm.

On oak log, Cades Cove, Sept. 26, 1963.

Pileus 4-12 mm broad, conchate, buff, with pale brownish fibrils, even. Context thin, pallid; odor mild, taste very slightly woody-bitterish.

Lamellae buff, soon brownish, rather broad, close.

Spores 5-5.5 (6-7.5) x 4-4.5(5) μ , ellipsoid or ovoid, punctate, often more or less echinulate. Pleurocystidia none; cheilocystidia 24-33 x 7-12 μ , clavate. Gill trama slightly interwoven, hyphae 6-10 μ broad. Pileus trama interwoven. Cuticle bearing a turf of hyphae which are colorless to pale brownish, many incrusted, the apices at times forked. Clamp connections present.

Sections yellow at once in 2% KOH, then fading.

CREPIDOTUS LATIFOLIUS Pk.

Torrey Bot. Club Bull. 26:66. 1899.

Pileus 2-6 mm broad, dimidiate, suborbicular, submembranous, sessile, resupinate, attached by a tubercle, often dorsally attached, white and slightly pubescent when dry, hygrophanous, striatulate when moist, even when dry. Context white, thin.

Lamellae pallid, becoming pale ferruginous or dull cinnamon, incompletely converging, radiating, very broad, distinctly ventricose, subdistant, extending beyond the margin of the pileus, edges fimbriate.

Stipe none, attached laterally.

Spores 4.5-6 (7) μ diameter, globose, more rarely subovoid, finely punctate, brownish in 2% KOH. Basidia 28-32 x 7-8 μ , 4-spored. Pleurocystidia none; cheilocystidia 31-43 x 6-10 (12) μ , cylindric, at times capitate or ventricose. Gill trama undulating, subparallel, hyphae narrow, 3-7 μ broad. Pileus trama interwoven, Cuticle a cutis, often bearing tangled to loosely arranged narrow (2-8 μ), colorless hyphae, often a trichodermial turf, the terminal elements more or less cystidioid. Clamp connections on the epicuticular hyphae.

Habit, Habitat, and Distribution - On log, Ohio and Tennessee, July.

Material Studied - OHIO: Lloyd 49964, lectotype, from near Cincinnati, 1902 (Herb. National Fungus Collections, Beltsville, Md.); TENNESSEE: Hesler 12270.

Observations - The description of microscopic characters above is based on a study of the lectotype (Lloyd No. 49964).

As Singer (1947:72-73) says, the box labelled C. latifolius Pk. at the New York State Museum at Albany contains some notes but no specimens. However, we have studied a collection from near Cincinnati, by C. G. Lloyd, his No. 49964. This collection is in the Lloyd Herbarium, at the National Fungus Collections, Beltsville, Md. Since the type, apparently lost, is not available, it is suggested that Lloyd's No. 49964 be designated as the lectotype.

The cheilocystidia are different from those of C. praelatifolius Murr.

CREPIDOTUS LEUCOCHRYOSOS (B. & C.) Sacc.

Agaricus (Crepidotus) leucochrysos B. & C., Amer. Acad. Arts & Sci. Proc. 4: 117. 1860.

(Transl. from Latin)

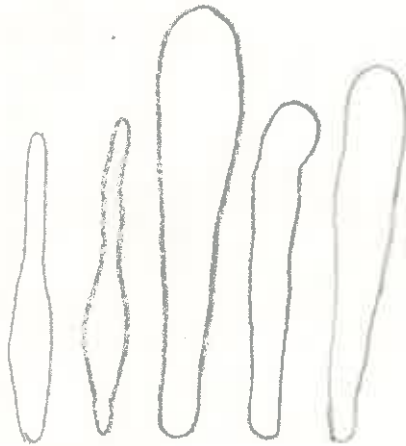
Yellow; pileus subflabelliform to reniform, subtly tomentose, glabrescent. Stipe none. Lamellae distant.

On decayed wood, Bonin Islands.

The spelling in the original description is as above. ~~It~~ Leucochrysos is also the spelling used by Saccardo, Syll. Fung. 5: 887.

Orepidotus leucochrysis (B. + C.)

Type



Ch - x 1000

Type

CREPIDOTUS LUNDELLII Pilát

On decayed Ulmus branches, Länna & Harparbol, Sweden, leg. Seth Lundell, Sept. 15, 1935. Det. & named by Pilát, No. 149039. TYPE, borrowed from Pilát.

Spores 6.5 - 8.5(9) x 4.5-5(5.3) μ , ellipsoid, inequilateral, smooth. Basidia 22-28 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 36-62 x 6-12 μ , cylindric, clavate, or ventricose, at times more or less constricted, often more or less capitate. Gill trama subparallel, hyphae 5-10 μ broad. Pileus trama interwoven. Cuticle not differentiated, the surface bearing a turf of colorless, more or less erect hyphae, 2-4 μ broad; also accompanied by some broader (4-10 μ) colorless hyphae, the cells of these hyphae often enlarged at the upper end, the terminal elements as cylindric-capitate pilocystidia. Clamp connections present.

CREPIDOTUS LATIFOLIUS Pk.

(Collected near Cincinnati, by C. G. Lloyd, 1902, det. C. G. Lloyd. No. 49964. Specimen borrowed from the C. G. Lloyd Mycological Collection, via National Fungus Collections, Beltsville, Md.)

Spores 4.5-6 x 4.5-6 μ , globose to subovoid, punctate, brown. Pleurocystidia none; cheilocystidia 32-43 x 7-8 μ , clavate-subcapitate, few. Gill trama undulating subparallel, hyphae 3-7 μ broad. Pileus trama interwoven. Cuticle a cutis, with more or less erect, slender, colorless hyphae which are scattered or numerous—at times approaching a trichodermium. Clamp connections present on the epicuticular hyphae.

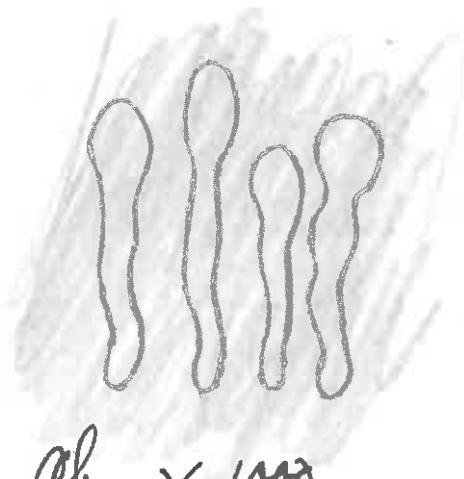
Observations. - The carpophores are broken and fragmented, so it was difficult to find pieces large enough for sections of the pileus and gills.

The packet was sent by Dr. C. R. Benjamin who writes (letter to me, dated Dec. 6, 1962): "...I am sending to you the only specimen of Crepidotus latifolius Pk. that I could find in the Lloyd collection. I believe that it must be the one on which Peck based his description."

On the ~~packet~~ ^{label}, a date of 1902 is given. It should be noted that ~~described~~ ^{the} species in 1899. The packet-label also says it was determined by C. G. Lloyd. These facts suggest that this collection may not have been seen by Peck and is not the type. Since the type seems to be lost, perhaps this collection, even though not too good, might be designated as the lectotype. - L. R. Hesler

Ophiodotus latifolius PK.

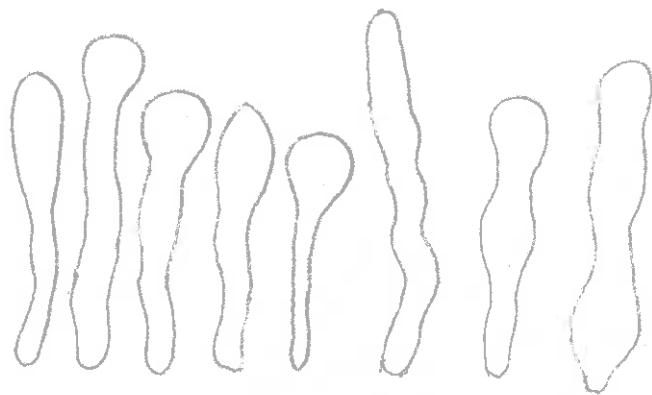
Floyd Collection, No. 49964, borrowed
from National Fungus Collections,
Beltsville, Md. Dr. C. R. Benjamin
thinks it is the type.



Ch - x 1000

Cepidostus latifolius K.

No. 12270



Ch - x 1000



Epicaular hyphae
x 1000

CREPIDOTUS LATIFOLIUS Pk.

(A copy of Lloyd's notes which are on file in the
Peck Herbarium at Albany)

Pileus dimidiate, sessile, orbicular, hygrophanous,
white, sparsely pubescent with white hairs(not visible when
wet), striatulate, often rufescent with spores.

Flesh white, very thin, less than a 1/2 mm thick.

Gills very broad, 2mm, almost orbicular, 5 or 6 times
as wide as the thickness of the flesh, the broad edges extending
beyond the margin of the plant, white, or pale ferruginous when
old.

Spores globose, 5 mc.

It grew gregarious on very rotten log. Very small
3-6 mm wide.

I cannot see any species it fits.

From Peck's small species "distans" it differs in not
being sulcate, having no stem, and globose spores

Spec. No. 3672. Pub. Bull. Torr. 26:66. 1899.

CREPIDOTUS LEUCOCHRYSOS (B. & C.) Sacc.

Syll. Fung. 5: 887. 1887.

Agaricus (Crepidotus) leucochrysos Berk. & Curt., Proc.
Amer. Acad. Arts & Sci. 4: 117. 1858.

Pileus 10-13 mm. broad, ^{yellow} sessile, flabelliform to reniform, cuneate-narrowed at the base, surface minutely tomentose, glabrescent, margin sulcate. Context thin, membranous.

Lamellae distant.

Spores 5-7(8) x 5-6(7.5) μ , globose, subglobose, pyriform or ovoid, more rarely ellipsoid, strongly punctate, wall thick (double), brown in 2% KOH. Pleurocystidia none; cheilocystidia 4--56 x 6-11 μ , clavate to cylindric or ventricose with a slender neck. Subhymenium of narrow, parallel hyphae. Pileus trama interwoven. Cuticle of repent hyphae. Clamp connections none.

Habit, Habitat, and Distribution -- On decayed wood, Bonin Isles.

Material Studied -- BONIN ISLES : Berkeley and Curtis, type deposited in Herbarium, Royal Botanic Gardens, Kew.

Observations -- This species is regarded by Singer (1947^X) as the same as C. nephrodes. Our study of the types of the two species indicates some relationships, but brown hyphae and clamp connections are present in nephrodes.

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Observations -- This species is regarded by Singer (1947?) as the same as C. nephrodes. Our study of the types of the two species indicates some relationships, but brown hyphae and clamp connections are present in nephrodes.

CREPIDOTUS LEUCOCHRYSOS (B. & C.) Sacc.

Type specimen. Bonin Isles. From
Kew Herb., studied Feb. 7, 1963.

Spores 5-7 (8) x 5-6 (7.5) μ , globose, subglobose, or pyriform to ovoid, more rarely ellipsoid, strongly echinulate, the spines prominent, wall double (medium thick), brown in 2% KOH. Pleurocystidia none; cheilocystidia 40-56 x 6-11 μ , clavate, cylindric, or ventricose. Gill trama subparallel, hyphae 4-6 μ broad. Subhymenium of narrow, parallel hyphae. Pileus trama interwoven. Cuticle of repent hyphae. Clamp connections not found.

Singer (1947) says it is a form of C. nephrodes. If so, it is a strongly spiny-echinulate form; the spores of the type of C. nephrodes are faintly punctate. Clamps are present in nephrodes, absent in leucochrysos.

Pilat (1950) says the spores are not perfectly globose, but for a short time pyriform, 8-8.5 x 5.6-5.9 μ . Singer (1947) studied the type, says it has the same kind of spores as nephrodes.

CREPIDOTUS LEUCOCHRYSOS (B. & C.) Sacc.

Agaricus (Crepidotus) leucochrysos B. & C., Amer. Acad. Arts &
Sci. Proc. 4: 117. 1860. ? 1858 ?

(Transl. from Latin)

Yellow; pileus subflabelliform to reniform, subtly tomentose,
glabrescent. Stipe none. Lamellae distant.

On decayed wood, Bonin Islands.

CREPIDOTUS LUTEOLUS Lamb.

Pilat No. 149047, det. Pilat, Austria, Nov. 1909.

Spores 8-11.5 x 4-4.8 μ , ellipsoid; otherwise as in
Pilat No. 23316.

CREPIDOTUS LUTEOLUS Lamb.

Pilat No. 197709, as C. versutus Pk., on fallen maple branches, McLean, New York, Oct. 27, 1935. Coll. and det. A. P. Viegas, confirmed by Singer. (NOTE: This is not C. Versutus Pk.)

Spores 8-11 x 4-5.5 μ . Otherwise as in Pilat No. 23316.

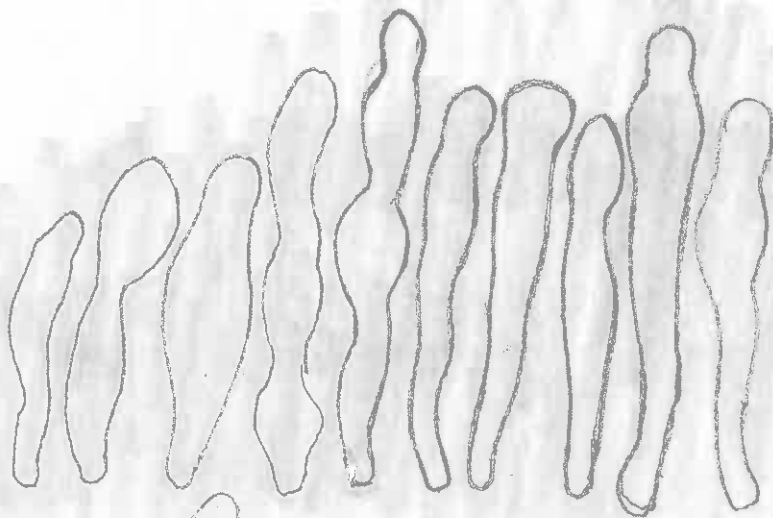
CREPIDOTUS LUNDELLII Pilát

On decayed Ulmus branches, Länna & Harparbol, Sweden, leg. Seth Lundell, Sept. 15, 1935. Det. & named by Pilát, No. 149039. TYPE, borrowed from Pilát.

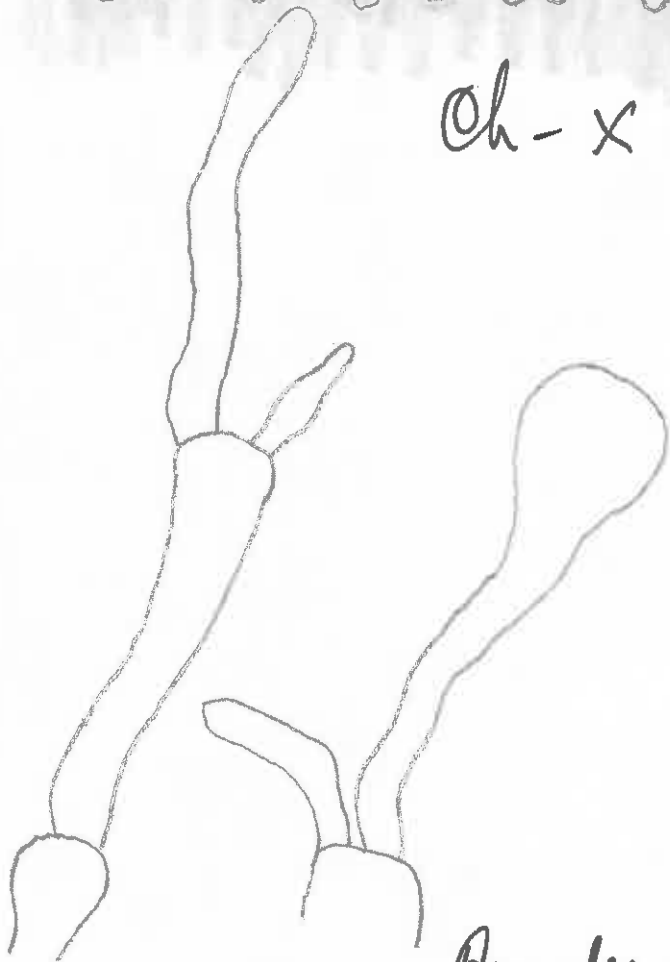
Spores $6.5 - 8.5(9) \times 4.5-5(5.3) \mu$, ellipsoid, inequilateral, smooth. Basidia $22-28 \times 6-7 \mu$, 4-spored. Pleurocystidia none; cheilocystidia $36-62 \times 6-12 \mu$, cylindric, clavate, or ventricose, at times more or less constricted, often more or less capitate. Gill trama subparallel, hyphae $5-10 \mu$ broad. Pileus trama interwoven. Cuticle not differentiated, the surface bearing a turf of colorless, more or less erect hyphae, $2-4 \mu$ broad; also accompanied by some broader ($4-10 \mu$) colorless hyphae, the cells of these hyphae often enlarged at the upper end, the terminal elements as cylindric-capitate pileocystidia. Clamp connections present.

Crepidotus lundellii Pilät

Type - Pilät No. 149039



Ch - x 1000



Broader epicuticular hyphae
bearing pilocystidia - x 1000

CREPIDOTUS LUNDELLII Pilát

On fallen dead branches of Fraxinus, leg. & det. R.A. Maas
Geesteranus, Province of Utrecht, Netherlands, No.10778,
Oct. 9, 1955.

(Notes by Bas)

Pileus up to 19 mm broad, stipitate when very young, later dorsally attached, reniform to cupuliform, white to pale buffy cream when old, woolly-pubescent, margin involute.

Lamellae free, rather distant, thick, broad, ventricose, for a long time remaining pale cream, finally pale yellowish-brownish with fimbriate, white edges.

Stipe minute, eccentric when young, white, minutely tomentose, later disappearing.

Spores 7.2-8.1(9.0) x 5.4-6.3 μ . Marginal cells 43-67 x 8-12 μ , subcylindric, subclavate, subcapitate.

(Notes by Hesler)

Spores ^{6-8.5 x 4.5-5.5} ~~7.2-8.1 x 5.4-6.3~~ μ , ellipsoid, slightly inequilateral, smooth. Basidia 18-24 x 5-6 μ , 4-spored. Pleurocystidia none; cheilocystidia ^{37.65} x 8-10 μ , cylindric-ventricose or clavate-
^{at times constricted.} ventricose. Gill trama subparallel, hyphae 4-10 μ broad. Pileus interwoven. Cuticle not differentiated, the surface bearing a turf of colorless hyphae, 3-6 μ broad. Pilocystidia abundant on the incurved margin, 55-80 x 4-6 μ , cylindric and often flexuous, apices rounded, at times more or less forked. Clamp connections present.

GREPIDOTUS LUNDELLII Pilát

On fallen dead branches of Fraxinus, leg. & det. R.A. Maas
Geesteranus, Province of Utrecht, Netherlands, No. 10778,
Oct. 9, 1955.

(Notes by Bas)

Pileus up to 19 mm broad, stipitate when very young, later dorsally attached, reniform to cupuliform, white to pale buffy cream when old, woolly-pubescent, margin involute.

Lamellae free, rather distant, thick, broad, ventricose, for a long time remaining pale cream, finally pale yellowish-brownish with fimbriate, white edges.

Stipe minute, eccentric when young, white, minutely tomentose, later disappearing.

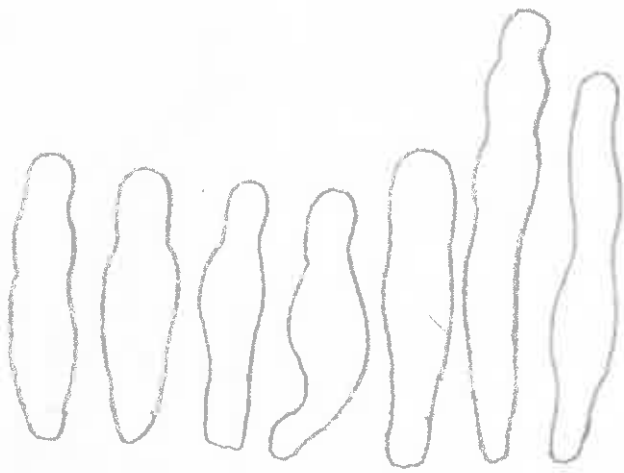
Spores 7.2-8.1(9.0) x 5.4-6.3 μ . Marginal cells 43-67 x 8-12 μ , subcylindric, subclavate, subcapitate.

(Notes by Hesler)

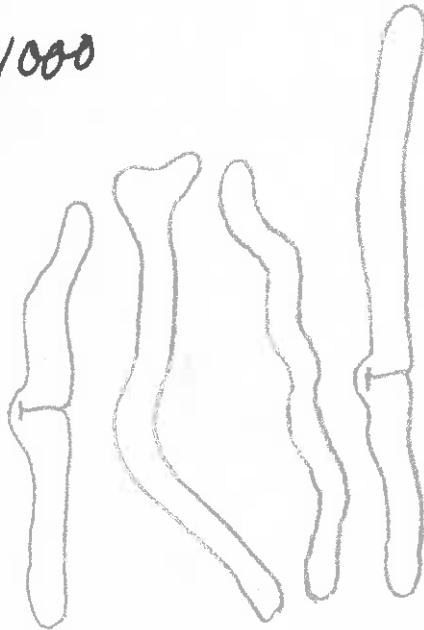
Spores ^{6-8.5 x 4.5-5.5} ~~7.2-8.1 x 5.4-6.3~~ μ , ellipsoid, slightly inequilateral, smooth. Basidia 18-24 x 5-6 μ , 4-spored. Pleurocystidia none; cheilocystidia 37-65 x 8-10 μ , cylindric-ventricose or clavate-ventricose, ^{at times constricted.} Gill trama subparallel, hyphae 4-10 μ broad. Pileus interwoven. Cuticle not differentiated, the surface bearing a turf of colorless hyphae, 3-6 μ broad. Pilocystidia abundant on the incurved margin, 55-80 x 4-6 μ , cylindric and often flexuous, apices rounded, at times more or less forked. Clamp connections present.

Orepidotus lundellii Pilát

Bas-10778, leg. Maas Geesteranus, on fallen
dead branches: Fraxinus, Prov. Utrecht,
Netherlands, det. Bas.



Ch - x 1000



Pils - x 1000

from pileus incurved
margin

CREPIDOTUS LUTEOLUS Lambotte

(Bas-11874)

Leg. Maas Geesteranus, Nov. 1, 1956, on dead twigs, Noord-Brabant,
Netherlands. (H-26100)

Pileus pale sulphur-yellow, sometimes whitish near the margin, glabrous, slightly viscid, felted on the center, margin not striate.

Lamellae at first pale sulphur-yellow, later brownish-pink, rather distant, free, rather thick, ventricose, moderately broad, edges entire and paler.

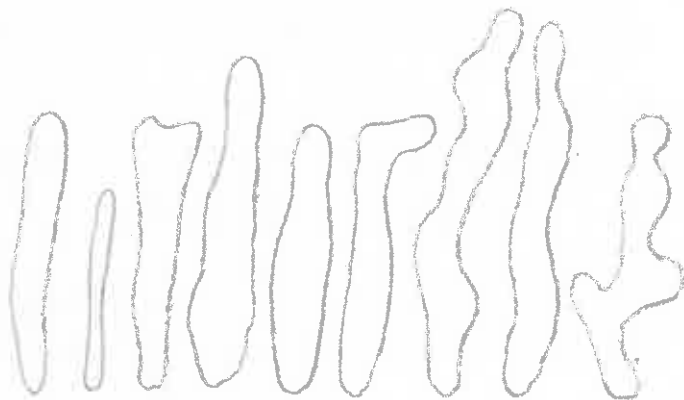
Stipe none.

Spores 7.5-11 x 4-5 μ , ellipsoid to oblong-ellipsoid, often slightly subfusiform, obscurely punctate, brownish. Basidia (28)33-42 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia (25)34-50 x (3)6-8 μ , clavate, obclavate, ventricose, often more or less crooked or flexuous, more rarely knobbed or contorted. Gill trama interwoven, hyphae 5-10 μ broad. Pileus trama interwoven. Cuticle usually not sharply differentiated, bearing a turf (more or less a palisade) of slender, colorless, erect hyphoid-pilocystidia, 20-60 x 2-3 μ , and at times long hyphae. Clamp connections present.

Although Bas' notes say "slightly viscid," there is no gelatinous zone on the surface.

Crepidulus lutesolus Ramb.

(Ba1-11874 / H-26100)



Ch - x 1000

CREPIDOTUS LUTEOLUS Lamb.
(= C. terricola Britz.)

Pilat No. 23316, leg. and det. Pilat, Czechoslovakia,
in Abies, Picea, Fagus forest, on Rubus idaei, Oct. 11,
1935.

Spores (7.5)8-10.5 x 4-5 μ , ellipsoid, inequilateral
in profile, punctate, pale yellowish-brown. Basidia 26-33 x
5-6 μ , 4-spored. Pleurocystidia none; cheilocystidia
34-45 x 3.5-6 μ , irregularly cylindric or filamentous,
flexuous or constricted. Gill trama slightly interwoven,
hyphae irregularly-shaped, cells 5-12 μ broad. Pileus
trama interwoven. Cuticle of repent hyphae, bearing a turf
of colorless, slender (2.5-4) hyphae, the upper portions
often crooked and coiled. Clamp connections present.

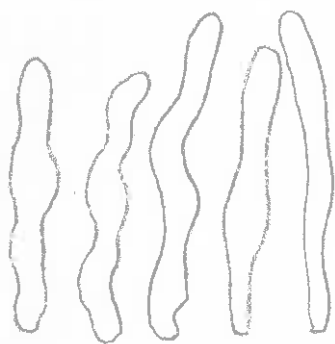
CREPIDOTUS LUTEOLUS Lamb.
(= C. terricola Eritz.)

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in Abies, Picea, Fagus forest, on Rubus idaei, Oct. 11,
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hyphae irregularly-shaped, cells 5-12 μ broad. Pileus
trama interwoven. Cuticle of repent hyphae, bearing a turf
of colorless, slender (2.5-4) hyphae, the upper portions
often crooked and coiled. Clamp connections present.

Gepardotus luteolus Ramb.

Pilat No. 23316



Ch - x 1000

CREPIDOTUS LUTEOLUS Lamb.

Pilat No. 149043, Bohemia, Nov.2, 1921, det. Pilat.

Spores 7.5-10 x 4-5 μ . Otherwise as ~~in~~ Pilat No.23316.

5009

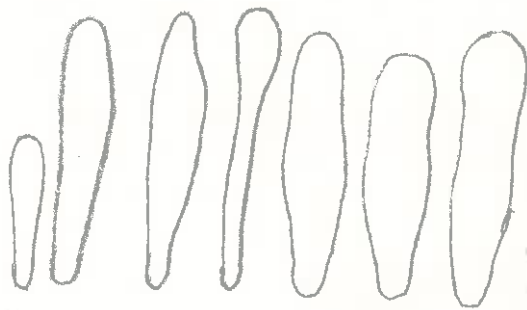
CREPIDOTUS MALACHIUS (B.& C.) Sacc.

ventriciformis

Spores 5-7.5 μ , globose to ovoid, obscurely punctate. Pleurocystidia none; cheilocystidia 18-36 x 5-10 μ , clavate to slightly ventricose. Gill trama irregularly parallel, hyphae 7-15 μ broad. Epicutis of repent hyphae, with scattered, colorless, more or less erect hyphae, the terminal elements at times pilocystidia, which are cylindric to clavate, 32-43 x 5-9 μ . Clamp connections present.

Crepidula *malachius* (B. + G.) Sacc.
~~*applanata* (F.) Kuntze~~

No. 5009



Ch - x 1000

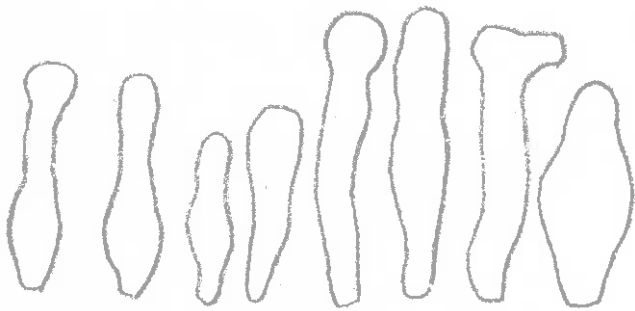
Crepidotus malachius
CREPIDOTUS MALACHIUS (B. & C.) Sacc.

8066
(H-8086)

Spores 5-7 μ , globose, rough. Pleurocystidia none; cheilocystidia 28-41 x 5-9 μ , clavate, ventricose, or bottle-shaped, rather rare and often appressed against the gill-edge. Gill trama subparallel. Cuticle repent, hyphae colorless; no erect hyphae.

Crepidulus malachinus
~~nephrodes~~ (Br@) (Aaaa)

No. 10390



ch - x 1000

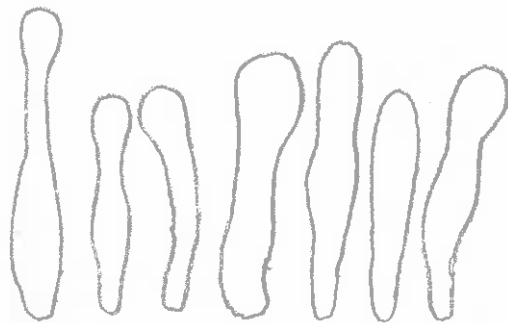
11438

CREPIDOTUS MALACHIUS (B. & C.) Sacc.

for malachius

Spores 5-7 μ , globose to slightly ovoid, punctate.
Basidia 22-26 x 5-7 μ , 4-spored. Pleurocystidia none;
cheilocystidia clavate and subcapitate, or ventricose,
28-44 x 7-10 μ . Gill trama subparallel, hyphae 5-9 μ broad.
Pileus trama interwoven. Cuticle repent, a few erect hyphae.
Clamp connections few on the cuticular hyphae.

Crepidotus ^{*malachinus*} ~~*repens*~~ (B & C) Pace.
No. 8066



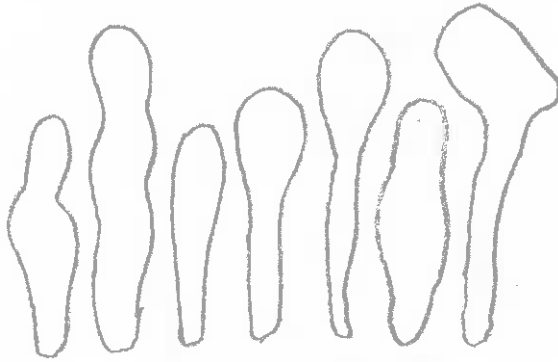
Ch - x 1000

10390

CREPIDOTUS MALACHIUS (B.& C.) Sacc.

Spores 5-7 μ , globose, punctate. Basidia 24-29 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 22-38 x 6-12 μ , clavate or ventricose, at times subcapitate. Gill trama subparallel, hyphae 5-9 μ broad. Cuticle of repent hyphae, few erect hyphae. Clamp connections few on the cuticular hyphae.

Crepidotus malachinus
nephrodes (B. & C.) Pace.
No. 11438



Ch - X 1000

CREPIDOTUS MALACHIUS (B. & C.) Sacc.

Type collection, Kew Herbarium,
collection by Chas. J. Sprague,
New England, Aug. 1856.

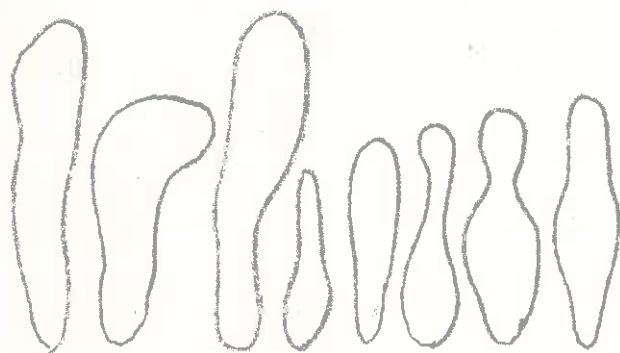
Spores 5-7.5 (8.5) μ , globose, at times subovoid, punctate, thick-walled, brown in 2% KOH. Basidia 25-32 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 24-43 x 6-10 μ , clavate, ampullaceous, ventricose, scattered over the gill edge (absent in most sections). Gill trama subparallel, hyphae 3-5 (10) μ broad. Pileus trama interwoven. Cuticle repent, with scattered, colorless, more or less erect hyphae. Clamp connections few on the epicuticular hyphae.

Gill broad in the type.

Pilat (1950) says the spores of the type are perfectly globose, subtly verrucose-punctate, 6-7 μ .

Singer (1947) says it has essentially the same characters as C. nephrodes - an earlier name.

Crepidotus malachius B. & C.
Type



Ch - x 1000

CREPIDOTUS MACEDONICUS Pilat

Type

Pilat No. 489031, det. Pilat, Macedonia, Yugoslavia,
on Fagus sylvatica, Aug. 1937.

Pileus conspicuously tomentose (hairs brownish)

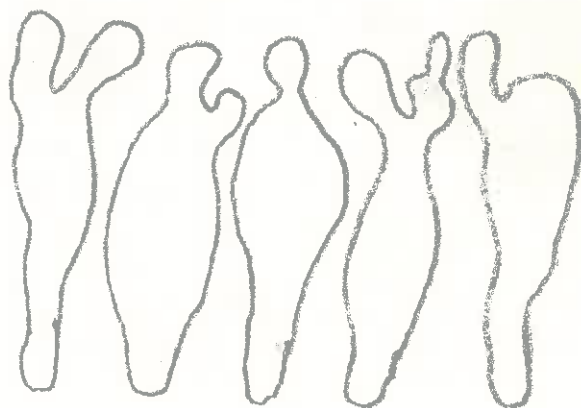
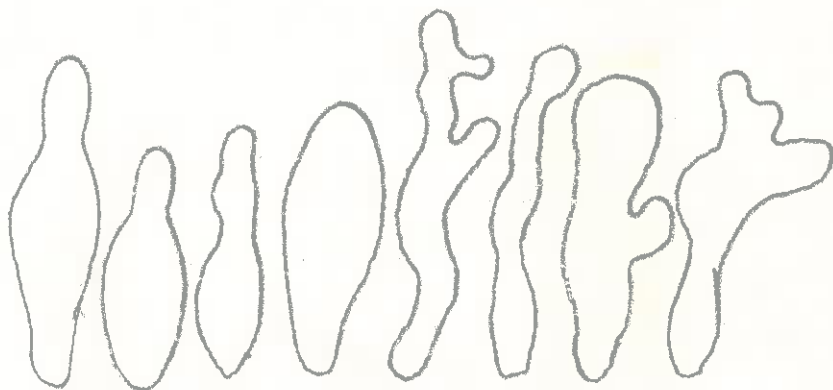
Spores (5) 5.5-7 x 4-5 μ , ovoid to ellipsoid, at times subglobose, strongly punctate-echinulate, brown. Basidia 18-25 x 4-6 μ , 4-spored. Pleurocystidia 20-32 x 5-7 μ , fusoid or clavate-capitate, not conspicuous; cheilocystidia 32-50 x 6-15 μ , clustered, conspicuous, variable: nine-pin-shaped-capitate, cylindric, clavate, ventricose, often irregularly forked-knobbed. Gill trama subparallel to interwoven, hyphae 6-10 μ broad. Pileus trama interwoven. Cuticle of repent hyphae, bearing a turf of colorless to pale fuscous, narrow (3-5 μ) hyphae, usually in bundles or strands. Clamp connections present.

Gepidotus macedonicus Pilat

Type



Pl. x 1000



Ch - x 1000

var. malachius

CREPIDOTUS MALACHIUS (B. & C.) Sacc.

Syll. Fung. 5:883. 1887

Agaricus malachius Berk. & Curt., Ann. Mag. Nat. Hist. III:4:291.
1859.

Pileus 2.5-6.5 cm. broad, convex or nearly plane, reniform, orbicular, cuneate, or flabellate, somewhat depressed behind, solitary, gregarious, or imbricate, glabrous or slightly tomentose at the base, hygrophanous, watery-white or grayish-white when wet, white when dry, striatulate when wet. Context white.

Lamellae rounded behind, white or whitish, becoming brownish-ferruginous, crowded, broad.

Stipe, none or with an inconspicuous, white, tomentose ^{pseudo} stipe.

Spores 5-7.5 (8.5) μ , globose, at times subovoid, punctate, thick-walled, brown in 2% KOH. Basidia 25-32 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 24-43 x 3-11 μ (apex), clavate, ampullaceous, ventricose, scattered over the gill-edge (absent in most sections). Gill trama subparallel, hyphae 3-5 (10) μ broad. Pileus trama interwoven. Cuticle repent, with scattered, colorless, more or less erect hyphae. Clamp connections few on the epicuticular hyphae.

AGARICUS (CREPIDOTUS) MALACHIUS B. & C.
Ann. & Mag. Nat. Hist. III:4:291. 1859.

(Photo of original description)

80. *A. (Crepidotus) malachius*, B. & C. Sparsus; pileo cuneiformi subflabellato albo molli; stipite brevissimo, albo tomentoso; lamellis ventricosis confertis ex albo flavidis. Curt. no. 5730. On the sides of old stumps in wet woods, New England, Aug., C. J. Sprague.

Gregarious, but scattered, horizontal; pileus 1-2 inches across, smooth, white, cuneiform, subflabellate; flesh rather thick behind, very thin in front; stem 1-2 lines long, white, tomentose; gills at first white, then yellow-brown, ventricose, obtuse behind, thin, crowded. Spores nearly globose, $\frac{1}{4500}$ inch in diameter.

This species resembles *A. nephrodes* in the kid-like pileus, but the gills and spores are very different.

AGARICUS (CREPIDOTUS) MALACHIUS B. & C.
Ann. & Mag. Nat. Hist. III:4:291. 1859.

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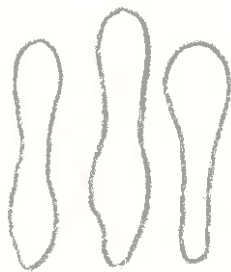
12160

malachius
CREPIDOTUS ~~NEPHRODES~~ (B. & C.) Sacc.

var malachius

Spores 5-7 μ , globose, punctate. Basidia 23-28 x 6-7 μ , 2-4-spored. Pleurocystidia none; cheilocystidia clavate or subventricose, 26-33 x 4-7 μ . Gill-trama subparallel. Pileus trama interwoven. Cuticle repent, no erect hyphae found.

Crepidulus malaghinus
~~nepherodes~~ (B+C) Acc.
No. 12160



Ch - x 1000

CREPIDOTUS MALACHIUS var. TRICHIFERUS var. nov.

(H-13242)

Spores 5-7.5 (8) μ , globose, punctate. Basidia 22-30 x 5-6 μ , 4-spored. Pleurocystidia none; cheilocystidia 32-57 x 5-10 μ , cylindric to clavate, at times ventricose, conspicuous. Gill trama subparallel, hyphae 6-14 μ broad. Pileus trama interwoven, often more or less vesiculose. Cuticle a repent hyphae, bearing a turf of rather long, colorless hyphae, 4-8 μ broad, the terminal elements often cystidioid. Clamp connections present.

Routien called this putrigenus, but the latter lacks clamps.

16336

CREPIDOTUS MALAGHIUS (B.& C.) Sacc.

may trichosporus

Spores 5-7 μ , globose, punctate. Pleurocystidia none; cheilocystidia clavate or sub-ventricose, 26-38 x 6-9 μ . Gill trama subparallel. Cuticle of repent hyphae, with scattered or sparse pilocystidia, which are more or less ventricose or cylindrical. Clamp connections present.

16400

malachius
CREPIDOTUS ~~NEPHRODES~~ (B. & C.) Sacc.

not malachius

Pileus 2-4 cm., glabrous, white to faintly tinged yellowish, hygrophanous, striatulate (when fresh, and when dried). Context thin, white.

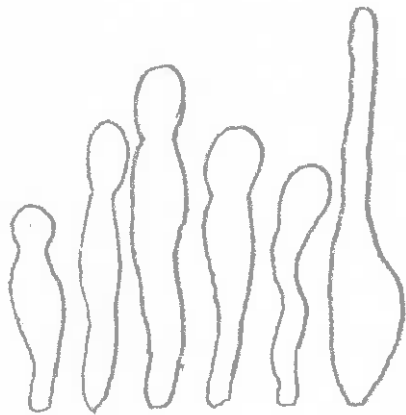
Lamellae decurrent, radiating, broad, narrowed behind, nearly subdistant, edges fimbriate.

Stipe none.

Spores 5-7 μ , globose, punctate, brownish, double-walled, the outer wall thicker and darker. Basidia 24-30 x 6-7 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 25-52 x 5-7 (apex) μ , base at times up to 10 μ broad, clavate to ventricose, usually subcapitate, rarely with an apical prolongation and then bottle-shaped. Gill-trama subparallel, hyphae 6-9 μ broad. Pileus trama interwoven. Cuticle repent; no erect hyphae. Clamp connections on the cuticular hyphae.

Grepidotus malacchius
Grepidotus neplodes (B+C) Acee.

No. 16400



ch - x 1000

CREPIDOTUS MALACHIUS (B. & C.) Sacc. *var. trichiferum*

(H-17552)

(*from Mexico*)

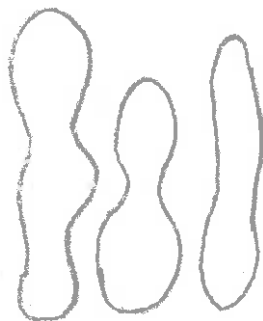
Pileus 1.5-2.5 cm broad, semiorbicular to cuneate, dingy or pallid, brownish from spores on surface, whitish villose, or pubescent, dry, margin even.

Lamellae radiating, broad, close, white then brownish.

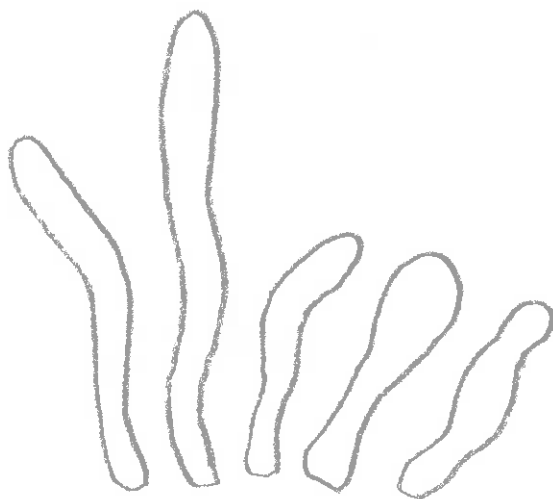
Stipe none.

Spores 5-7 x 5-6 μ , ovoid to subglobose, conspicuously punctate or echinulate, brown in mass and under microscope. Pleurocystidia none; cheilocystidia 30-40 x 6-11 μ , irregularly clavate, flask-shaped, or dumb-bell-shaped, not conspicuous nor abundant. Gill trama subparallel. Pileus trama interwoven. Cuticle repent bearing numerous clavate, erect, colorless hyphae, the terminal colorless elements 30-61 x 7-10 μ —pilocystidia. Clamp connections on the epicuticular hyphae.

malachius (B.+C.) Sacc.
Gieprkottus No. 17552
(from Mexico)



Ch - x 1000



Pilocyrtidia

crepidotus malachius
CREPIDOTUS MALACHIUS (B. & C.) Sacc.

(H-19201)

Pileus 1.5-3 cm broad, convex, becoming plane, sessile of sub-stipitate, suborbicular to flabelliform, white, tinged grayish, hygrophanous, moist, glabrous or somewhat tomentose behind, margin striatulate. Context whitish, firm.

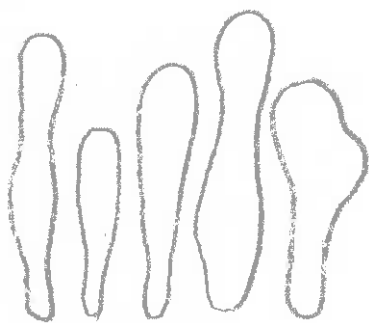
Lamellae radiating from a lateral point (or stipe, if any), rather close, medium broad, white at first, becoming rusty-brown.

Stipe none.

Spores 5.5-7 μ , globose to subglobose, finely punctate. Basidia 24-30 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia clavate, at times subcapitate, ventricose or irregular, 25-42 x 5-8 μ . Gill-trama subparallel. Cuticle of repent hyphae; few erect hyphae.

Grepidotus malaghins
~~reproder~~ (B+C) Sacc

No. 19201



Ch - x 1000

24752

CREPIDOTUS ~~NEPHRODES~~ (B. & C.) Sacc.*malachius**malachius*

Pileus 1.5-5 cm. broad, sessile or nearly so, more or less applanate to subconchate, not viscid, hygrophanous, "drab gray" (wet), white (dry), disc white (dries from disc outward), glabrous, striatulate half way. Context white, thin, fragile; odor none; taste sub-astringent.

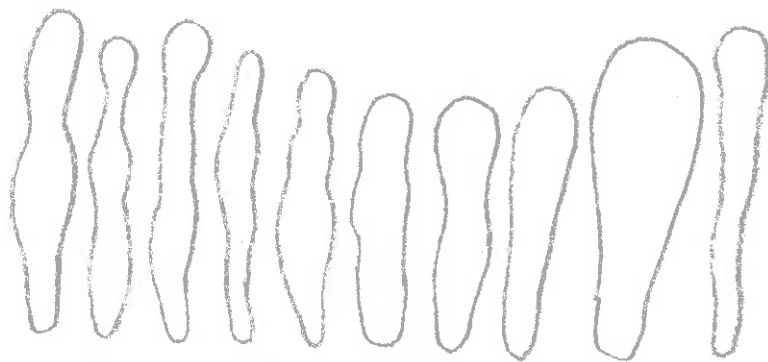
Lamellae radiating from a lateral point, white, soon dull pinkish, ^{broad,} ^{or} broad behind, ^{somewhat} narrow in front, close, many short, faces rugose, edges fimbriate.

Stipe none or very short, pileus sessile or attached by a tubercle, white villose-fibrillose at the point of attachment.

Spores globose, 5-6 μ diameter, punctate, "Dresden brown" in deposit. Basidia (17) 26-35 x (6) 7-8 μ , 4-spored. Pleurocystidia none; cheilocystidia 30-46 x 6-10 (13) μ , clavate or ventricose, at times slightly constricted. Gill trama subparallel, hyphae 4-10 μ broad. Pileus trama interwoven. Cuticle of repent, colorless hyphae. Clamp connections found on the villose fibrils at the point of attachment of the pileus to the substratum, and on the cuticular hyphae. ~~Hyphae on the surface of the tubercle with ring-like incrustations.~~

? [Look again! I could not find the second time

malacchius
Crepidotus nephrodes (B. & C.) Aacc.
No. 24752



Ch - x 1000

CREPIDOTUS MALACHIUS (B.&C.) Sacc. *new malachius*

(H-25759)

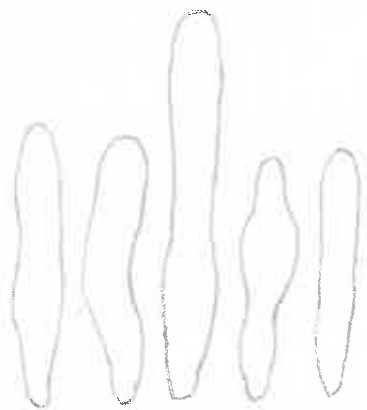
On oak log, Cades Cove, July 27, 1963.

Pileus 12-25 mm broad, white, hygrophanous, glabrous, margin striatulate when wet.

Lamellae close, medium broad, white at first.

Spores 5-7 μ , globose, punctate. Basidia 24-28 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 32-50 x 5-8 μ , cylindric, clavate, or subventricose. Gill trama subparallel, hyphae 4-8 μ broad. Pileus trama interwoven. Cuticle of repent hyphae, no erect hyphae nor pilocystidia. Clamp connections present, rare.

Pepidotus malachinus (B. + C.) Aar.
(H-25759)



Ch. x 1000

25805

CREPIDOTUS MALACHIUS (B.& C.) Sacc.

On chestnut log, Mt. LeConte, coll. H. H. Burdsall, Jr.
Aug. 5, 1963.

Pileus white, hygrophanous, striatulate. Context
thin; odor mild, taste fungoid, then bitterish.

Lamellae white then pale brown, ventricose, broad
toward base, close.

Micro-characters typical.

CREPIDOTUS MALACHIUS var. PLICATILIS Pk.

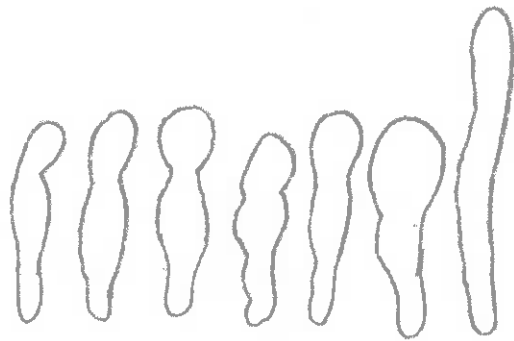
Type

This is puberulus

Spores (5) 6-8 x (5) 6-7.5 μ , globose or slightly subglobose, minutely rough (appearing smooth at first, but on closing the diaphragm the punctations are distinct). Basidia 28-33 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 25-43 x 5-9 μ , cylindric or more often more or less clavate to capitate, with the central portion ventricose, constricted between. Gill trama subparallel. Pileus trama radial, more or less interwoven. Cuticle repent. Clamp connections on the hairs at points of attachment; none found elsewhere.

Singer (1947) says the type has characters essentially the same as the type form, and also those of C. nephrodes.

Crepidotus malachius var. *plicatilis* PK.
Type



Ch - $\times 1000$

CREPIDOTUS No. 8969

W. V. SAMPSON

Pileus 1-2.5 cm broad, semiorbicular, white, glabrous or slightly pruinose (under lens), dry, margin striate.

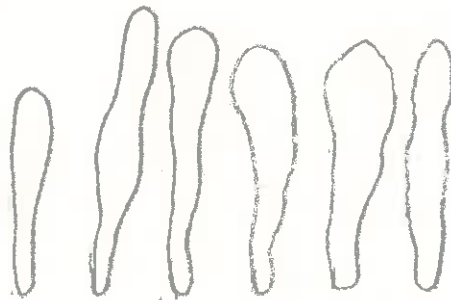
Lamellae white then brownish, close or nearly subdistant, broad.

Stipe none.

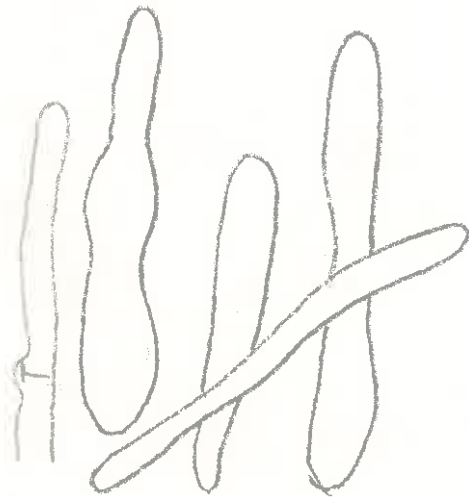
Spores 5-7 μ in diameter, globose, faintly punctate, brownish in 2% KOH. Basidia 22-28 x 5-7 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 27-40 x 5-9 μ , clavate or slightly ventricose. Gill trama subparallel, hyphae 5-12 μ broad. Pileus trama: pseudoparenchymatous in tangential sections, the hyphae radial and more or less parallel in radial sections. Cuticle repent, not sharply differentiated from the trama, with scattered or gregarious, colorless, cylindric to obclavate or ventricose pilocystidia, 35-60 x 4-10 μ . Clamp connections present, but rare.

Cf. *malachius*, but note structure of pileus trama.

malachius trichiferus
Orepidotus nephrodes (B. & C.) Sacc
No. 8969

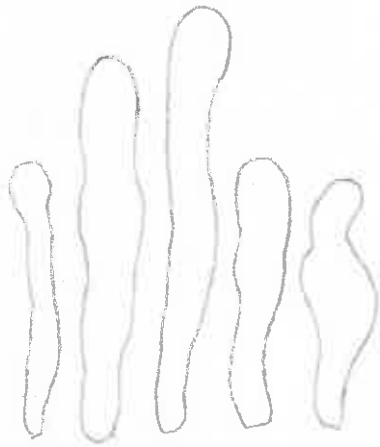


Ch - x 1000



~~Ch~~ ~~Ch~~ - Pils - x 1000

Orepidotus malachius var. *trichiferus*
H-13242



ch - x 1000

CREPIDOTUS MALACHIUS var. TRICHIFERUS

(H-26096)

Leg. M. A. Donk, on stump, Netherlands; det. as C. applanatus
(Pers. ex Pers.) Kummer, Sept. 20, 1962.

Pileus up to 35 mm broad and 22 mm long, buff to buffy brown, minutely whitish granular-pruinose when young, becoming glabrous, unpolished, slightly striate at margin, minutely white felted-tomentose near base. Context without gelatinous layer, more or less hyaline-concolor with surface when moist. Odor spontaneous nihil, but rather strong ? -fish pungent (sickening) when crushed.

Gills crowded, thin, rather wide (up to 4.5 mm), rather dark brownish buff with faint flesh pink tinge.

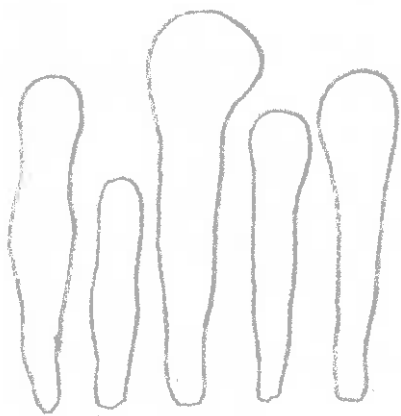
Spore print flesh-pink with an ochraceous tinge. Spores 4.5-7 μ , globose, punctate. Basidia 22-27 x 5-6 μ , 4-spored. Pleurocystidia none; cheilocystidia 30-52 x 7-15 μ , clavate, at times subventricose, more or less capitate. Gill trama sub-parallel, hyphae 4-8 μ broad. Pileus trama interwoven. Cuticle of repent hyphae, bearing scattered, clavate to cylindric pilocystidia, 30-68 x 6-7 μ .

Although Bas identified it as applanatus, the broad gills and larger spores place it in C. malachius var. trichiferous.

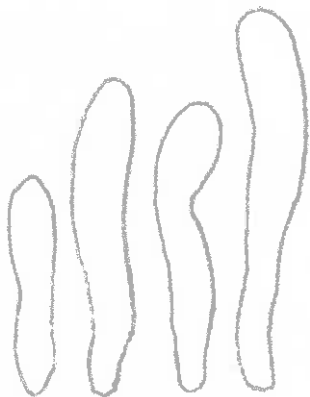
Gepidostus malacchius var. ^{*trichiferus*} ~~*malacchius*~~

(from Bas, Netherlands)

U-T No. 26096



Ch - x 1000



Pilo - x 1000

CREPIDOTUS MALACHIUS (B. & C.) Sacc. var. MALACHIUS

Coll. from Cornell Herb. No. 2658, leg. Murrill, conf.
by Bres., June 21, 1898. Labelled C. applanatus Pers.,
on rotting wood, Ithaca.

Spores 5-7.5 μ , globose, punctate. All characters
agree with C. malachius var. malachius.

CREPIDOTUS MALACHIUS var. TRICHIFERUS var. nov.

(Collection: No. 5522, from Plant. Path., Cornell Univ.,
labelled C. globiger Berk. det. Bres., on rotting log,
McGowan's Woods, leg. Mr. Clark, Nov. 1, 1900.)

Spores 5.5-7.5 μ diameter, globose, punctate. Other
characters agree with C. malachius var. trichiferus.

Gills are too broad for C. applanatus var. globigera.

Pileus 4-13 cm. broad, sessile, somewhat imbricate, dimidiate, cuneate or broadly ~~flattened~~ ^{flabelliform}, convex, then more or less ~~plane~~ ^{plane}, or the margin wavy and the midportion more or less depressed, white or whitish, becoming tinted "light ochraceous-buff," coarsely rivulose-reticulated, innately fibrillose, distinctly viscid or almost glutinous when wet, soon dry, not hygrophanous, margin incurved and even. Context thick, tough, rather turgid, pallid.

Lamellae radiating, white at first, becoming "snuff brown," "argus brown" or "Brussel's brown," with a purple-brown tint where bruised, close, linear, relatively narrow (up to 5 mm.), narrowed at the ends, edges white-fimbriate, ^{at times gelatinous}.

Stipe none, pileus tapering into a stipe-like base, which is usually white villose-strigose.

Spores (6) 7-8 (8.5-9) x 4-4.5 (5) μ , ellipsoid in front view, shorter spores slightly inequilateral in profile, some spores suboblong, 7.5-8.5 x 4 μ , smooth, "Prout's brown" in deposits, brown in 2% KOH. Basidia 23-30 x 5-7 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 48-96 x 5-10 μ , long clavate-cylindric, at times short-clavate, occasionally subcapitate, sometimes pale fuscous, many of tramal origin. ~~Gill edges at times gelatinous~~. Gill trama with a broad, ~~dark~~ ^{dark} mediostrate of parallel to subparallel hyphae, the hyphae on either side colorless and loosely interwoven. Subhymenium of narrow more or less

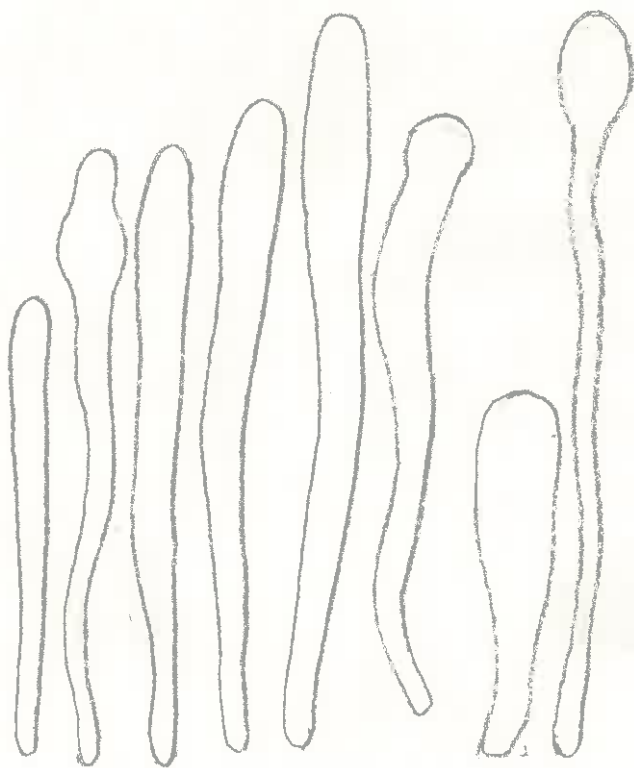
interwoven hyphae. Pileus trama interwoven, hyphae 5-12 μ broad. Cuticle a broad (350-500 μ or more) zone of gelatinous, interwoven, narrow (2-3 μ) hyphae, the surface usually bearing numerous colorless, narrow (3-5 μ) hyphae forming a trichodermium. Hypodermium usually quite distinct. Clamp connections present on the hyphae of the epicutis, pileus trama, and the gill trama.

This was described as C. mollis (Smith & Hesler, ^XElisha Mitchell Sci. Soc. Jour. 56:310. 1940). It differs from the European mollis in the presence of clamp connections, long cheilocystidia, somewhat smaller spores (especially more narrow), in the organization of the gill trama, and in the purplish-black color of the gills where bruised.

This species is close to C. betulae, but differs in its greater size (4-13 cm.) of the pileus, the gills becoming purplish-black where bruised, and a much thicker cutis (350-500 μ or more).

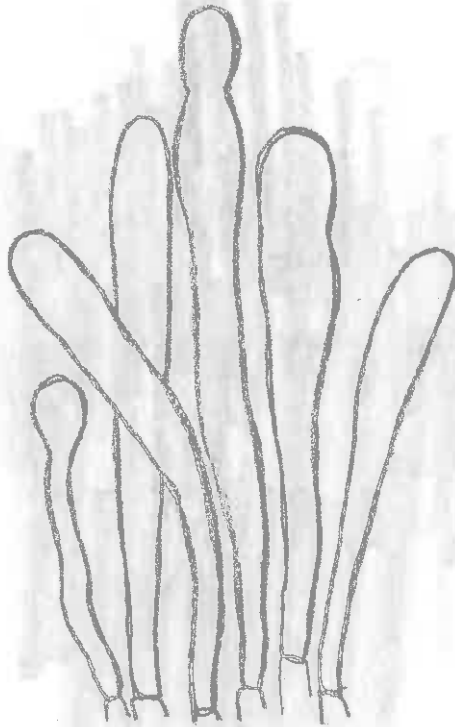
Crepidatus maximus sp. nov.

No. 9718



Ch - x 1000

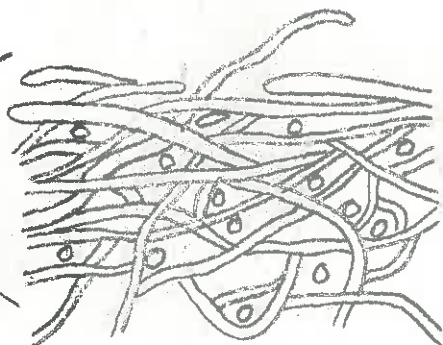
Crepidotus mollis (Fr.) Kummer
No. 9718 *maximus* sp. nov.



Ch - x 1000

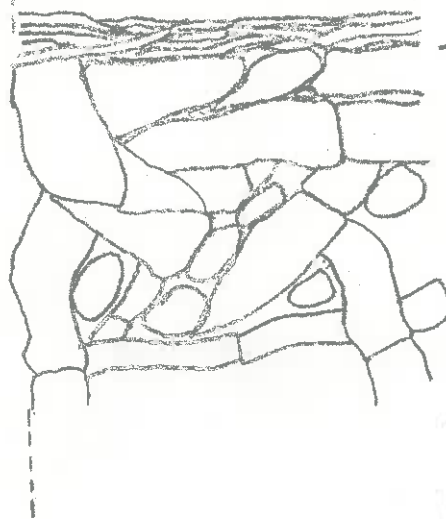
Crepidotus mollis (Fr.) ~~Kummer~~
 No. 9718 *maximus* sp. nov.

Darker outer-
 most zone; hyphae
 narrow (2-3 μ broad),
 the zone 20-40 μ thick



Sxocutis
 375
~~400~~ - 500 μ
 thick

Hypodermium



Context (flesh)
 of pileus; hyphae
 5-12 μ broad

Mollis and synonyms

melleus

CREPIDOTUS CALOLEPIDOIDES Murr.

Mycologia 5:30. 1913

Pileus 3 cm. broad, strongly convex above, concave below, solitary, sessile, narrowly attached behind, melleous with an ochraceous tint on the umbo, disc decorated with minute, fulvous, conic elevations, margin striate, attachment of the pileus white, finely pubescent or slightly strigose.

Lamellae slightly arcuate, cremeous to fulvous, broad, not crowded.

Spores 7.5-10 x 5.5-7 μ , ellipsoid, at times the ends slightly pointed, smooth. Basidia ²⁶⁻³²~~30-37~~ x 6-8 μ , 4-spored, the sterigmata up to 8 μ long. Pleurocystidia none; cheilocystidia 43-58 x 3-7 μ , clavate, subcylindric, to obclavate or flask-shaped; the gill-edges often gelatinous ^{and the trama ch often forked or branched.} Gill trama subparallel, hyphae 3-7 μ broad. Pileus trama interwoven. Cuticle an ixocutis, 40-85 μ thick, hyphae narrow (2-4 μ), very loosely interwoven and imbedded in a gelatinous matrix, the surface bearing, at least on the disc, conspicuous, septate, brownish, incrustated hyphae, the cells broad (5-20 μ), cylindric to irregular. Clamp connections none.

Habit, habitat, and distribution. - On a small dead branch of a deciduous shrub, Jamaica and Ecuador, September and December-January.

Material studied. - JAMAICA: Murrill, No. 556, type from Cinchona, Jamaica, Dec. 25-Jan. 8, 1908-9; ECUADOR: Rose No. 27364, Sept. 27, 1918 (in NYBG Herb.).

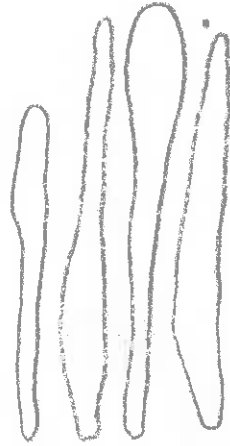
Observations. - Murrill (Mycologia 5:31) says: "Resembling C. calolepis, but with minute conic elevations instead of tomentose-scaly." *These conic elevations are inconspicuous.*

~~This species (C. calolepidoides) seems to be the same as calolepis. The minute conic elevations cited by Murrill are not conspicuous, and both are fibrillose-scaly. They agree in all essential characters (macroscopic and microscopic).~~

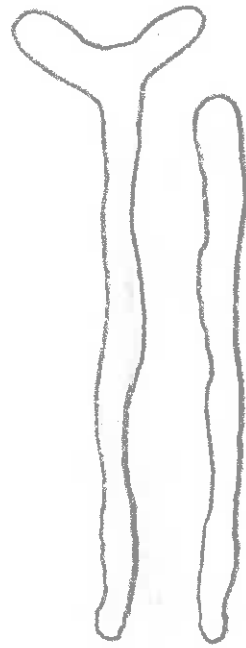
This is near fulvotomentosus + mollis.

Orepidotus calolepidoides Murr.

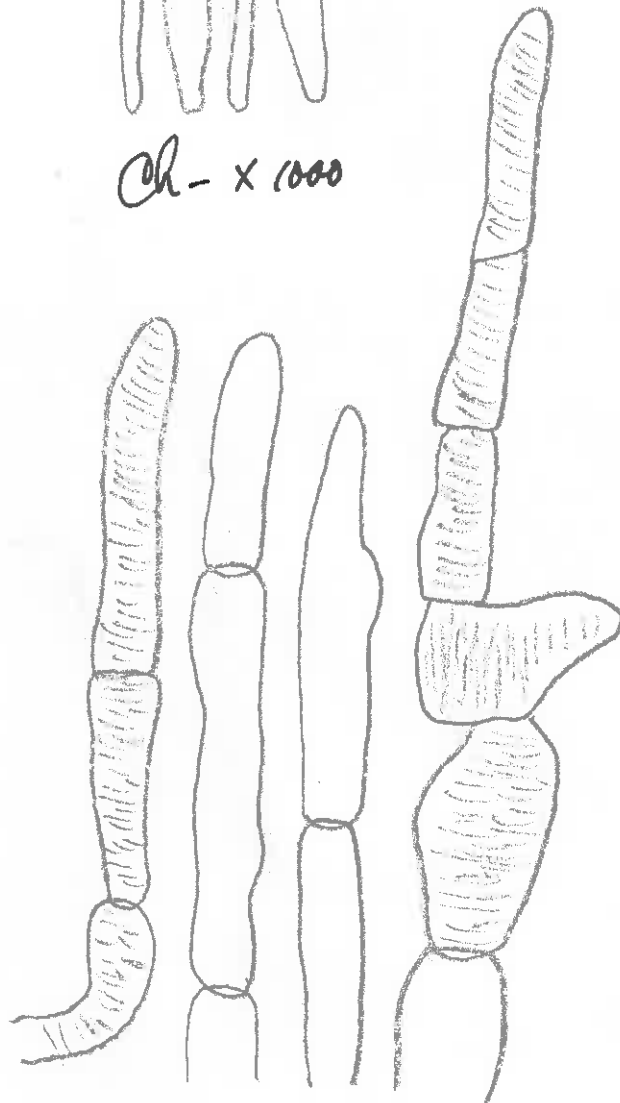
Type



Ch - x 1000



Tramal Ch - x 1000



↑
Elements of scale, incrustated
by transverse markings - x 1000

CREPIDOTUS CALOLEPIDOIDES Murr.

No. 23764: Vicinity of Tablon de Ona, Ecuador,
Coll. by J. N. Rose, A. Pachano, & George
Rose, Sept. 27, 1918.

A study showed this collection to be the same in all
microscopic details as the type of C. calolepidoides Murr.

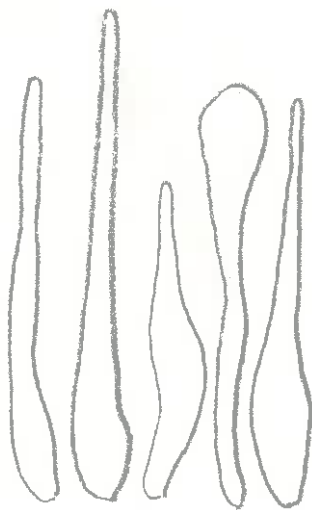
R. mellea
CREPIDOTUS CALOLEPIS (Fr.) Quel.

(Coll. by Romell, Sweden, 1891. From Breasadola,
Herb. N. Y. Bot. Garden.)

Spores 7.5-10 x 5.5-7 μ , ellipsoid, smooth. Basidia 23-28 x 6.5-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 42-63 x 5-8 μ , ventricose, slender-clavate, to slender flask-shaped, of the tramal type. Gill edges gelatinous. Gill trama subparallel, hyphae 3-5 μ broad. Pileus trama interwoven. Cuticle an ixocutis 170-300 μ thick, hyphae loosely interwoven. Hyphae of scale brown, incrusted (see photo). Clamp connections none.

Crepidotus calolepis (Fr.) Quél.

Romell coll., Sweden, ¹⁸⁹¹; from Bresadola Herb.,
at N.Y. Bot. Garden.



Ch. x 1000

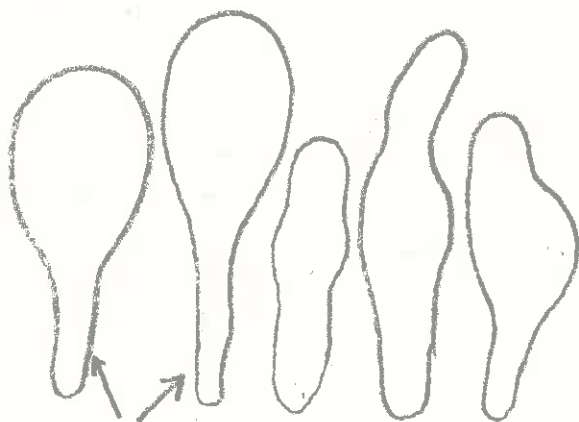
mollis
CREPIDOTUS ~~CALOLEPIS~~ (Fr.) Quel.

No. 219, on bark of wind-felled, decaying trunk
of Populus tremula, 15.IX.1935. Fungi Exsiccati
Suecici Praesertim Upsalienses, Lundell & Nannfeldt.
(Borrowed from Copenhagen Museum)

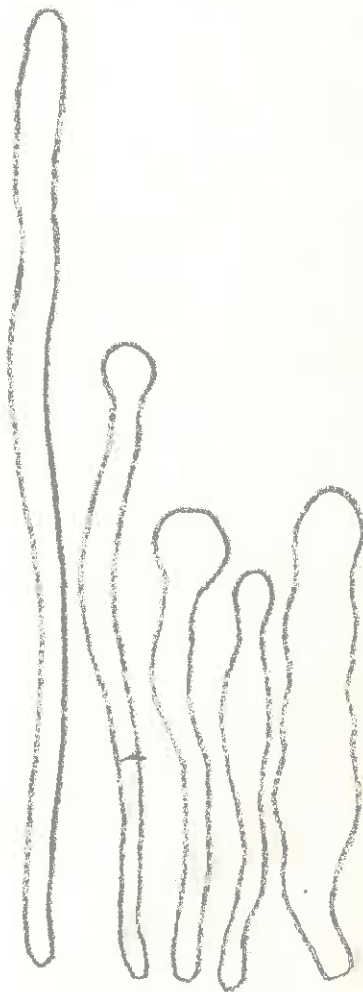
Spores 8-10 (11) x 5-6 (7) μ , ellipsoid in face view,
inequilateral in profile, smooth. Basidia 32-43 x 7-11 μ ,
4-spored. Pleurocystidia 35-51 x 9-19 μ , mostly balloon-
shaped, some others ventricose or bottle-shaped, conspicuous;
cheilocystidia 55-125 x 5-10 μ , mostly tramal and gelatinous,
(gill edges mostly gelatinous), a few non-gelatinous, cylindric,
often slightly capitate, occasional constricted. Gill trama
interwoven, hyphae 4-8 μ broad. Pileus trama interwoven.
Cuticle an ixocutis 250-400 μ thick, of interwoven hyphae;
surface with numerous tufts of brown, incrusted hyphae forming
fibrillose scales. Clamp connections none.

Opeidotus calolepis (Fr.) Quél.

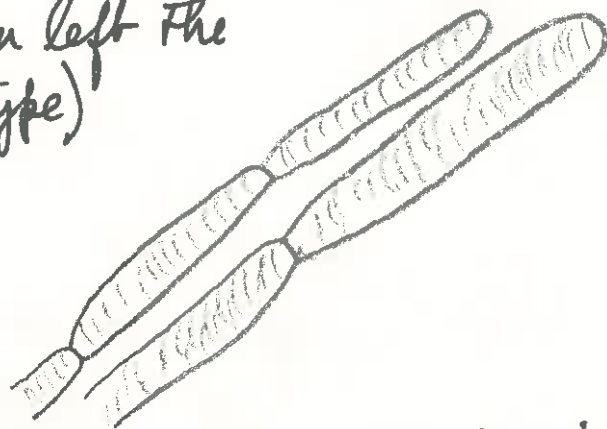
No. 219. Fungi Exsic. Suecici Praesertim Upsalenses
Sundell + Kunnfelt - 15.IX. 1935



Pl - x 1000
(the two on left the
commonest type)



Ch - x 1000



Ornamented epicuticular
brown hyphae - x 1000

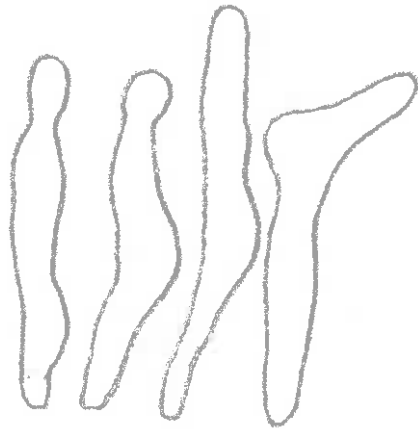
mollis
CREPIDOTUS ~~GALOLEPIS~~ (Fr.) Quel.

(Coll. L. M. Johnson, No. 1649, Ann Arbor, Mich.,
May 25, 1894. Borrowed from N. Y. Bot. Garden.)

Spores 7.5-9.5 x (4.5) 5-6 μ , ellipsoid, smooth. Basidia 22-32 x 5-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 36-56 x 3-8 μ , cylindric, ventricose, flask-shaped, or irregular, some tramal. Gill trama subparallel, hyphae 4-8 μ broad, gill edges gelatinous. Pileus trama interwoven. Cuticle an ixocutis, 90-160 μ thick, with brown hyphal tufts on surface, the hyphae septate and incrustated. Clamp connections none.

Crepidulus calolepis (Fr.) Quél.

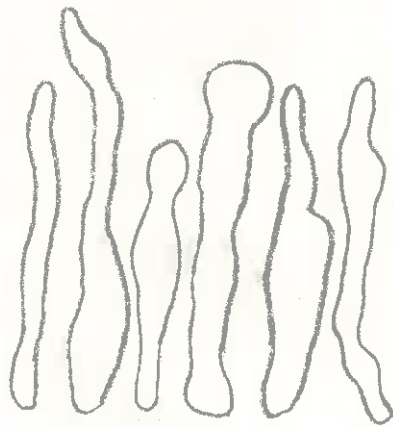
(Ronell collection, near Stockholm, July 18, 1897)



Ch - $\times 1000$

Crepidatus calolepis (Fr.) Quel.

(Coll. G. M. Johnson, Ann Arbor, Mich., No. 1649,
May 25, 1894; borrowed from N. Y. Bot. Garden)



Ch - x 1000

Miller
CREPIDOTUS FULVOTOMENTOSUS (Pk.) Pk.

N. Y. State Mus. Nat. Hist. Ann. Rept. 39:73. 1886.

Agaricus (Crepidotus) fulvotomentosus Pk., N. Y. State Mus. Nat. Hist. 26:57. 1874.

Pileus 1-2.5 cm. broad, hygrophanous, watery-brown when wet, whitish, yellowish or pale ochraceous when dry, clothed with numerous small, tomentose, tawny scales, suborbicular, reniform, or dimidiatae, sessile or with a rudimentary stipe, at times striatulate when moist. Context moderately thick, slightly tough, whitish or pallid; odor and taste mild.

Lamellae rounded behind, radiating from a lateral or an eccentric point, white or whitish, becoming brownish-ferruginous, close or moderately close, broad, subventricose.

Stipe none; attached by a tubercle or a rudimentary stipe.

Spores 7-9.5 x 4.5-6 μ , ellipsoid or subovoid, *inequilateral in profile*, ~~at times~~ *subamygdaliform*, smooth. Basidia 26-32 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 25-50 x 4-6 μ , clavate to more or less cylindrical, at times subcapitate, often inconspicuous. Gill trama of subparallel to slightly interwoven hyphae. Pileus trama of loosely interwoven hyphae, 5-7 μ broad. Cuticle a gelatinous zone, ¹⁵⁰~~300~~-450 μ thick, of loosely interwoven hyphae, 2-3 μ broad, with a moderately distinct somewhat compact zone (hypodermium) separating the cuticle from the subjacent pileus trama, the surface with brownish hyphal bundles (the scales),

the hyphae septate, and with conspicuous incrustations, the bundles erect, semi-erect, or repent. Clamp connections none on either the cuticular or epicuticular brown hyphae, or on the basal tomentum next to the substratum.

CREPIDOTUS FULVOTOMENTOSUS (Pk.) Pk.

(= mollis)

Described as Agaricus (Crepidotus) fulvotomentosus

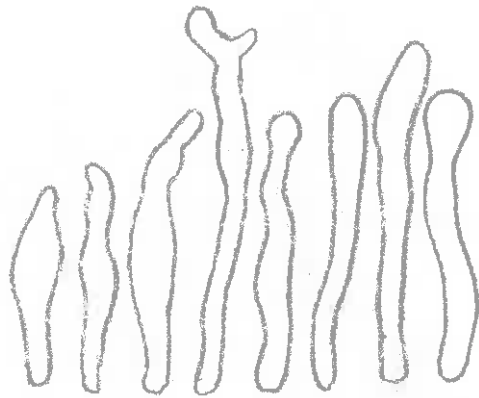
TYPE

(from Savannah, Wayne Co., New York, August)

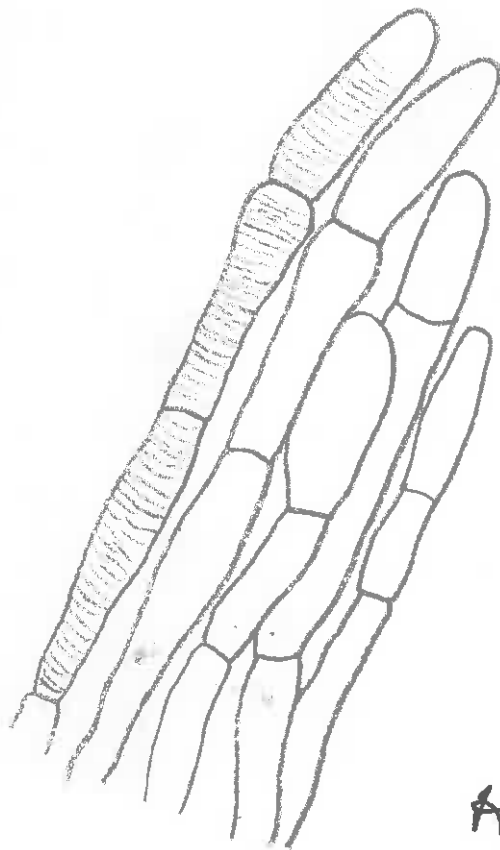
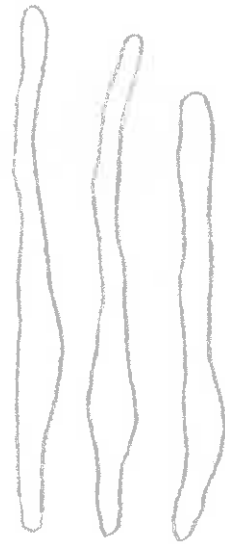
Spores 7-9.5 x 4.5-6 μ , ellipsoid or subovoid, at times sub-amygdaliform, smooth. Basidia 26-32 x 6-7 μ , 4-spored. (a) regular type: Pleurocystidia none; cheilocystidia/25-50 x 4-6 μ , clavate to more or less cylindric, at times subcapitate, often inconspicuous; (b) tramal: 58-70 x 5-7 μ , gelatinous. Gill trama subparallel, hyphae 5-10 μ broad. Pileus trama of loosely interwoven hyphae, 5-7 μ broad. Cuticle a gelatinous zone, 300-450 μ thick, of loosely interwoven hyphae, 2-3 μ broad, with a moderately distinct somewhat compact zone (hypodermium) separating the cuticle from the subjacent pileus trama, the surface with brownish hyphal bundles (the scales), the hyphae septate, 5-12 μ broad, and with conspicuous incrustations, the bundles erect, semi-erect, or repent. Clamp connections none on either the cuticular or epicuticular brown hyphae, or on the basal tomentum next to the substratum.

Gill edges are often gelatinized: the tramal hyphae for a short distance (100 more or less μ) above the edge become gelatinized. Their ends grow out at the edge, and they form a gelatinized, or swollen, zone of long, slender cheilocystidia.

Agaricus (Pezizotus) fulvotomentosus Fr.
Type

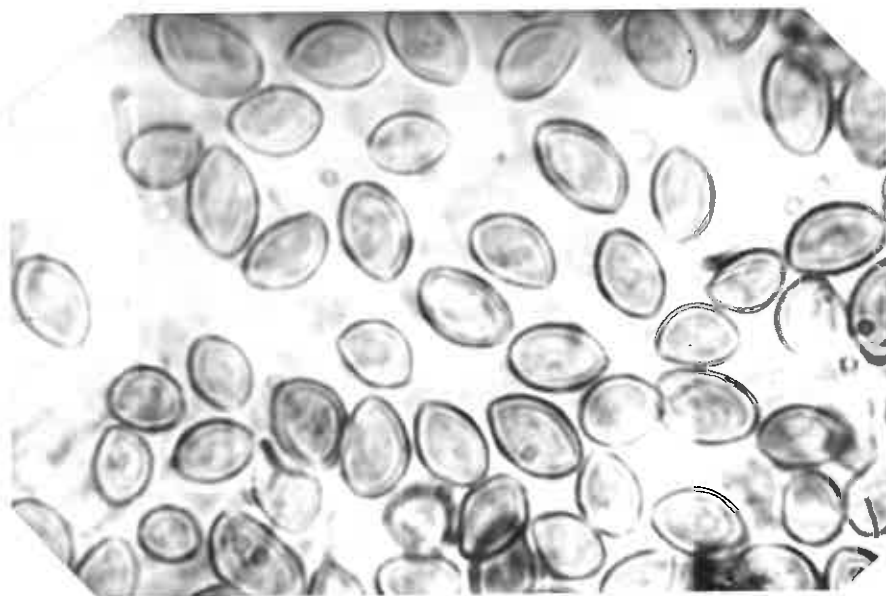


Ch - x 1000



Hyphal bundle from
the pileus-surface - x 1000

All hyphae with spiral or ring markings.



mollis
Crepidotus ~~fulvotomentosus~~ - Spores of Type

5446

- mollis
CREPIDOTUS FULVOTOMENTOSUS Pk.

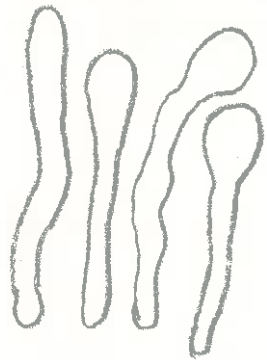
Pileus 5-12 mm. broad, sessile, dimidiate, semi-orbicular, "honey yellow," disk becoming "isabella color," viscid, not hygrophanous, with indistinct, appressed scales, white villose behind and on margin, margin even, incurved. Context rather thick when fresh, thin when dried, toughish, pallid or whitish; odor and taste mild.

Lamellae radiating from an eccentric or lateral point, broad, close, whitish becoming "olive buff," edges fimbriate.

Stipe none; attached by a lateral, villose tubercle.

Spores 8-10 x 5-6 μ , ellipsoid, smooth, in mass: pale buffy brown (not matched). Pleurocystidia none; cheilocystidia cylindric to irregular, often subcapitate, 32-42 x 4-8 μ . Gill-trama of subparallel to slightly interwoven hyphae. Pileus-surface with appressed or semi-erect, scattered tufts of brown hyphae (scales), these hyphae often with spiral markings (incrusted). Beneath the zone of brown scales is a zone of gelatinized cuticle (hyphae), 125-180 μ thick. Clamp connections absent.

No. 5446 *Orepidotus fulvotomentosus* PK.
mollis



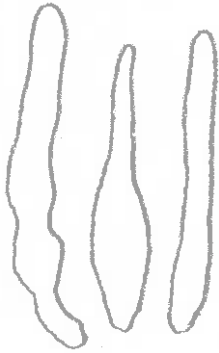
ch - x 1000

9040

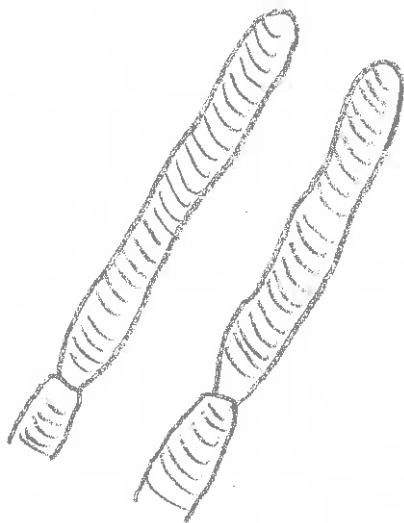
mollis
CREPIDOTUS FULVOTOMENTOSUS Pk.

Spores 8-10 x 5-6 μ , ellipsoid in front view, slightly inequilateral in profile, thick-walled (double), brown, smooth. Basidia 24-32 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 37-44 x 4-8 μ , obclavate, cylindric, ventricose, at times slightly constricted. Gill trama subparallel, hyphae 4-8 μ broad. Pileus trama interwoven. Cuticle an ixocutis, 120-225 μ thick, with tufts of brown, incrustated hyphae. Clamp connections none.

Crepidatus ^{mollis} ~~fulvotomentosus~~ ~~PK.~~
No. 9040



ch - x 1000



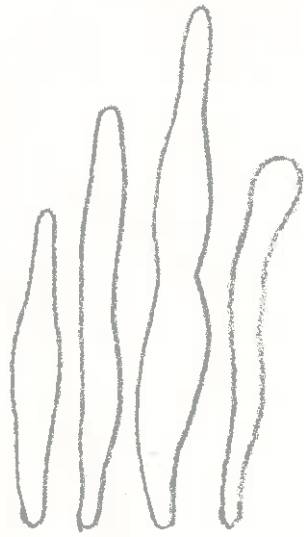
Incubated brown,
epicuticular hyphae - x 1000

18251

CREPIDOTUS FULVOTOMENTOSUS Pk.

Spores (7) 8-10 x 4.5-6 μ , ellipsoid to subovoid or slightly fusoid, ends often acute, smooth, thick-walled. Pleurocystidia none; cheilocystidia clustered, versiform (variable) ventricose to irregularly cylindrical, 42-70 x 3-4 (apex) x 9-10 μ (broadest portion, at times). Gill-trama subparallel or slightly interwoven. Cuticle: (1) surface of brown hyphae, often incrustated (spirally marked) (scales); (2) gelatinous zone.

No. 18251 *Crepidatus fulvotomentosus* PK.



Ch - x 1000

mollis
CREPIDOTUS No. 19232

~~(MAY 1951)~~

Pileus 1.5-3 cm broad, reniform, flabelliform, or cuneate, glabrous or with scattered brownish fibrils, villose behind, viscid or subviscid when wet, hygrophanous, whitish, dingy when wet, even when dry, slightly striate when wet. Context thin, white; odor and taste mild.

Lamellae radiating, close, narrow, whitish becoming brownish, edges fimbriate.

Stipe none (pileus laterally attached, sessile).

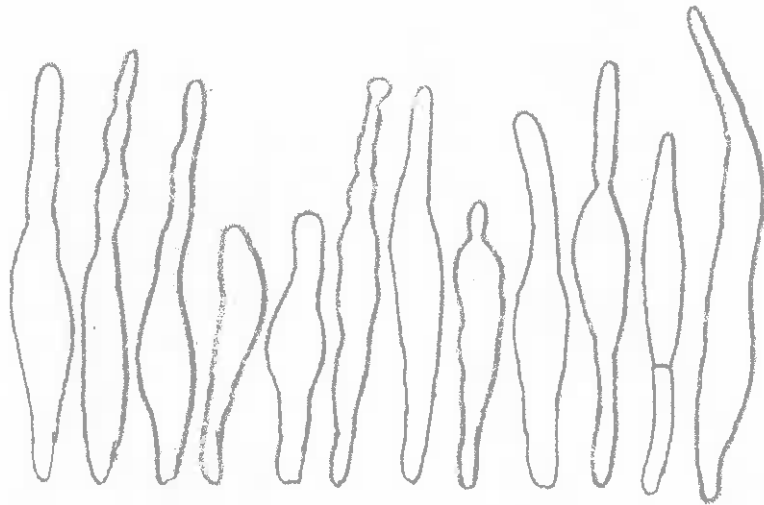
Spores ~~5.5-8 x 4.3-5 (5.3) μ~~ ^{6-8 x 4.5-5.5 μ} , ellipsoid in front view, slightly inequilateral in profile, smooth, wall thick, double, brownish in 2% KOH, color in deposit: "buckthorn brown." Basidia 26-32 x 6-7 μ , 4-spored, sterigmata stout. Pleurocystidia none; cheilocystidia ^{glutinous, tramal,} 33-56 x 5-9 μ , ventricose with a long neck, or at times more or less clavate and more rarely mucronate, obclavate to cucurbitiform. Gill trama subparallel, hyphae 4-9 μ broad, irregularly branched. Gill edges ^{at times} ~~never~~ gelatinous. Subhymenium a zone of narrow (3-5 μ), parallel hyphae. Pileus trama interwoven, much branched and with numerous septa. Cuticle a gelatinous zone (65-¹⁵⁰~~90~~ μ thick) with scattered, surface, more or less erect or repent hyphae of two types: (a) slender, long (60-140 x 3-4 μ), colorless, simple hyphae; (b) brownish, broader

(more)

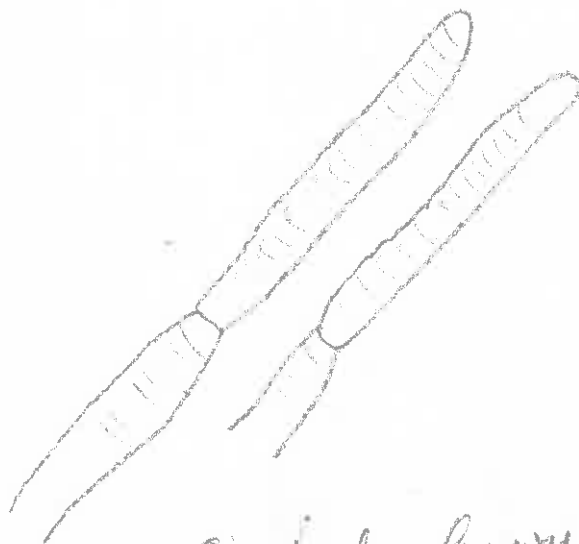
(4-10 μ) hyphae, some of which are lightly incrustated. Clamp connections none.

Smith (in his notes) describes clavate, capitate or subcapitate pilocystidia (end cells of epicuticular hyphae) which he says are curious, and found most frequently near the cap-margin.

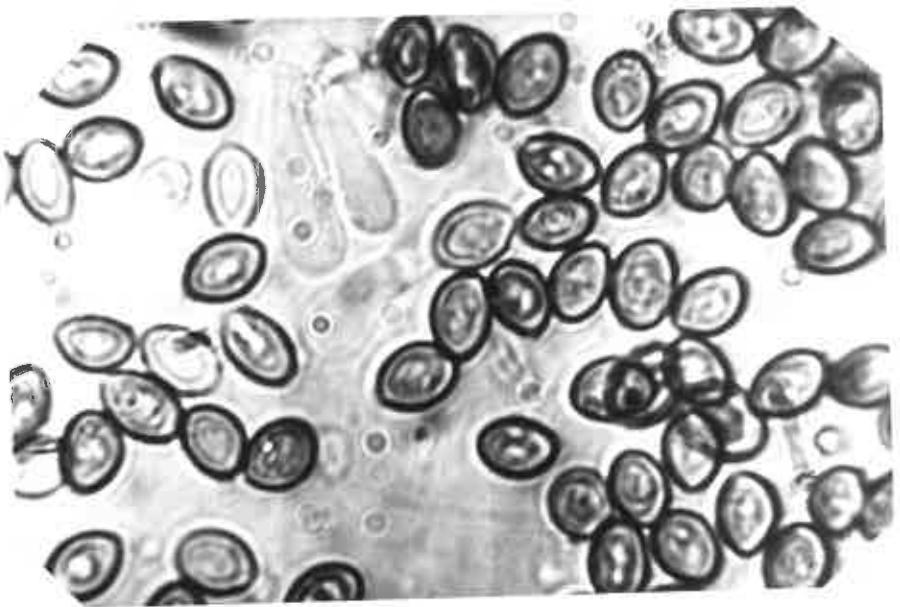
Gregarotus mollis
No. 19232



Ch - x 1000



Gregarotus brown,
lightly incriminated hyphae - x 1000



Crepidotus No. 19232 - Spores
mollis

21666

mollis
CREPIDOTUS FULVOTOMENTOSUS Pk.

Photo

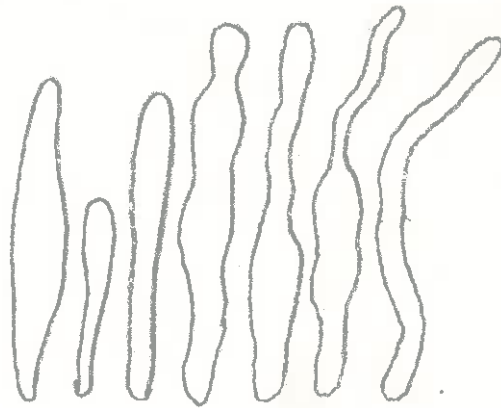
Pileus 7-17 mm. broad, convex-conchate to dimidiate, "chamois," densely brownish fibrillose, somewhat viscid, even. Context thin, tough, gelatinous-soft, pallid; odor and taste mild.

Lamellae radiating, broad, close, white at first, finally "pinkish buff" to near "cinnamon buff," edges fimbriate.

Stipe none, pileus laterally attached, white-villose at point of attachment.

Spores 7-9 (10) x 4.5-6 μ , ellipsoidal to subovoid, ends often pointed, smooth. Pleurocystidia none; cheilocystidia filamentous, cylindrical-clavate to ventricose, 25-55 x 3-7 μ . Gill edges at times gelatinous. Gill-trama slightly interwoven to subparallel. Pileus trama interwoven. Cuticle a gelatinous zone, with brown, incrustated, epicuticular hyphae.

No. 21666 *Crepidulus fulvotomentosus* PK.



Ch - x 1000



21666 - *Geopidatus fulvotomentosus* PK. - x 7/3
mollis

21847

mollis
CREPIDOTIS FULVOTOMENTOSUS Pk.

Cuticle an ixocutis 170-230 μ thick, the surface bearing pale to brownish tufts of hyphae (scales) which may be incrustated.

Spores (6) 7-9.5 x 4-6 μ , variable in size, smooth, ellipsoid.

24421

-mollis
CREPIDOTUS FULVOTOMENTOSUS Pk.

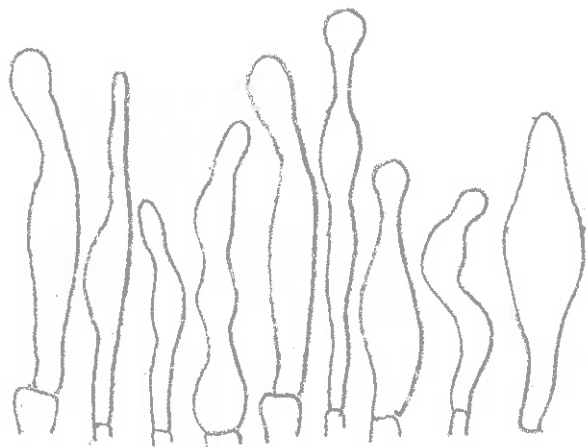
Pileus 1-2 cm., applanate, ^{brownish}~~tawny~~, with minute tufts of ^{tawny}~~brown~~, fibrillose scales, viscid, laterally attached, margin even. Context white, thin, pliant; odor and taste mild.

Lamellae radiating from a lateral point, tawny, crowded, medium broad, wavy, edges whitish, fimbriate.

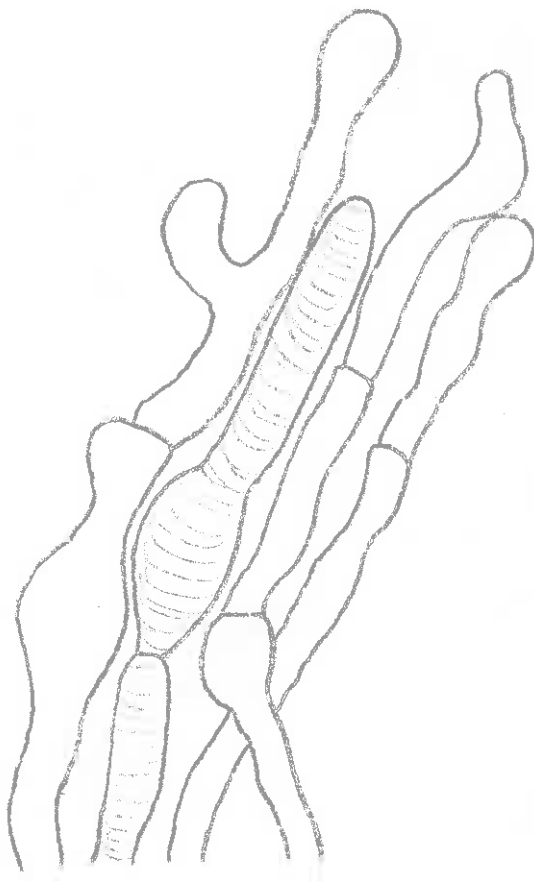
Stipe none, or rudimentary, short, ^{and disappearing}.

Spores 7.5-10 x 5-6 μ , ellipsoid, smooth, brown under 'scope. "Dresden brown" in deposit. Basidia 22-32 x 5-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 30-53 x 5-8 μ , of the tramal type, irregularly cylindric, ventricose, bottle-shaped, at times appendiculate, again more or less capitate, at times constricted. Gill trama subparallel, hyphae 6-12 μ broad. Subhymenium of compact, parallel hyphae extending parallel to the long axis of the gill. Pileus trama interwoven. Cuticle an ixocutis, the zone 180-300 μ thick, of loosely interwoven, gelatinous hyphae, the surface bearing scattered tufts of brown, ring-like encrusted hyphae which are irregularly-shaped, often constricted, and at times branched. Clamp connections none on epicuticular hyphae (scales) nor on tomentum at base of pileus.

Gepidostus No. 24421
fulvotomentosus PK.



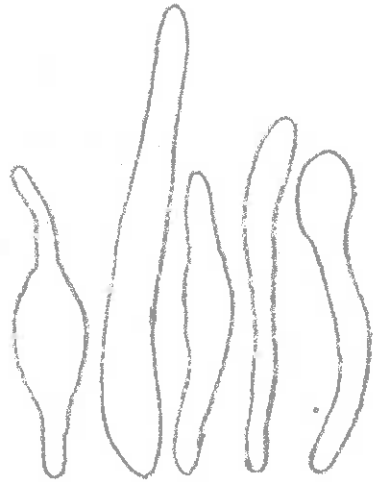
Framal Ch - $\times 1000$



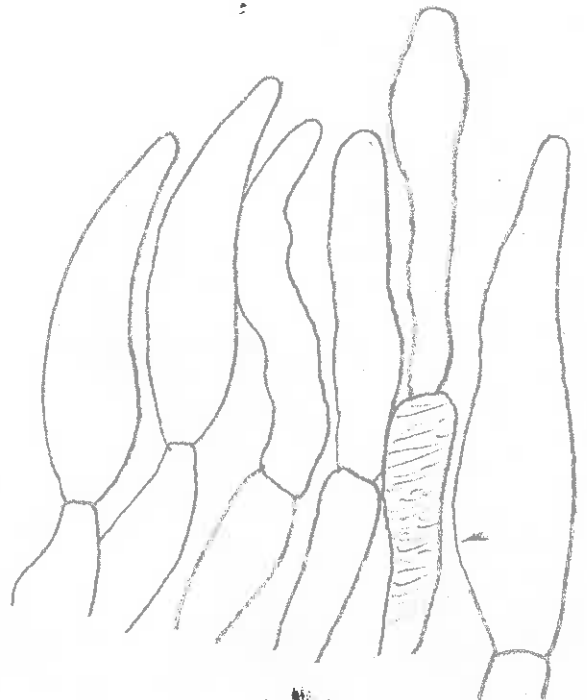
Scale elements - $\times 1000$

Crepidotus Paerens (Pk.) Sacc.

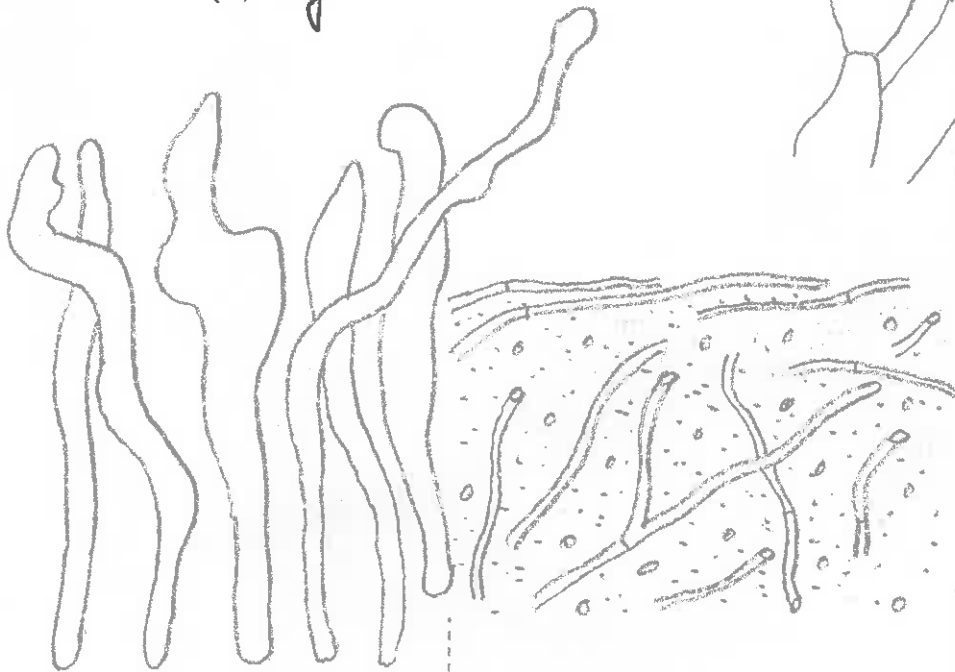
Type



(a) Regular Ch - x 1000



Hyphae of a scale -
x 1000



(b) Fruct. Ch - x 1000
from gelatinized
gill. edge

Spores - x 1000

CREPIDOTUS HARRIS (Pk.) Sacc.

= mollis

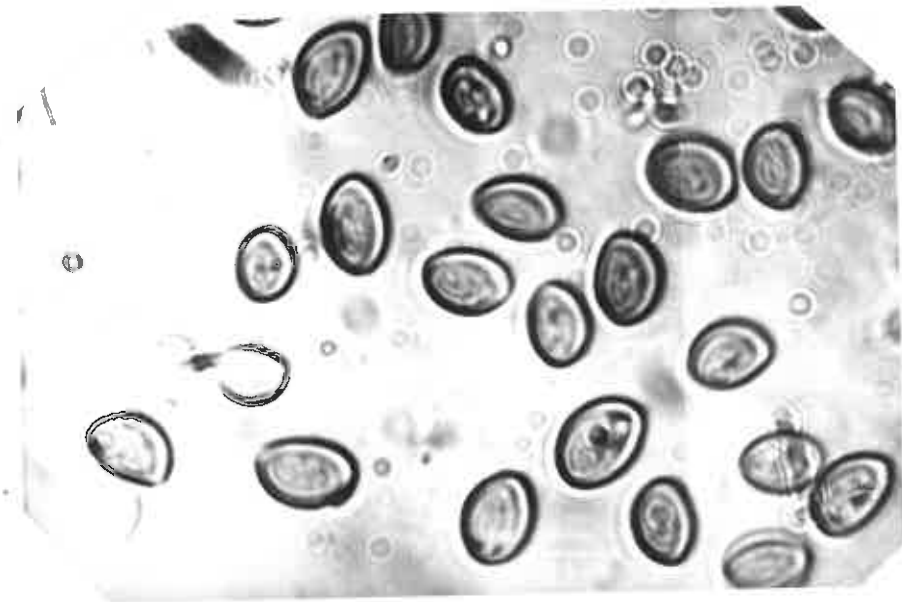
(from Albany, on decaying wood, Sept.)

TYPE

Spores 7-9 x 4.5-5.5 μ , ellipsoid in front view, slightly inequilateral in profile, smooth, brown under microscope. Basidia 20-26 x 5-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 40-100 x 3-10 μ , variable: (a) regular, clavate, obclavate, sub-capitate, fusoid, ventricose; (b) tramal, filamentous, often more or less crooked. Gill trama subparallel, hyphae 6-10 μ broad. Subhymenium of narrow (2-4 μ) parallel hyphae. Pileus trama interwoven. Cuticle a distinct ixocutis, 150-220 (400) μ thick, hyphae slender, irregularly disposed, imbedded in a gelatinous matrix. Scaled, sometimes found in the sections, are composed of brownish, septate hyphae, 5-12 μ broad, which may be incrustated. Hypodermium distinct. Clamp connections none.

Gill edges often gelatinous.

Peck describes the spores as 7.5-5 μ !



Crepidotus haerens Pk. - Spores of type

(= *mollis* (Fr.) Kummer)

11450

mollis (Fr.) Kummer.
CREPIDOTUS ~~HAERENS (Pk.) Sacc.~~

Spores (5.5) 6-8 x 4.5-5.5 μ , ellipsoid, smooth.
Basidia 22-27 x 6-7 μ , 4-spored. Pleurocystidia none;
cheilocystidia both tramal and hymenial, as usual. Gill
trama subparallel, often branched, hyphae 4-6 μ broad.
Pileus trama interwoven, branched. Cuticle a gelatinous zone,
100-400 μ wide, with brown incrustated hyphae, 5-15 μ broad.
Clamp connections none.

Some pilei seem to be devoid of brown, fibrillose
scales; in others brown fibrillose scales are conspicuous.

11548

mollis (Fr.) Kummer
CREPIDOTUS ~~HABRENS~~ (Pk.) Sacc.

Spores 7-8.5 x 4-5 μ , ellipsoid, smooth. Pleurocystidia none; cheilocystidia subventricose to nearly flask-shaped, 33-53 x 4-7 μ . Gill-trama parallel or subparallel. Cuticle an ixocutis, with individuals or small clusters of brown, incrustated hyphae.

Agrees with the type.

Pepidostus laevis (Pk.) Aacc.

No. 11548



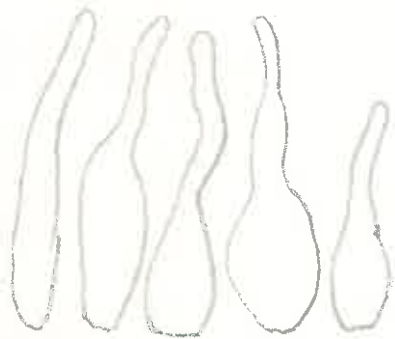
Ch. x 1000

17475

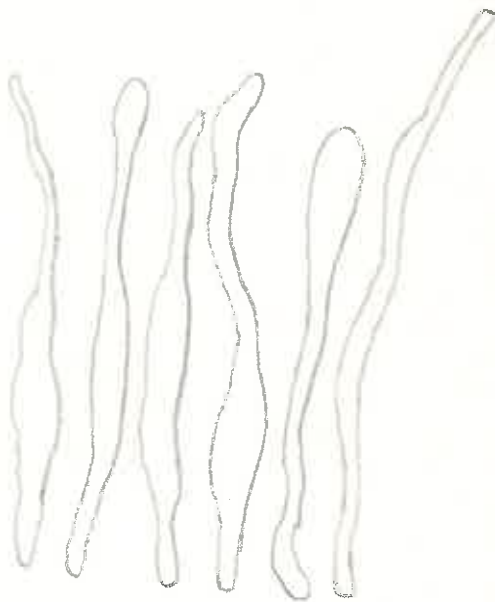
mollis (Fr.) Kummer
CREPIDOTUS ~~HAERENS~~ (Fr.) Sacc.

Spores and other characters agree with the type,
including the cuticle which is an ixocutis, 150-220 μ thick,
with a conspicuous hypodermium. ~~The~~ ~~for~~ All pilei
have a moderate number of brown fibrillose
scales, seen under lens.

Pepidotas Murrill - F 19240
mollis



Ch (hymenial) - x 1000



Ch (trawl) - x 1000

20950

mollis (Fr.) Kummer
CREPIDOTUS ~~HABRENS~~ (Fr.) Sacc.

Pileus 1-3 cm. broad, sessile, laterally attached, flat, dimidiate, glabrous, viscid, hygrophanous, cuticle separable, white (dry), watery brown (wet), striatulate. Context thin, white; odor and taste mild.

Lamellae radiating, ventricose, subdistant, rather broad, white then "sage brown," edges fimbriate.

(9)
Spores 6-8.5[^] x 4.5-5.5 μ , smooth, ellipsoidal, color in mass: "olive brown" or "cinnamon-brown", Basidia 24-29 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia clustered, mostly clavate, 20-35 x 4.5-5.5 μ . Cuticle an ixocutis, a gelatinous zone 180-240 μ thick; hypodermium distinct. ^{Brown hyphae present.} Gill-trama subparallel, tending toward pseudoparenchyma. Subhymenium of parallel hyphae, 15-22 μ thick. Clamps none.

mollis (Fr.) Kummer

CREPIDOTUS ~~HAERENS~~ (Pk.) Sacc.

(H-25686)

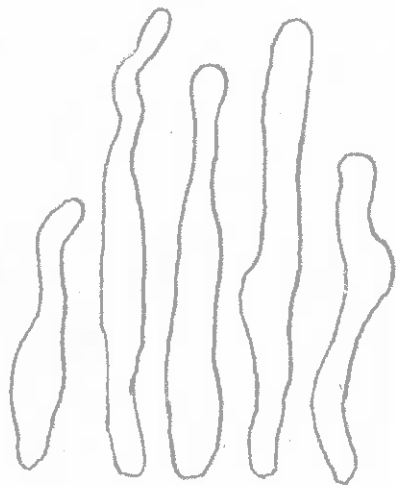
On sycamore log, near Cherokee, N.C., July 11, 1963.

Pileus white, with a few obscure brownish, more or less appressed fibrils.

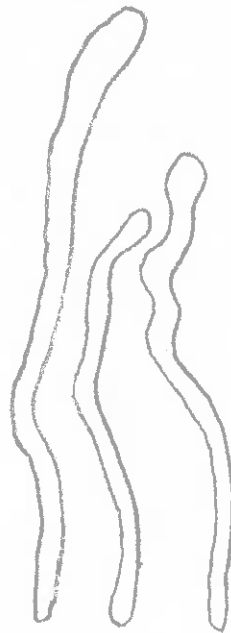
Lamellae broad, close, edges fimbriate.

Spores 7-9 (10) x 5-6 (6.5) μ , ellipsoid, smooth. Basidia 28-34 x 6-7.5 μ , 4-spored. Pleurocystidia none; cheilocystidia of two types: (1) hymenial, 38-60 x 6-8 μ , flask-shaped, to irregularly cylindric; (2) tramal, 70-105 x 4-6 μ , filamentous, apices often more or less enlarged, gelatinous. Gill trama of irregularly branched hyphae. Pileus trama similar to gill trama. Cuticle a gelatinous zone, 170-240 μ thick, bearing colorless and brown hyphae on the surface, the brown ones repent or erect, some incrustated. Clamp connections none.

mollis (Fr.) Kummer
Rapidatus ~~*laevius* (Pk.) Aacc.~~
(H - 25686)



Hymenial Ch - x 1000



Fractal Ch - x 1000

mollis (Fr.) Kummer

CREPIDOTUS ~~HAERENS (Pk.) Sacc.~~

(H-25764)

Pileus pallid, appearing glabrous but with sparse, scattered brown fibrillose scales, viscid, shining when dried, striate.

Lamellae narrow, medium close, edges gelatinous.

Spores 7-9 x 5-6 μ , ellipsoid, inequilateral in profile, smooth. Basidia 24-32 x 6-7 μ , 2-4-spored. Pleurocystidia none; cheilocystidia typical. Ixocutis 140-230 μ broad. Epicuticular hyphae brown, incrustated, 5-11 μ broad. Clamp connections absent.

CREPIDOTUS MOLLIS (Schaeffer) Fr.

Pilat, No. 23489, from Prague Nat'l. Museum, from Maryville, Washington, coll. Y. M. Grant, Sept. 1926.

Pileus nearly glabrous to fibrillose-scaly, scales brownish.

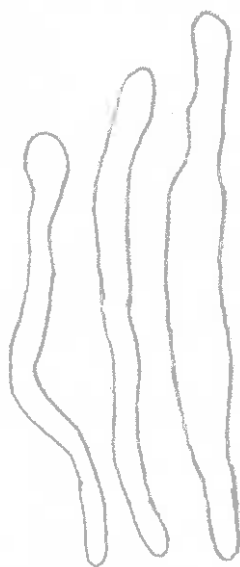
Lamellae narrow, close, edges in some gelatinous.

Spores 7.5-9.5 (10-11) x 5-6 (7) μ , ellipsoid, inequilateral, smooth. Basidia 24-34 x 6-8 μ , 4 (rarely 2)-spored. Pleurocystidia none; cheilocystidia tramal and gelatinous: 55-71 x 4-7 μ , filamentous to subclavate with a neck, hymenial 33-46 x 6-9 μ , clavate, nine-pine, or subfusoid-ventricose. Gill trama of short cells, hyphae subparallel to slightly interwoven, 5-12 μ broad. Pileus trama interwoven. Cuticle a gelatinous zone 200-280 μ thick, hyphae 3-4 μ broad, surmounted by scattered tufts of brown, incrusting hyphae 5-9 μ broad. Clamp connections none.

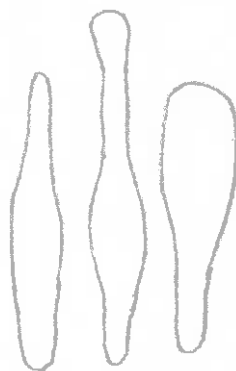
This is mollis, with some pilei nearly glabrous, others rather densely fibrillose.

Orepidotus mollis (Schaeffer) Fr.

Pilat No. 23489 (U.S.A. - Washington)



Ch (trawl) - $\times 1000$



Ch (hymenium) - $\times 1000$

CREPIDOTUS MOLLIS (Schaeffer)

Pilat, No. 193926, ex-herb. Kryptog. Musei
Bohemiae Pragae, leg. K. Cejp, det. A. Pilat,
Aug. 26, 1928.

Pileus nearly glabrous to brownish fibrillose-scaly.

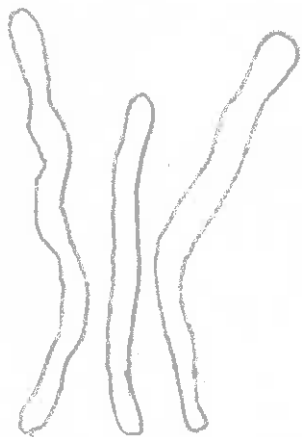
Lamellae close, broad, edges at times gelatinous.

Spores (6) 7-9 x 4.3-5.5 μ , ellipsoid, inequilateral, smooth.
Basidia 27-32 x 6-7 μ , 4-spored. Pleurocystidia none; cheilo-
cystidia tramal, 44-62 x 3-5 μ , filamentous, hymenial 39-55 x
7-8 μ , fusoid-ventricose, clavate with a neck. Gill trama, pileus
trama, subhymenium all as usual. Cuticle a gelatinous zone 90-200 μ
thick bearing tufts of brownish, incrusting hyphae 5-8 μ broad.
Clamp connections none.

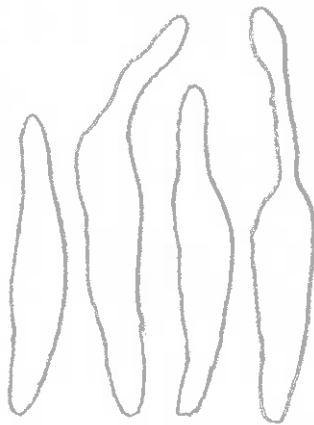
Gepidolus mollis (Schaeffer)

Pilat No. 193926

from Bohemia



Ch (anamal) - x 1000



Ch (hymenial) - x 1000

CREPIDOTUS MOLLIS (Schaeffer) Fr.

ex. Herb. Kryptogamologicum Musei Nationalis Pragae-from A. Pilat.

No. 20565, leg. & det. Pilat, from Czechoslovakia. Spores 7-9 (11) x 4.5-5.5 (6) μ , ellipsoid, smooth. Other characters as usual.

No. 149083, leg. & det. J. A. Herink, Bohemia, Aug. 13, 1943. Spores 7-9.5 x 5-6 μ . Other characters as usual.

No. 23487, leg. & det. Pilat, from Czechoslovakia, Aug. 1934. As usual, except more densely scaly than other coll. seem. Spores 7-9.5 (10.5) x 5-6 μ .

No. 23496, leg. & det. Pilat, Czechoslovakia, Aug. 1934. Same as others except that the gills are medium broad to broad.

No. 23503, leg. & det. Pilat, from Czechoslovakia, Aug. 1934. Same as others except pileus densely scaly as in "fulvotomentosus" and "calolepis"; gills medium broad.

CREPIDOTUS MOLLIS (Schaeffer) Fr.

ex. Herb. Kryptogamologicum Musei Nationalis Pragae-from A. Pilat.

No. 20565, leg. & det. Pilat, from Czechoslovakia. Spores 7-9 (11) x 4.5-5.5 (6) μ , ellipsoid, smooth. Other characters as usual.

No. 149083, leg. & det. J. A. Herink, Bohemia, Aug. 13, 1943. Spores 7-9.5 x 5-6 μ . Other characters as usual.

No. 23487, leg. & det. Pilat, from Czechoslovakia, Aug. 1934. As usual, except more densely scaly than other coll. seem. Spores 7-9.5 (10.5) x 5-6 μ .

No. 23496, leg. & det. Pilat, Czechoslovakia, Aug. 1934. Same as others except that the gills are medium broad to broad.

No. 23503, leg. & det. Pilat, from Czechoslovakia, Aug. 1934. Same as others except pileus densely scaly as in "fulvotomentosus" and "calolepis"; gills medium broad.

GREPIDOTUS MOLLIS (Fr.) Kummer

ex. Mich-Herb: leg. Chas. Barrows, det. A.H. Smith as C. fulvotomentosus, on rotten aspen log, 8000 ft., near Santa Fe, N. Mex., 1955.

Pileus densely tawny fibrillose to scaly.

Lamellae narrow, close, edges gelatinous.

Spores 7-9 x 5-6 μ , ellipsoid to subvoid, smooth, wall double, brown. Basidia 27-33 x 6-8 μ , 4-spored. Pleurocystidia none; cheilocystidia 38-63 x 4-8 μ , of tramal origin, gelatinous, filamentous to cylindric-subventricose. Gill trama parallel to subparallel, hyphae 4-7 μ broad. Pileus trama interwoven. Cuticle a gelatinous zone 120-170 μ thick, surmounted by brown, incrustated hyphae, 4-9 μ broad, singly or in tufts (forming scales). Clamp connections none.

C. mollis has narrow gills; C. fulvotomentosus broad gills. Pilat would doubtless call this C. mollis var. calolepis.

CREPIDOTUS MOLLIS (Schaeff. ex Fr.) Kummer

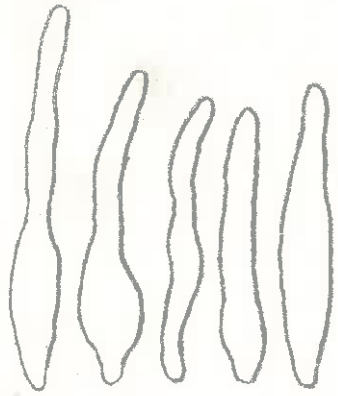
D. A. Reid & M. A. Donk, Burnham Beeches, Buehs.,
on beech, 6.10.57, from Kew Herb.

Spores 7-9 (10) x 4.5-5.5 μ , ellipsoid in face view, slightly inequilateral in profile, smooth, brownish in 2% KOH, wall double. Basidia 23-27 (30) x 5-6 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 36-50 x 4-9 μ , subcylindric, fusoid, ventricose, bottle-shaped and with a long neck. Gill trama subparallel, hyphae 4-9 μ broad. Subhymenium of parallel, narrow hyphae. Pileus trama interwoven, hyphae 5-12 μ broad. Cuticle an ixocutis—hyphae gelatinous, interwoven, narrow (1.5-2 μ broad), bearing on the surface hyphae 3-6 μ broad, more or less repent but, at intervals, clusters (tufts) of pale fuscous ^(some incrusted) or colorless erect hyphae forming the scales (seen under a lens). Hypodermium distinct. Clamp connections none.

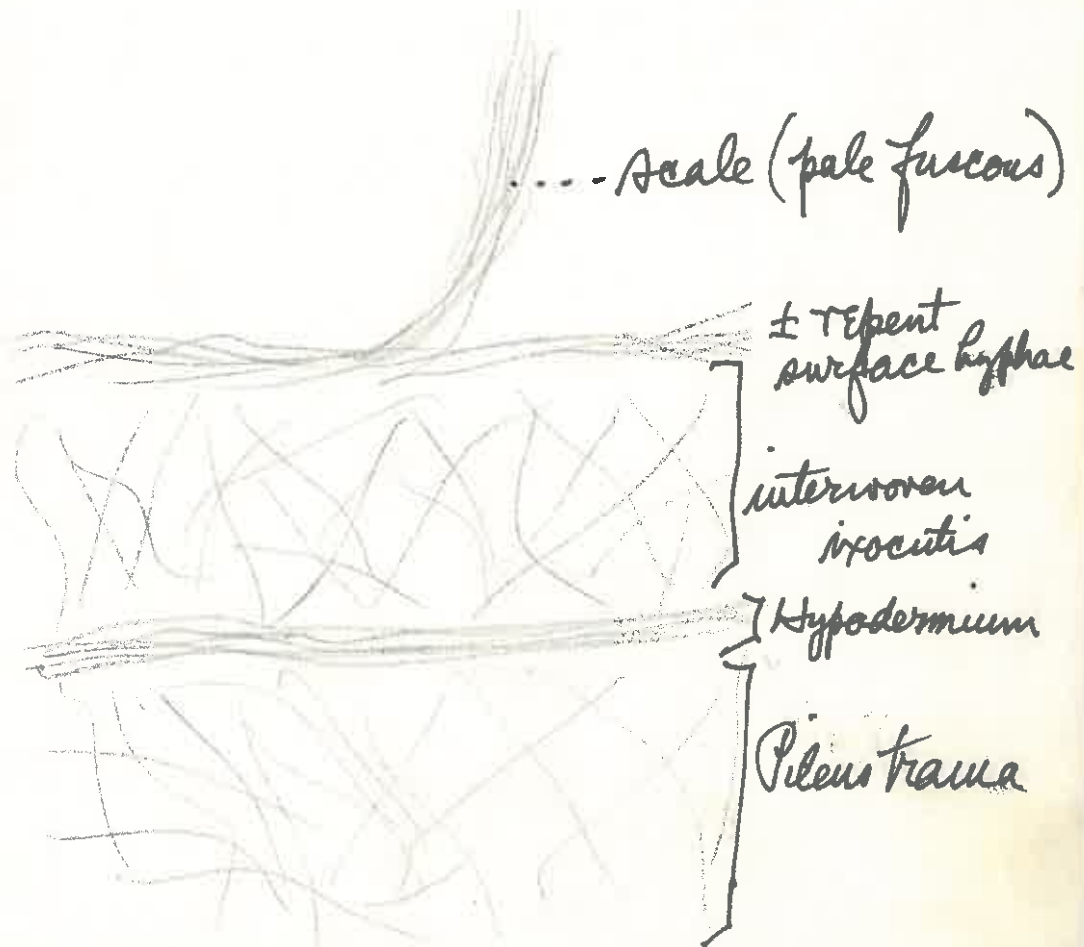
The gelatinous cuticular zone is 300-470 μ thick, and occupies at least half the pileus thickness. Occasionally the gill-edges are gelatinous.

The pileus shows scattered, moderately numerous brown, more or less erect fibrillose scales.

Orepidotus mollis (Schaeff. ex Fr.) Kummer
Kew Herb: D.A. Reid + M.A. Donk, 6.10.57



Ch - x 1000



GREPIDOTUS MOLLIS (Fr.) Kummer

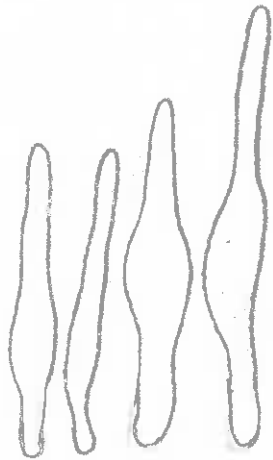
No. 14465, on *Populus tremula*, near Stockholm, July 21, 1918,
wide Albert Pilat.

Spores 6-8 (9) x 4.5-5.5 μ , ellipsoid, smooth.

Pleurocystidia none; cheilocystidia irregularly cylindric, clavate, subventricose, 33-52 x 4-8 μ . Gill-trama of large, short cells. Subhymenium of narrow, parallel hyphae. Surface of pileus: (1) an outer, thin, brownish zone, at times bearing more or less erect hyphae or clumps of hyphae (scales), some of which are incrustated; (2) a gelatinous zone, 80-200 μ thick; (3) an opaque, narrow zone—hypodermium.

Crepidotus mollis (Fr.) Kummer

No. 14465, on Populus tremula, near Stockholm,
Sweden, July 21, 1918. vide Albert Pilat



Ch - x 1000

CREPIDOTUS MOLLIS (Schaeff. ex Fr.) Kummer

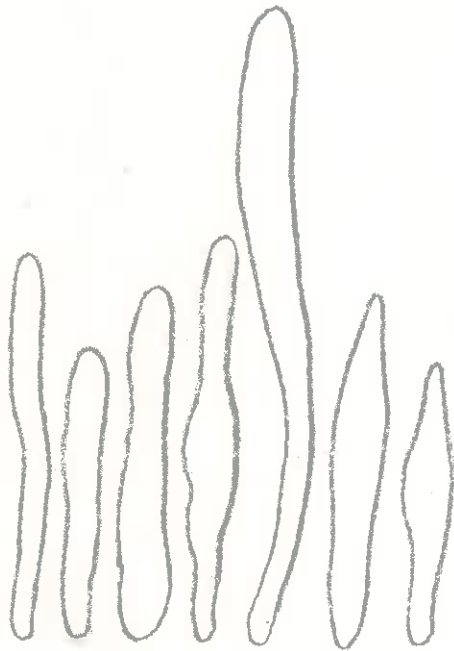
(No. 907, on fallen elm trunk, Goteborg, Seth
Lundell & J. A. Nannfeldt, Fungi Exsiccati
Suecici Praesertim Upsaliensis. 1.X.1937
(borrow from Universitetets Botaniske Museum,
Copenhagen).

7

Spores ~~7-5~~-9.5 x 5-5.7 μ , ellipsoid in face view,
inequilateral in profile, smooth. Basidia 22-28 x 5-7 μ ,
2-4-spored. Pleurocystidia none; cheilocystidia 38-52 x
4-8 μ , cylindric, clavate or ventricose, frequently gelatinized
(some gill edges gelatinized), and then tramal and up to
82 x 6 μ . Gill trama subparallel, hyphae 4-6 μ broad. Pileus
trama interwoven. Cuticle a broad (¹⁵⁰~~300~~-400-600 μ), gelatinous
zone, the hyphae interwoven, 3-5 μ broad, with scattered
clusters of colorless, repent to semi-erect hyphae 3-11 μ broad.
Clamp connections none.

Crepidulus mollis

No. 907, Findell + Naunfeldt, Upsala. (Borrowed
from Copenhagen Museum)



Ch - x 1000

CREPIDOTUS MOLLIS

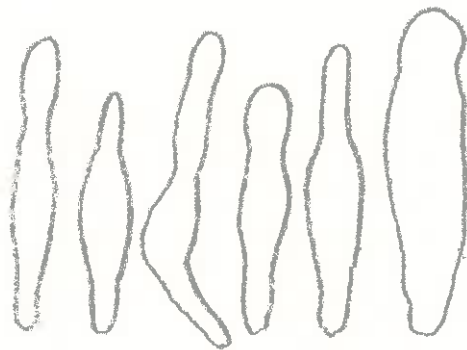
On Fraxinus, near Fort William, Scotland,
28.8.56, coll. Dr. S. Boths.

Spores 7-9 (10) x 4.5-5.5 μ , smooth, (as others). Basidia 26-30 x 5-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 32-43 x 5-10 μ , ventricose, clavate, sub-bottle-shaped. Some gill-edges gelatinous. Gill trama subparallel, hyphae 6-10 μ broad. Subhymenium of parallel, narrow hyphae. Pileus trama interwoven. Cuticle a gelatinous zone, surface hyphae rusty brown, often in erect tufts—scales, these hyphae often incrustated. Hypodermium distinct. Clamp connections none.

Pilat would call this C. mollis var. calolepis (Fr.)
Pilata. The pileus has appressed, flat, brown squamules.

Orepidotus mollis

On Fraxinus, near Fort William, Scotland,
28.8.56. coll. A. S. Both



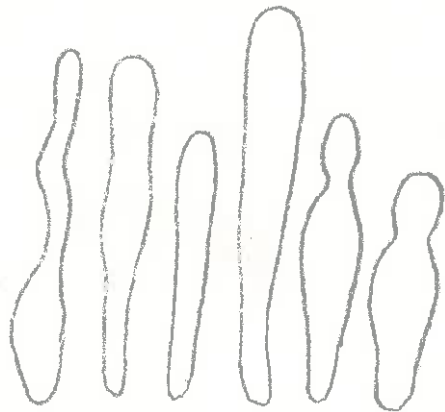
Ch - x 1000

CREPIDOTUS MOLLIS (Schaeff. ex Fr.) Kummer

On ash, Killiecrankie, Scotland, D. A. Reid, 26/8/53,
Kew Herb.

Spores 7-9.5 x 4.5-5.5 μ , ellipsoid in face view, slightly inequilateral in profile, smooth, brownish in 2% KOH. Basidia 25-30 x 5-6 μ , 4-spored. Pleurocystidia none; cheilocystidia 30-52 x 5-7 μ , clavate to ventricose, or bottle-shaped. Gill trama interwoven, hyphae 6-14 μ broad. Subhymenium of narrow (3-6 μ) parallel hyphae. Pileus trama interwoven, hyphae 5-12 μ broad. Cuticle a zone, 130-200 μ thick, occupying about 1/6 of the pileus flesh, of gelatinous hyphae 2-3 μ broad, with some surface hyphae more or less repent, at intervals clusters of hyphae erect—as scales. Hypodermium distinct. Clamp connections none.

Grepidotus mollis (Schaeff. ex Fr.) Kummer
D.A. Reid, on ash, Killiecrankie, Scotland,
26/8/53, Kew Herb.



Ch - x 1000

CREPIDOTUS MOLLIS (Fr.) Kummer

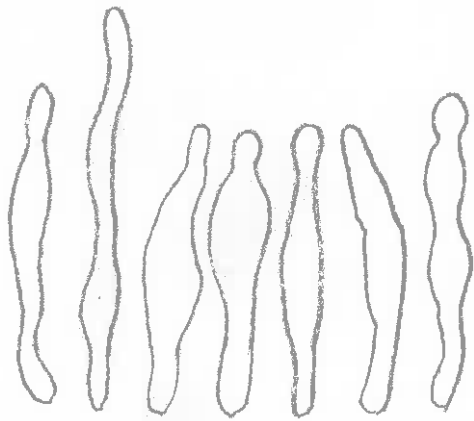
Coll. H. R. D. 19.10.11. Ilston Valley, Gower,
Glam., Kew Herb.

Spores 7-9 (10) x 4.5-5.5 (6) μ , smooth (as in others).
Basidia 24-28 x 5-6 μ , 4-spored. Pleurocystidia none; cheil-
ocystidia 37-53 x 3-8 μ , cylindric, clavate, to ventricose.
Gill trama subparallel, hyphae 4-6 μ broad. Pileus trama
interwoven. Cuticle a gelatinous zone 375-500 μ thick,
occupying $2/5-1/2$ the pileus flesh, with more or less erect
or repent hyphae, some incrusted, with scattered tufts of
fuscous hyphae—scales, some of which are incrusted. Clamp
connections none.

The pilei are with densely brownish, more or less erect
fibrillose scales.

Pepidotus mollis (Fr.) Kummer

Coll. H.R.D. 19.10.14. Ilston Valley, Gower. Glam.
Kew Herb.



Ch - x 1000

CREPIDOTUS MOLLIS (Fr.) Kummer

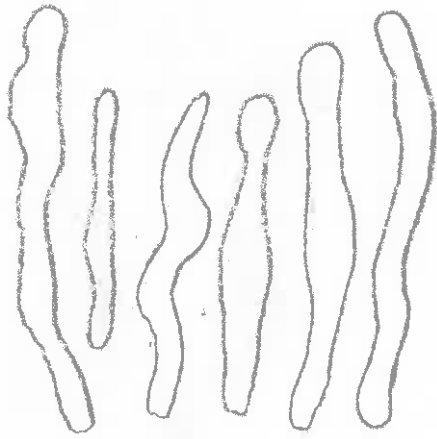
R. W. G. Dennis, coll. on fallen beech trunk,
Norbury Park, Mickleham, Surrey, 4.11.45, Kew
Herb.

Spores 8-9.5 (10) x 5-5.5 (6) μ , ellipsoid in front view, slightly inequilateral in profile, smooth, brownish in 2% KOH. Basidia 25-28 x 5-6 (7) μ , 4-spored. Pleurocystidia none; cheilocystidia 35-57 x 3-7 μ , filamentous, clavate, ventricose, at times irregular and somewhat capitate. Gill trama interwoven, hyphae 6-12 μ broad. Pileus trama interwoven. Cuticle a gelatinous zone 250-400 μ thick, 1/4 to 1/2 the thickness of the pileus, with more or less repent surface hyphae, at times aggregated into more or less erect scales. Hypodermium distinct. Clamp connections none.

Occasionally the gill edge is gelatinized. The pileus has scattered, brownish, fibrillose, more or less erect scales.

Orepidotus mollis (Fr.) Kummer

R.W.G. Dennis, Norbury Park, Mickleham, Surrey.
H. 16-45



Ch - x 1000

CREPIDOTUS MOLLIS (Fr.) Kummer

(Bas-9607; H-26101)

On dead Populus, leg. Maas Geesteranus, det. Bas, Nov. 29, 1953.

Pileus fan-shaped, without stipe, up to 52 mm wide and 34 mm long. Very pale brownish-yellowish, sometimes with a hyaline bluish grey margin, thinly tomentose (especially near margin) on a subviscid background; cap margin at first involute.

Gills at first whitish to pale greyish-brownish, then rather dark grey-brown, up to 7 mm wide, thin, edge slightly granular.

Spores 7.5-9.5 x 5-5.5 μ , ellipsoid, smooth. Pleurocystidia none; cheilocystidia: (a) tramal, 60-88 x 4-5 μ , filamentous, (b) hymenial, 30-45 x 4-7 μ , cylindric to ventricose or fusoid. Gill trama subparallel hyphae 3-7 μ broad, at times irregularly branched, cells 5-9 μ broad. Pileus trama interwoven. Cuticle a gelatinous zone, 250-310 μ broad, bearing clusters of brown hyphae, only a few incrustated, mostly faintly so. Clamp connections none.

CREPIDOTUS MOLLIS (Fr.) Kummer

(Bas-10185; H-26102)

Leg. Geesteranus, Holland, Oct. 16, 1954, on Populus.

Pileus cream to yellowish-brownish, minutely arachnoid-fibrillose, base whitish-pubescent, viscid.

Lamellae pale greyish-brown.

Spores and other microscopic characters as in Bas-9607
(= H-26101).

mollis (Fr.) Kummer

CREPIDOTUS ~~UBER (Berk. & Curt.) Sacc.~~

Murrill-F 19240, on hardwood log, Planera Hammock, Florida,
leg. West, Arnold, & Murrill, Oct. 21, 1938; det. by Murrill
as C. mollis.

Pileus 1-2.5 cm broad, flabelliform to orbicular,
appearing glabrous but with a few, scattered, brownish,
fibrillose tufts.

Lamellae medium broad, medium close to nearly sub-
distant, edges more or less gelatinous.

Stipe none.

Spore 6.3-8 (9) x 4.5-5.5 μ , ellipsoid, inequilateral,
smooth. Basidia 19-24 x 5-7 μ , 4-spored. Pleurocystidia
none; cheilocystidia of two types: (1) hymenial: 28-40 x
7-13 μ , bottle-shaped or flask-shaped, with a slender neck;
(2) tramal: gelatinous, filamentous, slender fusiform, or
slender bottle-shaped, 60-80 x 3-8 μ . Gill trama subparallel,
hyphal cells large (22-65 x 8-20 μ). Pileus trama of two
general zones: (1) the inner one-fourth ^{at base} densely interwoven ^{and not gelatinous;}
(2) the outer ^{or more} three-fourths ^{interwoven} loosely organized and gelatinous. ^{the surface}
Cuticle not strongly differentiated, bearing a few scattered
tufts of brown incrusted hyphae, 5-8 μ broad. Clamp connections
none.

At the base of the pileus there is a brownish tomentum
composed of hyphae, 3-5 μ broad, which are colorless under
the microscope. A few clamp connections were found on these
hyphae.

CREPIDOTUS MOLLIS (Schaeffer) Fr. var. CALOLEPIS (Fr.) Pilat

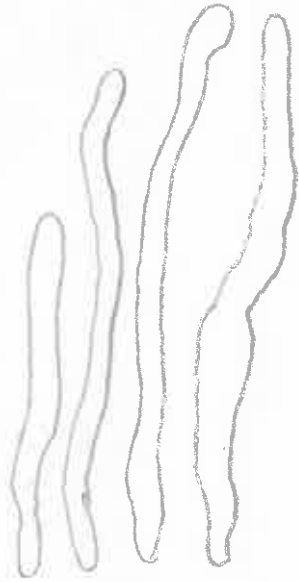
Pilat No. 23453, on Populus tremula, leg. Seth Lundell, Upsala, det. Pilat. (Lundell labelled it C. calolepis (Fr.), June 8, 1934.)

Pileus densely brownish fibrillose-scaly.

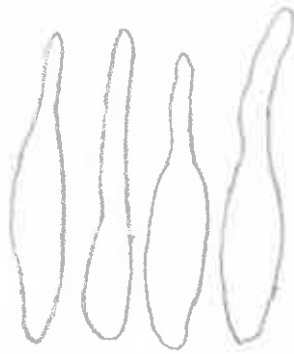
Lamellae narrow to medium broad, close.

Spores 7-9.5 x 5-6 μ , ellipsoid, inequilateral in profile, smooth. Basidia 25-31 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia tramal, 48-74 x 3-7 x 3-4 μ , filamentous, hymenial 37-42 x 6-8 x 3-4 μ , bottle-shaped, subfusoid, usually with a neck. Gill trama of short cells, hyphae more or less interwoven. Subhymenium of narrow, parallel hyphae. Pileus trama interwoven. Cuticle a gelatinous zone 100-230 μ thick, of narrow, interwoven hyphae, bearing brown, incrustated hyphae in tufts. Clamp connections none.

Pepidotus mollis var *calolepis* (Fr.) Pilat
Pilat - 23453



Ch (traumat) - $\times 1000$



Ch - hymenial - $\times 1000$

CREPIDOTUS MOLLIS (Fr.) Kummer var. ALVEOLUS (Fr.) Quél

(Bas-961; H-26103)

Leg. Leenhouts, Holland, on Populus, Sept. 5, 1952, det.

Maas Geesteranus.

Pileus reniform, ochraceous yellow-brown, glabrous, with a thick gelatinous separable cuticle, base whitish-pubescent.

Lamellae pale brown, rather thick, crowded, edges entire, concolor.

Stipe none.

Spores 7.5-10 x 5-6 μ , ellipsoid, smooth. Pleurocystidia none; cheilocystidia as in mollis. Gill trama subparallel, at times irregularly branched. Pileus trama interwoven. Cuticle a gelatinous zone, 60-180 μ thick, differing from mollis in being much more dense, dingy-grayish. Epicuticular hyphae brown, 4-9 μ broad, some incrusted. Clamp connections absent.

This differs from mollis in the much denser ixocuticle. Although Bas' notes say "glabrous," a lens shows brown fibrils (often as squamules), and sections (under the microscope) show scattered (in older pilei) to dense clusters of brown hyphae (in young pilei).

CREPIDOTUS MOLLIS var. CALOLEPIS (Fr.) Pilat

No. 3644, Kew Herb., Haslemere, Oct. 1913. Det.
Rev. Dr. Albert Pilat, Sept. 18, 1948.

Spores 7-9 (10) x 5-6 μ , ellipsoid in front view, slightly
inequilateral in profile, smooth. Basidia 24-28 x 5-6 μ , 4-spored.
Pleurocystidia none; cheilocystidia 34-56 x 4-8 μ , ventricose to
subcylindric, ⁽⁸⁰⁾ *some tramal on gelatinous gill-edges.* Gill trama interwoven, hyphae 6-12 μ broad.
Subhymenium parallel. Pileus trama interwoven. Cuticle a
gelatinous zone 150-250 μ thick, the surface with rusty brown
incrusted hyphae, often clustered to form scales. Hypodermium
distinct. Clamp connections none.

The scales on the pileus are flat, appressed.

Crepidatus mollis var. *calolepis* (Fr.) Pilat
No. 3644 Kew Herb., from Haslemere, Oct. 1913..
~~Edinburgh, 18th 1878.~~ Det. by Pilat,
Sept 18, 1948



Ch - x 1000

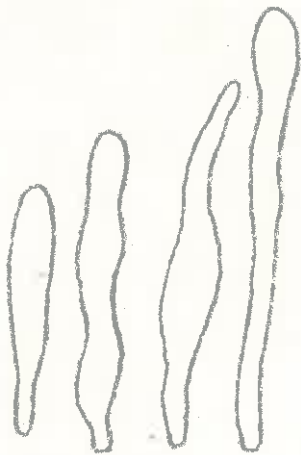
219 CREPIDOTUS MOLLIS var. CALOLEPIS (Fr.) Pilat

on Populus tremula, from Sweden, Sept. 15,
1935, vide Pilat.

Spores 8-10 (11) x 5-6 (7) μ , ellipsoid, smooth.

Pleurocystidia none; cheilocystidia ventricose, clavate,
33-60 x 3-7 μ . Gill-trama of subparallel hyphae; subhymenium
of narrow, parallel hyphae. Cuticle: (1) brown, surface
zone, of more or less erect hyphal clusters, hyphae with
incrustations, cells 6-18 μ broad; (2) below this zone a
gelatinous zone 300-700 μ thick, of interwoven, colorless
hyphae, 3-5 μ broad; (3) an opaque narrow zone, the hyphae
more or less tangentially parallel—the hypodermium.

Pepidotus mollis var. *calolepis* (Fr.) Pilat
No. 219, from Sweden



Ch - $\times 1000$