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November 2013

Agrocybe Notebook 1

L. R. Hesler

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AGROCYBE HOWEANA (Pk.) Singer

Agaricus (Stropharia) howeanus Pk., Buffalo Soc. Nat. Sci. Bull. 1:53. 1873.

Pholiota howeana (Pk.) Pk., New York State Mus. Bull. 122:147. 1908.

(Peck's Deser., Bull. 122)

Pileus 2.5-7.5 cm broad, convex, becoming nearly plane, subumbonate, yellowish, sometimes darker in the center, smooth. Context fragile; taste bitter (acc. to Smith's notes) (also Overholts, Ann. Mo. Bot. Garden 14:110)

narrow (see Peck's Key, Bull. 122)

Lamellae rounded behind, thin, close, whitish becoming ferruginous brown, edges eroded.

Stipe 5-10 cm long, 4-8 mm thick, concolorous with the pileus, equal or slightly thickened at the base, glabrous, hollow. Annulus fugacious (see Peck's Key, Bull. 122:142) (but Overholts reports persistent annulus; Notes on Type (by Hesler) Smith says collapsing, membranous, evanescent.)

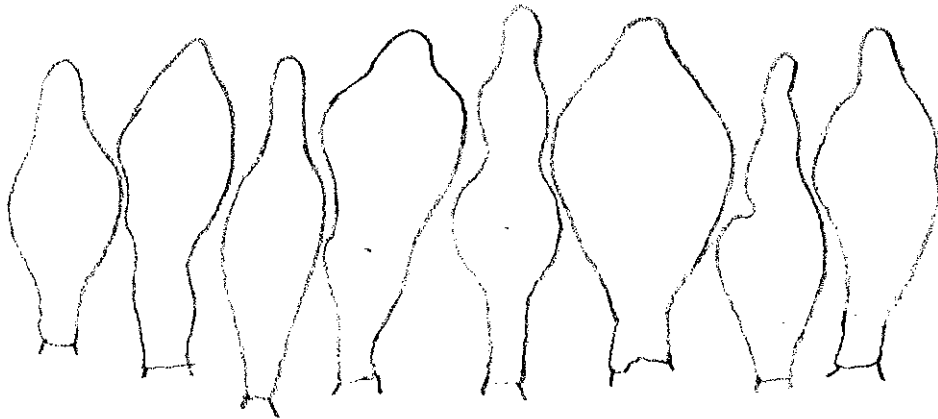
Spores 8-10 x 5-6 μ , ellipsoid or often subovoid, wall thick, apices truncate, smooth, yellowish-brown in 2% KOH. Pleurocystidia 38-50 x 12-24 μ , ventricose, more or less stipitate, conspicuous, rather abundant, cheilocystidia 18-38 x 8-14 μ , similar, sparse. Pileus cuticle of one to two layers of cells, dry. Stipe cuticle of dry, repent hyphae.

Type, leg. C. H. Peck, Center, Albany County, New York. Overholts (1924) adds that the pileus may be yellowish-brown, sometimes slightly lighter and rugulose when mature, margin even; lamellae sinuate-adnate or when young with a decurrent tooth, edges paler; veil forming a conspicuous, persistent, superior annulus; spores 8-10 x 4.5-5.5 μ , truncate. Also, Kauffman (1918) reports it from Michigan, and says it approaches Peck's P. temnophylla. Peck (1908), in his key (p. 142), separates the two,

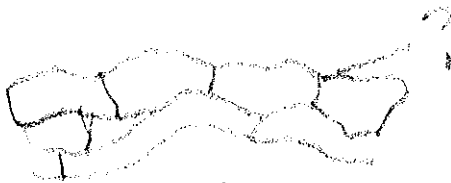
stating that in howeana the annulus is fugaceous, the lamellae narrow; in temnophylla the annulus is persistent, the lamellae very broad. Peck also thinks temnophylla approaches Pholiota praecox.

Agaricocybe roweana (Pk.) Sing. ✓

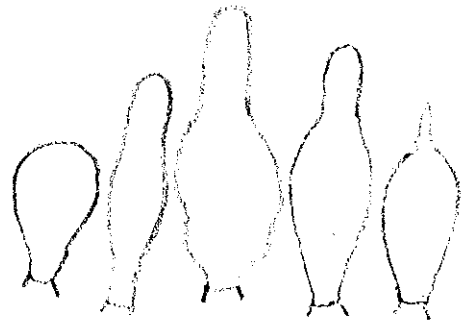
[Type: *Agaricus roweanus* Pk.]



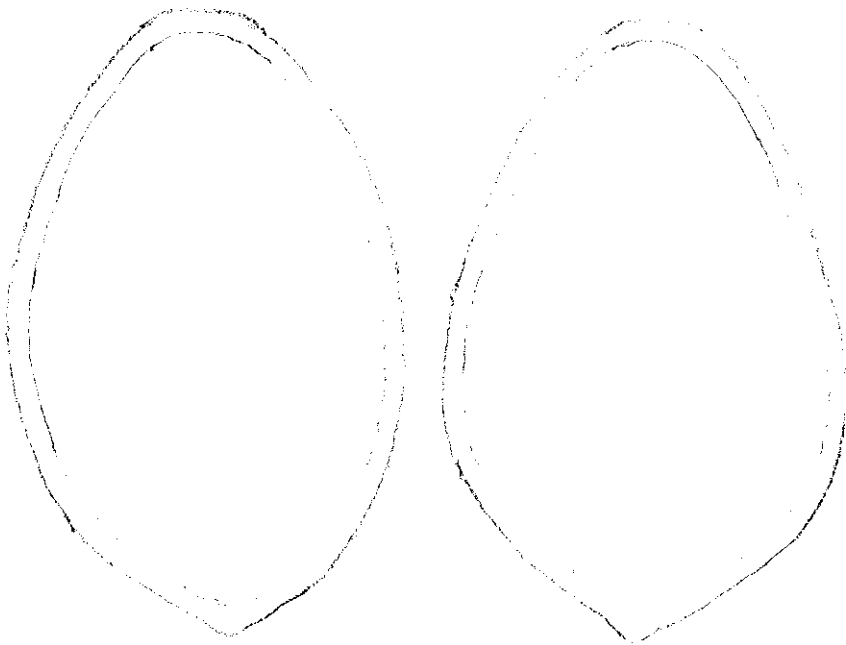
Bas x 1000



Pileus cuticle x 1000



Sp x 1000



Spores x 8000

Overholts gives it 4:53. 1873.
?

AGROCYBE HOWEANA (Pk.) Singer

Agaricus (Stropharia) howeanus Pk., Buffalo Soc. Nat. Sci.

Bull. 1 (No. 2):53. 1873.

Pholiota howeana (Pk.) Pk., New York State Mus. Bull.

122:147. 1908.

Description from Overholts' Pholiota [This may be acervicola]

Pileus 2.5-8 cm broad, convex then plane, sub-umbonate, yellowish or yellowish-brown, sometimes lighter and slightly rugulose when mature, sometimes the center darker, dry, glabrous, margin even. Context fragile, fleshy; taste bitter.

Lamellae sinuate-adnate, or when young with a decurrent tooth, often seceding and leaving a distinct trace on the stipe, whitish, becoming ferruginous-brown, rather close, edges eroded and lighter colored.

Stipe 5-11 cm long, 4-7 mm thick, concolorous with the pileus, equal or slightly thickened at the base, glabrous or the base white-tomentose, hollow, with mycelial strands at the base. Veil forming a conspicuous, persistent, superior annulus.

Peck + Smith
both say
fugacious.

Notes on Type by Hesler

Spores (6) 8-10 x 5.5-7 μ , ellipsoid or ovoid, often slightly rhomboid, smooth, truncate, double-walled, brown in KOH. Basidia 23-26 x 6-7 μ , 4-spored. Pleurocystidia 38-64 x 16-23 μ , ventricose; cheilocystidia 30-43 x 12-18 μ , similar. Gill trama of slightly interwoven, hyphae 2-5 μ

Agaricus (Stropharia) howeanus (Pk.) Pk.
Mus. Ann. Rep. 26:59. 1874.
New York State

broad. Pileus trama more or less radial, apparently becoming vesiculose. Pileus cuticle cellular. Clamp connections not found. Caulocystidia none.

Type collected by Peck, at Center, Albany County, New York in June. In 1873, he published it as Agaricus (Stropharia) howeanus, stating that it "might with equal propriety be referred to the subgenus Pholiota." In 1908, he called it Pholiota howeana (Bull. 122:147). Kauffman (1918) reports it from Michigan. His specimens are smaller than the type, and have a mild taste. The spores are typically somewhat angular (or slightly rhomboid).

It is close to A. acericola, and the two should be carefully checked for differences, if any.

1920
AGARICUS (STROPHARIA) HOWEANUS Pk.

N. Y. State Mus. Ann. Rept. 26: 59. 1874

Stropharia howeana (Pk.) Pk., Buffalo Soc. Nat. Sci. Bull. 4: 53.
1873.

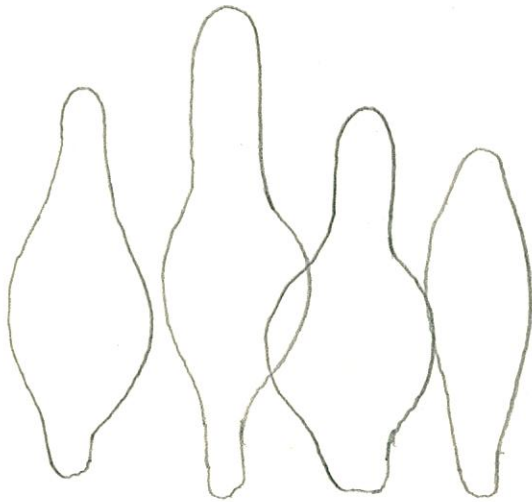
Agrocybe howeana (Pk.) Singer,

Type (= Agrocybe)

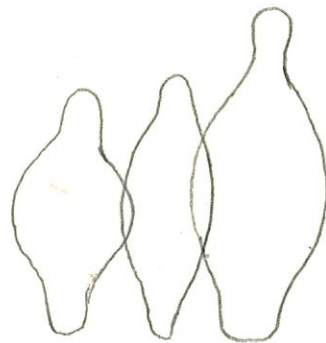
On soil, Center, Albany Co., June

Spores ~~###~~ 8-10 x 5.5-7 μ , ellipsoid or ovoid, often slightly rhomboid, smooth, truncate, double-walled, brown. Basidia 23-26 x 6-7 μ , 4-spored. Pleurocystidia 38-64 x 16-23 μ , ventricose; cheilocystidia 30-43 x 12-18 μ , similar. Gill trama interwoven, hyphae 2-5 μ broad. Pileus trama more or less radial, apparently becoming vesiculose. Cuticle cellular. Clamp connections not found. Caulocystidia none.

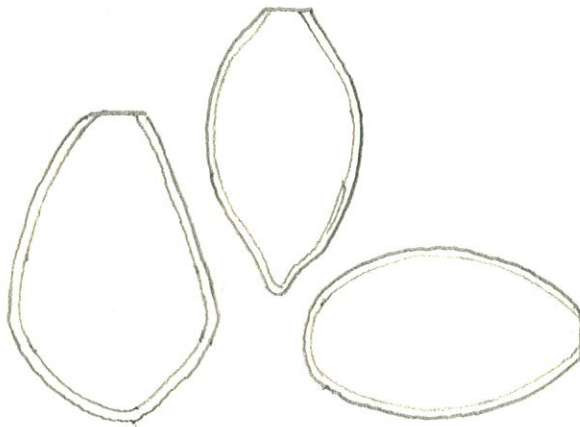
Agaricus (Stropharia) howeana (Pk.)
= *Agrocybe howeana* (Pk.) Sing.
Type



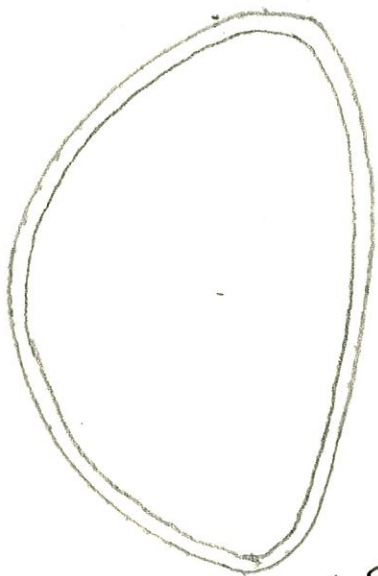
Pl - x 1000



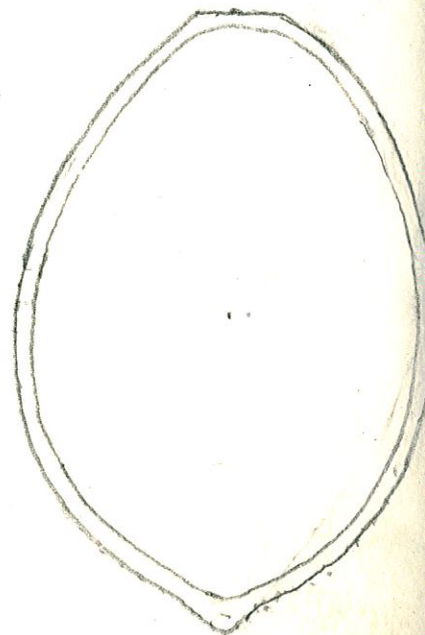
ch - x 1000



Spor - x 4000



x 8000



x 8000

Smith-55440

AGROCYBE HOWEANA (Pk.) Singer forma.

gregarious on lawn, Medford, Oregon, leg. Mr. Butler, November 11, 1956.

Notes by Smith

Pileus 3-8 cm broad, obtuse, expanding to plane, rarely slightly umbonate, subviscid in youngest specimen, moist, hygrophanous, pale bister to dingy cinnamon buff, fading to pinkish buff or paler and then the surface appearing reticulate-wrinkled, glabrous. Context pallid watery gray near gills; odor none, taste bitter.

Lamellae adnate, pallid, soon brownish, finally dark wood brown to cocoa brown, close, broad, edges eroded in age.

Stipe 7-10 cm long, 10-12 mm thick, pallid or grayish pallid, interior finally darkening to more or less cinnamon brown and this color causing surface to appear darker, slightly enlarged downward, surface naked and long-striate. ^{Veil forming a} ~~membranous~~ ^{annulus,} thin, superior, flaring, finally evanescent.

Notes by Hesler

Spores (7.5)8.5-11 x (5)6-7 μ , slightly inequilateral in profile, ellipsoid in face view, wall double and moderately thick, truncate, brown in 2% KOH. Pleurocystidia 42-68 x 18-28 μ , ventricose to pyriform-clavate, scattered to only moderately abundant, conspicuous; cheilocystidia 22-48 x 7-18 μ , pyriform-clavate, at times more or less constricted, sometimes in tufts, but not always conspicuous. Pileus cuticle of cuneiform, ^{clavate to} (cell structure on margin similar). ~~subglobose~~ cells, pushed out of position in age. Stipe cuticle of repent, dry hyphae, surface bearing caulocystidia 28-60 x 6-12 μ , scattered, clavate, subcylindric-capitate. Clamp connections occasionally found on eoicuticular hyphae, and on caulocystidia stalks.

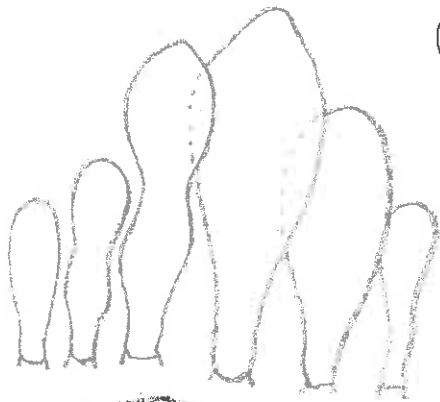
Cf. A. howeana This is apparently a color-form (brownish rather than buff or yellowish); and, although Smith (notes above) says over

The pileus is subviscid in youngest specimen, sections failed to show any gelatinous zone over the pileus cuticle.

Agrocybe howeana (PK.) Sing. [color form]
Sm - 55440



$\times 1000$



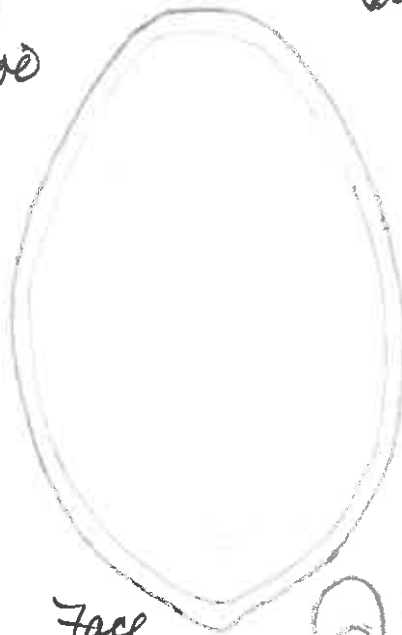
$\times 1000$



Pileus cuticle
(from margin) - $\times 1000$

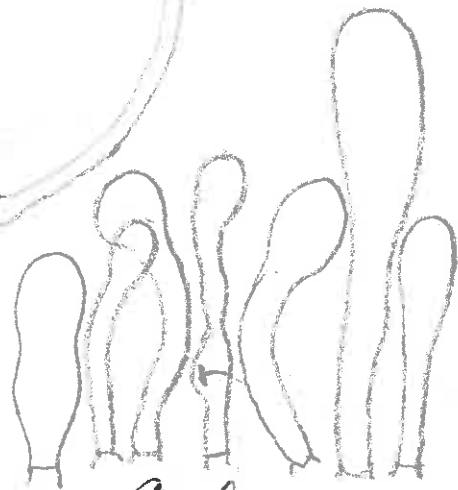


Profile



Face

$\times 8000$



$\times 1000$

AGROCYBE ILLICITA(Pk.) comb. nov.

Agaricus(Hebeloma) illicitus Pk., New York State Mus. Ann.
Rept. 24:68. 1872.

Hebeloma illicitum(Pk.)Sacc., Syll. Fung. 5:806. 1887/

Pileus gregarious or cespitose, 2.5-4 cm broad, broadly convex or expanded, hygrophanous, very dark brown when moist, a little paler when dry, smooth. Context fleshy, firm.

Lamellae adnexed, pale dingy brown, close, broad, tapering outwardly, plane or ventricose.

Stipe 3.5-5 cm long, 4 mm thick, paler than the pileus, firm, equal, scabrous, hollow, distinctly striate at the top, base with a white mycelium.

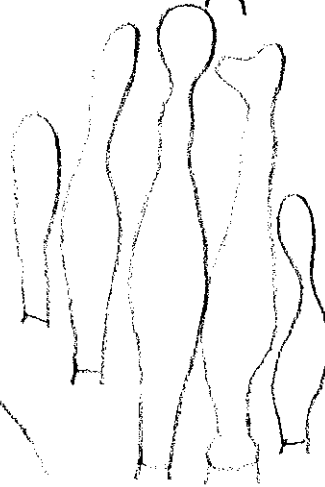
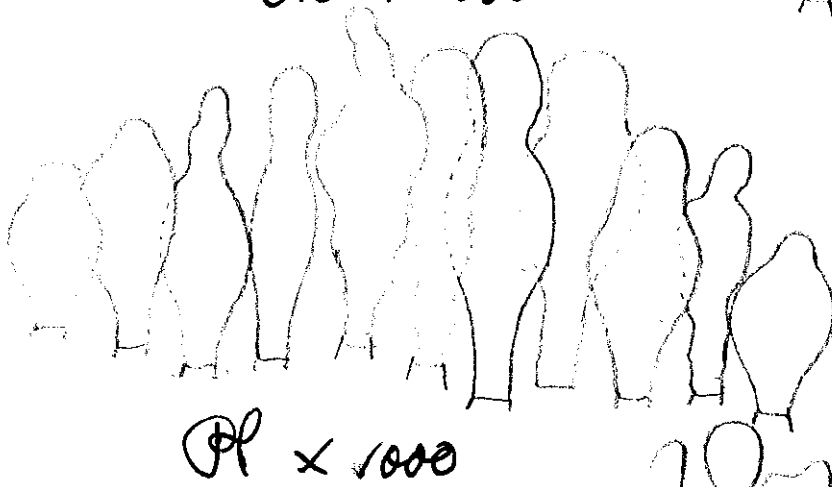
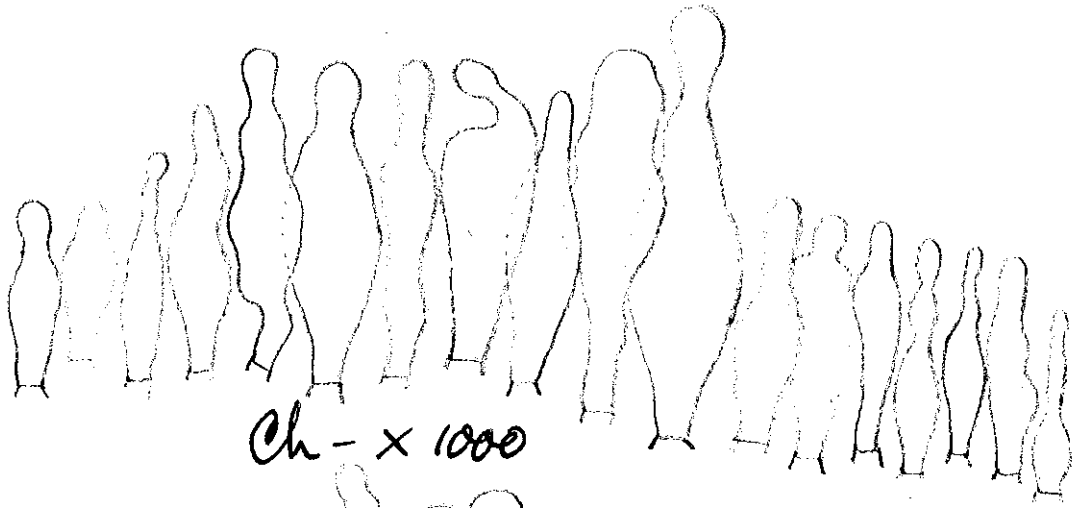
Notes by Hervey (Type)

Spores 5.5-7(8) x 4-4.5 μ , only faintly inequilateral in profile or not at all, ellipsoid to subovoid in face view, wall rather thin (more or less 0.2 μ), smooth, yellowish brown in KOH, ~~no~~ ^{present, not truncate} germ pore, Basidia 18-23 x ~~11-14~~ ⁵⁻⁷ μ , 4-spored. Pleurocystidia 22-48 x 9-17 μ , pyriform, vesiculose, ventricose, clavate, scattered but conspicuous; cheilocystidia 24-57 x 5-15 μ , similar (ventricose, capitate or not, often constricted, bottle-shaped, etc.), clustered. Gill trama of slender, slightly interwoven hyphae. Pileus cuticle a zone of dry, variously and irregularly shaped cells; pileocystidia scattered, 27-60 x 6-11 μ , similar to cheilocystidia. Stipe cuticle of repent, dry hyphae, with scattered caulocystidia similar to pileocystidia. Clamp connections not seen.

over

In his notes, Smith says it is clearly in the
forma-group, and very likely is not distinct
from Agave forma.

~~Agrocybe~~ ~~Phalloma~~ ~~illicium~~ (PK.) ~~Sacc.~~ Comb. nov.
Type = An Agrocybe



Spores x 8000

Agrocybe
NAUCORIA LENTICEPS (Pk.) ^{comb. nov.} Sacc.

Syll. Fung. 5:838. 1887

Agaricus (Naucoria) lenticeps Pk., New York State Mus.

Ann. Rept. 31:34. 1879.

Naucoria
~~Agrocybe~~ lenticeps (Pk.) ^{Sacc. comb. nov.} Syll. Fung. 5:838. 1887.

Type

Pileus 1.2-2 cm broad, convex to nearly plane, dingy-ochre or subolivaceous, disc brown or blackish-brown. Context thin.

Lamellae adnate, with a decurrent tooth, whitish or pallid, subdistant.

Stipe 2-3 cm long, scarcely 2 mm thick, paler above and slightly squamulose, hollow.

Notes by Hesler (on Type)

(7)
Spores 12-17 x ^{8-10.5} μ , obscurely inequilateral in profile, ellipsoid in face view, smooth, wall 0.5 μ thick, truncate, brown in KOH. Basidia 23-26 x 7-8 μ , 4-spored. Pleurocystidia 22-36(50) x ~~6~~ 7-15 μ , variable: mostly clavate or subpyriform, ventricose, rarely more or less cylindric, scattered; cheilocystidia 25-40 x 7-11 μ , variable: mostly ampullaceous, neck distinct and at times with a slight capitellum, subcylindric and mucronate, rarely septate. Gill trama subparallel, hyphae 4-7 μ broad. Pileus cuticle of irregularly shaped cells with some hyphal fragments especially at surface (somewhat suggestive of

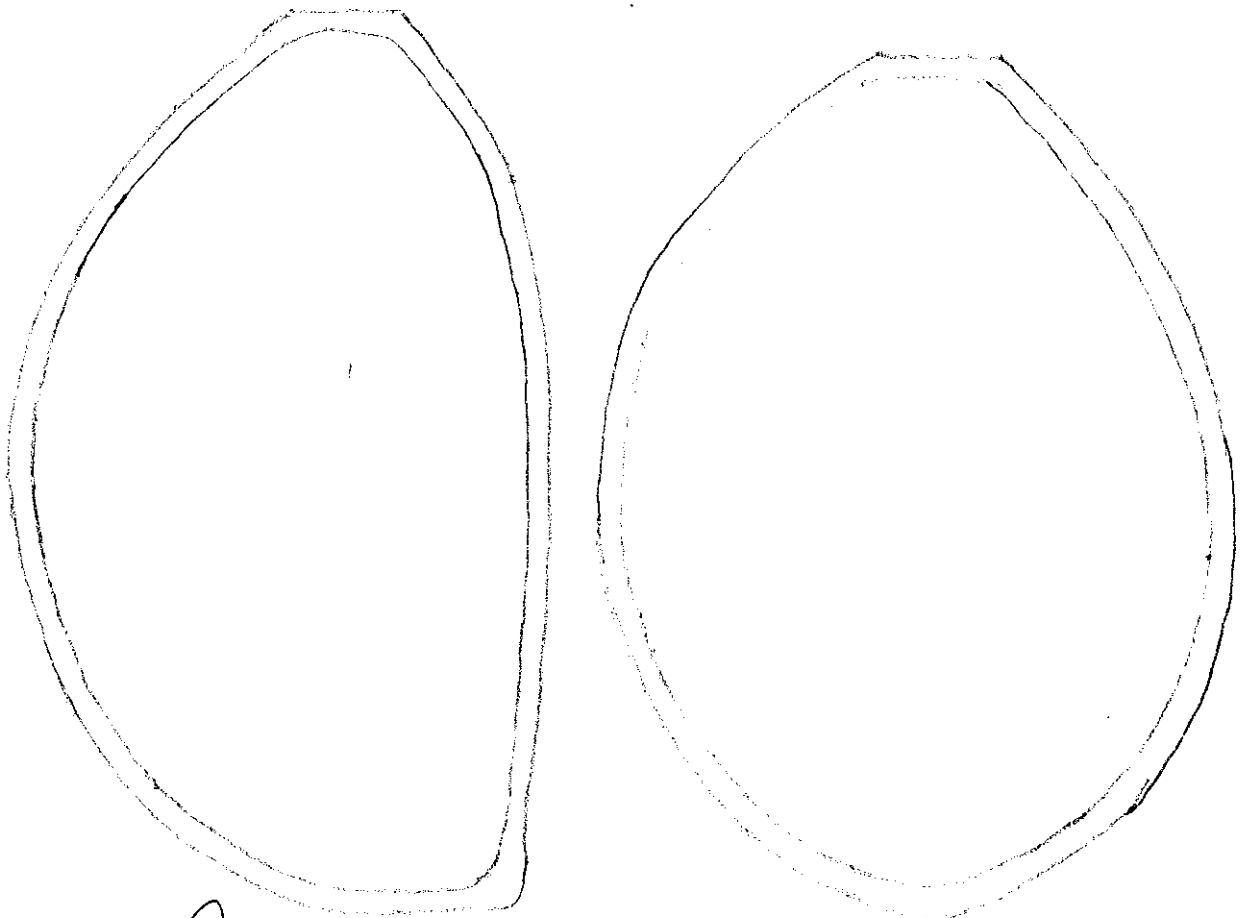
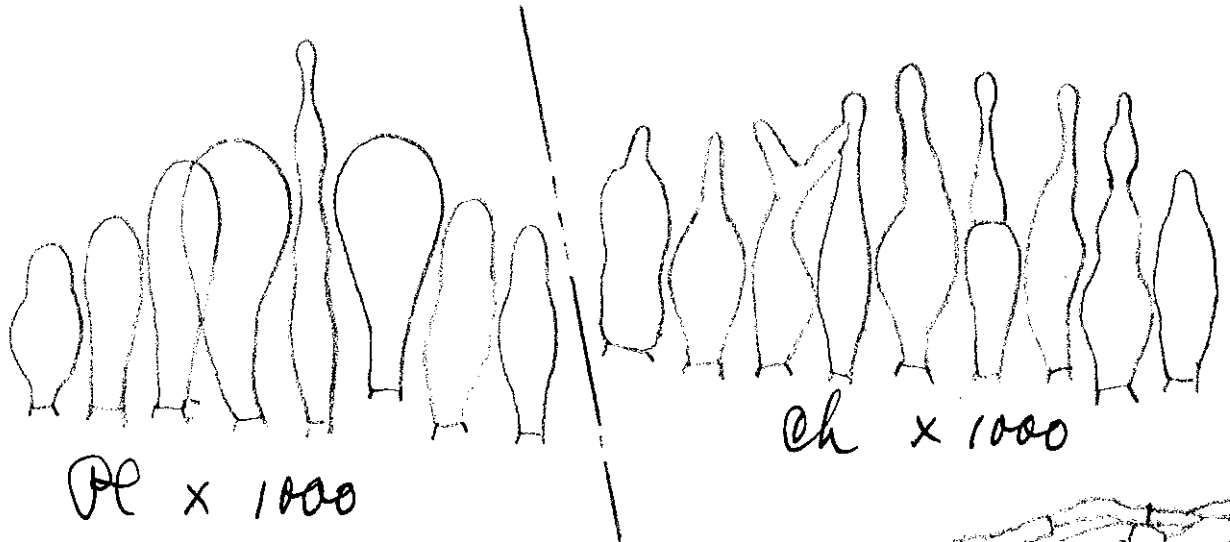
Lactarius camphoratus); pileocystidia not found. Stipe cuticle of repent hyphae; caulocystidia few, ampullaceous.

Type, on sandy soil, along railroads, coll. by Peck, Center, New York, October (about 1878).

~~Watling (letter) states that *L. subamarus* Murr.~~

Naucoria lenticaps PK.

Type [= *Agrocybe lenticaps* (PK) Comb. nov.]



Profile

Spores x 8000

Face

AGROCYBE MURRILLII nom. nov.

Hebeloma praecox Murr., Mycologia 3:166. 1911.

Illustrations:

Murrill, Mycologia 3, pl. 49, fig. 2

Pileus 4-5 cm broad, convex to expanded, slightly umbonate, gregarious, ochraceous-isabelline, glabrous, opaque, margin incurved, entire or undulate. Context white; odor pleasant, taste sweet.

Lamellae sinuate, arcuate, pallid when young, fulvous at maturity, crowded, rather broad, many lamellulae.

Stipe 3-4 cm long, 5-8 mm thick, cremeous, brittle, subequal, finely scabrous, sometimes rough, stuffed to hollow, dry. Veil remnants on the stipe (none on pileus).

Notes by Hesler (Type)

Spores 4.5-6(7) x ~~4.5~~ 3-4.5 u, slightly inequilateral in profile, ellipsoid to subovoid in face view, smooth, with an obscure, germ pore, brown in 2% KOH. Basidia 20-25 x 4-5 u, 4-spored. Pleurocystidia 28-50 x 10-17 u, ventricose or cylindric-capitate, rare and inconspicuous; cheilocystidia 22-33 x 5-8(12) u, irregularly ventricose or flask-shaped, at times sub-capitate, inconspicuous. Gill trama slightly interwoven, hyphae 5-8 u broad. Pileus trama vesiculose to interwoven. Pileus cuticle of more or less a palisade of clavate to ventricose cells, 25-40 x 10-20 u, the surface bearing scattered pileocystidia, 30-78 x 5-12 u, variously

flask-shaped to subcylindric-constricted, often sub-capitate. Stipe cuticle of repent hyphae. Caulocystidia 20-35 x 5-8 μ , clavate, scattered. Clamp connections present. Pileus and gill trama pale yellowish in KOH; reddish brown in Melzer's reagent.

Type among moss, on shady banks, New York Botanical Garden, New York City, Murrill, June 20, 1910.

Veil: In his description, Murrill says that the margin shows no trace of a veil. In his notes, following his description, he states that remnants of a partial veil are left clinging to the stipe, leaving none on the pileus margin.

AGROCYBE MURRILLII nom. nov. [~~non A. praecox~~ (Fr.) Fayod]

Hebeloma praecox Murr., Mycologia 3:166. 1911.

Illustrations:

Murrill, Mycologia 3, pl. 49, fig. 2

Pileus 4-5 cm broad, convex to expanded, slightly umbonate, gregarious, ochraceous-isabelline, glabrous, opaque, margin incurved, entire or undulate. Context white; odor pleasant, taste sweet.

Lamellae sinuate, arcuate, pallid when young, fulvous at maturity, crowded, rather broad, many lamellulae.

Stipe 3-4 cm long, 5-8 mm thick, creameous, brittle, subequal, finely scabrous, sometimes rough, stuffed to hollow, dry. Veil remnants on the stipe (none on pileus).

Notes by Hesler (Type)

Spores 4.5-6(7) x 4/5 3-4.5 μ , slightly inequilateral in profile, ellipsoid to subovoid in face view, smooth, with an obscure, germ pore, brown in 2% KOH. Basidia 20-25 x 4-5 μ , 4-spored. Pleurocystidia 28-50 x 10-17 μ , ventricose or cylindric-capitate, rare and inconspicuous; cheilocystidia 22-33 x 5-8(12) μ , irregularly ventricose or flask-shaped, at times sub-capitate, inconspicuous. Gill trama slightly interwoven, hyphae 5-8 μ broad. Pileus trama vesiculose to interwoven. Pileus cuticle of more or less a palisade of clavate to ventricose cells, 25-40 x 10-20 μ , the surface bearing scattered pileocystidia, 30-78 x 5-12 μ , variously

Agrocybe ~~x~~ murrillii - page 2
(= Hebeloma praecox Murr.)

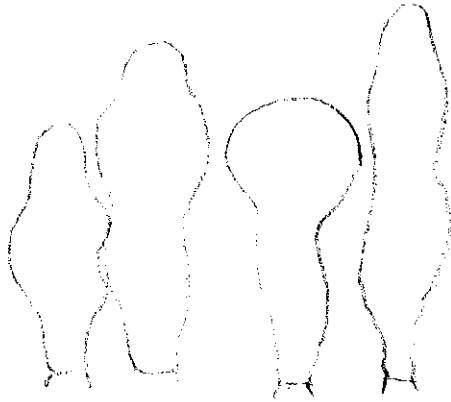
flask-shaped to subcylindric-constricted, often sub-capitate. Stipe cuticle of repent hyphae. Caulocystidia 20-35 x 5-8 μ , clavate, scattered. Clamp connections present. Pileus and gill trama pale yellowish in KOH; reddish brown in Melzer's reagent.

Type among moss, on shady banks, New York Botanical Garden, New York City, Murrill, June 20, 1910.

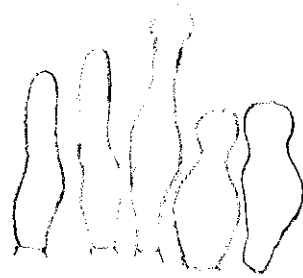
Veil: In his description, Murrill says that the margin shows no trace of a veil. In his notes, following his description, he states that remnants of a partial veil are left clinging to the stipe, leaving none on the pileus margin.

Agrocybe murrillii nom. nov.

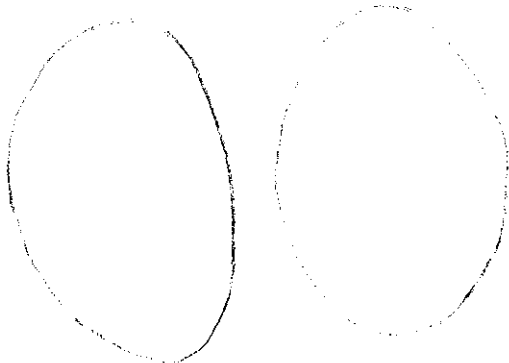
[*Hebeloma praecox* Murr.] - Type



Sp $\times 1000$



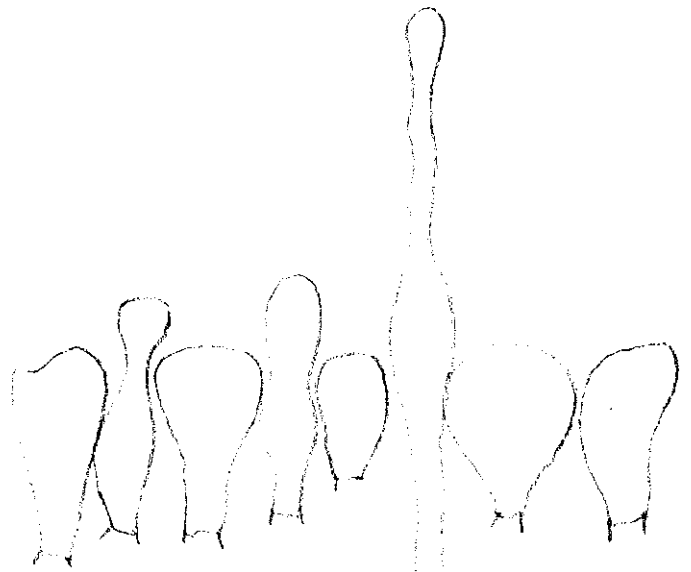
Ch $\times 1000$



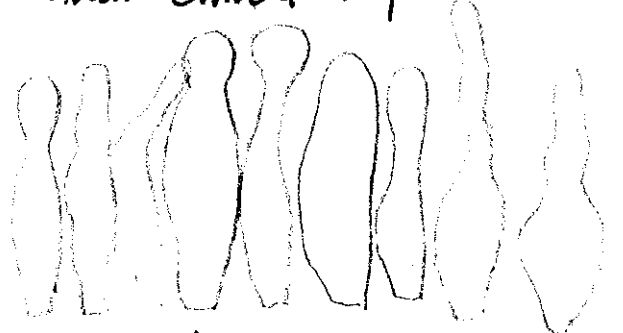
Profile

Face

Spores $\times 8000$



Pileus cuticle + pileo. $\times 1000$



more Pileo - $\times 1000$

~~Exclude~~ Conocybe (vexans or blattaria) acc. to
Dennis Orlon + Hora)

AGARICUS (PHOLIOTA) MYCENOIDES Fr.

Synt. Myc. 1: 246. 1821.
Leg. Peck, Catskill Mts. and Adirondack Mts., September

Agrocybe mycenoides (Fr.) ?

= A. paludosa (Lange) Harding ?

= A. rugosa (Pk.) Harding ?

Spores 8-10 x 4.5-5.5 μ , ellipsoid, slightly inequilateral, smooth, pore present, truncate. Basidia 26-30 x 6-7 μ , 4-spored. Pleurocystidia none; cheilocystidia 28-38 x 4-6 μ , subventricose, not always conspicuous. Gill trama subparallel, hyphae 2-4 μ broad. Pileus trama radial. Cuticle a palisade of more or less wedge-shaped to subrectangular, erect cells. Clamps present. Caulocystidia slender-clavate, subcapitate, scattered.

See Overholts (Pholiota p. 115) for descr. + discussion.

Kauffman, Agar. Mich. p. 314, report based on a Beardslee coll. in Montmorency Co., Mich., + in ~~Montmorency~~ reported by Longyear (in Mich. Acad. Sci. Rep. 4); found in moss in swamps.

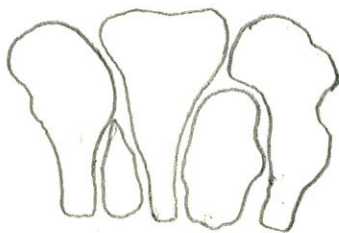
Dennis, Orlon + Hora (see Index p. 201) suggest this taxon ~~may be~~ probably is Conocybe vexans Orlon or C. blattaria (Fr.) Kühn. sensu Bondier.

Agaricus mycenoides Fr.
(*Pholista*)

~~*Agaricus*~~ (*Agrocybe*)



Ch. x 1000



Cuticular cells

Tenn-18654

AGROCYBE OMBROPHILA (Fr.)

but this may be eresia
Smith (in ed.)
~~comb. nov.~~

On lawn, Highlands, N. C., Aug. 27, 1948

viscid (young + wet), soon dry,
Pileus 3-4 cm broad, convex, ~~dry~~, glabrous, marginal
portion "cinnamon-buff," disc somewhat darker, finally
"bister," margin even and decorated with a white band
(veil-remnants). Context thin, white; odor and taste mild.

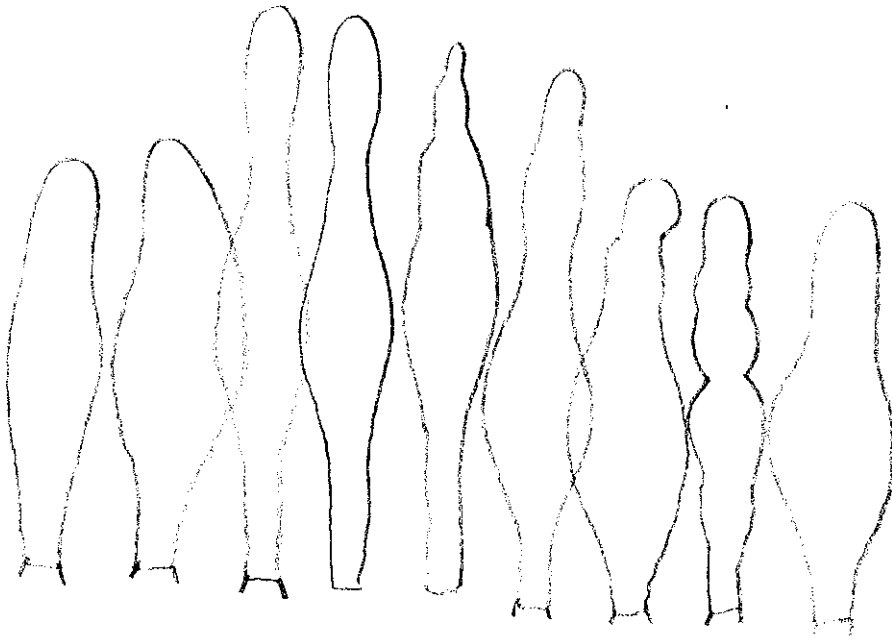
Lamellae adnate-decurrent, "pinkish buff" at first,
finally "buckthorn brown," close, broad, edges fimbriate.

Stipe 3.5-4 cm x 6-9 mm, glabrous, dry, shining,
equal. Annulus membranous, superior to median, persistent.

Spores (9) 10-14 x 5-6.5 μ , inequilateral in profile,
ellipsoid to slightly oblong in face view, smooth, germ-
pore none, wall double, 0.4 μ thick. Basidia 30-38 x 7-8 μ ,
4-spored. Pleurocystidia 58-76 x 11-18 μ , ventricose with
a slender base and neck; cheilocystidia 30-48 x 7-14 μ ,
similar to pleurocystidia, or subfusoid, usually the base
and neck not as slender as in pleurocystidia. Gill trama
subparallel, hyphae 4-9 μ broad. Pileus trama ~~of~~ of broad
(6-12 μ) interwoven hyphae. Pileus cuticle a palisade of
clavate or ventricose to fusoid, erect cells, with a zone
of gelatinous hyphae overlaid. Hypodermium of brown cells.
Clamp connections not found. Pileus and gill trama yellowish
brown in KOH; dark brown in Melzer's reagent.

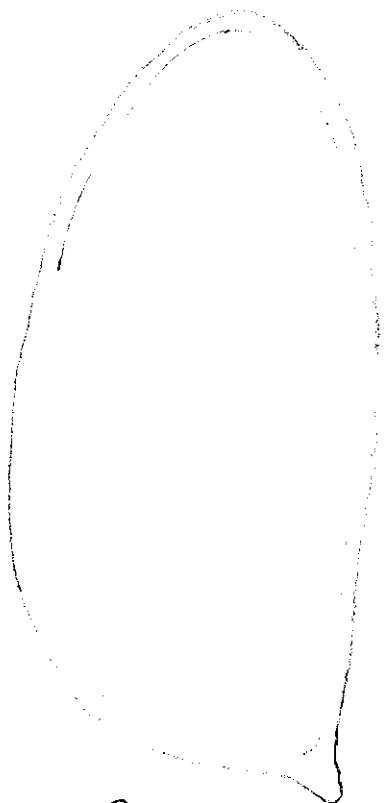
Agrocybe umbrophila (Fr.) comb. nov.

18654

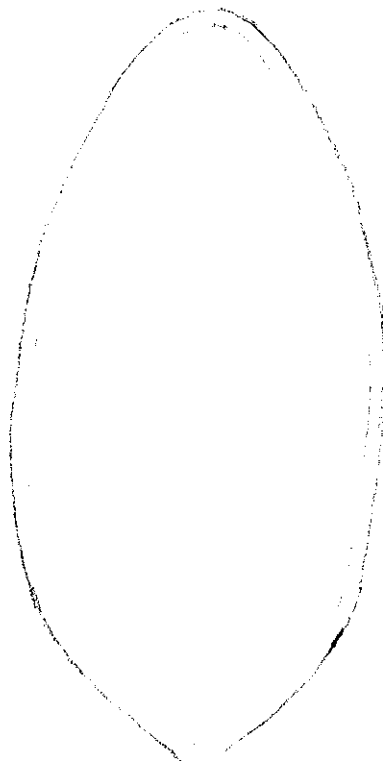


Pl x 1000

[ch - another sheet]



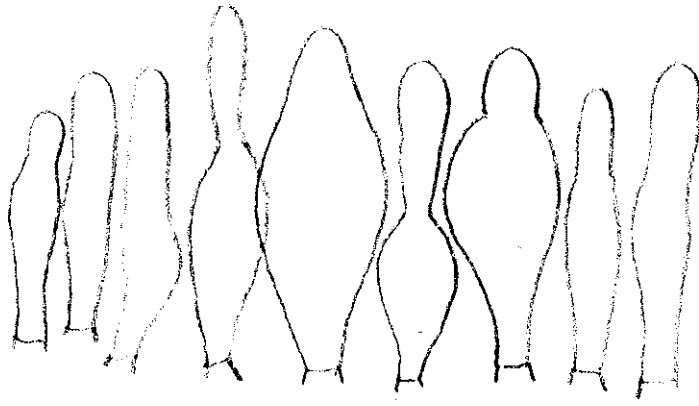
Profile



Face

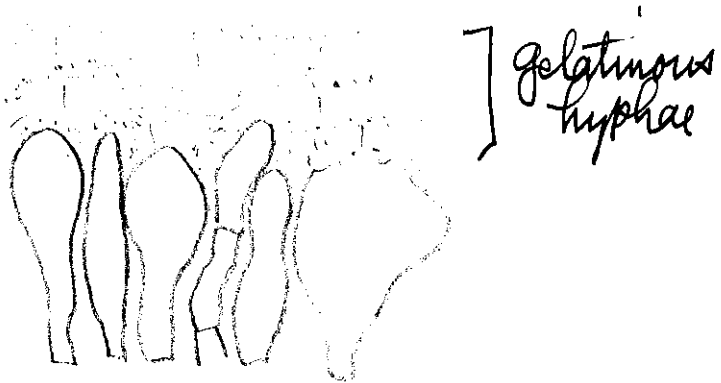
Spores x 8000

Agrocybe ombrophila (Fr.) comb. nov.
18654



Ch x 1000

more



} gelatinous
hyphae

Pileus cuticle x 1000

AGROCYBE PALLIDA (Murr.) ^{Marling (in ed.)} ~~comb. nov.~~

Gymnopilus pallidus Murr., Mycologia 4:252. 1912.

Flammula pallida (Murr.) Murr., Mycologia 4:262. 1912.

Pileus 3-7 cm broad, irregularly convex to plane, umbonate, surface dull-yellowish-gray, dry, smooth, glabrous, margin inflexed. Context hyaline to grayish, watery; without characteristic taste or odor.

Lamellae adnexed, crowded, broad, ^{(sickle-shaped),} falcate, grayish-white to fulvous.

Stipe 3-4 cm long 5-7 mm thick, stout, pallid, hollow, fibrillose. Veil slight, evanescent, leaving no annulus.

Spores 8-10 x 4.5-5.5 μ , somewhat inequilateral in profile, ellipsoid to subfusoid in face view, smooth, truncate. Basidia 24-28 x 5-6 μ , 4-spored. Pleurocystidia 43-56 x 8-15 μ , rare, ventricose; cheilocystidia 30-53 x 6-10 μ , flask-shaped, ventricose, usually with a neck. Gill trama subparallel, hyphae 3-5 μ broad. Pileus trama vesiculose. Pileus cuticle a thick zone (60-90 μ) of ^{subglobose} ~~polyhedral~~ cells.

Habit, Habitat, and Distribution. On soil, under conifers, New Westminster, British Columbia, leg. Albert I. Hill, March 28, 1905, Type (NY).

AGROCYBE PALLIDA (Murrill) comb. nov.

Gymnopilus pallidus Murr., Mycologia 4:252. 1912.

Flammula pallida (Murr.) Murr., Mycologia 4:262. 1912.

Pileus 3-7 cm broad, irregularly convex to plane, umbonate, dull yellowish gray, glabrous, dry, margin inflexed. Context hyaline to grayish, watery; odor and taste not distinctive.

Lamellae adnexed, grayish-white to fulvous, broad, crowded, falcate. (sickle-shaped).

Stipe 3-4 cm long, 5-7 mm thick, pallid, fibrillose, hollow. Veil slight, evanescent, leaving no annulus.

Notes by Hesler (on Type)

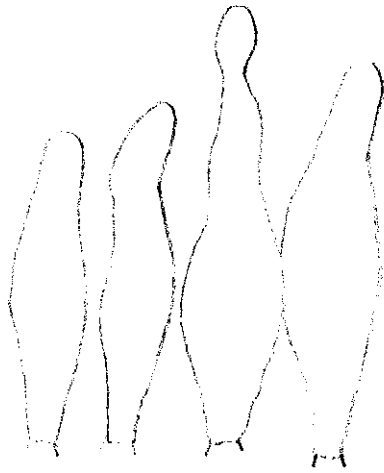
Spores 8-10 x 4.5-5.5 μ , somewhat inequilateral in profile, ellipsoid to subfusoid in face view, smooth, truncate. Basidia 24-28 x 5-6 μ , 4-spored. Pleurocystidia 43-56 x 8-15 μ , rare, ventricose; cheilocystidia 30-53 x 6-10 μ , flask-shaped, ventricose, usually with a neck. Gill trama subparallel, hyphae 3-5 μ broad. Pileus trama vesiculose. Pileus cuticle a thick zone (60-90 μ) of pseudoparenchyma.

Type, on soil, under conifers, New Westminster, British Columbia, leg. Albert I. Hill, March 28, 1905.

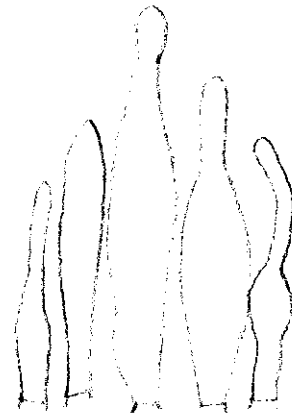
Watling plans to transfer it to Agrocybe (letter, Mar. 14 - '75).

Agrocybe pallida (Murr.) comb. nov.
(=*Gymnopilus pallidus* Murr.)

Type



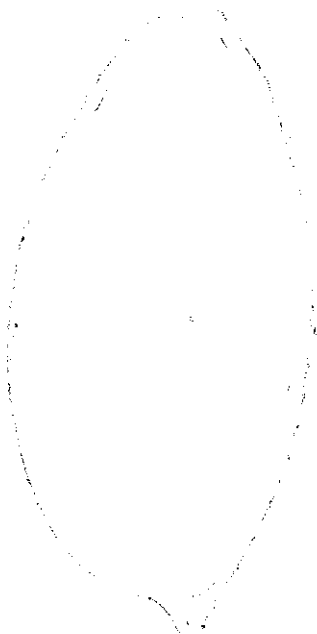
gl x 1000



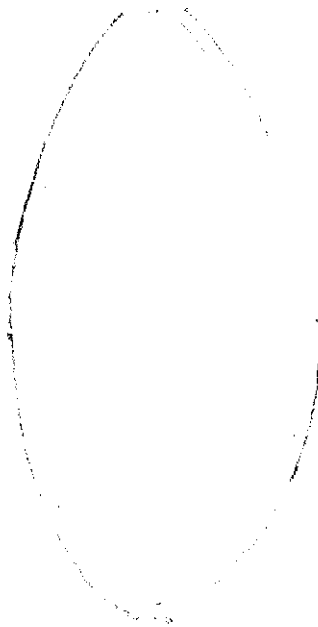
ch x 1000



Pileus cuticle
x 1000



Profile



Face

Spores x 8000

Agrocybe pediades (Pers. ex Fr.) Fayod
Ann. Sci. Nat. VII. 9: 358. 1889.

(cf. my #20490)

In Dennis, Orton + Hora (Index, p. 205),
state that it is a nomen confusum. Further,
they indicate ^{that K + R call it} A. semiorbicularis, with spores
11-16 x 8-12 μ ; K + M, A. vernaeti, 7-9 x 5-6 μ ;
Cooke, A. temulenta, 8-11 x 5-6 μ ; ss Riken,
Moser, with downy or silk cap + spores 10-12 x
6-7 μ suggests yet another fungus.

AGROCYBE PLATYSPERMA (Pk.) comb. nov.

Naucoria platysperma Pk., Torrey Bot. Club Bull. 25:324. 1898.

Pileus 2.5-3.5 cm broad, convex, becoming nearly plane, when young slightly tinged with ochraceous or reddish-yellow, ~~when young~~, soon whitish, glabrous, margin at first adorned with vestiges of a white, flocculent veil. Context white; *odor & taste not distinctive.*

Lamellae slightly rounded behind, pallid, becoming brownish, moderately crowded, rather broad.

Stipe 3.5-5 cm long, 2-4 mm thick, whitish, equal, slightly flocculent or furfuraceous when young, stuffed with a white pith, the mycelium sometimes forming white, thread-like strands. Veil white, quite ample at first, no annulus.

Notes by Hesler (*Type*)

Spores 12-17 x 9-11 μ , ellipsoid, not inequilateral, smooth, wall thick (double, about 0.8 μ), truncate, brown in KOH. Basidia (1)2-spored (no 4-spored found), 30-34 x 8-10 μ . Pleurocystidia 25-52 x 8-11 μ , ventricose, some more or less capitate-ampullaceous; cheilocystidia 25-34 x 5-9 μ , two kinds: (1) ventricose with a neck, (2) ampullaceous, and similar to pleurocystidia (ventricose or

ampullaceous and capitate). Gill trama of slender, sub-parallel hyphae. Pileus cuticle a palisade ~~stratum~~ layer of cells, more or less cuneiform, clavate, to subcapitate. Stipe cuticle repent, with conspicuous epicuticular hyphae, but no caulocystidia found. Clamp connections not found.

Type on soil, from Compton, California, leg. A. J. McClatchie, March.

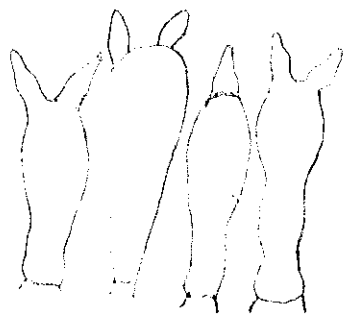
Special Note: When sectioning the mature pileus, the cuticular layer is torn away, leaving the interwoven pileus tramal hyphal exposed. To observe the cellular layer of the pileus cuticle, it was essential to section a "button."

(This happens in some other Agrocybes.) It is possible that the pileus margin might show cells & cuticle better than nearer the disc.

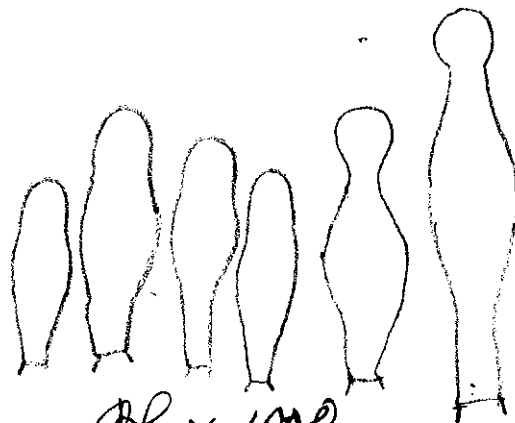
Kauffman + Smith both speak of compressed spores, but I either overlooked this feature or it was absent in material examined.

Naucoria platysperma PK.

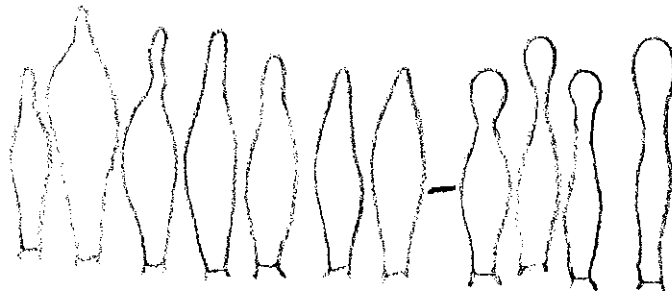
Type [= *Agrocybe platysperma* (PK.)]



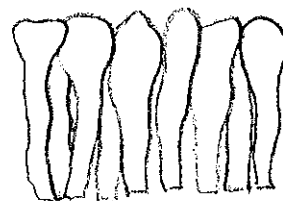
Basidia $\times 1000$



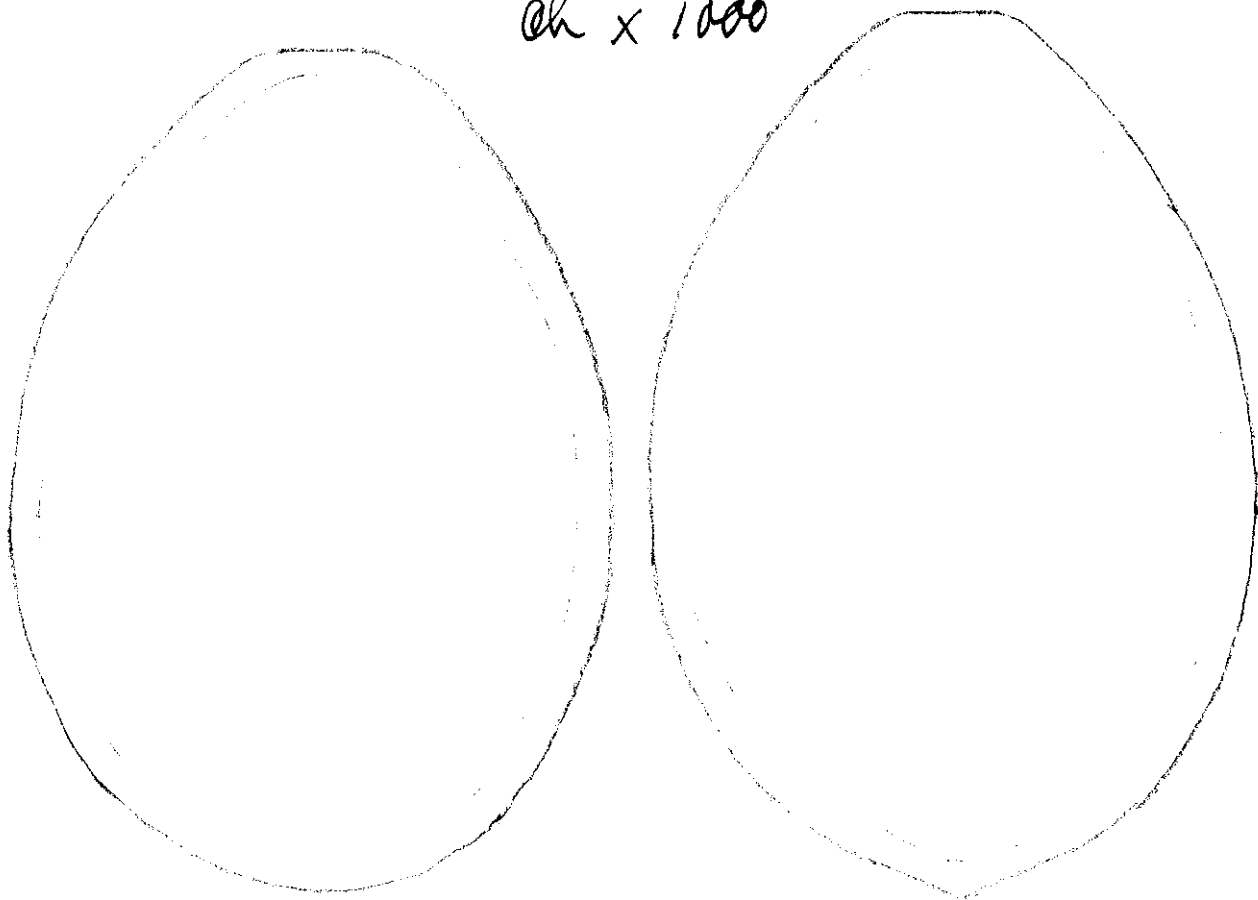
Sp $\times 1000$



Sp $\times 1000$



Filous cuticle
 $\times 1000$



Spores $\times 8000$

AGROCYBE PRAECOX (Pers. ex Fr.) Fayod

(Description translated from Horak, Synopsis Generum Agaricalium, pp. 70-72. Figs. a-g, p. 71. 1968)

Illustration:

Horak, Synop. Gen. Agar., p. 71, figs. a-g. 1968.

Lange, Flora Agar. Dan., Tab. 106 G.

Pileus 2.5-6(7) cm broad, flat hemispherical to broadly expanded, umbonate, yellowish-white when fresh, in age pale opaque-brown, disc darker, only slightly viscid when moist, soon dry and areolate-cracked, slightly hygrophanous, lamellae not showing through, when young sprinkled with veil particles. Context white; odor farinaceous, taste farinaceous-sour.

Lamellae broadly adnate to short-emarginate, not ventricose, yellowish-white when young, becoming coffee-brown, edges crenulate, concolorous with gill (faces).

Stipe 4-10 cm long, 6-10 mm thick, central singly or in tufts (caespitose), equal or the base thickened, whitish, later browning from the base, dry, the apex pruinose when young, otherwise glabrous, solid then hollow. Veil forming a membranous striate, funnel-shaped then pendant, persistent, whitish annulus.

Spores in deposit, dark (umber) brown, tobacco-brown, 8.5-11 x 5-6(7) μ , ovoid, smooth, medium-thick walled, gray-brown in KOH, germ-pore broad and distinct. Basidia 28-32 x 6-7 μ , 4-spored, more or less cylindric, Pleurocystidia 45-65 x 14-18 μ , spindle-shaped,

AGROCYBE PRAECOX (Pers. ex Fr.) Fayod

(Description translated from Horak, Synopsis Generum Agaricalium, pp. 70-72. Figs. a-g, p. 71. 1968)

Illustration:

Horak, Synop. Gen. Agar., p. 71, figs. a-g. 1968.

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Lamellae broadly adnate to short-emarginate, not ventricose, yellowish-white when young, becoming coffee-brown, edges crenulate, concolorous with gill (faces).

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Spores in deposit, dark (umber) brown, tobacco-brown, 8.5-11 x 5-6(7) μ , ovoid, smooth, medium-thick walled, gray-brown in KOH, germ-pore broad and distinct. Basidia 28-32 x 6-7 μ , 4-spored, more or less cylindric. Pleurocystidia 45-65 x 14-18 μ , spindle-shaped,

with a neck, somewhat constricted and with protuberances (see drawings), apices rounded, thin-walled, hyaline, not metuloid, often with hyaline-yellowish, vacuolar pigment; cheilocystidia 20-27 x 10-14 μ , in tufts, clavate-stipitate, thin-walled, smooth, hyaline, with scattered septa. Pileus cuticle of more or less clavate cells, 34-50 x 15-25 μ , often long-stalked, thin-walled, hyaline or yellowish-brownish in KOH, vacuolar pigment. Hypodermium of more or less irregularly interwoven, cylindric hyphae, 5-16 μ broad, smooth, thin-walled; with clamp connections. Pileocystidia none. Gill trama hyphae cylindric, thin-walled, hyaline, smooth, more or less parallel, 5-9 μ broad, clamp connections none. Caulocystidia none.

Hab. In meadows, cultivated soil, gardens; spring and summer; widespread, Europe.

(By Horak).

Observations, Apparently the veil, although ample and membranous, is fragile and may disappear early, or may cling to the pileus-margin (and thus not appear as an annulus on the stipe at all). Overholts (1927) states that the pileus is often fuscous or fuscous-black when very young, but soon whitish or cream-color, often tinged with yellow or tan, or the center brownish, or in wet weather uniformly tan, and in herbarium specimens usually ochraceous or tan.

with a neck, somewhat constricted and with protuberances (see drawings), apices rounded, thin-walled, hyaline, not metuloid, often with hyaline-yellowish, vacuolar pigment; cheilocystidia 20-27 x 10-14 μ , in tufts, clavate-stipitate, thin-walled, smooth, hyaline, with scattered septa. Pileus cuticle of more or less clavate cells, 34-50 x 15-25 μ , often long-stalked, thin-walled, hyaline or yellowish-brownish in KOH, vacuolar pigment. Hypodermium of more or less irregularly interwoven, cylindric hyphae, 5-16 μ broad, smooth, thin-walled; with clamp connections. Pileocystidia none. Gill trama hyphae cylindric, thin-walled, hyaline, smooth, more or less parallel, 5-9 μ broad, clamp connections none. Caulocystidia none.

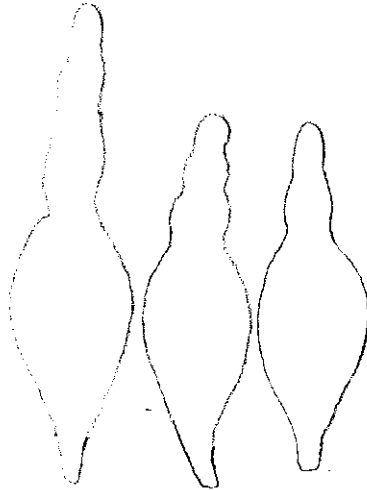
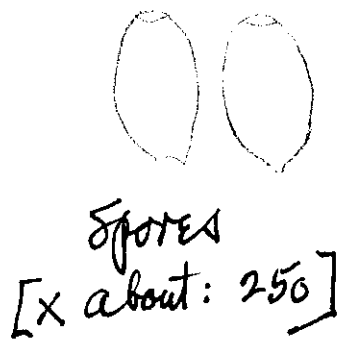
Hab. In meadows, cultivated soil, gardens; spring and summer; widespread, Europe.

(By Harkn.)

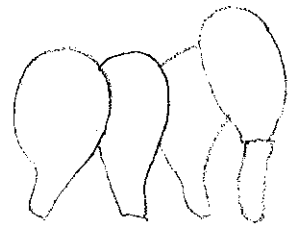
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Agrocybe praecox (Pers. ex Fr.) Fayod

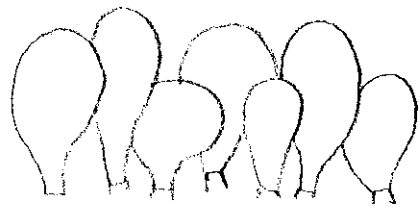
(Drawings traced from Horak: Synop. Gen. Agar. p. 71)



Bl. \pm x 1000



Ch. \pm x 1000



Pileus cuticular cells

Agrocybe praecox (Pers. ex Fr.) Fayod
Ann. Sc. Nat. VII. 9: 358. 1889.
Agaricus praecox Pers.; Syn. p. 420. 1801 ex Fr.,
Syst. Myc. 1: 282. 1821.

Singer (Persoonia 2: 39-40. 1961) studied
Persoon's material (L 910.261-732), + found:

Spores 8-11 x 5.7-7 μ , mostly 8.5-10 x
6-6.5 μ , smooth, melanos, with a distinct
apical germ pore. Cystidia 23 x 15 μ .

Tenn-5033

^{OK}
AGROCYBE PRAECOX (Fr.) Fayod, 1889.

At base of a tree, Mt. LeConte, July 20, 1934

Spores, cystidia, and cuticle as in Tenn-16725.

Tenn-9325

^{OK}
AGROCYBE PRAECOX (Fr.) Fayod

On soil, in woods, Indian Creek, N.C., GSMNP, Aug. 23, 1936

Spores, cystidia, and cuticle as in Tenn-16725.

Tenn-9454

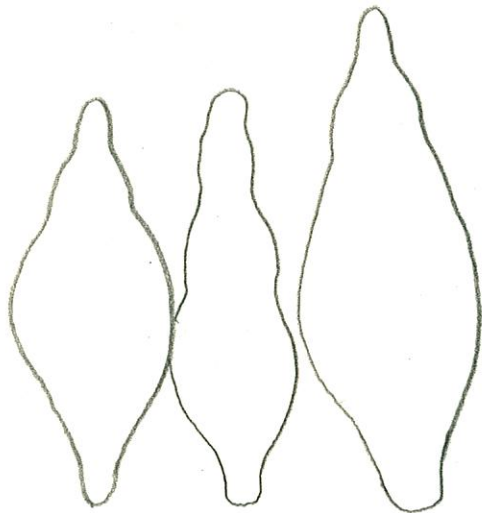
^{OK}
AGROCYBE PRAECOX (Fr.) Fayod

On soil, in woods, Swain Co., GSMNP, August 7, 1936

Spores and other characters as in Tenn-16725.

Agrocybe praecox (Fr.) Fayod

Tem - 9454



Pl - x 1000

this type of pl
rather common.

Tenn-12527

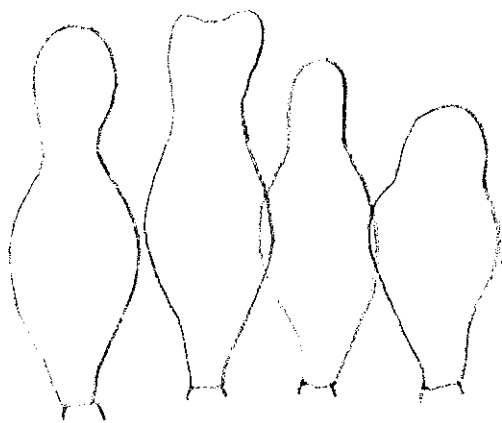
AGROCYBE PRAECOX (Fr.) Fayod

On soil, lawn, Fountain City, Tenn., June 5, 1940

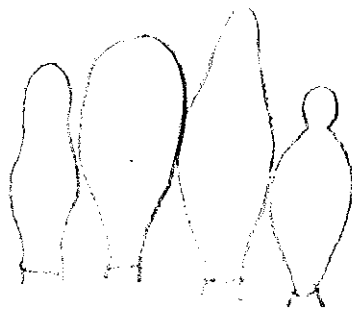
All characters as in Tenn-16725.

Agropyre praecox (Fr.) Fayod

12527



Pl x 1000



Ch x 1000

Tenn-13372

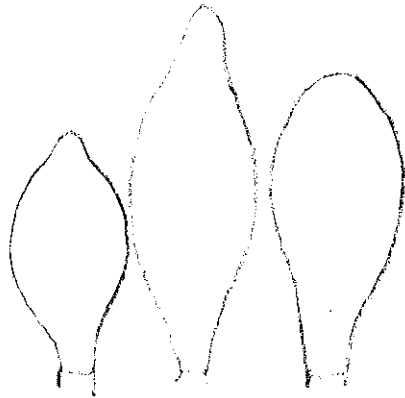
^{OK}
AGROCYBE PRAECOX (Fr.) Fayod

On soil, under elm, Knoxville, April 29, 1941

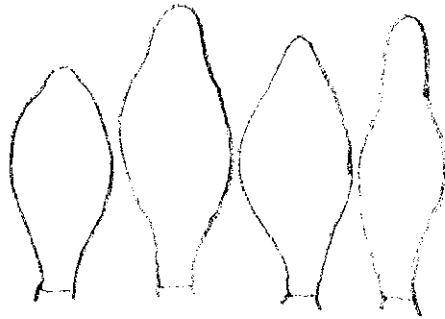
Spores 8-10 x 5-5.5 μ , in each field also some scattering spores 10-14 x 5.5-7.5 μ . Other characters as in Tenn-16725.

Pl 32-48 x 16-19 μ , ventricose, little or no neck;
Oh 30-38 x 12-15 μ , ventricose, with little or no neck or occasionally ^{rather} a conspicuous neck.

Agrocybe praecox (Fr.) Fayod
13372



Pl x 1000



ch x 1000

OK

Tenn-16725 AGROCYBE PRAECOX (Pers. ex Fr.) Fayod

On soil, Knoxville, det. LRH, cf. A. H. Smith, April 4, 1945

Pileus 2-4.5 cm broad, convex-plane, dry, "cream buff," to "honey yellow," appearing like plush, fibrillose under lens, margin reticulated. Context white, cream-buff above; odor farinaceous, taste farinaceous-bitter.

Lamellae adnate with a slight decurrent tooth or adnexed, somewhat ventricose, broad, ^{pallid then} crowded, [^] "snuff brown" at maturity, edges slightly fimbriate.

Stipe 6-11 cm x 4-8 mm, dingy below, white above, flexuous, dry, fibrous-striate, equal or tapering below, sub-bulbous, hollow-stuffed. Veil forming a superior, membranous, evanescent, annulus.

Spores in deposit: "snuff brown" or "Saccardo's umber," ⁽¹¹⁾ 7.5-10 ^{slightly} x 4.5-6 μ , /inequilateral in profile, ellipsoid to subovoid in face view, smooth, truncate (occasionally indistinctly so). Basidia 22-25 x 6-7 μ , 4-spored. Pleurocystidia 36-52 x 16-22 μ , moderately abundant, ventricose; cheilocystidia 20-40 x 5-17 μ , similar to pleurocystidia, and some clavate to subventricose. Gill trama subparallel, hyphae 6-15 μ broad. Pileus trama loosely interwoven. Pileus cuticle more or less a palisade of clavate to subpyriform cells, resting on a brown hyphoid hypodermium, the hyphae extending tangentially. Stipe cuticle of repent, dry hyphae. Caulocystidia in tufts, cylindric-capitate, 38-48 x 7-11 μ . Clamp connections

OK
Tenn-17483

AGROCYBE PRAECOX (Fr.) Fayod

On lawn, Colonial Village, Knoxville, May 12, 1946

Pileus 2-4 cm broad, hemispheric-convex, not fully expanding, color when young "buffy brown" to "dresden brown," hygrophanous, when ~~wet~~ ^{when dry} "isabella color", ~~(moist)~~ "tawny olive" to "honey yellow"; ~~vvvv~~, faintly rugose, ~~vvvv~~ glabrous, margin even. Context firm, medium thin, white; odor mild, taste farinaceous.

Lamellae adnate to sinuate or emarginate, seceding, ivory-whitish when young, later "pale drab-gray," finally "drab," rather broad, subventricose, crowded, edges serrulate.

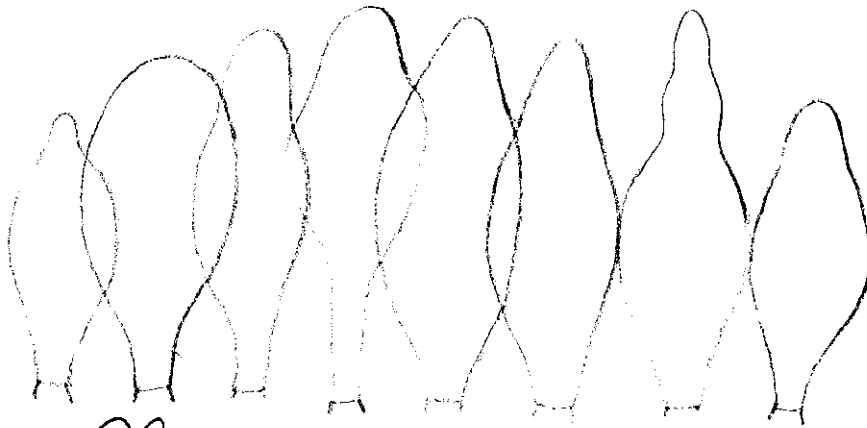
Stipe 3-5 cm x 5-8 mm, striate, appressed-fibrillose, equal or base enlarged, dry, hollow. Veil ample, membranous, leaving a shredded evanescent, superior annulus. ¶ Spores ellipsoidal to ovoid, smooth, truncate, 9.5-11 x 6-7 μ , color in mass: near "mummy brown." Pleurocystidia scattered, variable: ventricose, nodulose, apex slender, ^{in some sections, not in others,} ~~vvvv~~ forked, 37-64 x 18-24 μ ; cheilocystidia and other characters as Tenn-16725.

Tenn-16725

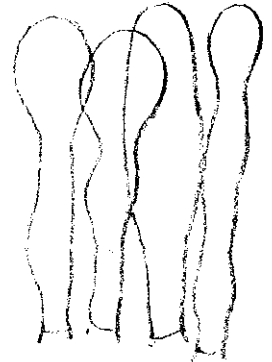
A. praecox - page 2

present. Pileus and gill trama pale yellowish in KOH;
reddish brown in Melzer's reagent.

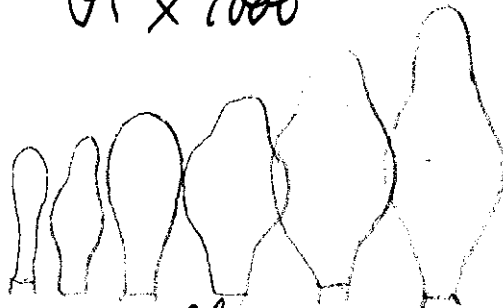
Agrocybe praecox (Fr.) Fayod
16725



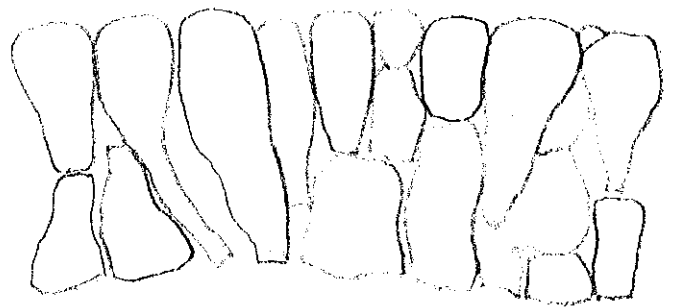
Pl x 1000



Caulo x 1000



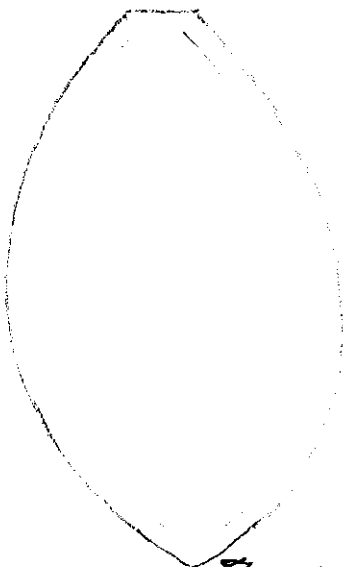
Ch x 1000



Pileus cuticle x 1000



Profile



Spores x 8000

Face

21350

AGROCYBE PRAECOX (Fr.)Fayod

on humus, Whittle's, near LeConte, Sevier Co., GSMNP,
leg - Smith& Hesler, det. Smith, April 27, 1954

Agrees in essential characters with Tenn-16725.

Tenn-24643

AGROCYBE PRAECOX (Fr.) Fayod

Berkeley, Calif., E.E.Morse, March 14, 1930

Characters as in Tenn-16725.

AGROCYBE PRAECOX VAR. SYLVESTRIS (Pk.) comb. nov.

Pholiota praecox var. sylvestris Pk., New York State Mus. Ann. Rept. 49:60. 1896.

Pileus convex, whitish, center brown or rusty brown, glabrous.

Notes on Type (by Hesler)

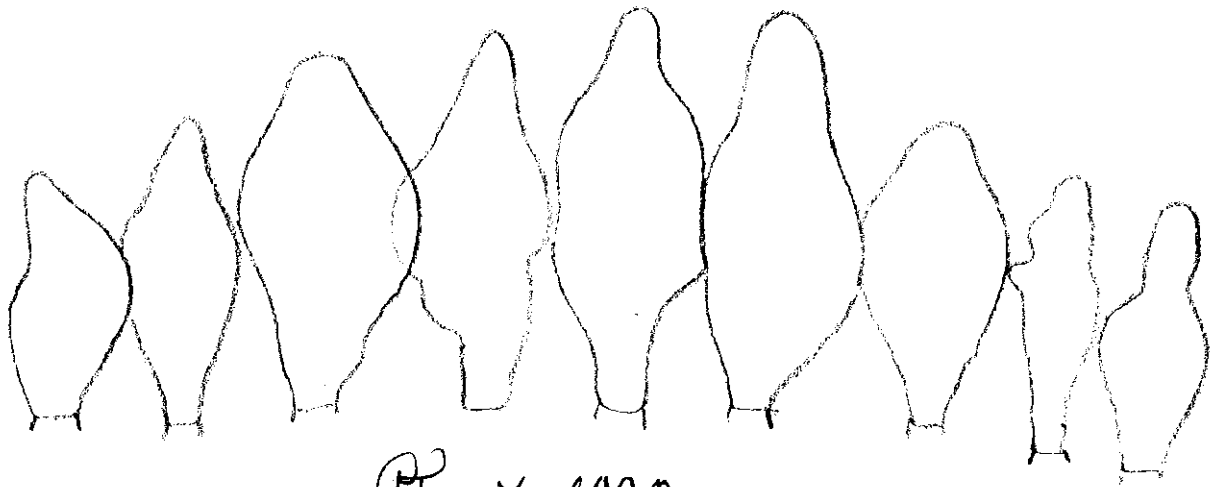
Spores (7.5)8-10(10.5) x 5.5-6(6.5) μ , slightly inequilateral in profile, ovoid to ellipsoid in face view, wall smooth, thick, apices truncate, yellowish brown in 2% KOH. Basidia 28-32 x 6-7 μ , 4-spored. Pleurocystidia 32-53 x 11-24 μ , ventricose, scattered, conspicuous; cheilocystidia 27-36 x 8-16 μ , more or less similar, rather sparse. Pileus cuticle cellular, one, or occasionally two cells deep. Stipe of dry, repent hyphae.

Type, leg. Chas. H. Peck, Caroga, New York, July.

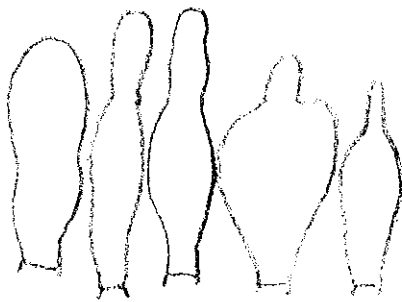
Cf. A. howeana.

Agrocybe praecox var. *sylvestris* (Pk.)

Type. (*Agaricus praecox*
var. *sylvestris* Pk.)



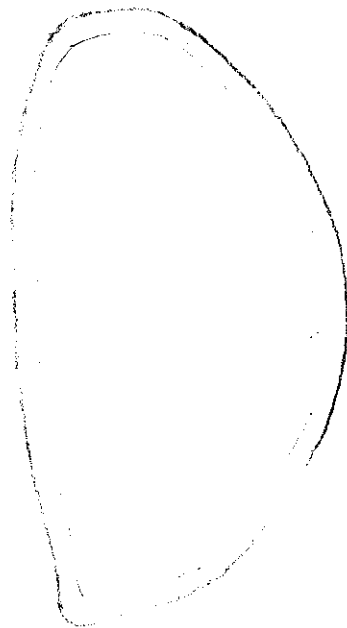
Sp $\times 1000$



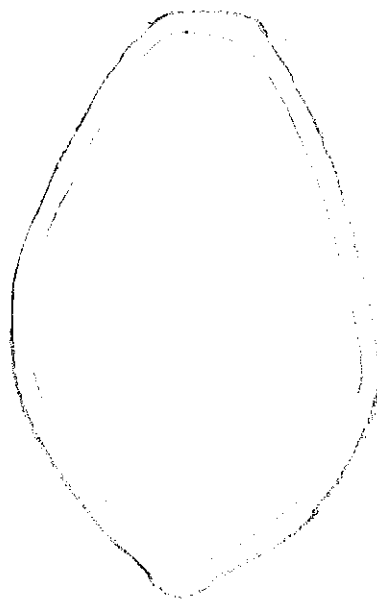
Ch $\times 1000$



Pileus cuticle $\times 1000$



Profile



Face

Spores $\times 8000$

AGROCYBE PRUINATIPES (Pk.) comb. nov.

Agaricus (Naucoria) pruinatipes Pk., New York State Mus.

Nat. Hist. Rept. 29:39. 1878.

Naucoria pruinatipes (Pk.) Sacc., Syll. Fung. 5:842. 1887.

Type

Pileus 2.5-3.5 cm broad, convex, hygrophanous, brownish when moist, ochraceous-yellow when dry, smooth. Context whitish.

Lamellae rounded behind, pale-cinnamon, close, rather broad, nearly plane.

Stipe 2.5-5 cm long, about 2 mm thick, pallid or cinereous, pruinose (minute squamules), equal, firm, stuffed or hollow. *Veil none evident.*

Notes by Hesler

Spores (5.5)6-8 x 4-5 μ , very slightly inequilateral, more rarely faintly subreniform, ellipsoid to subovoid in face view, smooth, some rather obscurely truncate, wall 0.3 μ thick, pale yellowish brown in water, medium brown in 2% KOH, pinkish and many collapsed in Melzer's reagent. Pleurocystidia 30-48 x 14-18 μ , ventricose-ampullaceous, neck short or none, subcapitate; cheilocystidia 27-40 x 7-11 μ , similar or with a longer neck. Pileus cuticle a palisade similar to N. platysperma (more or less clavate, subcuneiform), rather obscure in mature pileⁱ. Stipe cuticle repent, dry. No caulocystidia found.

Type on soil, in woods, Greig, New York, leg. Peck, September.

AGROCYBE PRUINATIPES (Pk.) comb. nov.

Agaricus (Naucoria) pruinatipes Pk., New York State Mus.

Nat. Hist. Rept. 29:39. 1878.

Naucoria pruinatipes (Pk.) Sacc., Syll. Fung. 5:842. 1887.

Type

Pileus 2.5-3.5 cm broad, convex, hygrophanous, brownish when moist, ochraceous-yellow when dry, smooth. Context whitish.

Lamellae rounded behind, pale-cinnamon, close, rather broad, nearly plane.

Stipe 2.5-5 cm long, about 2 mm thick, pallid or cinereous, pruinose (minute squamules), equal, firm, stuffed or hollow.

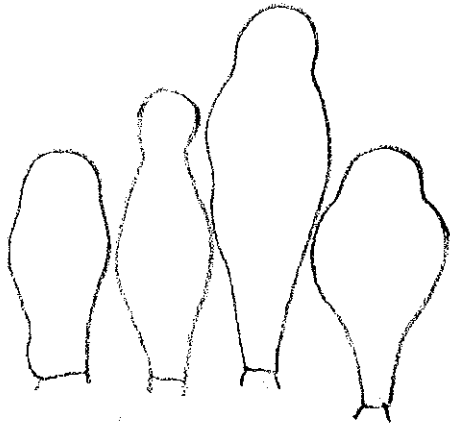
Notes by Hesler

Spores (5.5)6-8 x 4-5 μ , very slightly inequilateral, more rarely faintly subreniform, ellipsoid to subovoid in face view, smooth, some rather obscurely truncate, wall 0.3 μ thick, pale yellowish brown in water, medium brown in 2% KOH, pinkish and many collapsed in Melzer's reagent. Pleurocystidia 30-48 x 14-18 μ , ventricose-ampullaceous, neck short or none, subcapitate; cheilocystidia 27-40 x 7-11 μ , similar or with a longer neck. Pileus cuticle a palisade similar to N. platysperma (more or less clavate, subcuneiform), rather obscure in mature pileo. Stipe cuticle repent, dry. No caulocystidia found.

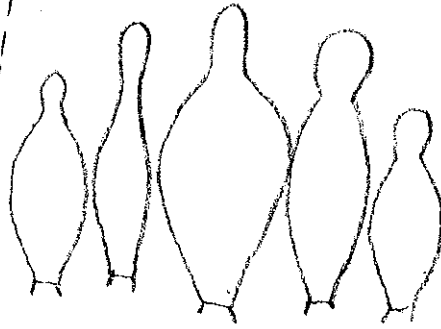
Type on soil, in woods, Greig, New York, leg. Peck,
September

Nauvoria pruinatipes PK.

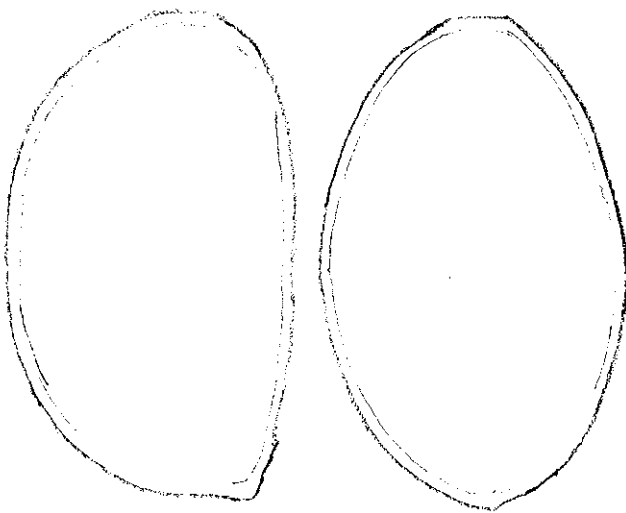
Type [*Agrocybe pruinatipes* (PK) comb. nov.]



PK x 1000



Ch x 1000



Profile

Face

Spores x 8000

14030

AGROCYBE RETIGERA (Speg.) Sing.

On soil, Campus (LSU), Baton Rouge, La., leg. B. Lowy,

August 31, 1957

Notes by Lowy

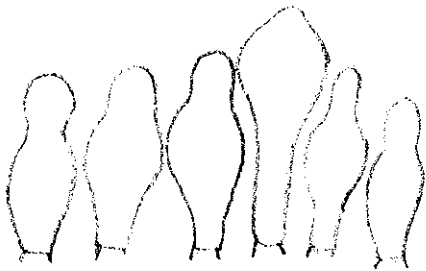
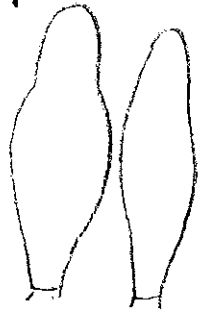
Pileus 10-15(25) mm broad, more or less campanulate, becoming expanded, white, ^{finally pallid-buff, dry, surface pitted.} ~~mm.~~

Stipe 4-6 cm long, 2.5-4 mm thick, white, ^{then buff,} silky, base bulbous, hollow, dry.

Notes by Hesler

Spores ¹⁶12-~~14.5~~ x ^{7.5}8-9.5 μ , obscurely inequilateral in profile, ellipsoid in face view, smooth, truncate, brown in KOH. Basidia 30-35 x 9-10 μ , 4-spored. Pleurocystidia 35-43 x 10-17 μ , ventricose, rather widely scattered; cheilocystidia 22-32 x 7-12 μ , similar. Pileus trama of broad, loosely interwoven hyphae. Pileus cuticle of cuneiform cells, soon pushed out of position, no gelatinous ^{found.} zone. Stipe cuticle of ~~repent~~ hyphae; no caulocystidia found.

Agrocybe retigera (Speg.) Sing.
14030 (ex-fung)



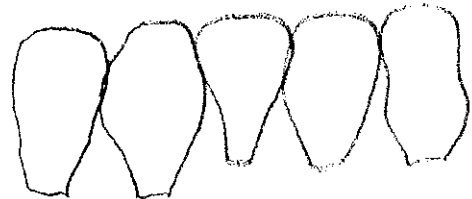
Ch x 1000



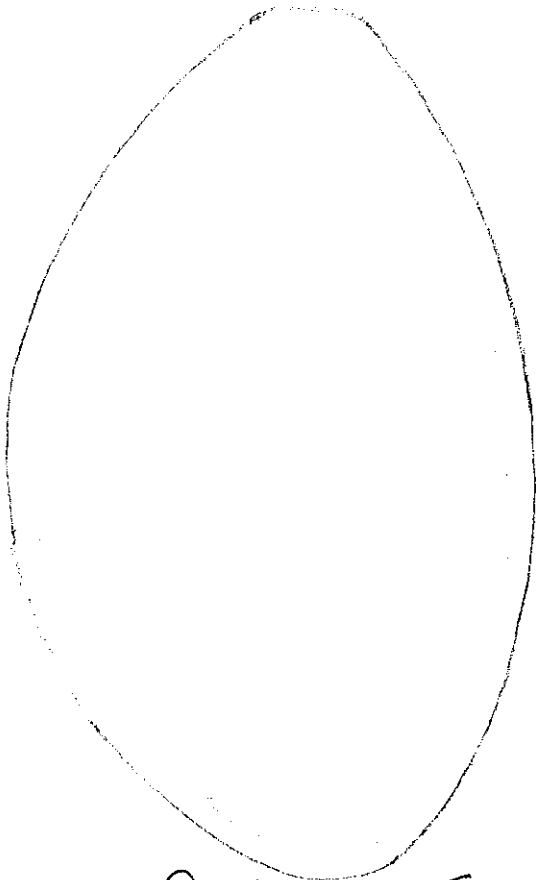
Pl x 1000



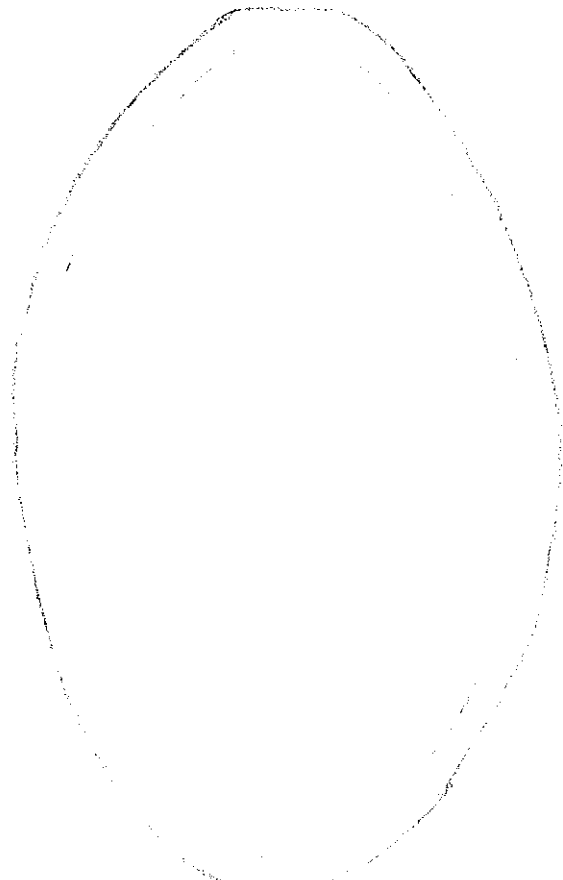
Basidia x 1000



Pileus Cuticle
x 1000



Profile



Spores x 8000

Face

16220

AGROCYBE RETIGERA (Speg.) Sing.

Filosa 23:213. 1950 (1952)

(Naucoria semiorbicularis var. lacunosa Murr., Mycologia:

35:431. 1943)

Type of Murrill's Variety

Pileus 2-3 cm broad, gregarious, convex, more or less expanding, dry, cremeous, conspicuously and deeply pitted except at the very center, glabrous, margin even. Context pallid, thin, farinaceous.

Lamellae adnexed, brown at maturity, close, broad, edges white-fimbriate.

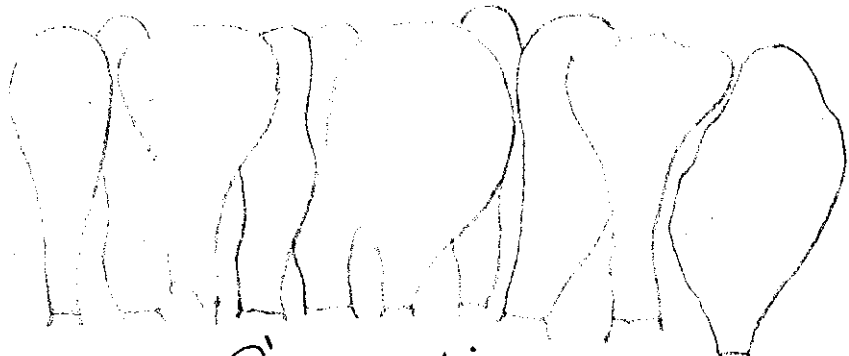
Stipe 3-4 cm long, 3 mm thick, pallid above, cremeous below, dry, glabrous. Veil none.

Notes by Hesler (on Murrill's coll., not Type). *Following notes from Murrill collection, not the type, from Gainesville, Fla. June 22-'4*

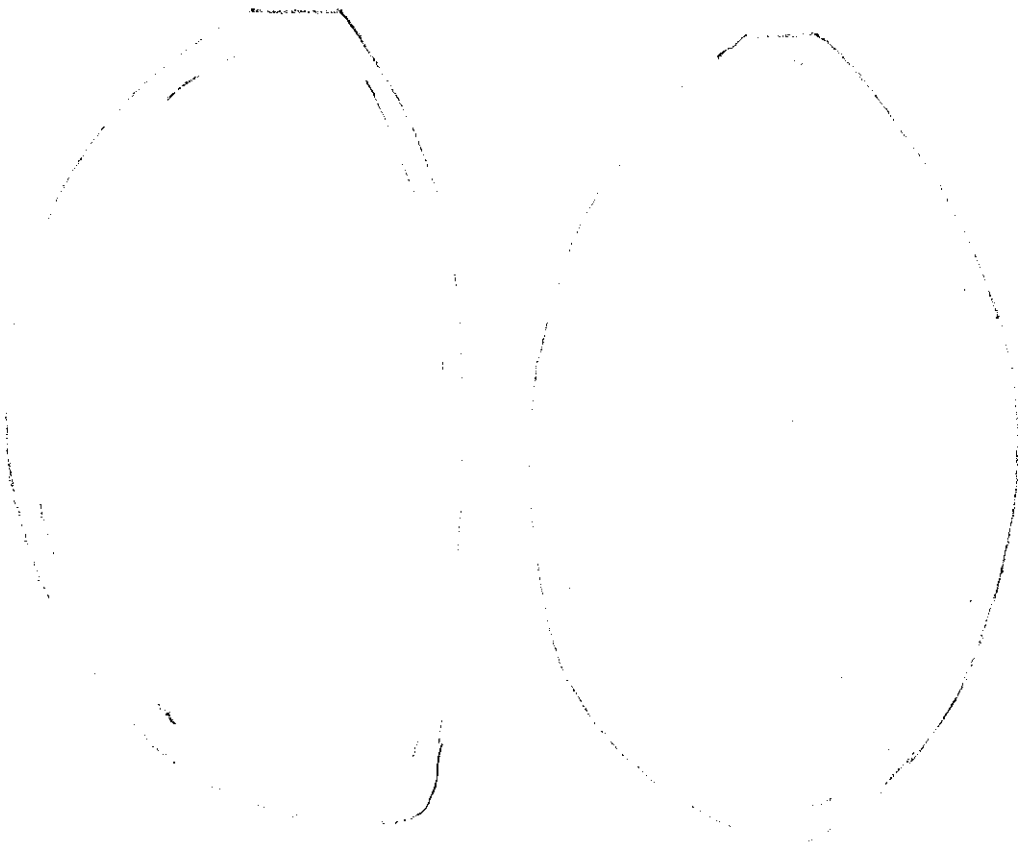
Spores 12-17 x 7-8.5(9) μ , very slightly inequilateral in profile, ellipsoid in face view, smooth, more or less truncate (most spores show at least some truncation), wall about 0.6 μ thick, brown in 2% KOH. Basidia 28-32 x 9-11 μ , 2-4-spored. Pleurocystidia 38-62 x 12-20 μ , ventricose, commonly irregularly shaped, at times with a neck and more or less capitate, widely scattered; cheilocystidia 28-64 x 10-27 μ , ventricose to subclavate and often irregularly shaped, rather abundant. Gill trama of subparallel hyphae, 5-12 μ broad. Pileus cuticle a palisade of inflated, clavate to pyriform cells, 35-42 x 8-25 μ ; no gelatinization observed. Clamp connections not found.

Type of N. semiorbicularis var. lacunosa Murr. on lawn, Gainesville, Fla., July 26, 1938 (F 17958).

Agrocybe rotigera (Speg.) Sing.
[*Nauoria semiorbicularis* var. *lacunosa* Murr.]



Pilars cuticle $\times 1000$



Profile

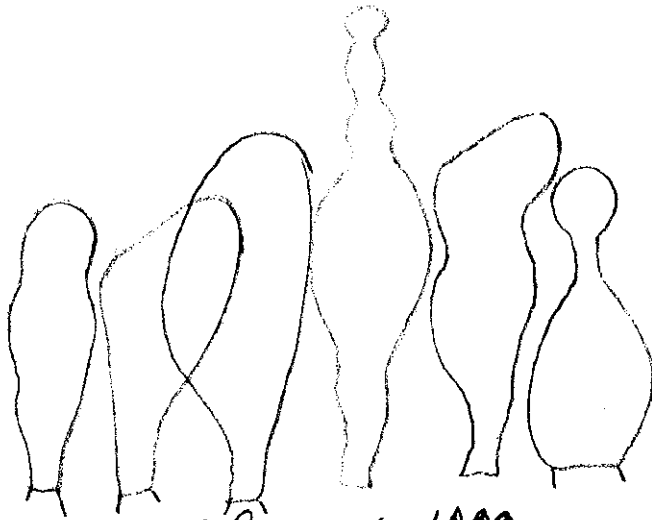
Face

Spores $\times 8000$

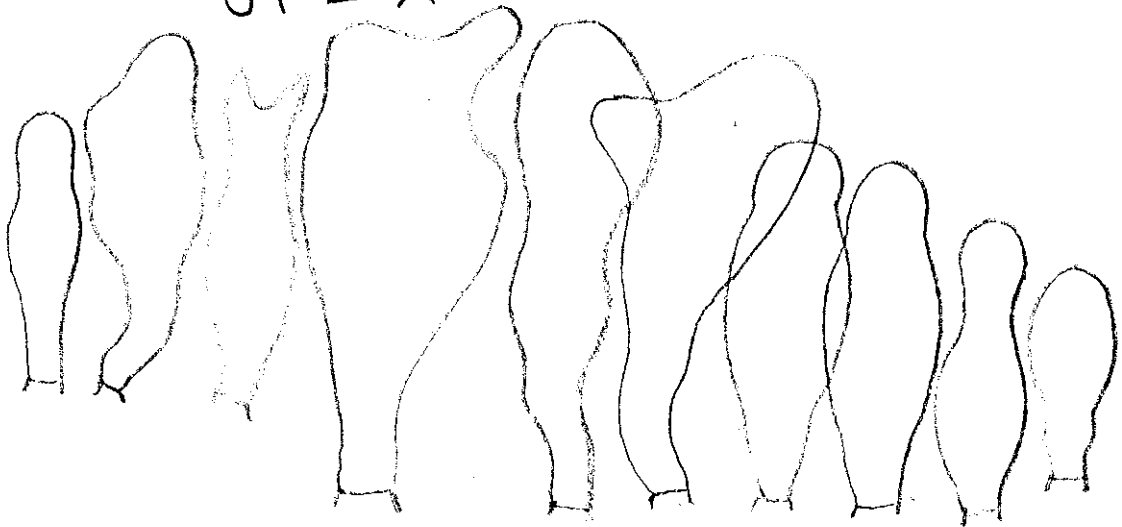
(more)

Agrocybe retigera (Speg.) Sing.

Tem-16220 (*A. semiorbicularis* v. *lacunosa* Murr. f. ~~Alps~~)



GP - X 1000



GP ch x 1000

(more)

20640

AGROCYBE RETIGERA (Speg.) Sing.

On lawn, Tuscaloosa, Ala., leg. C. G. Hollis, Aug. 8, 1952

(labelled Naucoria semiorbicularis by Hollis)

Pileus 1-2 cm broad, at first hemispheric, then convex-expanded, near "cream color," dry, glabrous, margin even, incurved. Context white, thin.

Lamellae adnate to adnexed, pallid, finally "snuff brown," close, rather broad, edges white-fimbriate.

Stipe 2.5-4 cm long, 1-2.5 mm thick, white, then dingy pallid, fibrillose, equal, dry, hollow. Veil none.

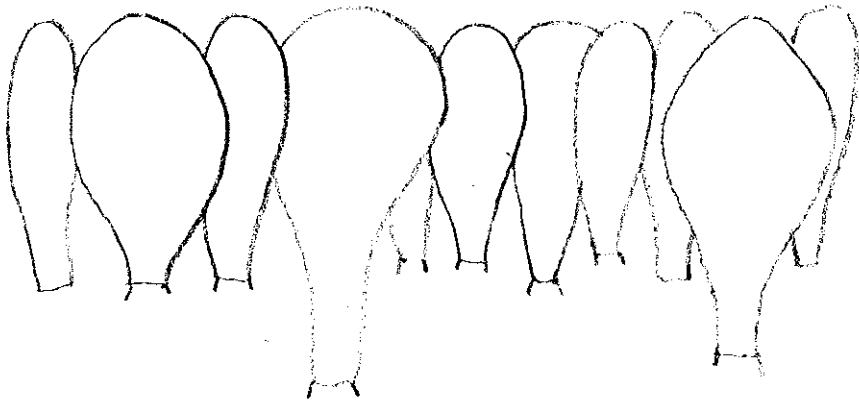
Spores 11-15 x 7-8.5 μ , faintly inequilateral in profile, ellipsoid in face view, smooth, truncate, brown in 2% KOH, wall 0.6 μ thick. Basidia 27-30 x 8-11 μ , (2)4-spored. Pleurocystidia 32-56 x 8-20 μ , scattered to widely so, mis-shapen, more or less cylindric-ventricose, sometimes collapsed and easily overlooked; cheilocystidia 28-63 x 10-25 μ , ventricose, at times capitate, some subpyriform, apices occasionally incipient-forked. Gill trama of subparallel hyphae, 5-10 μ broad. Pileus trama of broad, loosely interwoven hyphae. Pileus cuticle a palisade of clavate cells, 27-48 x 9-23 μ , best observed in younger pilei, becoming somewhat disarranged in full maturity; no evidence of gelatinization. Stipe cuticle of dry, repent hyphae, surface (at apex) bearing a rather dense epicuticular trichodermium, the terminal elements as cylindric to clavate caulocystidia. Clamp connections few on the stipe epicuticular hyphae.

This was labelled Naucoria semiorbicularis by Hollis. It differs from this species by its quite different pleurocystidia and cheilocystidia; its larger pileus cuticular cells, these cells remain intact at maturity of the pileus, and its slightly more slender spores (up to 8 u broad against 10-11 μ). It may be rather near Agrocybe semiorbicularis.

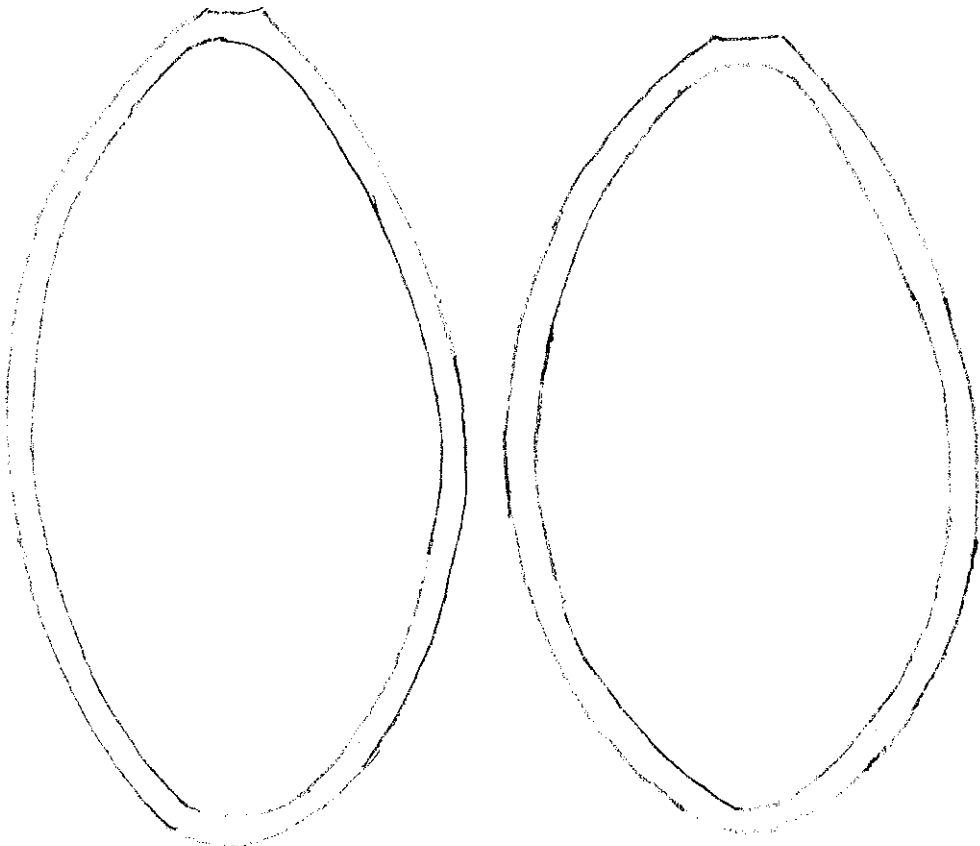
This seems to be the same as A. retigera (Speg.) Sing., as Singer indicate (1962:530-531).

Agropyre retigera (Speg.) Sing.
20640 (Alabama)

more

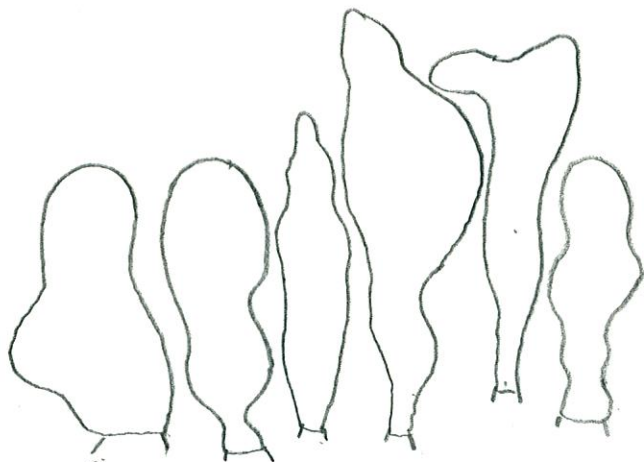


Pilens cuticle $\times 1000$

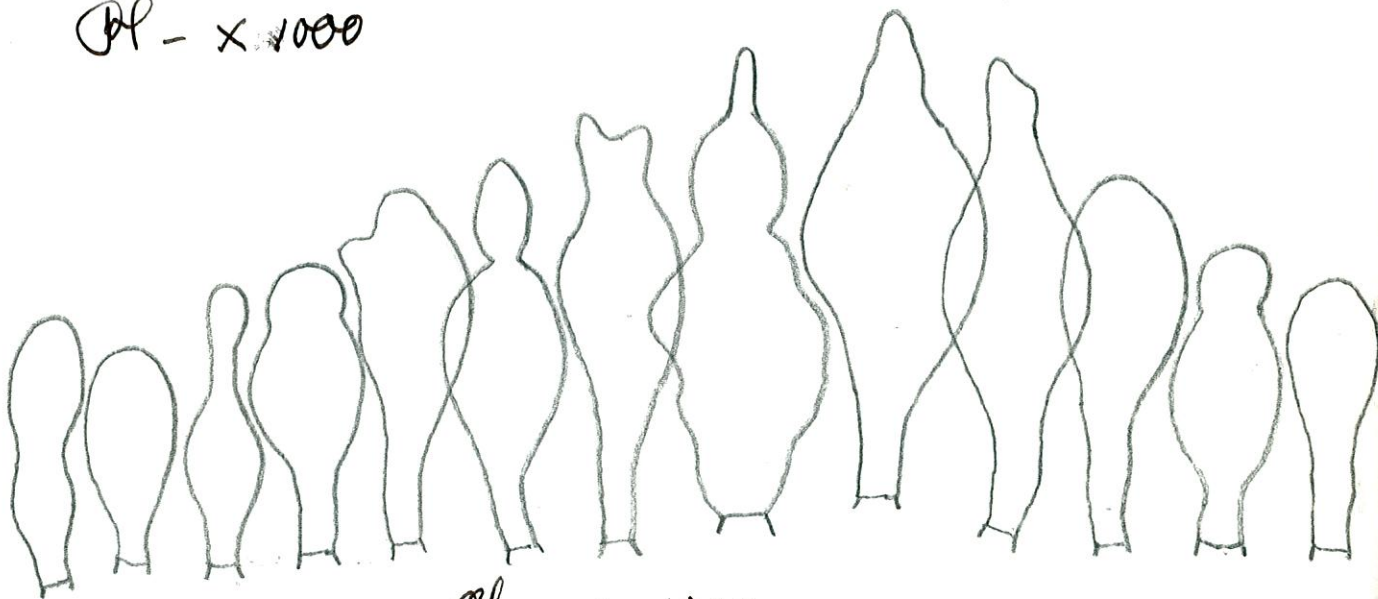


Spores $\times 8000$

Agrocybe retigera
20640 (Alabama)



Sp - x 1000



Ch x 1000

more

STROPHARIA RUGOMARGINATA Zeller & Epling

The Zeller herbarium was purchased by The New York Botanical Garden. I have studied the type and co-type of the above species, and it is an Agrocybe.

This should be: Agrocybe rugomarginata (Zeller & Epling) comb. nov.

Apr. 1977, L. R. H.

AGROCYBE SACCHARI (Murr.) Dennis

Bull. Soc. Myc. Fr. 69: 180. 1953

Naucoria sacchari Murr., Mycologia 4:79. 1912.

2. Hebeloma cubense Murr., North Amer. Flora 10:227. 1924

[from French]

(Translation of Dennis' original account)

A. finicola

Pileus reaching 2 cm broad, hemispheric, then convex, at first slightly viscid, often floccose on the marginal region, fibrillose from the veil remnants, at first honey-yellow, blending into "cream buff" on the margin; flesh thin, "cream buff."

Lamellae adnate, "snuff brown," rather broad, close.

Stipe at first white with veil/fibrils very apparent, then "cream buff," or chamois, hollow. Veil very evident, ~~not~~ not well-developed, white, ~~leaving~~ leaving remnants on pileus margin.

Spores 11-13 x 7-8 μ , elliptic, truncate at apex, smooth, brown. Basidia 4-spored. Cheilocystidia 25-33 x 8 μ , ventricose. Pileus surface of pyriform cells, sometimes covered with filamentous veil remnants. Carpophores in vegetable debris.

Material Examined: Trinidad, St. Augustine, on decaying stalks of Musa, Sept. 24, 1949, Dennis No. 36; Jamaica, Hope Gardens, on decaying trash of sugar cane, F. S. Earle No. 322, Oct. 31, 1902 (Typus); Cuba, on decaying cloth sack, in a garden, June 15, 1907 (Type of Hebeloma cubense).

this is an
Agrocybe
and is
different from
A. sacchari

(A. broadwayi)

This species differs from the preceding and from A. semiorbicularis by its very evident white veil and by its habitat. Naucoria ~~is~~ underwoodii Murr., on decaying wood, from Cuba, is also an Agrocybe, but its spores measure only 9-11 x 6-7 μ .

Singer (Sydowia 9: 403. 1955) states that it has all the characters of A. fimicola (Speg.) Sing. (The 4-spored race), and they are undoubtedly the same.

Singer also thinks A. fimicola is same as Naucoria subamara Murr. Lloydia 5: 150. 1942.

AGROCYBE SACCHARI (Murr.) Dennis

Bull. Soc. Myc. Fr. 69: 180. 1953

Naucoria sacchari Murr., Mycologia 4:79. 1912.

Hebeloma cubense Murr., North Amer. Flora 10:227. 1924.

(Translation of Dennis' original account)

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Lamellae adnate, "snuff brown," rather broad, close.

Stipe at first white with veil/fibrils very apparent, then "cream buff," or chamois, hollow.

Spores 11-13 x 7-8 μ , elliptic, truncate at apex, smooth, brown. Basidia 4-spored. Cheilocystidia 25-33 x 8 μ , ventricose. Pileus surface of pyriform cells, sometimes covered with filamentous veil remnants. Carpophores in vegetable debris.

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This species differs from the preceding and from A. semiorbicularis by its very evident white veil and by its habitat. Naucoria ~~¶~~ underwoodii Murr., on decaying wood, from Cuba, is also an Agrocybe, but its spores measure only 9-11 x 6-7 μ .

AGROCYBE SACCHARI (Murr.) Dennis

Bull. Soc. Mycol. de France 69:180. 1953

Naucoria sacchari Murr., Mycologia 4:79. 1912.

Hebeloma cubense Murr., North Amer. Flora 10:227. 1924.

Dennis says this

Type (Naucoria sacchari Murr.)

Pileus 1-1.5 cm broad, obtuse, convex to expanded, moist, subviscid, pale fuscous, shading to nearly white on margin, ^{which is} slightly floccose-scaly to glabrous, margin even.

Lamellae adnate, pale-fuscous, rather broad, distant, nearly plane.

Stipe 3-4 cm long, 1 mm thick, concolorous, floccose, cylindric, hollow.

Notes by Hesler

Spores 10-13(15) x 7.5-9(9.5) μ , brown in KOH, smooth, truncate, wall double.

→ Material very sparse, and I was unable to observe other micro characters.

It is Agrocybe sacchari (Murr.) Dennis

Type on rotting sugar-cane trash, near Kingston, Jamaica, leg. F. S. Earle, No. 322, October 31, 1902.

Dennis thinks Hebeloma cubense Murr. is same as A. sacchari (Murr.) Dennis, but gills crowded in former, and veil appendiculate.

over

Dennis (Bull Soc Myc Fr 69:180) gives an account
of A. sacchari (Murr.) Dennis [the comb. nov. made by Dennis
in an above citation], listing as synonyms: Naucoria
sacchari Murr., + Hebeloma cubense Murr.

AGROCYBE SEMIORBICULARIS (St. Amans) Fayod

Key to Some of Its Variants

- by H.R. Feltner, February, 1976.

1. Pileus 1-3(5) cm broad, hemispheric at first, finally expanding convex-hemispheric, glabrous, viscid when young, fresh, and moist, ochraceous buff to yellowish; odor mild, taste farinaceous; veil slight, cortinate, fugacious, leaving fibrillose remnants on the pileus-margin and/or on stipe-apex; spores 10-15 x 7-9(10) μ , truncate; pleurocystidia present, ventricose, often subcapitate, 8-10(12) μ broad
- A. semiorbicularis var. semiorbicularis (Tenn-13778, 21509)
1. Not with the above combination of characters 2
2. Pileus at maturity with tawny scales; odor fungoid; otherwise similar to type variety (South Carolina) . . A. semiorbicularis var. Tenn-29022
2. Not with the above combination of characters 3
3. Pleurocystidia absent 4
3. Pleurocystidia present, 7-12(15) μ broad 6
4. Spores 8-9(10) x 5-6 μ ; pileus ochraceous tawny . . A. vervacti (Fr.) Romagn. *
4. Spores 9-13 x 7-8 μ ; pileus dingy ochraceous, viscid A. semiorbicularis var. Tenn-16445 sensu Romagn.
4. Spores 11-18 x 8-11 μ ; pileus not as above 5
5. Pileus orange yellow to honey yellow, viscid; odor mild; stipe concolorous
- A. semiorbicularis var. Tenn-39210 (also: 26238)
5. Pileus light ochraceous buff, hygrophanous; odor farinaceous; stipe concolorous but paler
- A. semiorbicularis var. Tenn-39212
6. Spores 9-11.5 x 6-7 μ ; pileus honey yellow; stipe scurfy A. semiorbicularis var. Tenn-20490
6. Spores larger 10-18 x 7-10 μ 7

* Based on Smith's notes, in turn from Romagnesi, in turn based on A. vervacti sensu Sacc

A. semiorbicularis, variants - 2

- 7. Veil none 8
- 7. Veil present 11
 - 8. Odor mild or none, taste farinaceous; pileus
chamois or honey yellow
. . A. semiorbicularis var. Tenn-20811 (also: 24869)
 - 8. Odor and taste farinaceous; pileus otherwise
colored 9
- 9. Pileus pinkish buff, dry; spores (or several of them)
rhomboid A. semiorbicularis var. Tenn-20120
- 9. Pileus and spores not as above 10
 - 10. Pileus cream buff, then paler yellowish buff;
pleurocystidia 8-10 μ broad, cheilocystidia
6-7 μ broad
. . A. semiorbicularis var. Tenn-29008 (also: 39213)
 - 10. Pileus ochraceous, then yellowish tawny;
pleurocystidia 18-22 μ broad, cheilocystidia
9-16 μ broad . . . A. semiorbicularis var. Tenn-14184
- 11. Veil forming an annulus
. A. semiorbicularis var. annulata
- 11. Veil leaving appendiculate remnants on pileus
(no annulus)
. A. semiorbicularis var. Tenn-20857 (also: 14185, 23227)

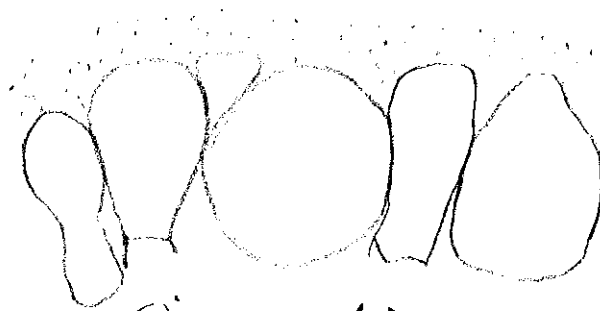
Notes inadequate

2800 AGROCYBE SEMIORBICULARIS (St. Amans) Fayod

On soil, new lawn, Hesler's yard, Knox Co., April 8, 1951

Spores 10-14.5(19) x 8-10.5(12) μ , smooth, thick-walled, truncate. Pleurocystidia none found; cheilocystidia 27-42 x 7-10 μ , ventricose, usually capitate. Pileus trama of broad, loosely interwoven hyphae. Pileus cuticle of sub-cuneiform to subclavate palisade of cells, with some more or less spherical elements, surface with a slight gelatinous zone.

Agrocybe semiorbicularis (Fr. Amans) Fayod
2800



Pileus cuticle $\times 1000$

Notes inadequate

3830 AGROCYBE SEMIORBICULARIS (St. Amans) Fayod

On Grassy soil, U-T Farm, Knoxville, May 22, 1934

Spores 11-16 x 7-9.5(11) μ , ellipsoid, smooth, more or less truncate. Pleurocystidia widely scattered, 36-47 x 8-12 μ ; cheilocystidia 26-33 x 9-12 μ , often capitate. Otherwise usual.

Notes needed on
odor, taste, & veil.

4153 AGROCYBE SEMIORBICULARIS (St. Amans) Fayod

On soil and compost, UT Farm, Knoxville, April 23, 1934

Pileus 1-2 cm, semiglobose, then expanding somewhat.
Stipe 2.5-4 cm long, 1.5-2.5 mm thick.

Spores 11-15(16) x 7-9 μ , smooth, many slightly or distinctly truncate. Pleurocystidia 34-45 x 7-11 μ ; ventricose, rarely capitate; cheilocystidia 28-34 x 6-10 μ , mostly with a capitellum. Pileus cuticle of more or less clavate, cell-layer.

Notes inadequate

4857 AGROCYBE SEMIORBICULARIS (St. Amans) Fayod

On soil, in pasture, UT Farm, Knoxville, April 6, 1935

Spores 11-15(18) x 8-11 μ , smooth, more or less truncate. Pleurocystidia rare, 38-44 x 7-10 μ ; cheilocystidia in clusters, 28-35 x 6-9 μ , often with a capitellum. Pileus cuticle of clavate cells, more or less collapsed, surface with a thin gelatinous zone.

Notes inadequate

9663 AGROCYBE SEMIORBICULARIS (St. Amans) Fayod

On lawn, leg. Mrs. H. M. Jennison, Knoxville, October 26, 1936

Spores 11-15.5 x 7-9.5 μ , smooth ϕ , more or less truncate. Pleurocystidia and cheilocystidia usual. Pileus cuticle of clavate cells, with a thin gelatinous zone on its surface.

Notes inadequate

10508 AGROCYBE SEMIORBICULARIS (St. Amans) Fayod

Leg. G. W. Martin, Iowa City, Iowa, May 15, 1935

Spores 11-16 x 7.5-9 μ , smooth, more or less truncate. Pleurocystidia not found; cheilocystidia 30-38 x 6-10 μ , ventricose, many with a capitellum. Otherwise usual.

13778

AGROCYBE SEMIORBICULARIS (St. Amans) Fayod *var. semiorbicularis*
Ann. Sc. Nat. VII. 9: 358. 1889.

Pileus 1-5 cm broad, almost hemispheric at first, convex, expanded, glabrous, hygrophanous, "ochraceous buff," "antimony yellow," "cream buff," or "chamois" to "honey yellow," darker when wet ("clay color"), viscid when wet, pellicle separable to disc, margin even or at times crenate or slightly appendiculate from veil.

Context thin, white, pinkish brown in 15% KOH, pliant; odor ^{mild or} none; taste ^{slightly and} ~~mildly~~ but promptly farinaceous, not bitter.

Lamellae adnate-decurrent to uncinata or adnexed, seceding, close to almost subdistant, many lamellulae, about 4 ranks, broad, ventricose, sub-triangular, at times ventricose, rounded behind, whitish when young, "natal brown," "snuff brown," "warm sepia," to "drab," edges crenulate or fimbriate.

Stipe 3-9 cm long, 1-5 mm thick, tough, concolorous or paler, equal or tapering either way, base often bulbillate, dry, pruinose at apex, elsewhere fibrillose, glabrescent, longitudinally striate, at times compressed, stuffed then hollow. Veil slight, fugacious, at times appendiculate, white, cortinate, ~~or nearly absent~~.

Spores ^{10-15(15.5)x(7)8-9.5μ} ~~various shapes~~ ellipsoid, smooth, more or less truncate, color in mass: "natal brown," "bone brown," "bister" to "benzo brown." Pleurocystidia absent or present and variable: cylindrical, bottle-shaped,

(No. 13778)

A. semiorbicularis - 2

apex rounded, rarely forked, 25-66 x 9-12(22) μ ,
scarcely projecting or projecting 15-35 μ , not always
abundant, occasionally missing; cheilocystidia clustered
on edges, bottle shaped, at times capitate, occasionally
forked, 28-45 x 7-12 μ (head about 4.5 μ). Pileus
cuticle a palisade of clavate cells, 20-25 x 9-12 μ .

13778 AGROCYBE SEMIORDICULARIS (St. Amans) Fayod var. semiorbicularis
On lawn, LaFollette, Tenn., leg. Miss Overton, June 15, 1941

Pileus 2-4 cm broad, convex, expanding, hygrophanous, "ochraceous buff" to "antimony yellow" when dry, "clay color" when wet, slightly viscid, margin even, glabrous. Context thin, pliant, white; odor none, taste mildly but promptly farinaceous.

Lamellae adnate-decurrent or adnexed, seceding, "natal brown" to "warm sepia" or "drab," pale when young, close, broad, edges white-fimbriate, ventricose, subtriangular.

Stipe 3-6 cm long, 1-4 mm thick, concolorous or paler, equal or tapering either way, dry, fibrillose, glabrescent, longitudinally striate, stuffed-hollow. *Veil slight, fugacious.*

Spores "natal brown" to "bister" in deposit, ^{10-15(15.5) x} ~~10-15 x~~ ^{(7) 8-9.5 μ} ~~8-9.5 μ~~ , truncate, smooth, brown in KOH. Pleurocystidia 35-66 x 9-12 ^{μ} ~~10-12 μ~~ , apices very rarely forked, ventricose, widely scattered; cheilocystidia 32-45 x 10-12 μ , ventricose, often capitate. Pileus cuticle a palisade of cuneiform to clavate cells, occasionally with a slightly gelatinous surface zone. Pileus trama of broad, loosely interwoven hyphae.

~~[same as 20490, #139213]~~

14184

~~14184~~

~~14184~~

14184 AGROCYBE SEMIORBICULARIS (St. Amans) Fayod var. ~~14184~~

On rich soil, under shrubs, Park Headquarters, GSMNP, ~~14184~~

Gatlinburg, Tenn., May 24, 1942

Pileus 1-2 cm broad, hemispherical, ~~viscid~~ *ochraceous buff to yellowish tawny,*

disc often darker, viscid, glabrous, margin even. Context white, medium thick; odor and taste farinaceous.

Lamellae adnexed, sub-triangular, broad, "drab," close, edges white-fimbriate.

Stipe 4-5 cm long, 1.5-4 mm thick, at times compressed, tapering downward or equal, concolor to pileus, paler above, fibrillose, hollow. *Veil none.*

Spores ellipsoid, smooth, 12-16 x 7-10 μ . Pleurocystidia 48-66 x 20-22 μ , ventricose; cheilocystidia 27-45 x 9-16 μ , ventricose, often somewhat capitate, some with a short basal stalk. Pileus cuticle of clavate cells, with a thin gelatinous zone on the surface.

14185

AGROCYBE

var. 20857
semiorbicularis (St. Amans) Fayod

On lawn, Chapman Highway, Knoxville, May 28, 1942

Pileus 2-3.5 cm broad, convex, becoming plane or not fully expanding, pale ochraceous (not matched), subviscid, margin appendiculate from veil remnants. glabrous, Context white, rather thin; odor and taste farinaceous.
~~hygroscopic.~~

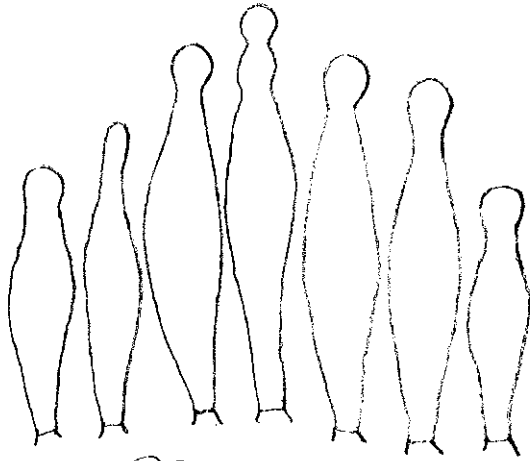
Lamellae adnate, rounded and broad behind, pallid at first, then brownish, rather narrow, close, edges fimbriate.

Stipe 3-6 cm long, 2-4 mm thick, "clay color," equal, with scattered fibrils, hollow. Veil white, slight, evanescent.

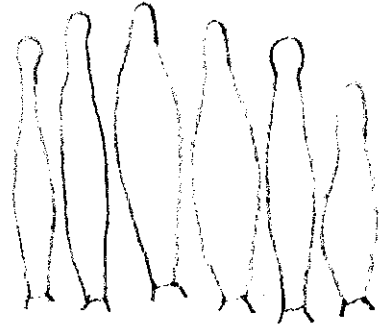
Spores "bister" in deposit, 11-15 x 8-10 μ , scarcely inequilateral in profile, ellipsoid in face view, smooth, wall 0.8 μ thick, truncate, brown in KOH. Pleurocystidia 34-52 x 7-11 μ , ventricose, capitate to subcapitate, scattered (not abundant); cheilocystidia 30-38 x 5-10 μ , ventricose, neck not capitate or rarely obscurely so. Pileus trama of broad, loosely interwoven hyphae. Pileus cuticle of clavate cells, soon more or less collapsing and not readily observed in mature caps, surface with a thin zone of gelatinous hyphae. Stipe cuticle of repent hyphae, surface bearing some aerial hyphae, the terminal elements as caulocystidia, somewhat similar to the cheilocystidia. Clamp connections not seen.

Smith called this N. platysperma, which is an Agrocybe.

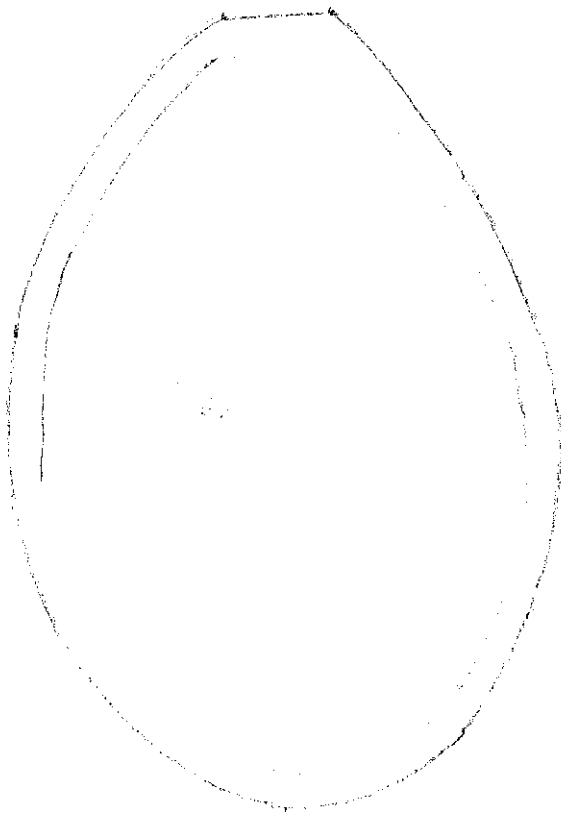
~~Agaricus~~ ~~Monocoria~~ ~~platyot~~
Termin - 14185 Agaricus semiorbicularis
var. 20857



Ph $\times 1000$



Ch $\times 1000$



Spore $\times 8000$

Notes inadequate.

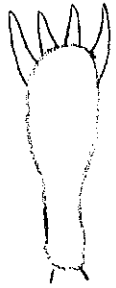
16322 AGROCYBE SEMIORBICULARIS (St. Amans) Fayod
On lawn, Park Headquarters, Gatlinburg, leg. S. A. Cain,
June 14, 1944

Pileus 8-15 mm, semiglobose, expanded-convex,
slightly viscid, glabrous. Stipe 3.5-5 cm long, 1-2 mm
thick.

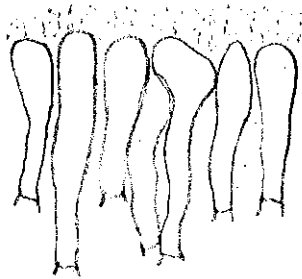
Spores 11-15 x 7.5-9.5 μ , smooth, many more or less
truncate. Pleurocystidia and cheilocystidia usual.
Pileus cuticle of clavate cells in a palisade, 22-32 x
4-6 μ , with a thin gelatinous zone on the surface.

Agrocybe semiorbicularis (Fr. Amana) Fayod

16322



Basidium
x 1000



Spores cuticle
x 1000

16445

AGROCYBE SEMIORBICULARIS var.

~~16445~~ 16445

~~16445~~

~~AGROCYBE~~

On Hesler's lawn, Knox Co., May 27, 1966

Pileus 8-15 mm broad, convex, dingy ochraceous, fibrillose, slightly viscid, ^{margin} even. Context white; odor and taste farinaceous.

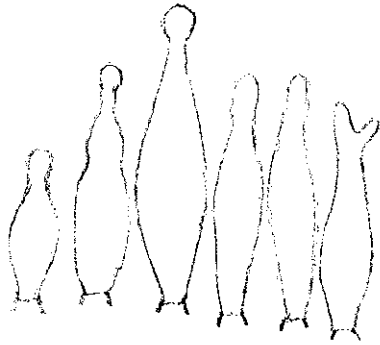
Lamellae whitish then dingy brown, broad, ^{close to} nearly subdistant.

Stipe 4-6 cm long, 1-2.5 mm thick, concolorous, with a faint orange tint when fresh, hollow. Veil white, evanescent.

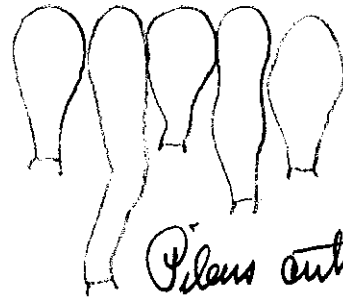
Spore deposit: near "Verona brown" when fresh, near "bister" on drying, ⁹ 10-12(13) x 7-8 μ , obscurely inequilateral in profile, ellipsoid in face view, smooth, obscurely to rather distinctly truncate, wall 0.7 μ thick, brown in KOH. Pleurocystidia none; cheilocystidia 18-36 x 6-10 μ , ventricose, mostly more or less capitate. Gill trama of subparallel hyphae, 4-6 μ broad. Pileus trama of broad (6-15 μ), loosely interwoven hyphae. Pileus cuticle of more or less clavate to subpyriform cells which become collapsed early in pileus development (best observed in "buttons"), surface with a thin gelatinous zone.

Moderately close to A. vervacti, in which the odor is weak and not farinaceous, lamellae close or crowded, spores 8-9 x 5-6 μ , cheilocystidia with flexuous necks and enlarged apices, pileocystidia present.

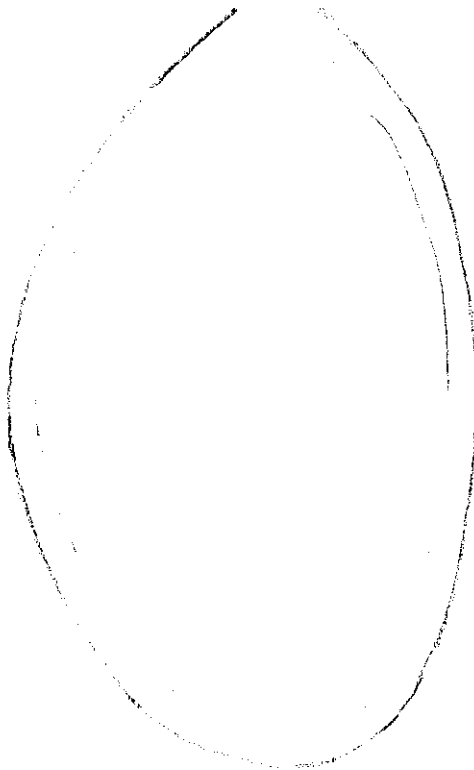
Agrocybe semiorbicularis var. 16445
16445



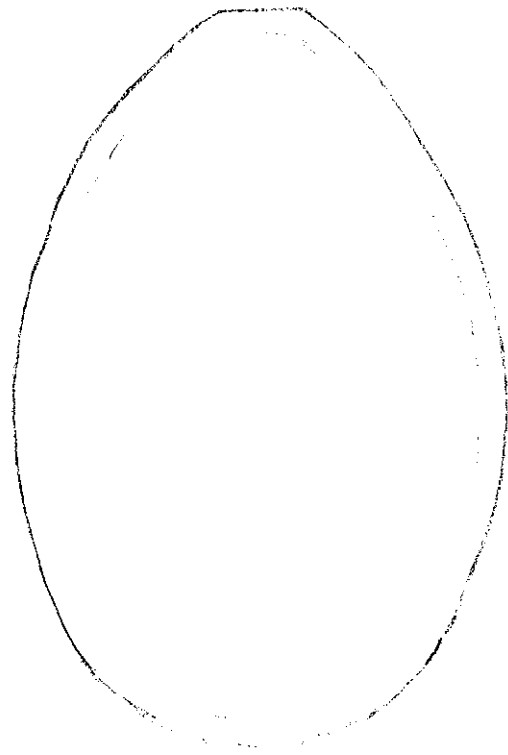
Ch x 1000



Pileus cuticle - x 1000



Profile



Face

Spores x 8000

Notes inadequate

17494 AGROCYBE SEMIORBICULARIS (St. Amans) Fayod
On lawn, Knoxville, May 12, 1946

Spores in deposit "bister," 10-15 x 7.5-9 μ , more or less truncate, smooth. Pleurocystidia not found; cheilocystidia 22-38 x 6-8 μ , ventricose, many with a small capitellum.

Tenn-20120

Agrocybe semiorbicularis var. ~~20184~~ ~~20182~~ ~~20188~~ 20120

on lawn, Hesler's yard, Timberlake Rd., Knoxville, July 4, 1951

to \pm cream buff,
Pileus mycenoid, 5-14 mm broad, pinkish buff, margin even,
scarcely incurved, glabrous, dry. Context rather thin;
odor and taste farinaceous.

Lamellae adnate, broad, medium close, edges white-fimbriate.

Stipe 3-4 cm long, 1.5-2 mm thick, concolor but paler. Veil none.

Spores 12-17 x (8)9-10.5 μ , ellipsoid, several more or less rhomboid, wall thick, double, smooth, some distinctly truncate, others only obscurely so, ~~gamy pores present~~, reddish brown in 2% KOH, yellowish brown in water. Basidia 26-32 x 7-9 μ , (4)-spored. Pleurocystidia 28-40 x 7-10 μ , clavate, and either appendiculate or capitate, scattered; cheilocystidia 15-38 x 4-8 μ , ventricose-subcapitate.

Gill trama of slightly interwoven hyphae, 3-5 μ broad.

Pileus trama of loosely interwoven hyphae, 5-10 μ broad.

clavate cells which have collapsed on the surface.
Pileus cuticle of ~~repent hyphae~~ ~~pileocystidia none~~ Stipe cuticle of repent hyphae; caulocystidia none. Clamp connections on stipe epicuticular hyphae.

near A. platysperma, in which the pileus is ochraceous or reddish yellow then soon whitish; ample veil present, as flocculent remnants on the pileus margin; ^(subannular) odor & taste not mentioned, but may be mild; the micro characters of the two (platysperma + 20120) are similar.

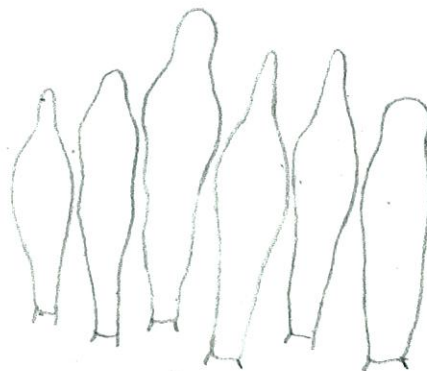
check again

Agrocybe

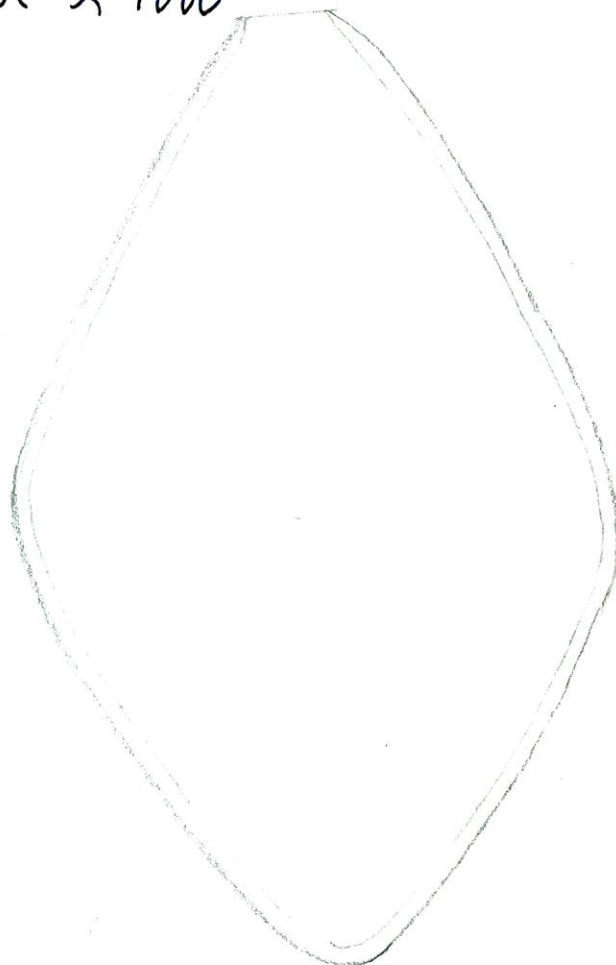
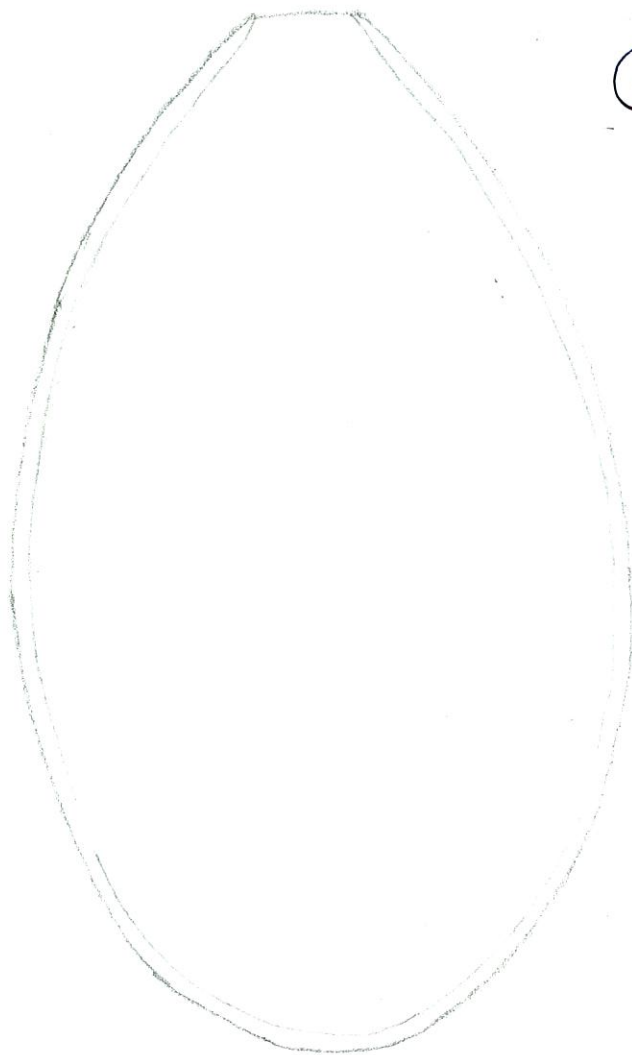
Term- 20120



ch x 1000



GP x 1000



Spores x 8000

AGROCYBE

semicircularis var

14184
20490
14184
~~20490~~
14184

7.

20/10/18

Spores ~~1.5-2.5 x 1.5-2.5~~ slightly inequilateral

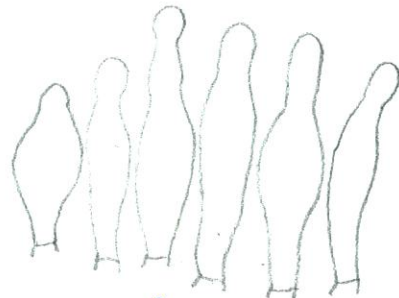
in profile, ellipsoid in face view, yellowish brown in 2% KOH, smooth, truncate, ~~and with a granular pore~~ Pleurocystidia

KOH, smooth, truncate, ~~and with a gelatinous zone~~, Pleurocystidia
30-52 x 8-14 μ , ventricose, more or less capitate, *rarely forked*,
scattered; cheilocystidia 20-34 x 6-10 μ , similar. Gill
trama of slightly interwoven hyphae, 3-7 μ broad. Pileus
trama of broad, very loosely interwoven hyphae. Pileus
cuticle of clavate to subglobose cells, which become repent,
with a thin gelatinous zone.

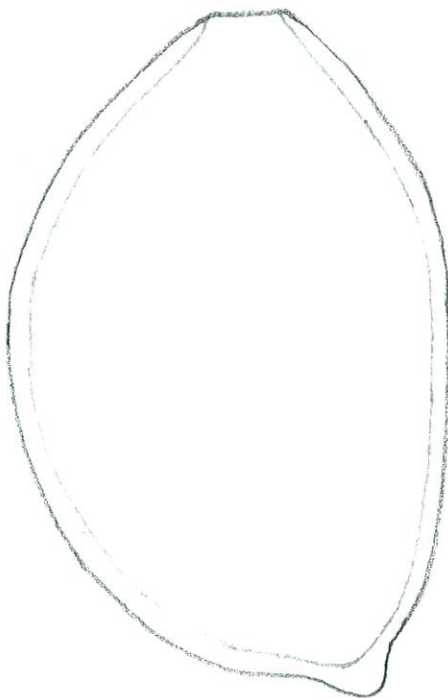
~~Platanus~~ *Agrocybe semiorbicularis* v. ~~##181~~ 20490
Tenn - 20490



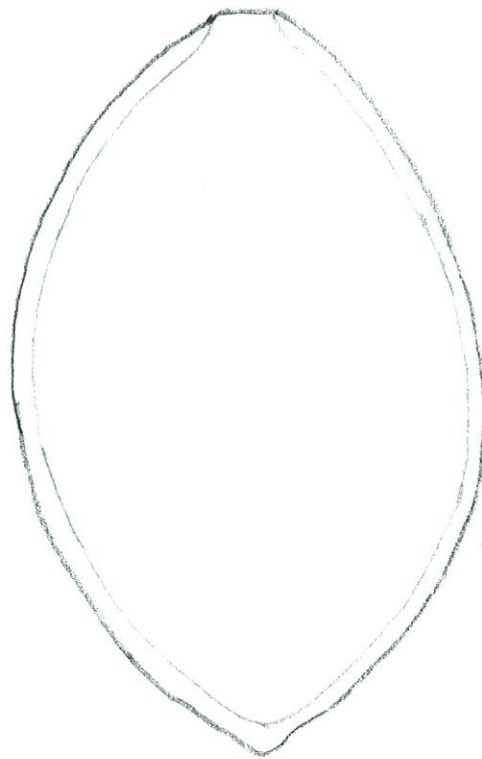
Pl x 1000



ch x 1000



Profile



Face

Spores x 8000

24307
no. 20811

20811 AGROCYBE SEMIORBICULARIS ~~(St. Amans)~~ Payson, PHOTO
On lawn, W. E. Cole's yard, Knoxville, May 6, 1953

Pileus 1.5-5 cm broad, convex, scarcely hemispheric, finally expanding plane or wavy, viscid when wet, ^{shining,} slightly hygrophanous, "chamois" to "honey yellow" or "ochraceous buff," pellicle separable to disc, ~~not~~ glabrous, ~~shining,~~ margin usually even, sometimes crenate. Context thin, yellowish; odor none, taste farinaceous, not bitter.

Lamellae adnate to subdecurrent, seceding, at first whitish, finally "snuff brown," nearly subdistant, lamellulae of 4 ranks, broad, ventricose, edges pale, crenulate or fimbriate.

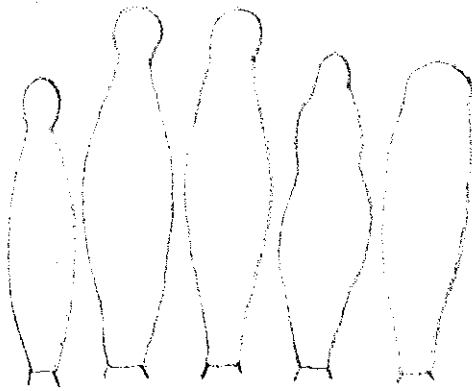
Stipe 5-9 cm long, 3-5 mm thick, equal or slightly enlarged above, slightly pruinose at apex, with few scattered fibrils below, concolorous but paler, dry, shining, hollow. Veil ^{none} ~~not seen~~. [Smith says: "veil rudimentary and leaving only a faint ^{fluorescent} fibrillose zone..."]

Spores in deposit: "bone brown," 10-15 x 7.5-9.5 μ , obscurely inequilateral in profile, ellipsoid in face view, wall 0.7 μ thick, smooth, truncate, ^{yellowish-} brown in KOH. Basidia 26-30 x 8-10 μ , 4-spored. Pleurocystidia 34-48 x 8-13 μ , ventricose, more or less capitate, scattered to widely so; cheilocystidia 30-42 x 6-10 μ , similar, clustered. Gill trama of slender, subparallel hyphae. Pileus trama of broad, loosely interwoven hyphae. Pileus cuticle a layer of cuneiform to clavate cells (a palisade), with a clear, gelatinous zone. Stipe cuticle of repent brownish hyphae. Clamps not observed.

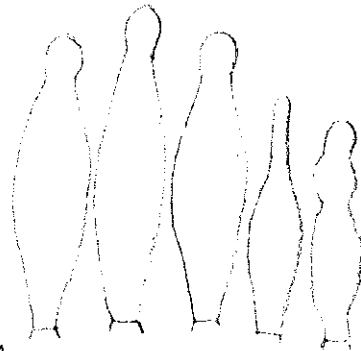
Identification confirmed by A. H. Smith, who called this collection a large form. ~~It lacks a veil, places it near~~ 13478 ^{but different}

Agrocyste semiorbicularis (Fr. Amann) Fayod

20811



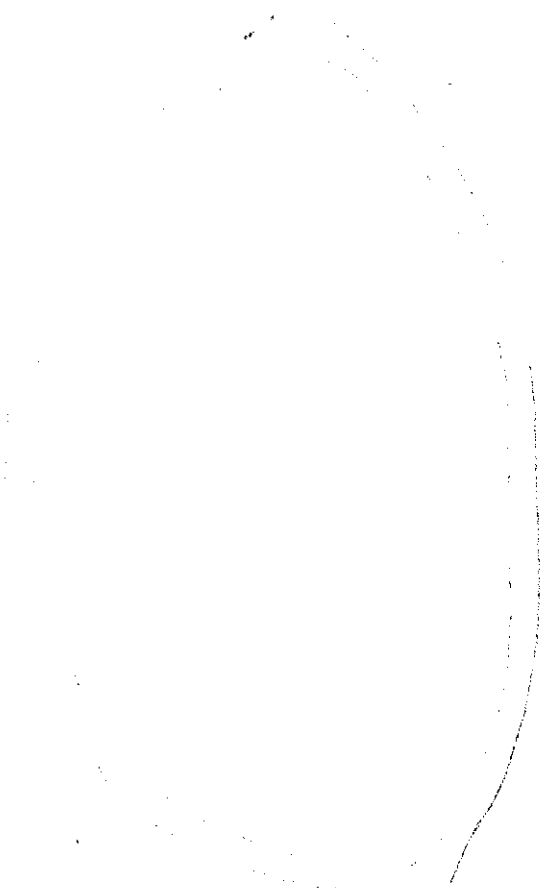
Sp $\times 1000$



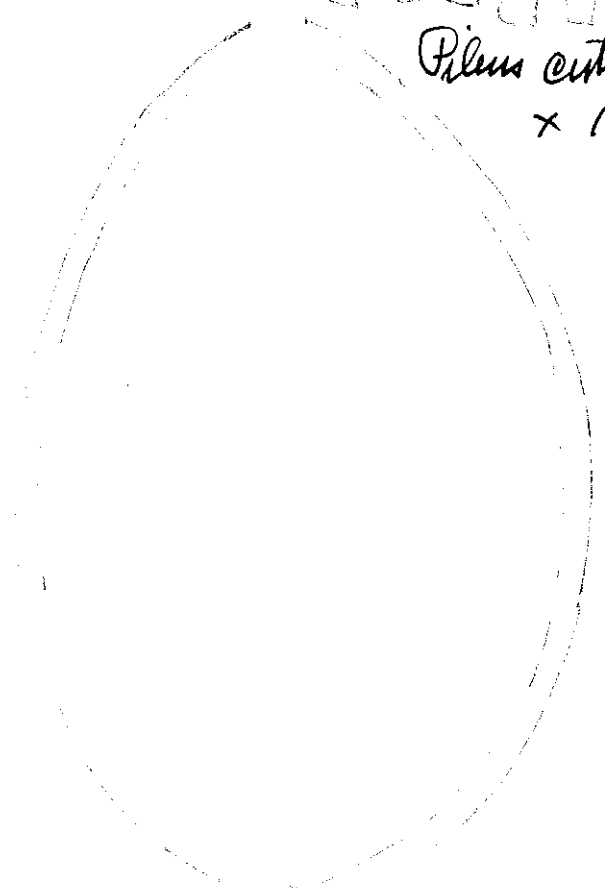
Ch $\times 1000$



Pileus cuticle
 $\times 1000$



Profile



Face

Spores $\times 8000$



20811 - *Agrocybe semiorbicularis* (Fr. Aman.) Fayod -
large form
[about x 1]

Notes inadequate

20813 AGROCYBE SEMIORBICULARIS (St. Amans) Fayod PHOTO

On lawn, Knoxville, May 9, 1953

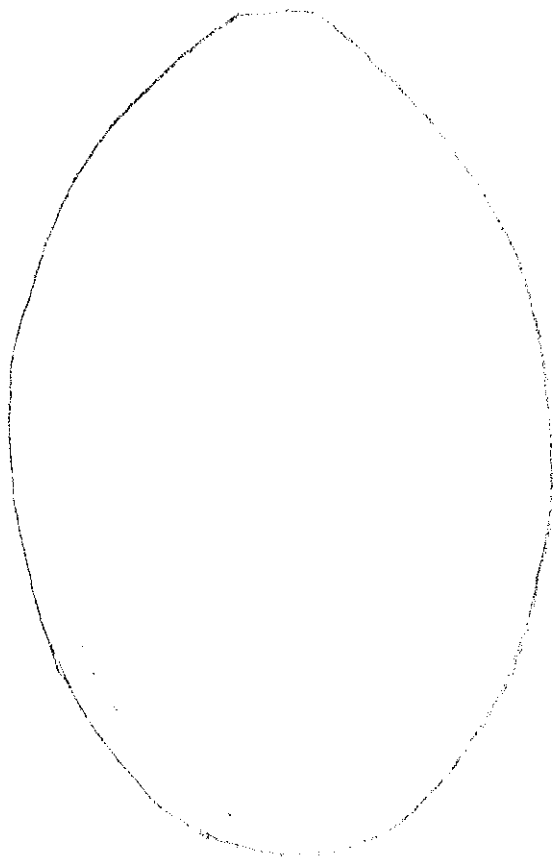
Pileus 1-2.5 cm broad, convex-semiglobose, yellowish when wet, "ochraceous buff" when dry.

Stipe 4-6 cm long, 1.5-2.5 mm thick.

Spores in deposit "bister," 11-15 x 7-9 μ , many truncate, smooth, brown in KOH. Pleurocystidia 38-46 x 9-16 μ ; cheilocystidia 28-34 x 10-12 μ , bottle-shaped, with or without an apical capitellum. Pileus cuticle of clavate cells, more or less collapsed on the surface, subgelatinous.

Agrocybe semiorbicularis

20813



Spore x 8000



20813 - *Agrocybe semiorbicularis* (St. Amans) Fayod

x $\frac{4}{3}$

20857

20857 AGROCYBE SEMIORBICULARIS (St. Amans) Fayod PHOTO
On lawn, Timberlake Road, Knox Co., coll. & det.: L. R.

Hesler, June 14, 1953

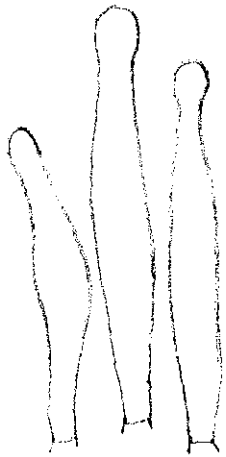
Pileus 1-3 cm broad, semi-globose, finally expanding, viscid when wet, "chamois" when young, "cream buff" when mature, glabrous, margin even, slightly appendiculate from veil for short time. Context medium thin, white; odor and taste farinaceous (not bitter).

Lamellae adnate, decurrent by a tooth, seceding in age, pallid when young, finally "snuff brown," close, broad, ventricose, edges fimbriate.

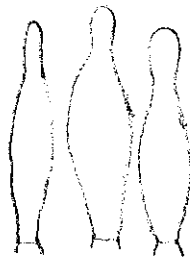
Stipe 3-5 cm long, 2-3 mm thick, brownish, glabrous, dry, equal, base usually bulbillate, occasionally compressed, hollow. Veil webby, white, ample, appendiculate for short time.

"benzo brown" in deposit,
Spores/11-16(17.5) x 7.5-10 μ , ellipsoidal, sometimes slightly truncate, smooth. Pleurocystidia 40-54 x 7-10(12) μ , scattered, variable: bottle-shaped, subfusiform, at times forked at apex; cheilocystidia 25-35 x 7-10 μ more or less clustered, variable: clavate (and obtuse at apex), bottle-shaped, sometimes capitate, at times forked (like pleurocystidia). Pileus cuticle of clavate cells which soon collapse.

Agaveya semiorbicularis (H. Amans) Fayol
20857



$\times 1000$



$\times 1000$



20857. *Agarocybe semiorbicularis* (St. Amans) Fayod

[about $\times 1$]

21509 AGROCYBE SEMIORBICULARIS (St. Amans) Fayod var. semiorbicularis
On rich soil and sawdust, Knoxville, August 14, 1954

Pileus 1-3 cm broad, viscid, "antimony yellow,"
glabrous. Context thick, white, pinkish-brown in 15%
KOH; odor mild, taste farinaceous (not bitter).

Lamellae adnate, broad, subdistant, at first white,
finally brownish, edges fimbriate.

Stipe 3-5 cm long, 2-4 mm thick, concolorous, glabrous,
stuffed then hollow, equal above the sub-bulbous base.
Veil slight, appendiculate, fugacious, white, cortinate.

Spores ^{10-14 x 7-9 μ (10),} ~~10-14 x 7-9 μ~~ , ellipsoidal, more or less
truncate. Pleurocystidia widely scattered, more or less
ventricose, sometimes capitate; ~~many~~ cheilocystidia 28-44
x 7-11 μ , ventricose, at times capitate.

22992

AGROCYBE

semiorbicularis var. 20857
PHOTO

On garden soil, Boarts', Timberlake Rd. Knox Co.,

May 31, 1959

Pileus 2-4 cm broad, convex, then plane, finally slightly wavy-upturned, ^{buff then} "tawny-olive" to "raw sienna," viscid, glabrous, margin even. Context pallid, nearly white, rather thick; odor and taste farinaceous.

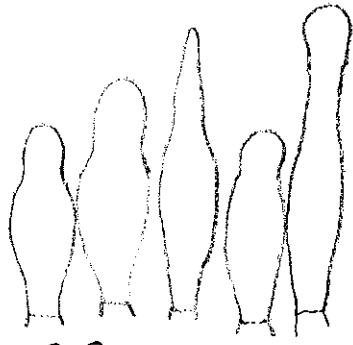
Lamellae adnate, becoming adnexed, seceding, pallid, finally "bister," rather close, broad, more or less rectangular, edges more or less fimbriate.

Stipe 3-5 cm long, 3-6 mm thick, "warm buff" to "light buff," apex pruinose, elsewhere sparsely fibrillose, equal, hollow. Veil white, slight, fugacious.

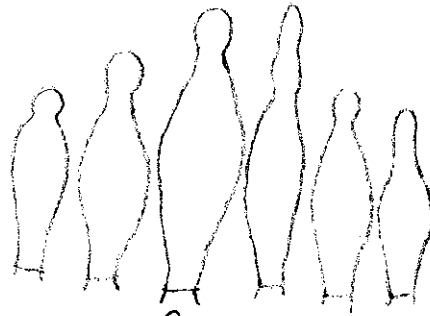
Spores "bister" in deposit, 10-15 x 7-10 μ , obscurely inequilateral in profile, ellipsoid in face view, smooth, truncate, brown in KOH. Pleurocystidia 25-⁴⁵~~35~~ x 8-10 μ , ventricose (more or less ten-pin shaped), or rarely ventricose with a neck, widely scattered, buried and inconspicuous; cheilocystidia 24-38 x 7-12 μ , ventricose, more or less capitate (rarely non-capitate), rather abundant. Pileus trama of broad (6-16 μ), loosely interwoven hyphae. Pileus cuticle of clavate cells, soon becoming repent and very inconspicuous, with a very thin gelatinous zone overlaid. Stipe of slender, repent brown hyphae; caulocystidia scattered, similar to cheilocystidia.

Agrocybe semiorbicularis var. 20867

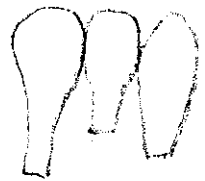
22992



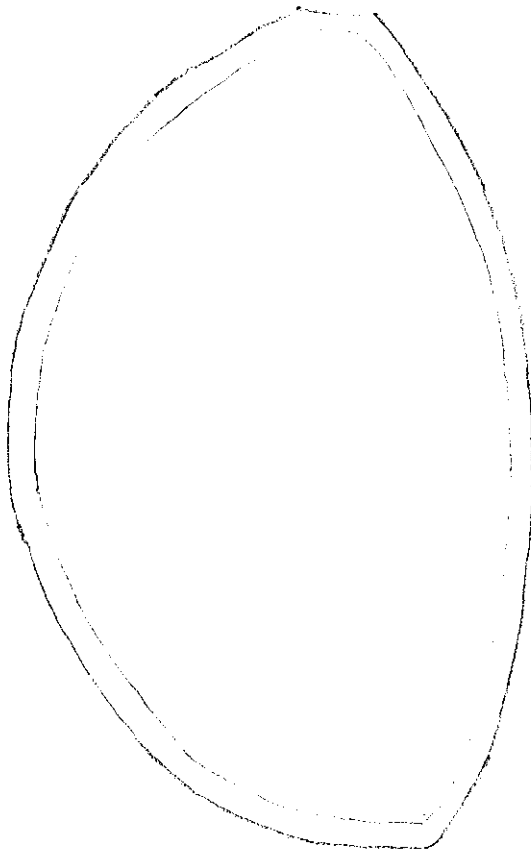
Pl $\times 1000$



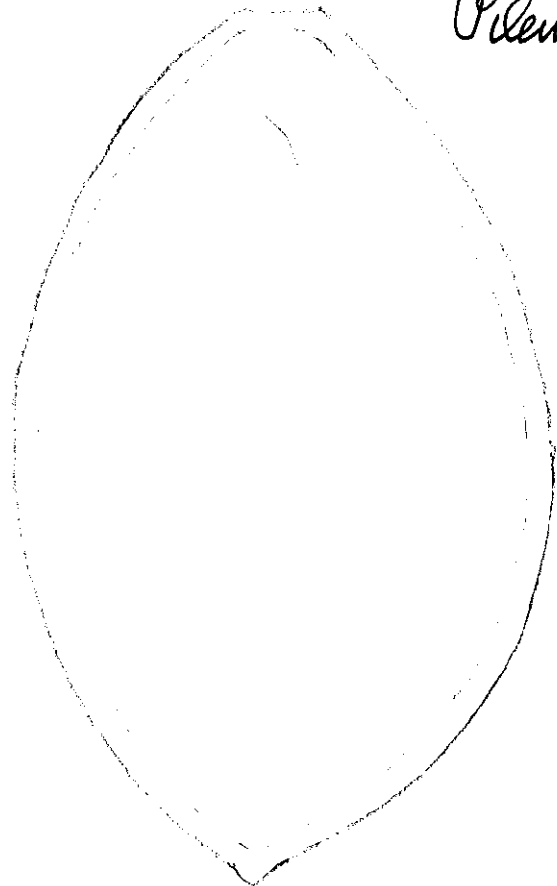
Ch $\times 1000$



Pileus cuticle
 $\times 1000$



Profile



Face

Spores $\times 8000$



22992 - *Agrocybe semiorbicularis* var. 20857
x 1

23227

AGROCYBE semiorbicularis var. 20857

On lawn, Hesler's, Timberlake Rd., Knox Co., May 31, 1959

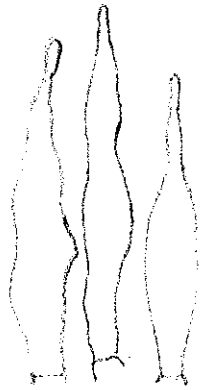
Pileus 8-15 mm broad, convex-hemispheric, expanding-convex, "ochraceous buff" to "yellow ocher," viscid, glabrous, margin even. Context white, rather thin; odor and taste farinaceous.

Lamellae adnate, seceding, white at first, then brownish, finally "bister," broad, close, more or less rectangular, edges fimbriate.

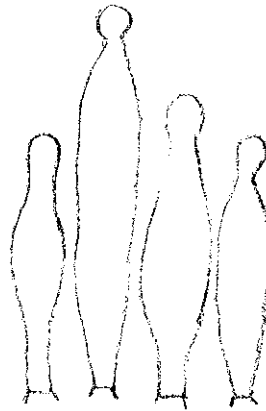
Stipe 2-5.5 cm long, 1.5-2.5 mm thick, "ochraceous buff," with scattered, short fibrils, tapering downward, hollow. Veil slight, white, fugacious, appendiculate for a short time; annulus none.

Spores "bister" in deposit, 10-14 x 8-10 μ , ellipsoid in face view, slightly truncate (in some obscurely inequilateral in profile ^{and} truncation not evident), smooth, brown, thick-walled. Pleurocystidia 40-46 x 8-10 μ , ventricose-cylindric, with a tapering neck, widely scattered (sparse); cheilocystidia 34-50 x 7-9 μ , ventricose, subcapitate or not. Pileus cuticle of more or less clavate cells (hymeniform layer), 16-20 x 3-8 μ , gelatinous zone about 25 μ thick.

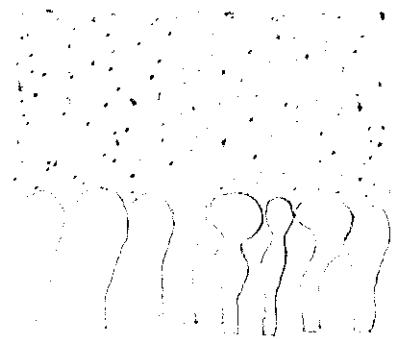
Agrocyte semiorbicularis var. 20857
20227



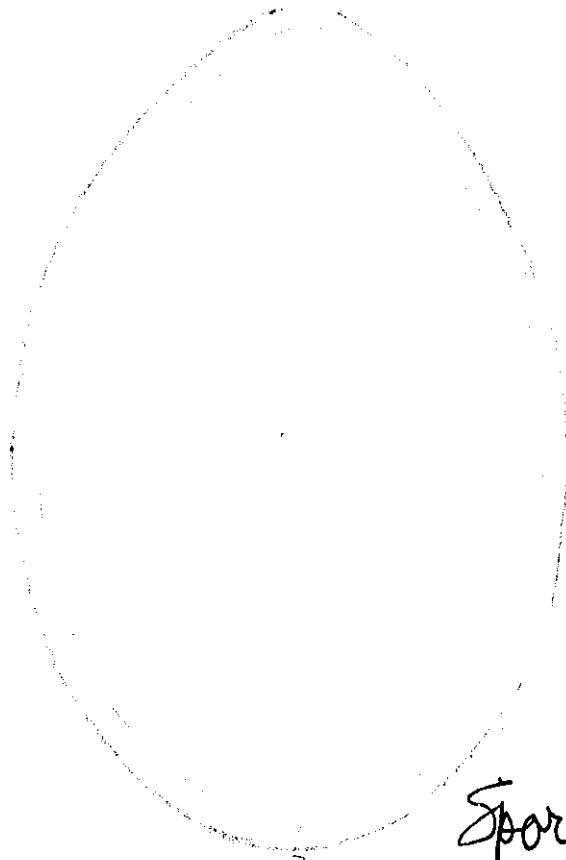
As x 1000
(rare)



Ch x 1000
(abundant)



Pileus cuticle
x 1000
(on very young pileus)



Spore x 8000

on lawn, Ducktown, Tenn., leg. A.J.Sharp, May 28, 1966

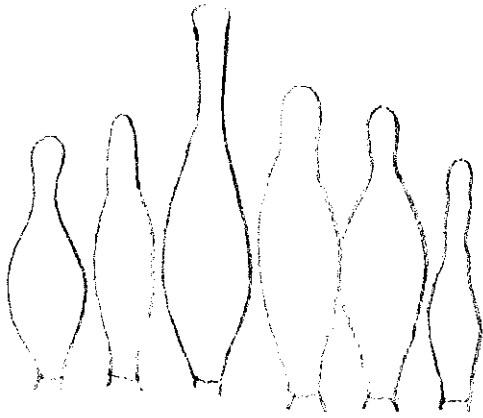
Pileus 1 . 2 cm broad, slightly hemispheric at first, then more or less expanding plano-convex, ochraceous, slightly viscid, margin even, glabrous. Contex medium thin; odor mild, taste farinaceous.

Lamellae, close, ~~margin~~ broad, slightly ventricose, brown(at maturity).

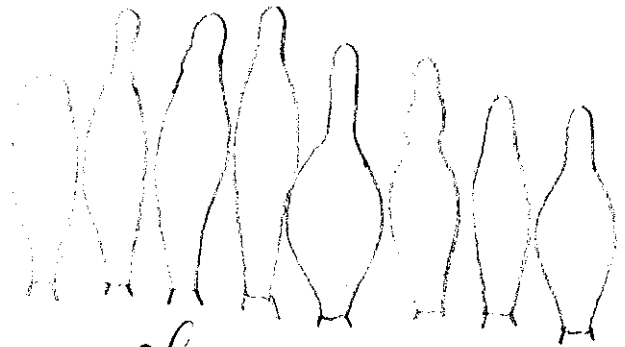
Stipe 4 - 6.5 cm long, 1.5 - 2.5 mm thick, pallid, dry, equal above a subbulbous base. *Veil none.*

Spores 10-13(15) x 7-9 μ , some slightly ~~in~~ inequilateral in profile, ellipsoid in face view, smooth, truncate, wall 0.6 μ thick, brown in KOH. Pleurocystidia 32-48x7-12 μ , scattered, ventricose, with a neck, a few subcapitate; cheilocystidia 28-40 x 8-12 μ , ventricose, with a neck, some subcapitate. Pileus cuticle of small clavate cells, 15-18 x 5-11 μ , which become ~~pinched~~ puckered more or less out of position and then inconspicuous; a thin gelatinous zone observed. Stipe cuticle dry, of repent hyphae. No canlocystidia found.

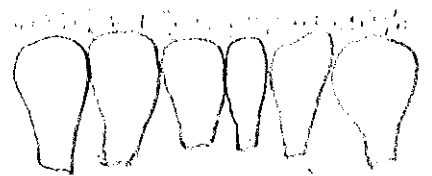
Agrocybe semiorbicularis var 20811
24869



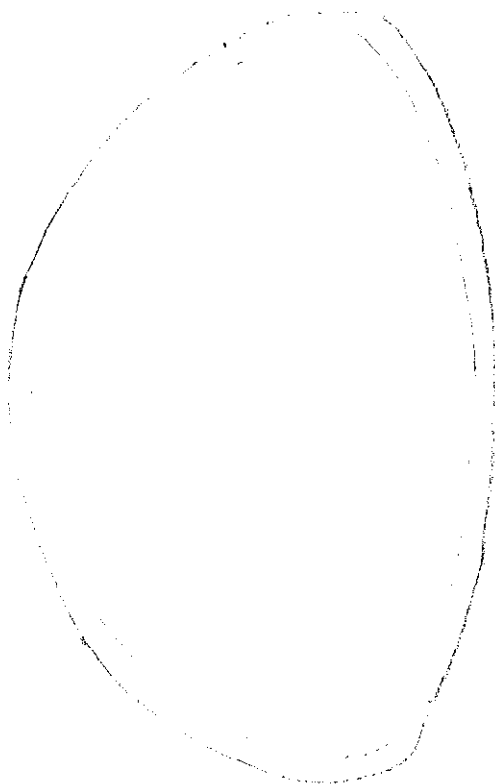
Sp $\times 1000$



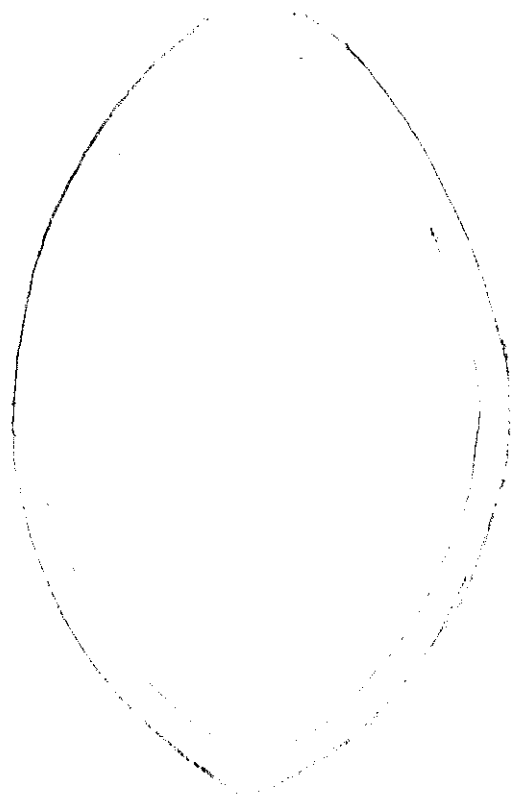
Ch $\times 1000$



Gills attached $\times 1000$



Profile



Face

Spores $\times 8000$

26238

AGROCYBE SEMIORBICULARIS var.

39210
~~14848~~

on lawn, Pascagoula, Mississippi, leg. Hesler,
Mch. 29, 1969

Pileus 10-15 mm broad, somewhat semiglobose then
expanding plano-convex, at first slightly orange-yellowish,
yellowish to ochraceous, viscid,
shining, glabrous, margin even. Context thin, firm;
odor mild, taste at first mild, becoming distinctly
farinaceous.

Lamellae adnexed, pallid, then brownish, finally
near "sage brown", rather close, broad.

Stipe 2.5 - 4 cm long, 1.5 - 2.5 mm thick,
pallid, becoming dingy brownish, dry, equal to very
nearly so, apex pruinose, elsewhere glabrous. Veil none
found at any stage.

Spores 11-15-7 x 8-11 μ , smooth, truncate.
Pleurocystidia none; cheilocystidia 23-37 x 7-12 μ , ventricose,
or ampullaceous, apices with or without a capitellum. Pileus
cuticle cellular, with a distinct gelatinous ^{zone} overlaid.
~~none/xxxxxxxx~~

Notes inadequate

28655 AGROCYBE SEMIORBICULARIS (St. Amans) Fayod

On lawn, Kentville, Nova Scotia, leg.-det. Petersen &

Olexia, July 30, 1965

Notes by Petersen

Pileus ocher to flesh-ocher. Odor "like a frog,"
taste none.

Notes by Hesler

Spores 11-15 x 7.5-10 μ , smooth, more or less
truncate. Pleurocystidia not found; cheilocystidia 22-37
x 7-10 μ , ventricose, apices with or without a capitellum.
Pileus cuticle a palisade of more or less clavate cells,
with a thin gelatinous covering zone.

29008

AGROCYBE

semiorbicularis var.

~~11184~~
29008
~~11184~~
29008

On lawn, Hesler's, Knox Co., May 28, 1966

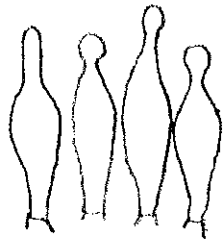
Pileus 1-2.5 cm broad, "cream buff" when young, fading at maturity to yellowish buff (not matched), ^{glabrous,} viscid.
Context pale buff; odor and taste farinaceous.

Lamellae adnate or adnexed, at first buff, finally purplish-brown (near "bister"), broad, ^{close to} nearly subdistant.

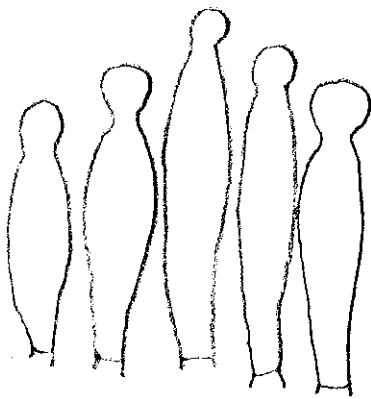
Stipe 5-8 cm long, 1.5-3 mm thick, buff, white-pruinose at apex, glabrous elsewhere, hollow. Veil none.

Spores 10-15 x 7-10 μ , slightly inequilateral in profile, ellipsoid in face view, smooth, truncate, brown in KOH. Pleurocystidia 33-46 x 8-10 μ , ventricose-capitate, widely scattered; cheilocystidia 24-30 x 6-7 μ , ventricose, many subcapitate. Pileus cuticle a palisade of more or less clavate cells, 17-26 x 4-9 μ , with a thin gelatinous zone on surface. Stipe cuticle of dry repent hyphae, surface bearing some epicuticular hyphae, the terminal elements at times more or less cylindric caulocystidia.

Agrocybe semiorbicularis var. ²⁹⁰⁰⁸~~1418~~
29008



Ch x 1000



Pl x 1000

AGROCYBE SEMIORBICULARIS (St. Amans) Payod no. 29022.

29022

~~XXXXXXXXXXXXXXXXXXXX~~
~~AGROCYBE DURA (Fr.) Sing.~~

On lawn, Fairfield Co., South Carolina, leg.
Mrs. Carolina Lyles (No. 33), May 20, 1966

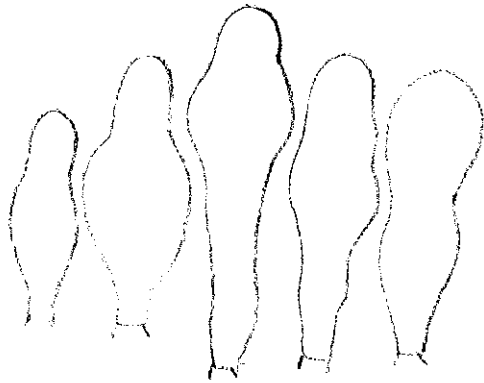
Pileus 1.5-3.5 cm broad, convex-hemispheric expanding plano-convex, creamy white to pale yellow, at maturity yellowish tawny, with tawny scales, margin even. Context white, firm; odor fungoid, taste peppery.

Lamellae adnate, white, then grayish-flesh, then rosy, finally dark brown, lamellulae present, close, rather broad, edges whitish-fimbriate.

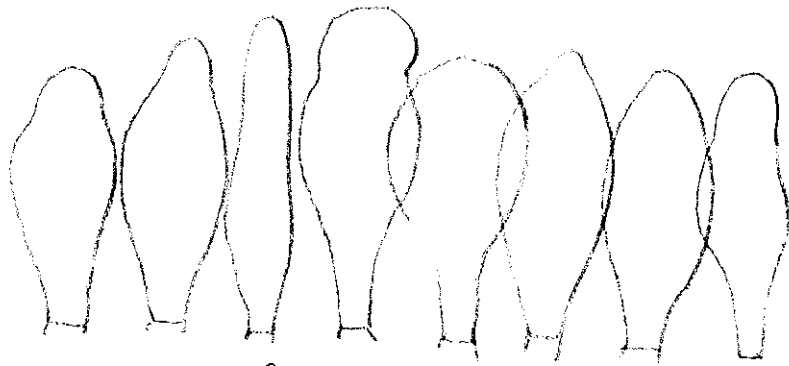
Stipe 5-6.5 cm long, 2 mm thick, white, with tawny fibrils, dry, equal above the sub-bulbous base. Veil submembranous (fibrillose-membranous), finally deciduous, with remnant both on stipe-apex and cap-margin.

Spores in deposit: near "mummy brown," 10-14.5 x 7-8 μ , slightly inequilateral in profile, ellipsoid to subovoid in face view, smooth, 0.6 μ thick, truncate, brown in 2% KOH. Pleurocystidia 28-48 x 9-15 μ , ventricose, stipe long (up to 30 μ), or very short (7 μ), or very short (7 μ), widely scattered; cheilocystidia 35-42 x 10-20 μ , mostly ventricose (9-pin), but several spathulate, subfusoid, flask-shaped. Gill trama of subparallel hyphae, 4-17 μ broad. Pileus trama of broad (8-20 μ), loosely interwoven hyphae. Pileus cuticle a palisade of clavate cells 18-23 x 8-11 μ , no gelatinous zone found (cells best observed in sections from "buttons"). Clamps not found. Stipe cuticle of dry, repent hyphae.

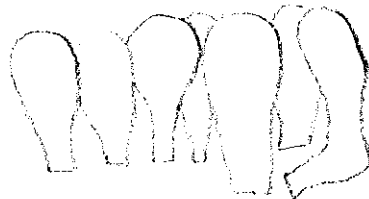
Agrocybe ~~anata~~ (Fr.) Sing.
29022 *semiorbicularis* (Fr. Omani) Fayod



Pl x 1000



Ch x 1000



Pileus cuticle
x 1000
(on "button")

39210

AGROCYBE

semiorbicularis V.

On lawn, Knoxville, Petersen's yard, May 28, 1974

YAN/AA
39210
39210

Pileus 1-1.5 cm broad, hemispheric then convex-hemispheric, orange-yellow when fresh, becoming "honey yellow" ^{to ochraceous,} glabrous, viscid, slightly shining, margin even, incurved. Context rather thin but firm, white; odor mild, taste mild, slowly becoming distinctly farinaceous.

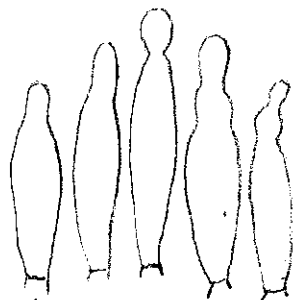
Lamellae adnexed, pallid brown, finally "sage brown," edges whitish and minutely fimbriate, broad, close to moderately so, lamellulae numerous.

Stipe 3-5 cm long, 1.5-2.5 mm thick, concolorous with pileus but paler, glabrous except the ~~pruinose~~ apex, equal or nearly so, stuffed, dry. Veil none.

Spores 11-18 x 9-11 μ , obscurely inequilateral in profile, ellipsoid in face view, wall smooth, 0.6 μ thick, apices obscurely to rather distinctly truncate in some (often not at all evident), brown in 2% KOH. Basidia 28-32 x 7-8 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 25-33 x 5-7 μ , ventricose, some with a neck, without or more commonly with a capitellum. Pileus cuticle a single layer palisade of clavate to cuneiform cells, with a thin but distinct gelatinous zone. Stipe cuticle of repent hyphae, bearing branching epicuticular hyphae, with numerous caulocystidia, 30-60 x 8-12(17) μ , more or less similar to cheilocystidia, but also many gnarled and ^{and some branched} mis-shapen ~~mis-shapen~~, mostly with more or less a capitellum, at times somewhat branched, more rarely septate.

Agroclype semiorbicularis var. 26238

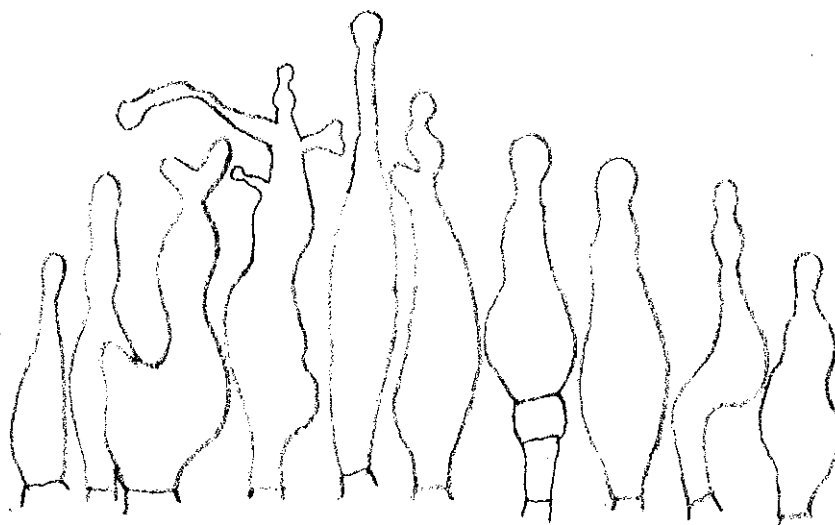
Term - 39210



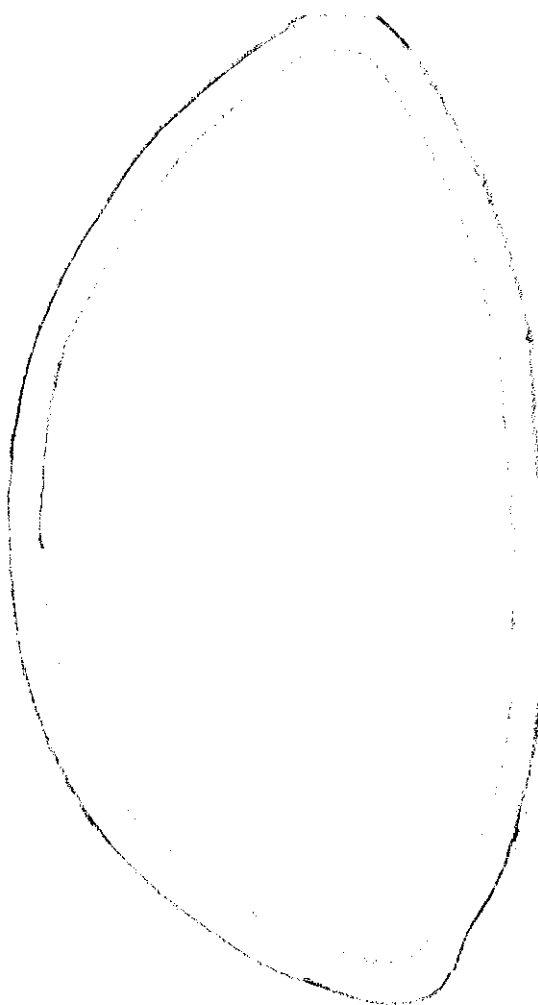
Ch x 1000



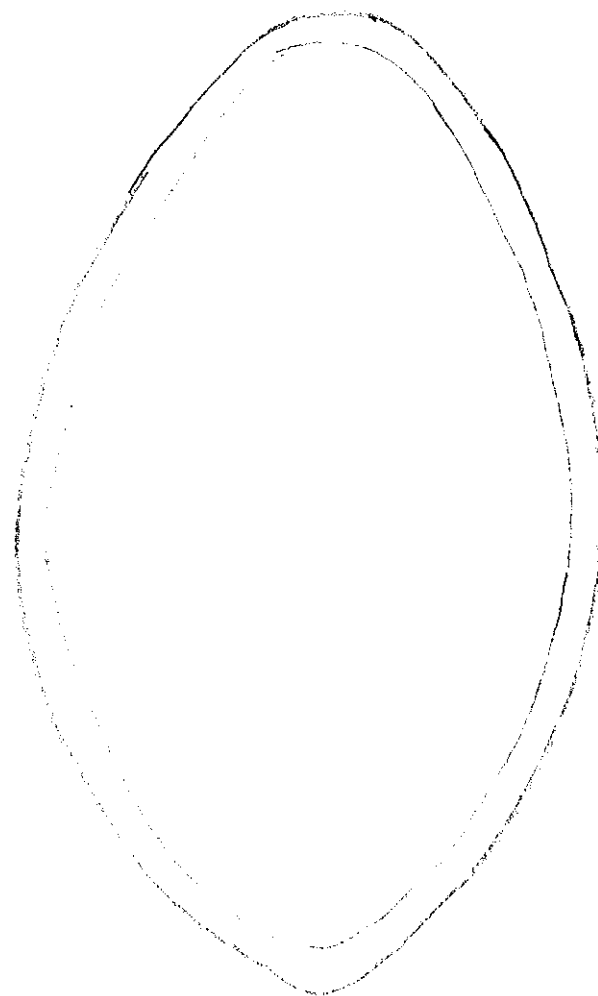
Pileus cuticle
x 1000



Caulo - x 1000



Profile



Face

Spores x 8000

39212

AGROCYBE

semiorbicularis var.

~~11184~~
~~29008~~
~~16445~~
39212

On lawn, Petersen's, June 1, 1974

Pileus "light ochraceous buff," 1.5-2 cm broad, hemispheric to more or less expanded, hygrophanous, glabrous, viscid, even. Context pallid; odor and taste farinaceous.

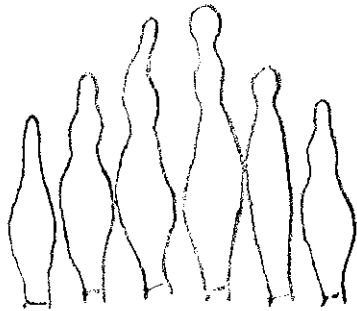
Lamellae adnate, becoming adnexed, often more or less seceding, medium close, rather broad, lamellulae alternating.

Stipe 4-6 cm long, 2.5-3 mm thick, concolorous but paler, dry, tubular, scattered-fibrillose, more or less crooked. *Veil none.*

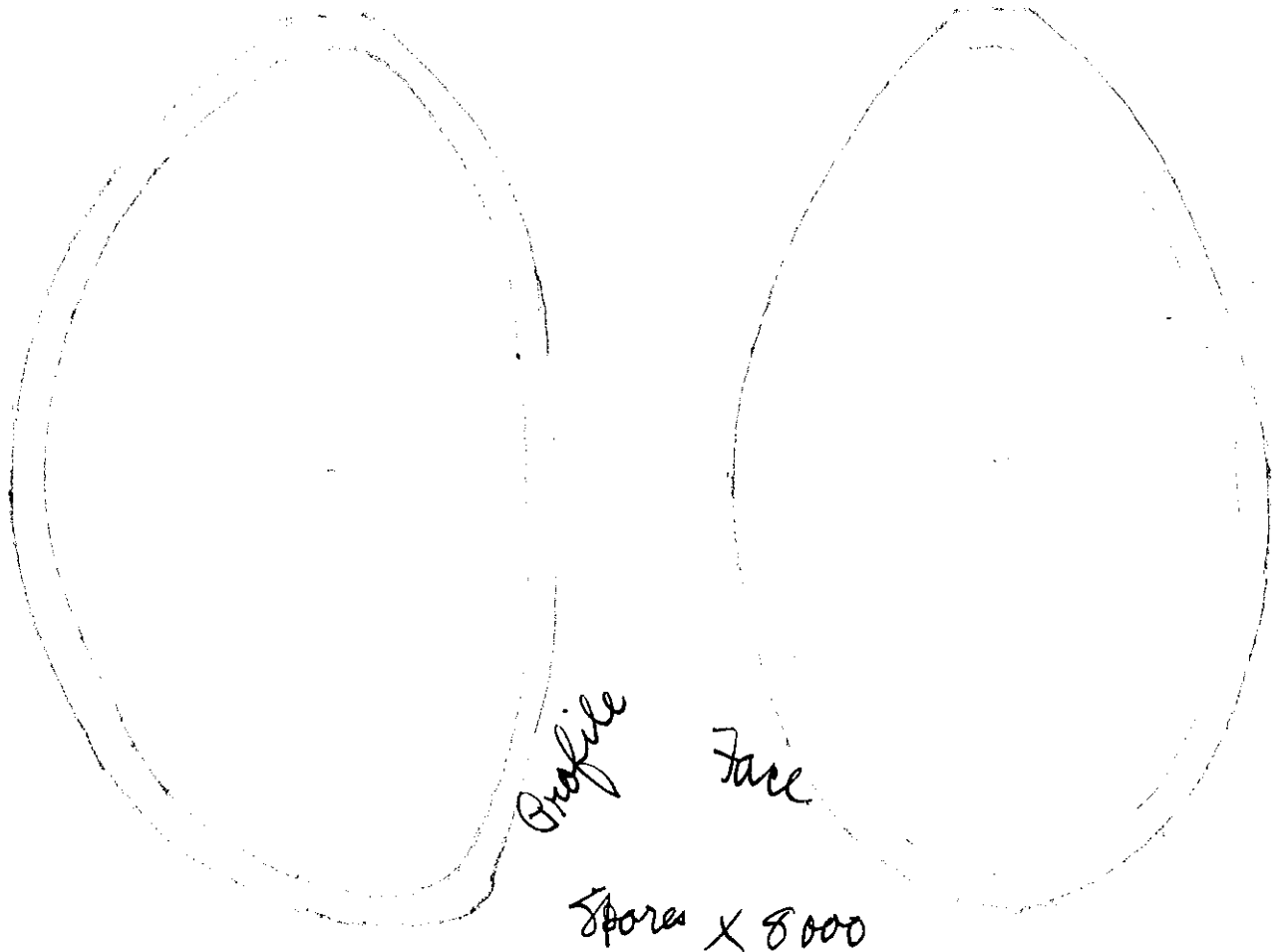
Spores 13-17 x 8-10 μ , slightly inequilateral in profile, ellipsoid in face view, smooth, many distinctly truncate, others obscurely so, wall 0.6 μ thick, smooth, brown in KOH. Pleurocystidia none; cheilocystidia 24-36 x 6-8 μ , ventricose, with a neck, some (not all) with a small capitellum. Pileus trama of broad (6-15 μ), very loosely interwoven hyphae. Pileus cuticle of clavate cells which become pushed aside and often repent, with a thin gelatinous zone on surface.

~~Same as 39210?~~

Agrocybe semiorbicularis var. ¹⁶⁴⁴⁵
14184
39212



Ch x 1000



Spores x 8000

29008
~~10184~~
~~29008~~
~~WANA~~

39213

AGROCYBE SEMIORBICULARIS var. ~~WANA~~

Johnson's lawn, Timberlake Rd., Knox Co., June 1, 1974

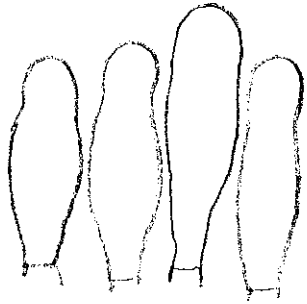
^{glabrous,}
Pileus 2-4 cm, ochraceous buff, ^{viscid,} ^{even: Context pale buff,} ~~Taste + odor +~~
^{farinaceous.}

^{Ramellae close, medium broad.}

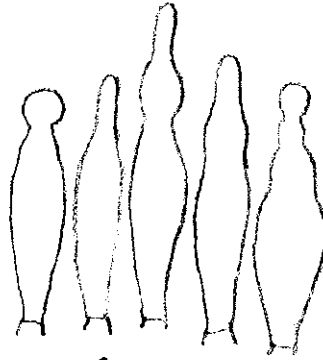
Stipe 5-7 cm long, 2.5-5 mm thick, concolorous but paler. Veil none.

Spores 10-14 x 7-9.5 μ , slightly inequilateral in profile, ellipsoid in face view, brown, small, truncate ^{least} (at ^{least} slightly so in some). Pleurocystidia 26-34 x 8-10 μ , ventricose or somewhat so, obscurely capitate, inconspicuous, scattered; cheilocystidia 30-42 x 6-10 μ , ventricose, with a neck, with or without a capitellum. Gill trama of subparallel hyphae, 5-9 μ broad. Pileus trama of loosely interwoven, broad (6-14 μ) hyphae. Pileus cuticle a palisade of small, clavate cells, which become disarranged in age, surface thinly gelatinous.

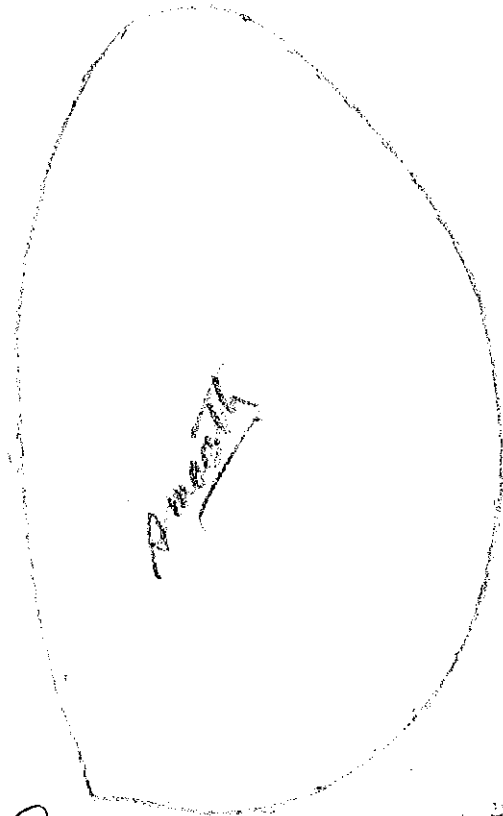
Agrocybe semiorbicularis var. ~~##184~~
29008
39213



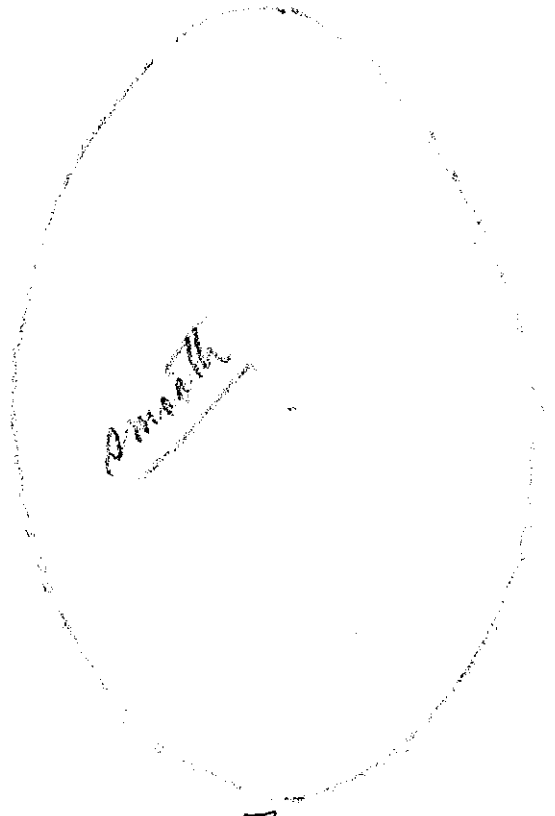
Pl x 1000



Ch x 1000



Profile



Spores x 8000

Face

Tenn-39998

AGROCYBE ~~DURA~~ semiorbicularis var. annulata Sing.?

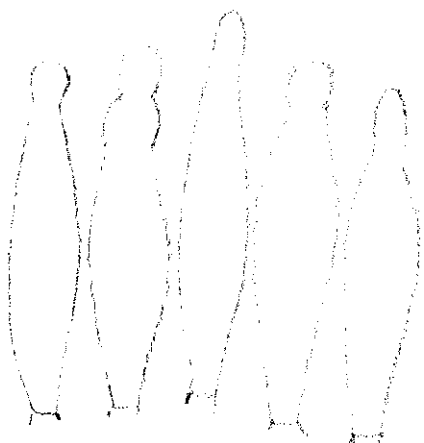
Ex-Watling, East Walling, amongst straw in garden, Apr.
5, 1960, Watling G33. (Tennessee-39998)

Notes by Hesler

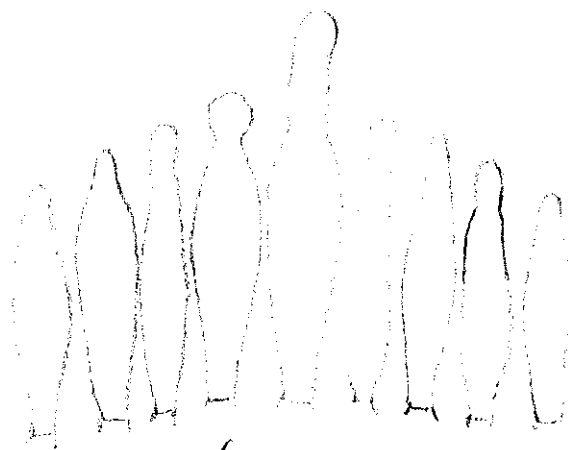
Spores 10.5-14.5 x 7.5-9(10) μ , only slightly inequilateral in profile, ellipsoid in face view, wall thick(double), smooth, truncate to obscurely so. Pleurocystidia 45-50 x 10-11 μ , scattered, ventricose, often subcapitate; cheilocystidia 30-50 x 5-9 μ , similar, in tufts, numerous. Pileus trama of interwoven hyphae. Pileus cuticle of irregularly subglobose cells, ~~RXXXX~~
Stipe cuticle of repent, dry hyphae. Caulocystidia 32-58 x 5-7 μ , subclavate to subventricose, scattered.

Watling (letter, May 13, 1975) states that ~~this~~ is in its cystidial characters ~~it~~ it is close to A. semiorbicularis, but differs in the presence of a veil. Perhaps it is what Singer calls A. semiorbicularis var. annulata.

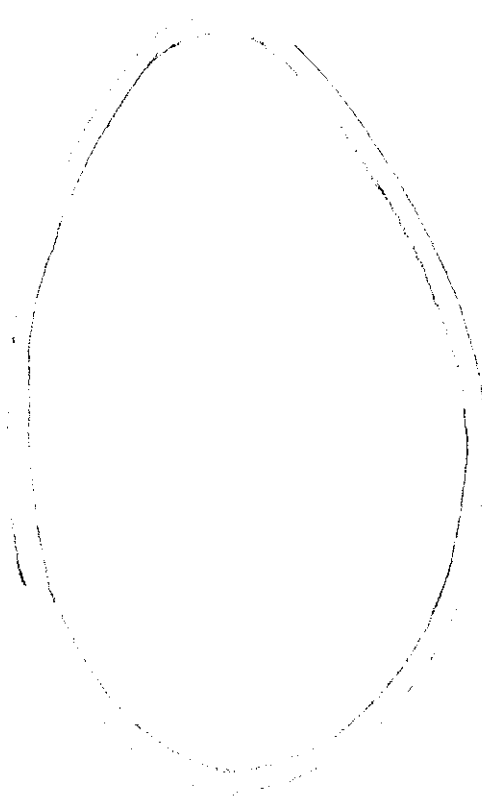
Agrocybe semiorbicularis var. *annulata* Sing.
 ex - Watling ⁸⁻³³ April 5 ~~July 65~~ 1960 (Tenn - 39998)



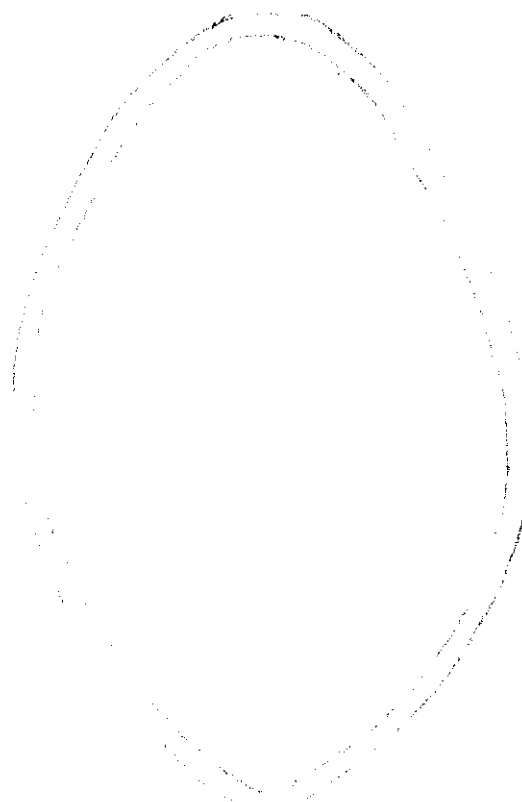
Sp x 1000



Ch x 1000

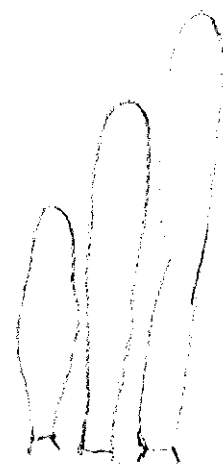


Slight profile



Face

Spores x 8000



Basidio
x 1000

sororia var.
Agrocybe hortense (Burt) Smith (ined.)
~~HEBELOMA HORTENSE Burt~~

Missouri Botanical Garden Annals 6: 172. 1919

ILLUSTRATION:

Burt, l.c., plate 3. (from Burt's description)

←
Pileus 4-10 cm broad, convex, umbonate, becoming expanded, pale "Isabella color" when moist, becoming "cartridge buff," the umbo "pinkish buff," ~~viscid~~ ^{hygrophanous, but often lacumose,} glabrous, margin slightly inrolled when very young. Context whitish; odor and taste farinaceous, not disagreeable and not of radishes.

Lamellae slightly sinuate, white at first, becoming "Isabella color," edges entire and not distilling drops, moderately close.

Stipe 4-9 cm long, 4-10 mm thick, fleshy, hollow, equal or the base bulbous, mealy above when young. Veil none, (~~Sect. Denudata~~).

Spores in deposit "Rood's brown," 10-11 x 6 μ . Basidia 4-spored. Cystidia none or not noteworthy.

On garden soil where straw manure had been applied.

Burt says it is noteworthy by its lack of viscosity, no odor of radish, and occurrence of cultivated soil. He points out that nearly all other Hebelomas ^(this is Agrocybe) are inhabitants of forests, and occur sparingly. It is edible with a pleasant and distinctive flavor.

(Krieger thinks it might be Naucoria sororia.)

Krieger, Louis C. C. 1927. New or otherwise agaricaceae from the United States and Canada. Mycologia 19:308-314.

Hebeloma hortense Burt (p. 310)

The author (K) grew it on a lawn from spawn furnished him by Burt. Caps finely lacunose under a hand-lens, isabella-colored, darker on the margin (hygrophanous?). Stem striate above. Odor like that of Naucoria semiorbicularis (Bull.) Fr., i.e. powerfully farinaceous or cucumber-like.

It suggested strong kinship, if not identity, with Naucoria sororia Pk., a robust "sister" of N. semiorbicularis.

HEBELOMA HORTENSE Burt

Notes on Part of Type Collection

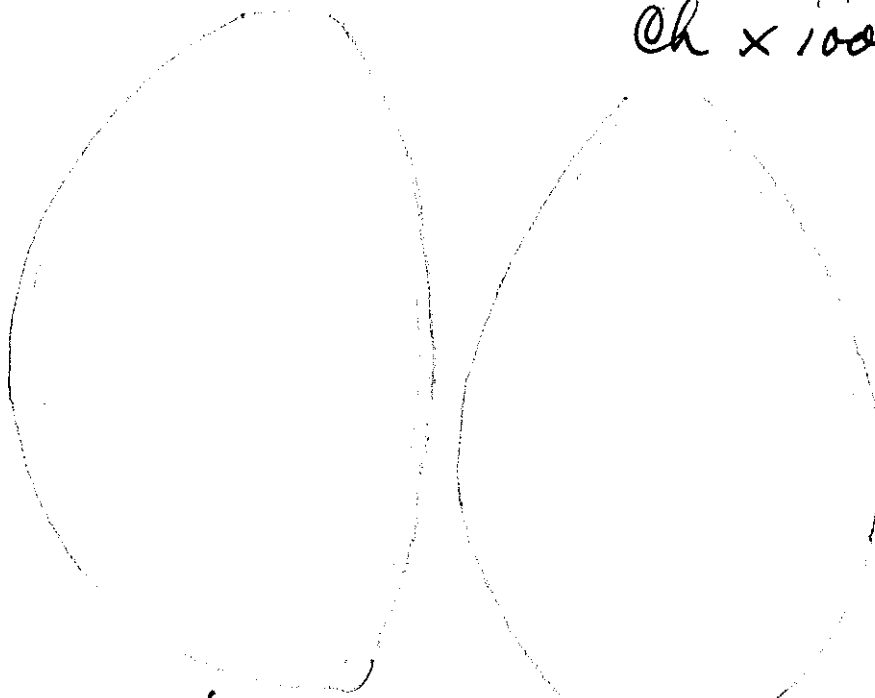
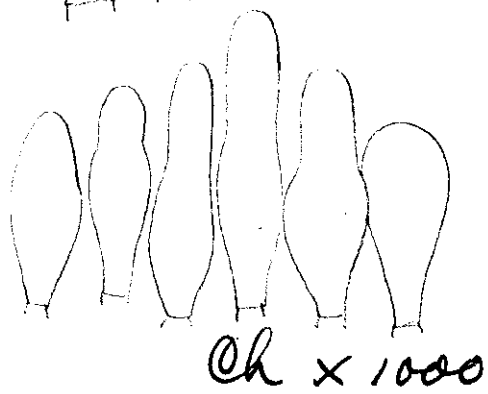
(Specimen borrowed from National Fungus Collections, studied
February 1, 1973)

Spores near "snuff brown" in 2% KOH, 9.5-13 x 6-7 μ , slightly inequilateral in profile, ovoid to ellipsoid in face view, smooth, wall 0.4-0.6 μ thick, apex truncate (rather distinct to obscure) germ pore present, obscure, no callus, not calyptrate. Basidia 28-34 x 6-8 μ , (2)4-spored. Pleurocystidia 30-50 x 8-16 μ , widely scattered, apex obtuse or rounded, ventricose to subclavate; cheilocystidia 26-38 x 8-12 μ , bottle-shaped, flask-shaped, to ventricose or cuneiform, not abundant. Gill trama of subparallel hyphae. Pileus cuticle a zone of dry cells (no palisade) ^{cells pushed out of position} the zone indistinct. Stipe cuticle of dry repent hyphae; apical zone bearing caulocystidia similar to cheilocystidia.

^{non-viscid}
The ~~viscid~~ cuticle of the pileus alone excludes it from ^{and the cellular cuticle} Hebeloma; the pleurocystidia and cheilocystidia are ~~more~~ ^{indicative} suggestive of ~~Hebeloma~~ Agrocybe. ^{1/}

A note on the packet states: "cf. large form of Naucoria semiorbiculata," signed C.L.S. (C. L. Shear?). It agrees well with my collection (16360) of Naucoria sororia Pk. (= Agrocybe).

Nebeloma hortense Burt
Type (Agrocyphe)



Profile
Face
Sp x 8000

NAUCORIA SORORIA Pk. var. sororia

Bull. Torrey Bot. Club 34:101. 1907

Agrocybe sororia (Pk.) comb. nov. (see note below)

Type

Pileus 5-10 cm broad, solitary or gregarious, convex, broadly umbonate, tawny, often with a darker zone near the margin when moist, subviscid, glabrous, lacunose, margin even; wavy or slightly lobed. Context fleshy, fragile, firm, watery, white; odor and taste farinaceous.

Lamellae adnate, whitish, becoming darker with age and on drying, narrow, crowded.

Stipe 4-12 cm long, 4-8 mm thick, pale-tawny, white within, apex striate, flexuous, fragile, equal or slightly bulbous, stuffed, dry. *Vail none (see AHS-Key).*

Notes by Hesler

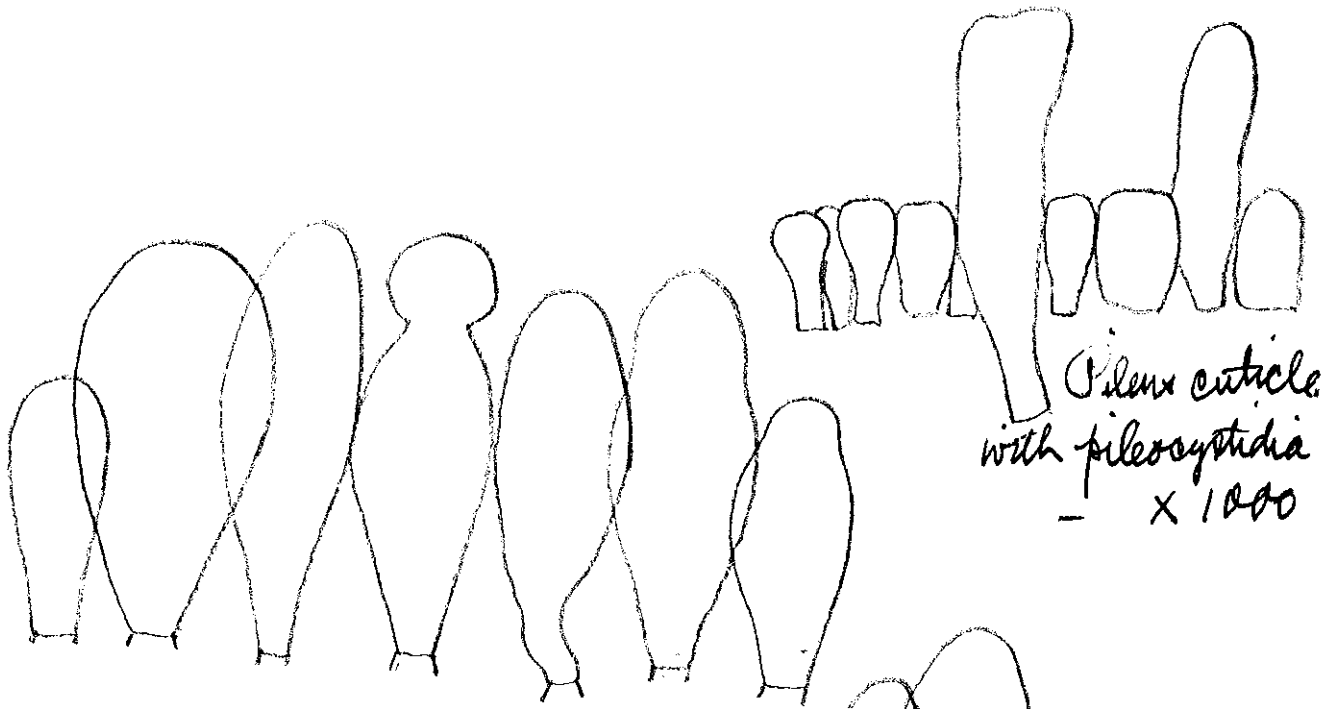
Spores ⁸ ~~8~~-11 ~~mm~~ μ x (5.5) 6-7.5 μ , slightly inequilateral in profile, ellipsoid (or some subovoid) in face view, wall 0.4 μ thick, smooth, truncate, brown in water, slightly darker brown in KOH, slightly paler pinkish brown in Melzer's reagent. Basidia 26-30 x 6-7 μ , 4-spored. Pleurocystidia 35-58 x 12-20 μ , ventricose and sometimes capitate, or vesiculose-pyriform, occasionally with a short stalk, scattered; cheilocystidia 30-52 x 6-18 μ , similar to pleurocystidia, or more rarely subcylindric and subcapitate, not abundant. Gill trama of subparallel hyphae,

5-7 μ broad. Pileus cuticle a layer of cells, cuneiform, brick-shaped, clavate; pileocystidia rather rare, 36-55 x 9-13 μ , subcylindric, arising at or below base of cuticular cells. Stipe cuticle of repent hyphae, bearing rather numerous, gregarious caulocystidia, 40-102 x 6-12 μ , subcylindric, often more or less ventricose, occasionally capitate. Clamp connections not observed.

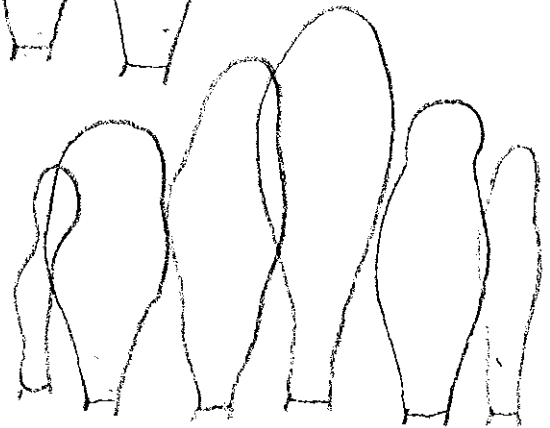
Type in open grassy places and on compost heaps, leg. Dimon Davis, Falmouth, Massachusetts, July 4, 1905.

Singer (1962) suggests that N. sororia apparently belongs to Agrocybe, under Subgenus Agrocybe Singer (1936), Sect. 3, Microspora Sing. (1936), but does not actually make the transfer.

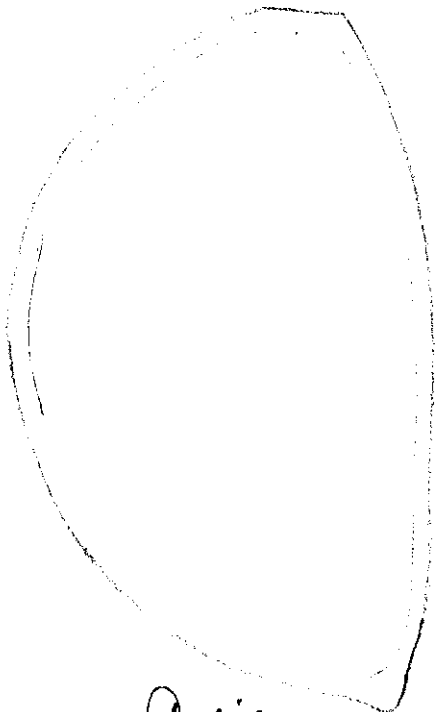
Nauporia sororia (Pk.)
Type



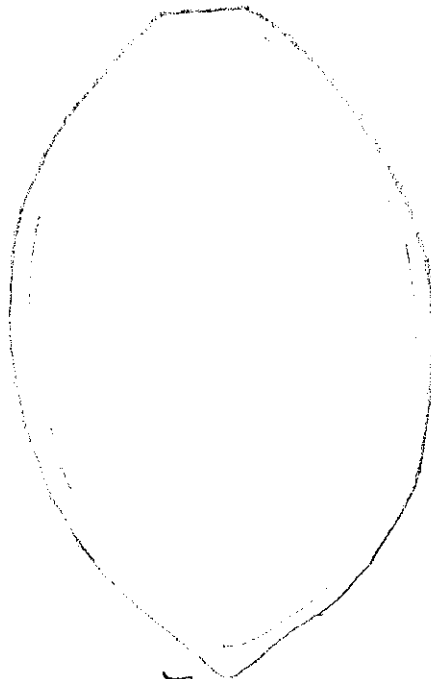
Pl x 1000



Ch x 1000



Profile



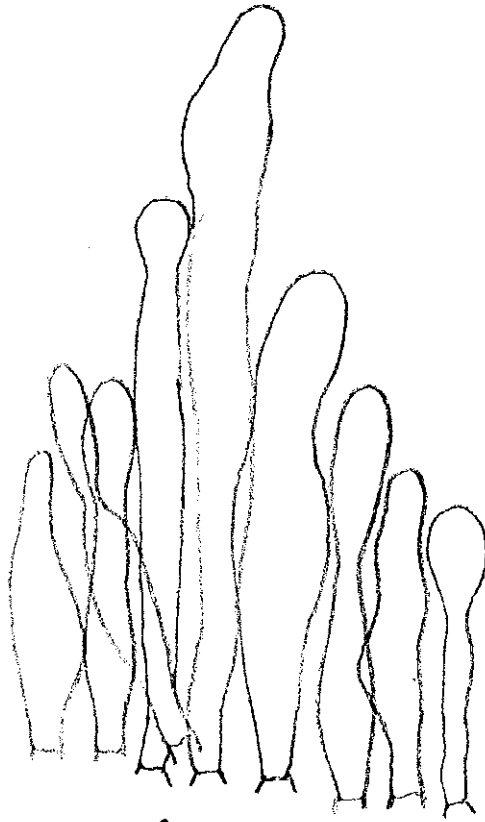
Face

Spores x 8000

(more)

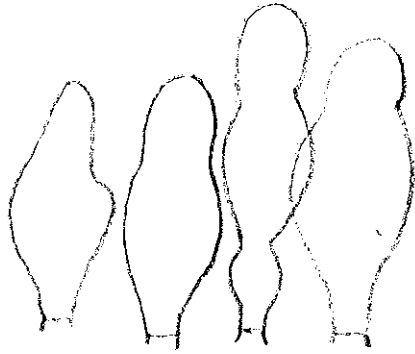
Naucoria sororia PK.

Type

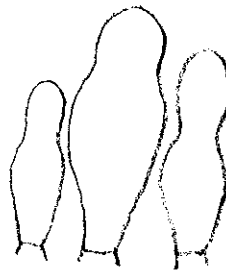


Caulo $\times 1000$

Agrocybe sororia (Pk.) comb. nov.
3693

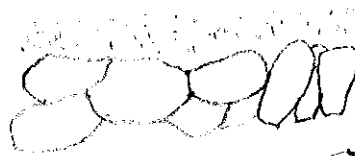


Gl x 1000

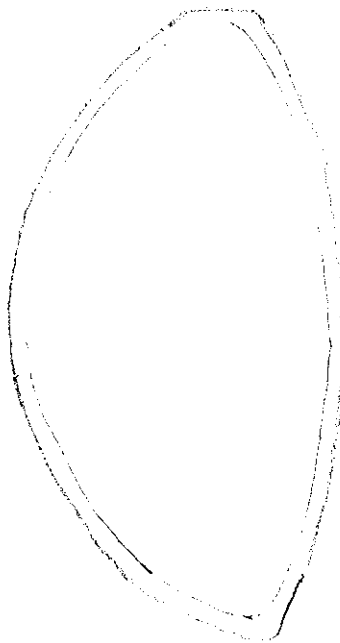


Ch x 1000

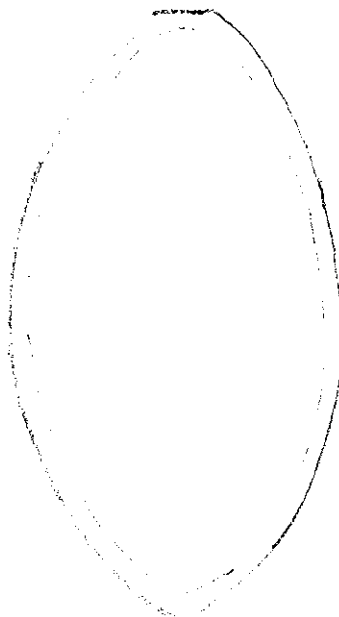
more



Pileus cuticle x 1000



Profile



Face

Spores x 8000

On silage, in orchard, University Farm, Knoxville,
Tenn., May 22, 1934

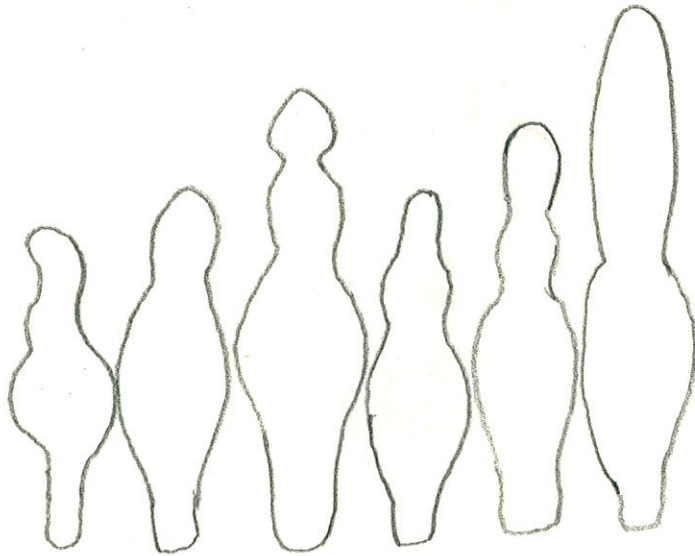
Pileus 2.5 - 5 cm broad, convex, expanding, moist
to subviscid, "clay color", becoming paler when dried,
glabrous, margin even. Odor and taste ~~farinaceous~~ *farinaceous*.

Lamellae adnate then emarginate, pallid when young,
brown at maturity, medium broad, ventricose, close, edges
white-fimbriate.

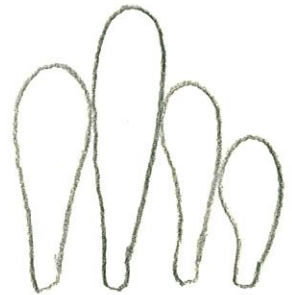
Stipe 5 - 7 cm long, ⁴⁻⁶ ~~mm~~ mm thick, apex mealy,
elsewhere fibrillose, dry, subbulbous.

Spores in deposit "bister", 8.5-10(11) x 5-6 μ ,
slightly inequilateral in profile, ellipsoid in face view,
smooth, truncate, brown in 2% KOH. Pleurocystidia ~~3x~~ 30-43(70)
x 12-18 μ , ventricose, sparse, widely scattered; cheilocystidia
~~2x2x~~ 20 - 38 x 7-12 μ , similar, sparse. Gill trama subparallel
to slightly interwoven, hyphae 6-11 μ broad. Pileus trama
vesciculose. Pileus cuticle of rather small cells with a
thin gelatinous zone on surface (found only on young pilei).
Stipe cuticle of repent hyphae, bearing more or less erect
epicuticular hyphae. Caulocystidia as terminal elements of
epicuticular hyphae. No clamp connections seen.

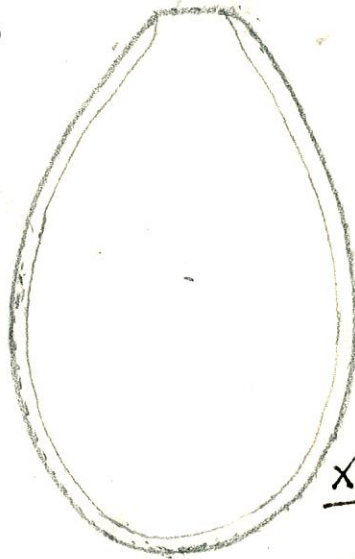
Agrocybe ~~stria~~ sororia (PK.) comb. nov.
Tenn - 3693



Pl - x 1000

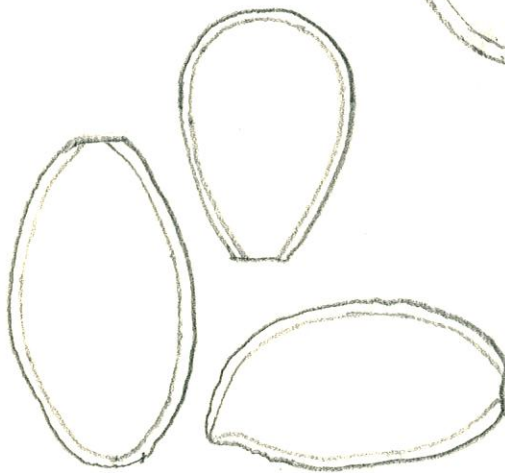


Ch - x 1000



x 8000

more



Spores - x 4000



Cuticle - x 1000

Tenn-3832 AGROCYBE SORORIA (Pk.) comb. nov.

On silage, on soil, University orchard, Knoxville,

June 3, 1934

Pileus 2-6 cm. Stipe 5-8 cm long, 5-8 mm thick,
dingy pallid. Veil none.

Spores 9-11.5 x 6-7 μ , slightly inequilateral in
profile, ellipsoid to subvoid in face view, wall thick
and smooth, brown in KOH. Pleurocystidia 34-50 x 12-16 μ ,
ventricose, 9-pin-shaped, sometimes subcapitate;
cheilocystidia 24-43 x 7-15 μ , similar. Gill trama of
subparallel hyphae, 4-7 μ broad. Pileus cuticle a layer
of cells: cuneiform, clavate, brick-shaped. Stipe
cuticle repent, with gregarious caulocystidia, as in
the Type.

Tenn-3833 AGROCYBE SORORIA (Pk.) comb. nov.

In silage, on soil, University Farm, Knoxville, leg.

A. J. Sharp, May 11, 1934

Notes by Ruby Rice

Basidia $3.5 \times 7.5-9.5 \mu$, 4-spored. Pleurocystidia $48 \times 22 \mu$, "ellipsoid." Subhymenium thin, "sub-cellular." Gill trama of subparallel, short-celled, broad hyphae (up to 22μ broad).

Notes by Hesler

Pileus 2-4 cm broad, at first somewhat umbonate, finally becoming cracked on surface. Stipe 4-8 cm long, 4-7 mm thick, often slightly broadened at apex, crooked.

Spores $9-12 \times (5.5)6-7.5 \mu$, truncate, brown in KOH, smooth. Pleurocystidia $38-52 \times 12-20 \mu$, ventricose; cheilocystidia $30-38 \times 8-17 \mu$, similar. Pileus cuticle cellular, as in Type.

Tenn-3834 AGROCYBE SORORIA (Pk.) comb. nov.

On silage, U.T. Farm, leg. Sharp & Hesler, May 22, 1934

Pileus 3-5 cm, more or less umbonate at first then expanding. Stipe 5-8 cm x 4-8 mm, slightly thickened at apex.

Spores 9-11.5(13) x 6-7.5 μ , smooth, truncate, brown. Pleurocystidia 37-52 x 9-17 μ , ventricose; cheilocystidia 20-40 x 8-15 μ , similar. Pileus cuticle cellular, as in Type.

Tenn-10245 AGROCYBE SORORIA (Pk.) comb. nov.

On silage, on ground, Knoxville, U-T Farm, May 23, 1937

Spores 9.5-11.5 x 6-7.5 μ , truncate, smooth, brown.
Pleurocystidia 37-50 x 12-20 μ , ventricose; cheilocystidia
27-38 x 7-16 μ , similar. Pileus cuticle cellular, as in
Type.

Tenn-11204 AGROCYBE SORORIA (Pk.) comb. nov.

On silage compost, U.T. Farm, April 3, 1938

Spores 9-11.5 x 6-7.5(8) μ , truncate, smooth,
brown in KOH. Pleurocystidia 34-47 x 9-20 μ , ventricose;
cheilocystidia 26-47 x 9-12 μ , similar. Pileus cuticle
of a layer of cuneiform, clavate, or brick-shaped cells.

Tenn-14208 AGROCYBE SORORIA (Pk.) comb. nov.

On rich soil, under shrubs, Park Headquarters, Gatlinburg,
Tennessee, leg. Hesler; det. Smith; May 24, 1942

Notes by Hesler

Pileus 3-5.5 cm broad, turbinate or campanulate-convex, umbonate, olive-buff (not matched, near "buffy brown," but paler), pruinose under lens, dry, margin even, incurved. Context white, thick on disc, abruptly thin on margin; odor and taste farinaceous.

Lamellae adnate, ^{medium}~~not~~ broad, crowded, pallid, finally "buffy brown", edges white fimbriate.

Stipe 6-9 cm long, 7-10 mm thick, concolorous, apex floccose, elsewhere glabrous, equal or enlarged downward, solid.

Spores 8.5-11(12) x 6-7.5 μ (some immature), truncated, smooth, brown in KOH. Pleurocystidia 37-66 x 14-22 μ , ventricose to clavate-pyriform; cheilocystidia 32-42 x 8-17 μ , similar. Pileus cuticle cellular as in Type.

Tenn-16360 AGROCYBE SORORIA (Pk.) comb. nov.

On saw-dust, near Gatlinburg, not in the Park, May 7, 1944

Spores 9-11.5(13) x 6-7.5 μ , slightly inequilateral in profile, ellipsoid to subovoid in face view, smooth, truncate at apex, germ pore present. Pleurocystidia 43-52 x 10-18 μ , bottle-shaped, ventricose, widely scattered; cheilocystidia 40-46 x 11-15 μ , similar, not abundant. Pileus cuticle a dry cell-zone, as in Type.

24344

AGROCYBE SORORIA (Pk.) comb. nov.

On saw-dust, Cashiers, Highlands, N. C., June 15, 1961

Pileus 3-6 cm broad, semi-globose to convex, becoming expanded, finally margin upturned, more or less umbonate, *slightly* viscid, often rugose, mottled and more or less zoned, "tawny-olive" and pale-gray brown, ~~hygrophanous(?)~~, glabrous, even. Context whitish, very thin outward; odor farinaceous, taste farinaceous, ~~starchy~~.

Lamellae adnate, at times becoming emarginate, at first pallid, then brownish, finally "verona brown," close, ventricose, rather broad but somewhat variable, many lamellulae, edges short-fimbriate.

Stipe 5-8 cm long, 5-12 mm thick, dingy pallid-brownish, ribbed above by ridges extending down from gills, base more or less bulbous, stuffed then hollow, more or less equal above bulb. Veil not found.

Spores "buffy brown" in deposit, (9.5)10-12 x 5.5-7 μ , slightly inequilateral in profile, ellipsoid to more or less ovoid in face view, smooth, truncate, brown in KOH, wall 0.6 μ thick. Pleurocystidia 34-43 x 14-20 μ , ventricose-ampullaceous; cheilocystidia 34-48 x 10-15 μ , similar to pleurocystidia but narrower. Gill trama of subparallel hyphae, 4-6 μ broad. Pileus trama radial. Pileus cuticle a layer of more or less clavate to ventricose or subpyriform cells, overlaid at times with a very thin gelatinous zone; no pileocystidia observed. Stipe cuticle

Agrocybe sororia 2

24344

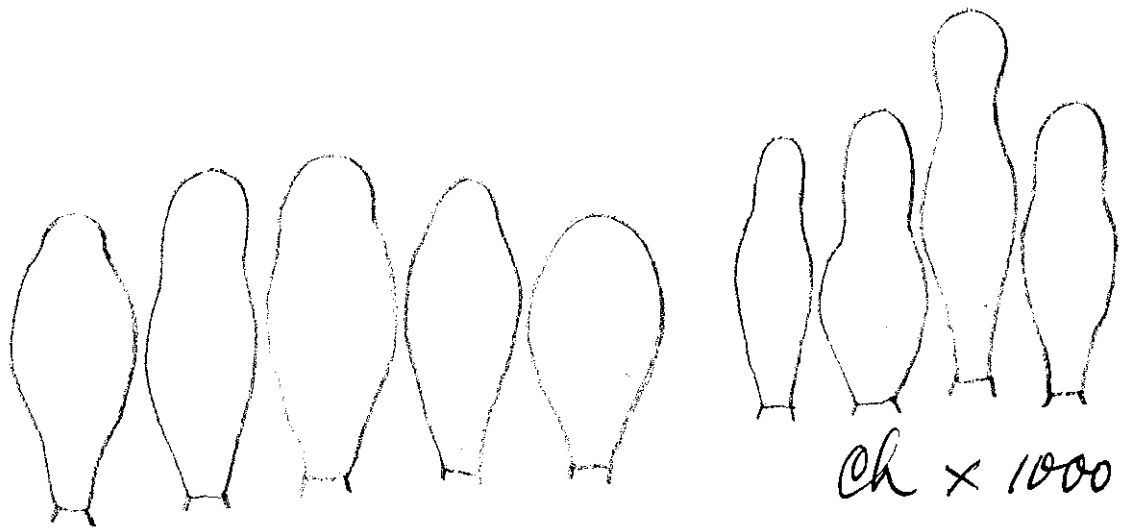
~~Agrocybe~~ page 2

of repent hyphae, bearing many caulocystidia, 35-60 x
7-12 μ , mostly similar to cheilocystidia.

Cf. A. amara. Also A. sororia.

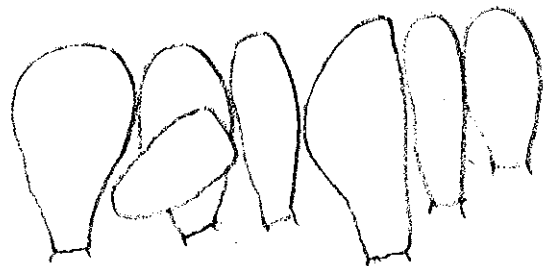
Agrocybe soraria (PK.) comb. nov.

Tenn. - 24344

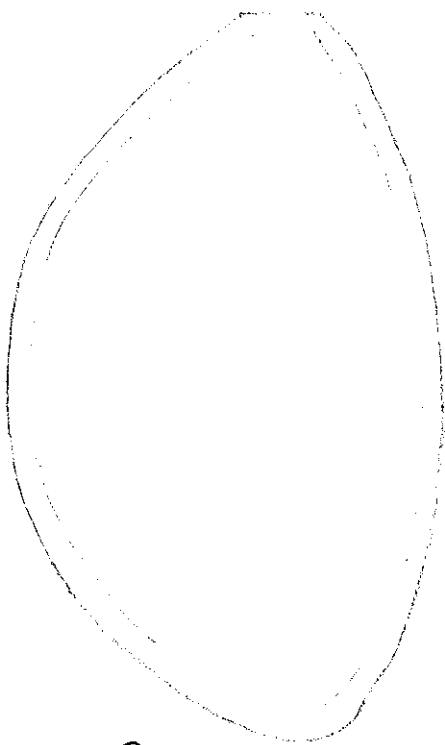


Sp $\times 1000$

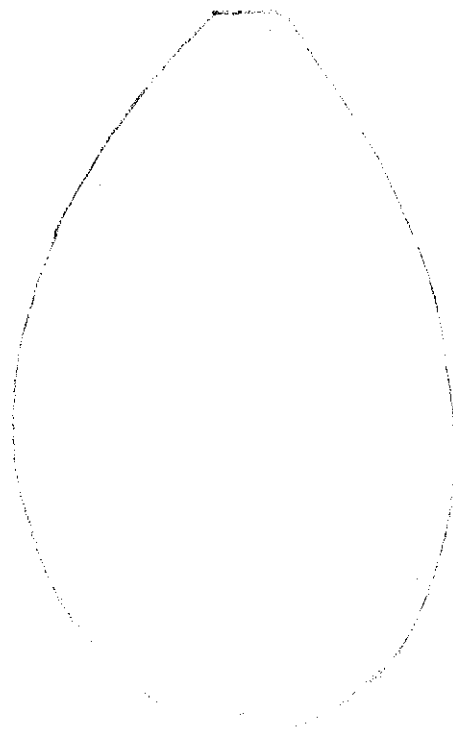
Ch $\times 1000$



Pileus article $\times 1000$



Profile



Face

Spores $\times 8000$

AGROCYBE SUBPEDIADES (Murr.) comb. nov.

Naucoria subpediades Murr., Lloydia 5:150. 1942.

Type

Pileus 1-2 cm broad, conic or convex to subexpanded, umbonate, isabelline, disc fulvous, dry, smooth, margin even. Context pallid; odor none, taste strongly farinaceous.

Lamellae adnate, pallid to fulvous, edges white, broad, medium distant, inserted.

Stipe 3-5 cm long, 1-2 mm thick, isabelline, equal, glabrous, dry.

Notes by Hesler (on Type)

Spores 11-15(16) x (7.5)8-10(10.5) μ , ellipsoid, smooth, truncate, ~~gymnopore present~~, brown in H₂O, similar or very slightly darker brown in 2% KOH, reddish brown in Melzer's reagent. Pleurocystidia 42-50 x 8-10 μ , ventricose, occasionally subcapitate, scattered to rare; cheilocystidia 32-40 x 6-7 μ , similar, scattered. Gill trama of subparallel hyphae, 3-6 μ broad. Pileus cuticle of dry, rather small, irregularly globose cells; pileocystidia none. Stipe cuticle of ~~repent~~ non-incrusted hyphae. Caulocystidia 27-44 x 5-8 μ , quite similar to cheilocystidia.

Type (F 18162) collected by Murrill, on open lawn,

F 18162

N. subpediades - 2

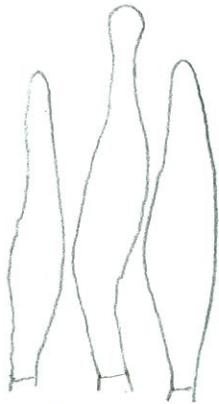
Gainesville, Fla., May 27, 1938. He states that it suggests N. semiorbicularis but is smaller and of different shape.

This is an Agrocybe, and may be close to A. retigera (Speg.) Singer.

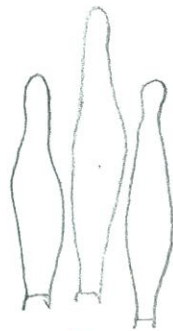
Kanconia subpediades Murr.

Type - 7 18162

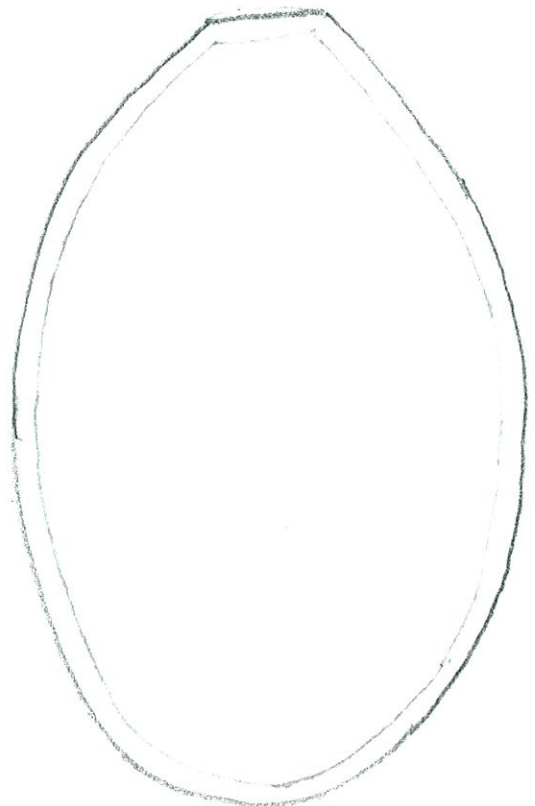
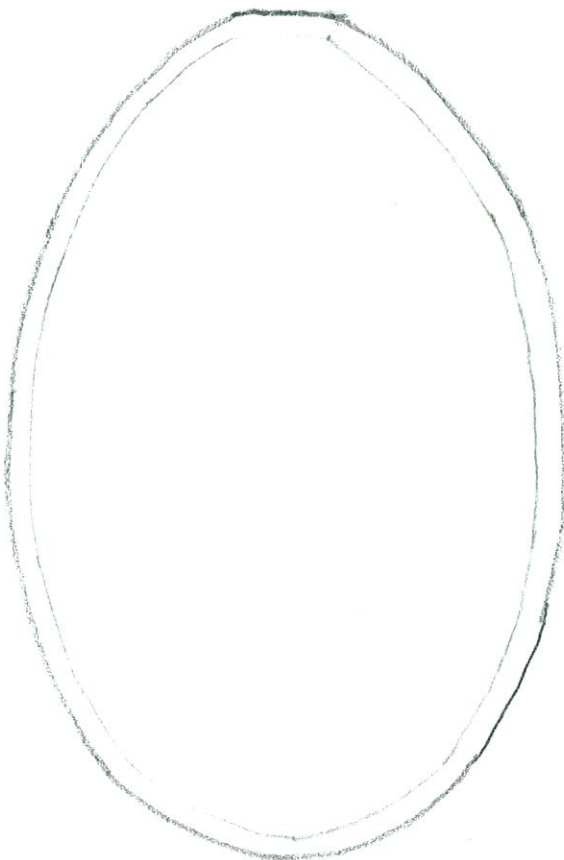
[= Agroclype subpediades (Murr.) comb. nov.]



♂ x 1000



♂ x 1000



Spores x 8000

a *Singer*
AGROCYBE TEMNOPHYLLUS (Pk.) ~~comb. nov.~~

[in a Russian journal. ... (see to Hallenst.)]
Agaricus temnophyllus Pk., New York State Cab. Nat. Hist. 23:90 1873.

Pholiota temnophylla (Pk.) Sacc., Syll. Fung. 5:740. 1887.

Pileus 2.5-5 cm broad, hemispherical then convex, dull yellow, *dry,*
smooth. Context fleshy.

Lamellae attached, obliquely truncate at the inner extremity, very
broad, brownish-ferruginous.

Stipe 5-10 cm long, 4-8 mm thick, white, smooth, hollow. Veil
forming a membranous white annulus, dusted with brownish-ferruginous
spores.

Notes on Type (by Hesler)

Spores 8-11(12) x 6-8 μ , slightly inequilateral in profile, ellipsoid
to ovoid in face view, wall thick, smooth, truncate, yellowish-brown in
2% KOH. Pleurocystidia 27-54 x 8-22 μ , ventricose, scattered, conspicuous;
cheilocystidia 24-40 x 6-17 μ , more or less similar, sparse. Pileus
cuticle cellular, one layer thick, *dry.* Stipe cuticle of dry, repent hyphae.

Type on grassy soil, roadside, leg. Peck, Sandlake, New York, June.

Cf. with A. howeana and A. praecox var. sylvestris.

Peck (1873) comments that it resembles Agaricus semiorbicularis so
closely in color, taste, etc., that in the absence of the annulus it
might be taken for a large form of that species; he also states (Bull 122:
146) that it approaches Pholiota praecox in some respects, but its large
size and peculiar broad lamellae are distinguishing characters.

*the gills are obliquely truncate on their inner
ends — whence temnophyllus (temno = cut).*

AGROCYBE TEMNOPHYLLA (Pk.) comb. nov.

Agaricus temnophyllus Pk., New York State Cab. Rept. 90.

1873.

Pholiota temnophylla (Pk.) Sacc., Syll. Fung. 5;740. 1887.

(Description from Overholts's Pholiota)

Pileus 2.5-5 cm broad, hemispheric becoming convex, ochraceous-yellow, cinnamon-buff, to ochraceous tawny in dried plants, dry, glabrous.

Lamellae obliquely sinuate-adnate, brownish-ferruginous, medium close, 4-8 mm broad.

Stipe 5-10 cm long, 4-8 mm thick, white, glabrous, equal, hollow. Veil membranous, white, forming a distinct, superior, persistent annulus.

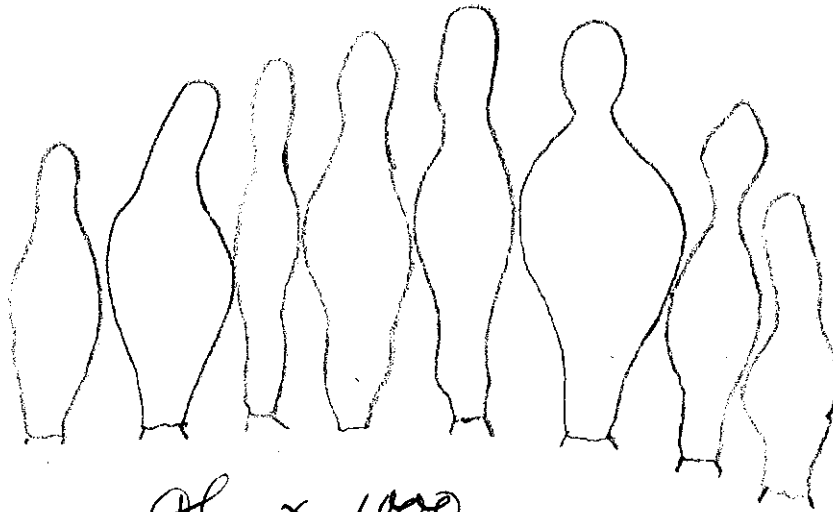
Notes by Hesler (Type)

Spores 8-11(12) x 5-7.5(9.5) u, ellipsoid to ovoid in face view, wall double and very thick, smooth, truncate, Basidia 26-30 x 6-7(8) u, 2-4-spored. Pleurocystidia 35-43 x 10-14 u, ventricose, scattered; cheilocystidia 18-43 x 6-9 u, ventricose, rare. Gill trama slightly interwoven, hyphae 5-10 u broad. Pileus trama radial. Pileus cuticle of cells, more or less a palisade. Clamp connections not found.

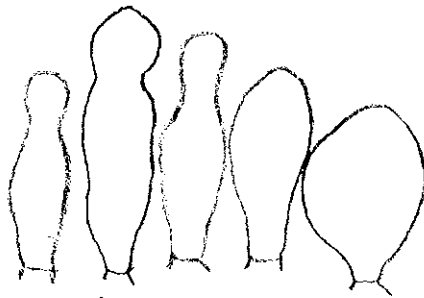
Type from Sandlake, Rensselaer County, New York, leg. Peck.

Overholts is of the opinion that it is very close to Pholiota praecox (Agrocybe).

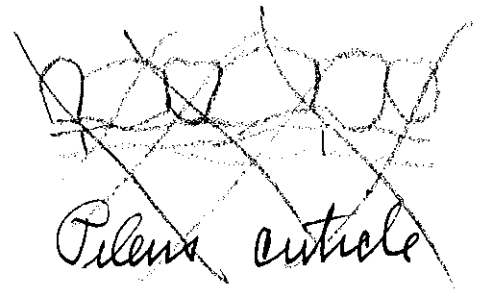
Agrocybe temnophyllus (PK.) comb. nov.
 (Agaricus temnophyllus PK. - Type ✓



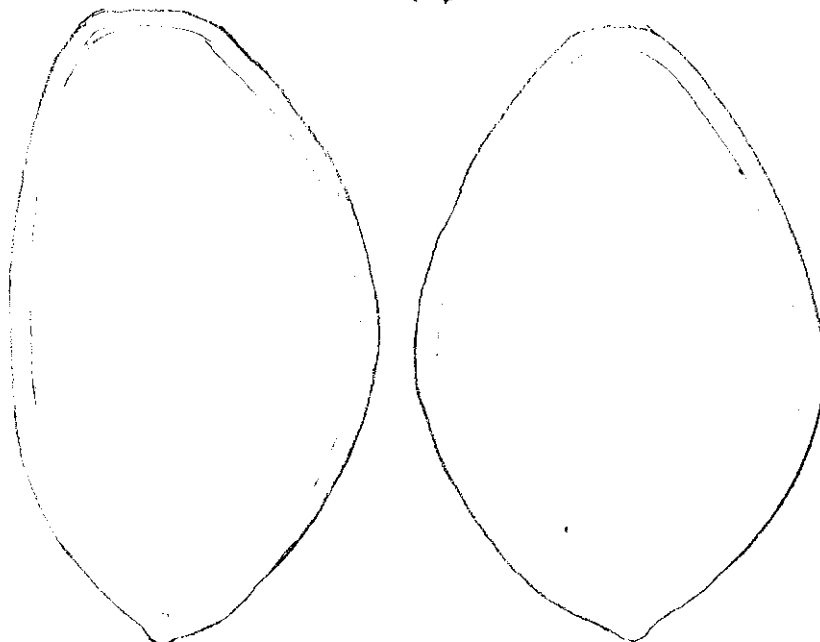
St x 1000



Sp x 1000



~~Gill surface~~



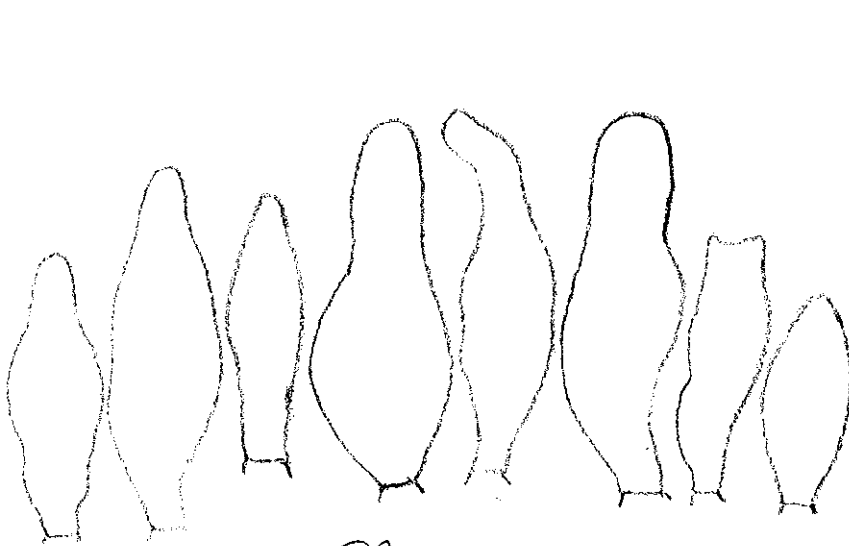
Profile

Face

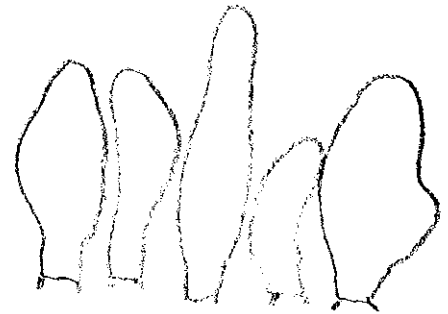
Spores x 8000

Agaricus temnophyllus PK.

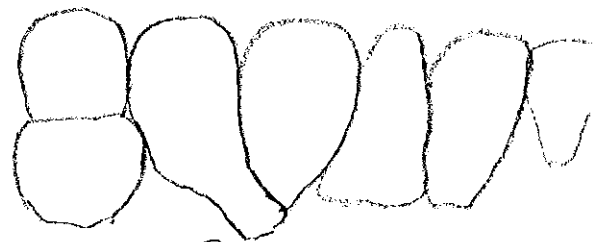
Type - Agrocybe



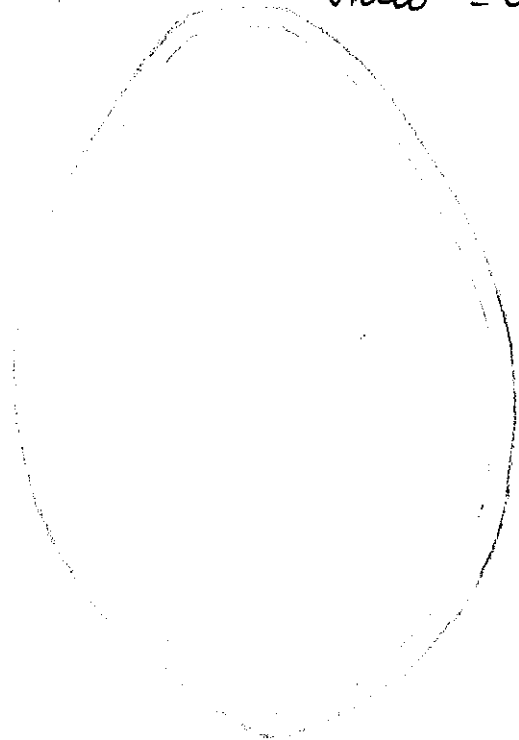
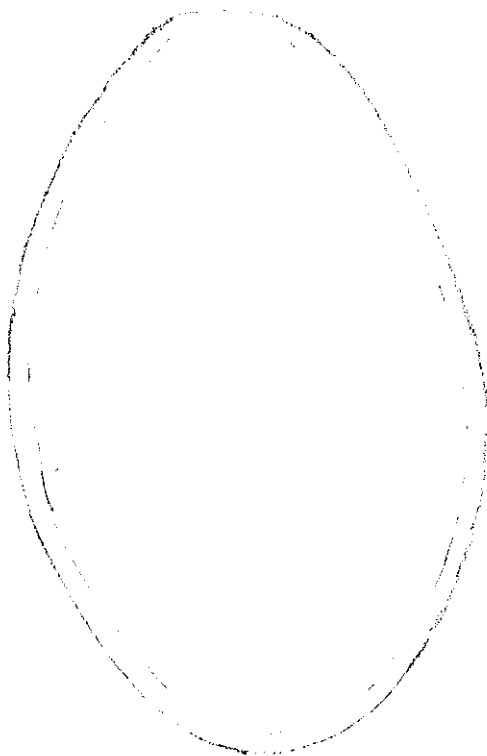
Bl x 1000



Ch x 1000



Pileo - cuticle



Spores x 8000

Agrocybe

PHOLIOTA TEMNOPHYLLA (Pk.) Sacc.

from Sandlake, Ren. Co., leg. C. H. Peck.

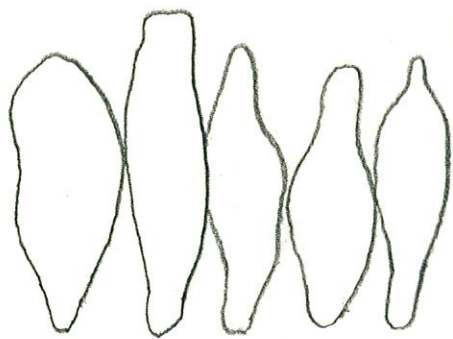
Type

Spores 8-11 (12) x 5-7.5 (9.5) μ , ellipsoid to ovoid in face view, wall double and very thick, smooth, truncate, germ-pore present. Basidia 26-30 x 6-7 (8) μ , 2-4-spored. Pleurocystidia 35-43 x 10-14 μ , ventricose, at times of the chrysocystidium-type, scattered; cheilocystidia 18-43 x 6-9 μ , ventricose, rare. Gill trama slightly interwoven, hyphae 5-10 μ broad. Pileus trama radial. ^{Pileus} cuticle of *cells*, ~~repent hyphae~~ ^{\pm in a palisade, dry.} Clamp connections not found. Pileus and gill trama yellowish brown in KOH; reddish brown in Melzer's reagent.

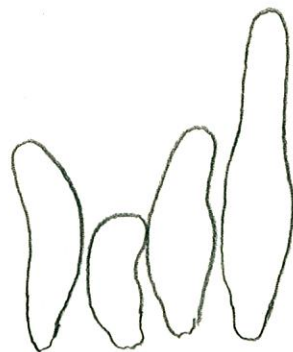
This is near P. praecox, and both ^{are} ~~myces~~ Agrocybe.

Pholiota tenuophylla (Pk.) Pacc.

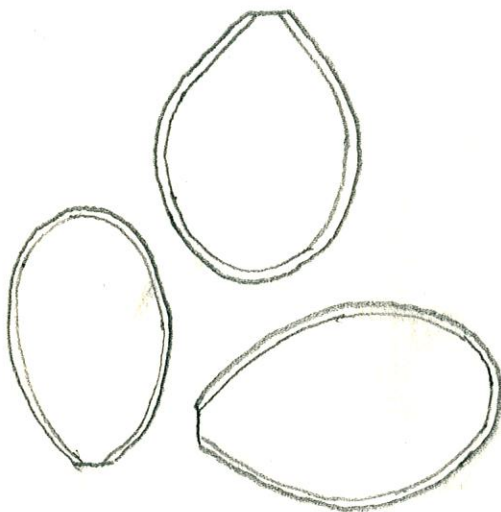
Type



Sp - $\times 1000$



Ch - $\times 1000$



Spores - $\times 4000$



Cuticular cells - $\times 1000$

Tenn-191144

Agrocybe dura (Fr.) Singer

PHOTO

Agrocybe dura (Fr.) ^{comb. nov.}
~~Agrocybe~~

On lawn, Knoxville, July 18, 1949

Pileus 3-4.5 cm, convex, nearly expanding, white or "cream buff," finally "sea foam yellow," not viscid, plush-like, glabrous, margin even. Context white, thick on disc, thin on margin; odor mild, taste pleasant-fungoid.

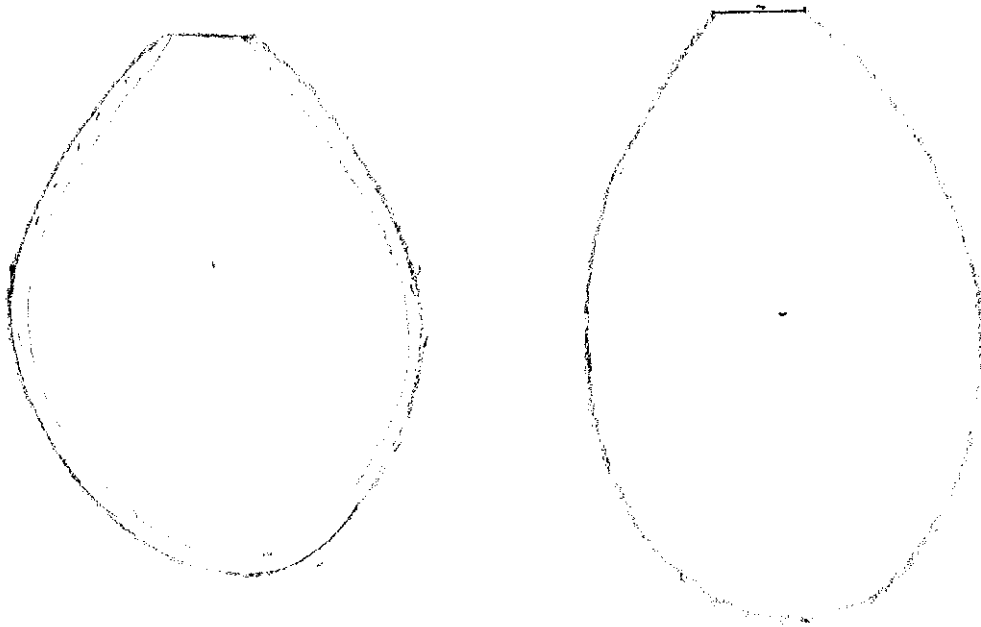
Lamellae adnate, seceding, broad, pallid when young, then "light drab," finally "sage brown" to "drab," nearly close, edges fimbriate.

Stipe 5-7 cm x 5-8 mm, white or dingy, glabrous, solid, base curved. Annulus membranous, ample, but evanescent.

Spores 11-12.5(14) x 7-8 μ , smooth, ellipsoidal, truncate, color in mass: "brussels brown." Pleurocystidia few, ventricose or flask-shaped, 38-46 x 18-22 μ ; cheilocystidia clustered, ventricose to clavate, 22-33 x 8-9 μ . ^{Pileus} Cuticle cellular, dry.

Pholiota temnophylla (Pk.) ~~Sacc~~ Sacc.
(= *Agrocybe temnophylla* [Pk.] comb. nov.)

Type



Spores $\times 8000$



19144: *Agaricus temnophylla* (Pk.) Singer

slightly enlarged ($\times \frac{4}{3}$)

Agrocybe

NAUCORIA UNDERWOODII Murr.

Mycologia 4:80. 1912

Agrocybe underwoodii (Murr.) Singer,

Type

Pileus 2 cm broad, convex to expanded, hygrophanous,
brownish ^{when wet,} ochraceous when dry, disc darker, glabrous.

Lamellae adnexed, dull-fulvous, rather broad, sub-
ventricose, subcrowded.

Stipe 3 cm long, 3 mm thick, concolorous, crooked,
slightly larger below, subfibrillose, apex floccose-
fibrillose, hollow. *Veil none.*

Notes by Hesler

Spores 8-10 ~~13~~ x 6-7 μ , ellipsoid to subovoid, smooth,
broadly truncate, wall thick, cinnamon brown in KOH.
Pleurocystidia 36-52 x 8-16 μ , ventricose, wall relative
thin; cheilocystidia 26-54 x 7-17 μ , slightly more variable
in size than the pleurocystidia, similar otherwise.
Gill trama thin, with a yellowish brown mediostrate,
subhymenium not gelatinous. Pileus cuticle cellular.
Pileocystidia not found. (Stipe material sparse, not
sectioned.)

On rotten wood, leg. L. M. Underwood & F. S. Earle,
No. 1237, El Yunque Mt., Baracoa, Cuba, March 1903.

This is clearly an Agrocybe.

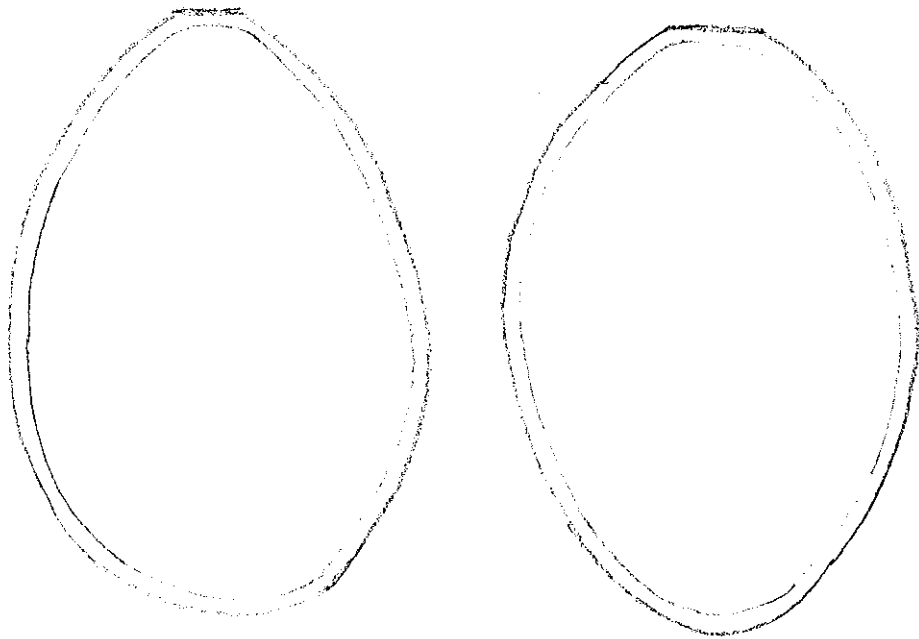
Nauconia underwoodii Murr.

Type [= Agrocybe underwoodii (Murr.) Sing.]



Pl x 1000

Ch x 1000



Spores x 8000

Agaricus
PROLLOTA WASHINGTONENSIS Murr.

Mycologia 4: 259. 1912

On ground, low woods, near Seattle, Wash., Oct. 20 - Nov. 1, 1911,
W.A. Merrill No. 333 (type)

Type

Spores 10-14 x 5.5-7 μ , ellipsoid or ovoid, inequilateral or subamygdaliform, smooth, germ pore present. Basidia 24-28 x 6-7 μ , 4-spored. Pleurocystidia 42-68 x 6-11 μ , flask-shaped with a long neck, or subcylindric; cheilocystidia 30-44 x 5-8 μ , more or less cylindric and sometimes subcapitate, or flask-shaped. Gill trama subparallel, hyphae 3-6 μ broad. Pileus trama more or less interwoven or vesiculose. Cuticle of subglobose to pyriform cells. Pilocystidia none. Clamps not seen. Caulocystidia in tufts, or sometimes scattered, (45-86 x 5-9 μ) clavate-cylindric.

This is an Agrocybe. Overholts (1927) thinks it is P. omerophila, and Harding (1952) says it is P. erobia.

erecta

AGROCYBE WASHINGTONENSIS (Murr.) comb. nov.

Pholiota washingtonensis Murr., Mycologia 4:259. 1912.

Pileus reaching 10 cm broad, convex to applanate or slightly depressed, pale-isabelline, center dull-fulvous, hygrophanous, glabrous, more or less rugose, margin striate.

Lamellae adnate with a tooth, avellaneous, becoming dark-fulvous, broad, not crowded.

Stipe 6-8 cm long, 5-15 mm thick, white at apex, brownish and fibrillose below, streaked, equal or tapering upward. Veil white, ample, membranous, leaving a large, superior, persistent annulus.

Notes by Hesler (Type)

Spores 10-14 x 5.5-7 μ , inequilateral or subamygdali-form in profile, ellipsoid or ovoid in face view, smooth, germ pore ^{none} ~~prominent~~. Basidia 24-28 x 6-7 μ , 4-spored. Pleurocystidia 42-68 x 6-11 μ , flask-shaped with a long neck, or subcylindric; cheilocystidia 30-44 x 5-8 μ , more or less cylindric and sometimes subcapitate, or flask-shaped. Gill trama subparallel, hyphae 3-6 μ broad. Pileus trama more or less interwoven or vesiculose. Pileus cuticle of subglobose to pyriform cells. ~~Pileus~~ Pileocystidia none. Clamps not seen. Caulocystidia in tufts, or sometimes scattered, clavate-cylindric, $\frac{3}{4}$ 45-86 x 5-9 μ .

Type on the ground in low woods, near Seattle,
Washington, leg. Murrill, No. 333, October 20-November 1,
1911.

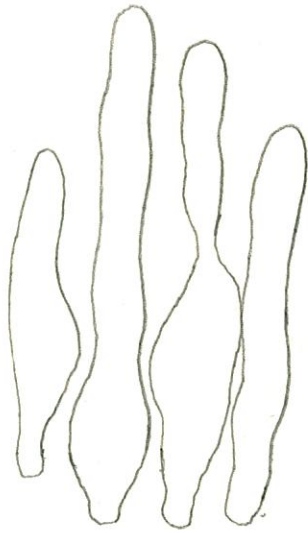
Overholts is of the opinion that this is ~~P.~~

P. ombrophila, while Harding (1952) thinks it is

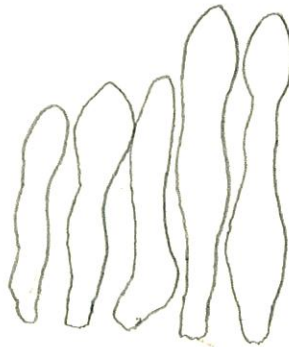
P. erebia. Walling (letter, dated 12/31/74) says it is in
the ~~Phlox~~ Agrocybe erebia - Complex.

Pholiota washingtonensis Murr.

Type

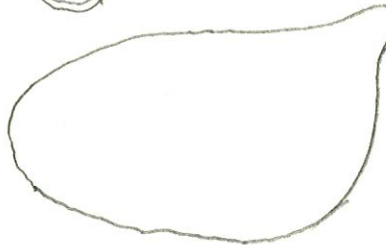
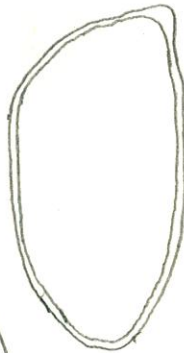


Pl - x 1000

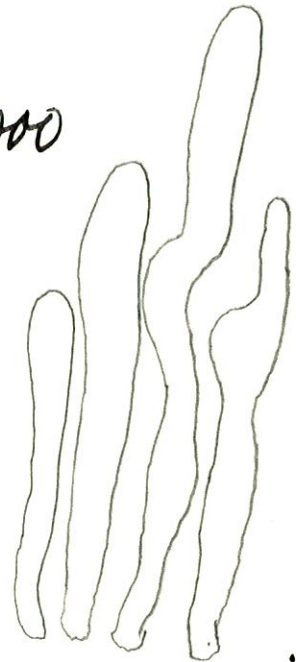


Ch - x 1000

more



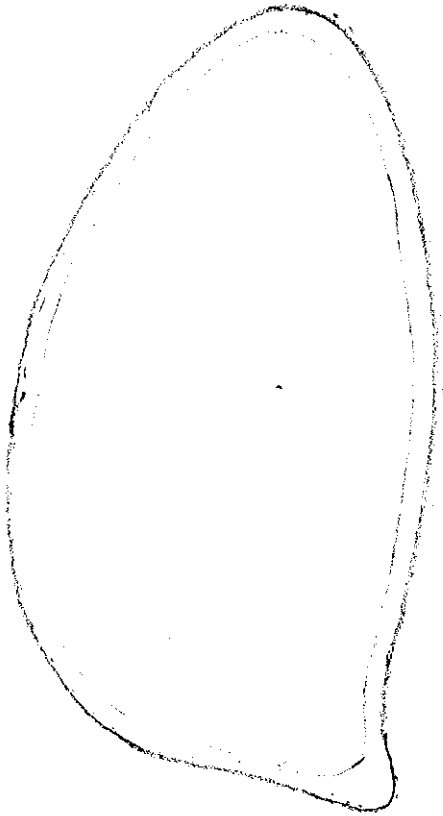
Spores - x 4000



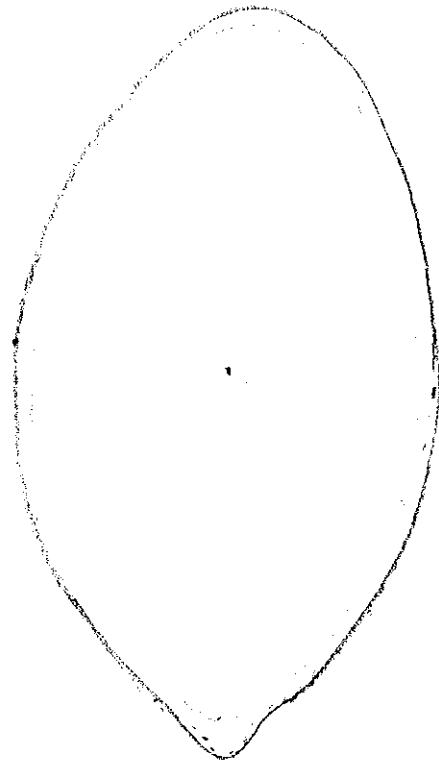
Caulocystidia -
x 1000

Pholiota washingtonensis Murr.

Type (= Agrocybe)



Profile



Face

Spores X 8000

NAUCORIA XUCHILENSIS Murr.

Mycologia 4:80. 1912

Agrocybe xuchilensis (Murr.) Singer, *Sydowia* 11: 361. 1957. (see
full description)

Type

Pileus 3.5 cm broad, convex to plane, slightly depressed, ochraceous, center fulvous, subglabrous, margin even.

Lamellae adnate, fulvous, broad, distant, inserted.

Stipe 2 cm long, 3 mm thick, cremeous, glabrous, cylindric, equal. Veil none.

Notes by Hesler

Spores 7-9 x 4.5-5.5 μ , obscurely inequilateral in profile, ellipsoid or at times subovoid, apical and often faintly subacute (hardly with a "nose"), small, wall thick, not truncate, no germ pore evident, cinnamon brown in 2% KOH. (Smith gives ch: 28-36 x 9-12 μ). Pleurocystidia none; cheilocystidia 23-38 x 4-6 μ scattered, not conspicuous, ventricose, some more or less constricted above. Pileus cuticle cellular. Pileocystidia none. (Stipe not sectioned; material rather sparse.)

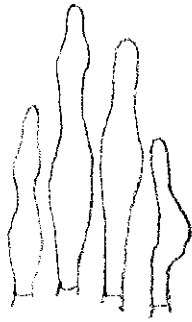
Type on soil, Xuchiles, near Cordoba, Mexico, leg. Murrill, No. 1124, January 17, 1910.

This is an Agrocybe, a species in which the spores lack an obvious germ-pore and not truncate, and pleurocystidia are absent.

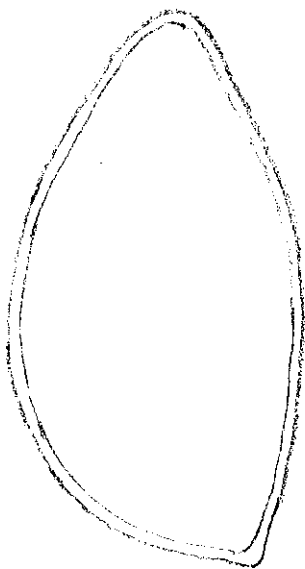
Smith says spores truncate but germ pore relatively small [was not omitted?]

Nauvoria xuchilensis Murr.

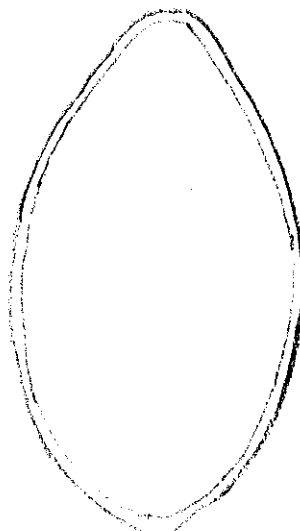
Type [= *Agrocybe* *xuchilensis* (Murr.) Sing.]



ch x 1000



Profile



Face

Spores x 8000

Sm-188

AGROCYBE *sp. nov.*

Cespitose on spruce chips, Ann Arbor, Michigan,
Carol Nimke, June 6, 1972

Notes by Smith

Pileus cespitose, 4-9 cm broad, obtuse to convex, crust-brown to more ochraceous, more or less "buckthorn brown", glabrous, viscid, surface often areaolate-rimose, margin curved in, often appendiculate from veil particles. Context thick, slightly ochraceous in KOH, FeSO_4 no reaction; taste bitter.

Lamellae adnate, pallid, becoming dull rusty brown, near "warm sepia", broad, moderately close, edges finally eroded.

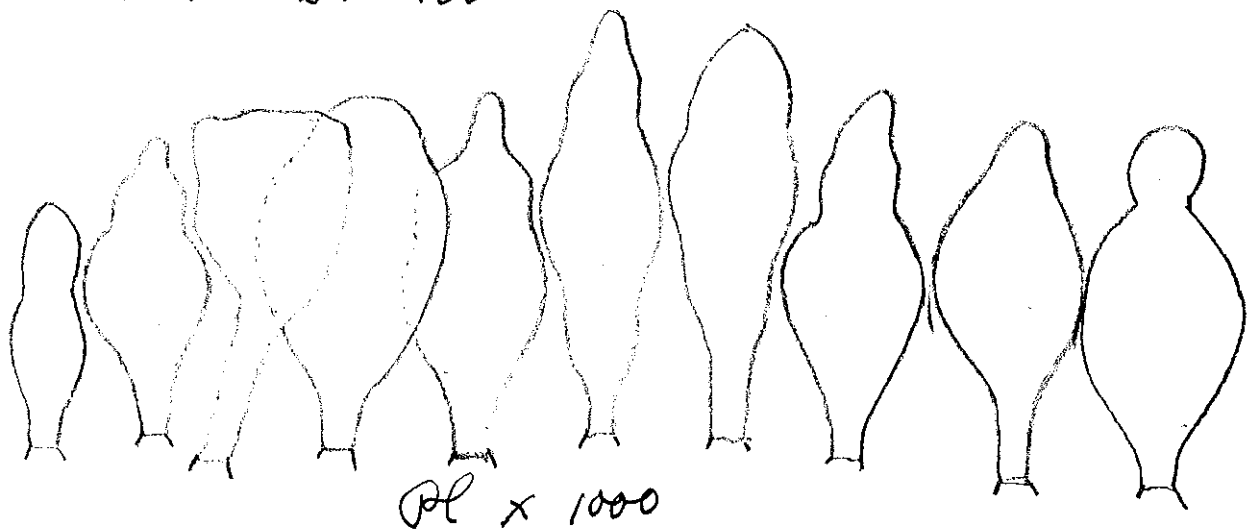
Stipe 4-10 cm long, 12-18 mm thick, white to dingy brownish but not especially so at base, equal or nearly so, stuffed with a soft pith then hollow, with copious rhizomorphs in the debris. Veil forming a membranous, apical, deciduous annulus, *often appendiculate on pileus margin.*

Notes by Hesler

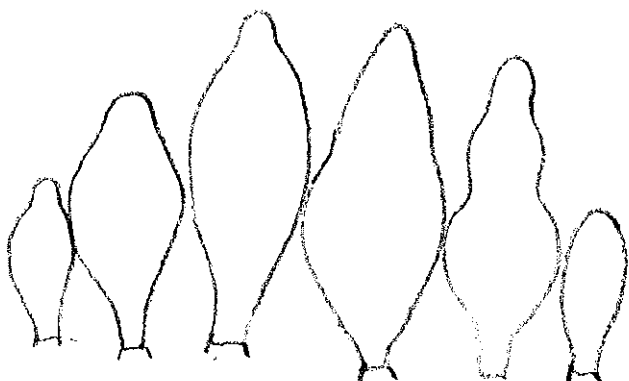
Spores 8-10 x 5-6 μ , obscurely inequilateral in profile, ellipsoid in face view, wall smooth, double and moderately thick, truncate to obscurely so, yellowish brown in 2% KOH. Pleurocystidia 32-56 x 9-24 μ , ventricose, a few irregular-shaped, scattered, conspicuous; cheilocystidia 20-45 x 8-20 μ , similar in shape. Pileus cuticle of clavate to subcuneate cells, 20-27 x 9-20 μ , with a rather thin gelatinous zone on the surface (cells in mature pilei pushed into a rather flattened position). Stipe cuticle of repent, dry hyphae, Caulocystidia not found.

Seems rather near ~~*Agrocybe*~~ ~~*ovata*~~ to *A. howeana* (but the latter is said to be dry).

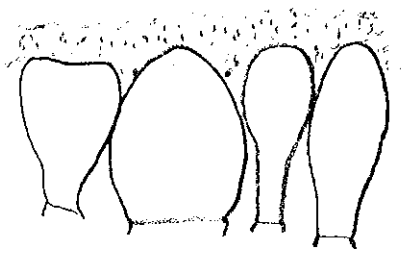
Agrocybe
 Nimke - ~~FA~~ - 188



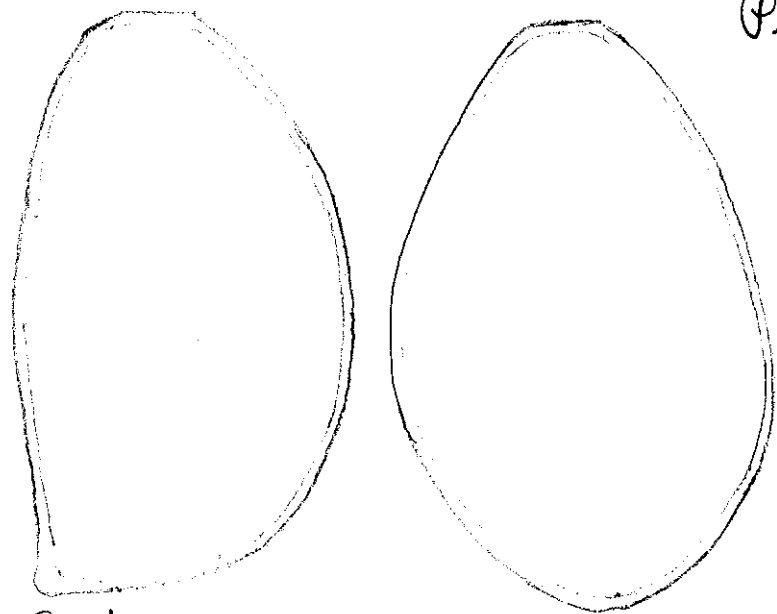
Pl x 1000



Ch x 1000



Pileus cuticle
 x 1000



Profile Face
 Spores x 8000

AGROCYBE *sp. nov.*

Nimke-340

on spruce duff and chip dirt, Ann Arbor, Michigan, June 7, 1973.

Notes by Smith

Pileus cespitose to gregarious, 3-8 cm broad, broadly obtuse to convex, margin uplifted and with only a low broad umbo, dull and unpolished when young, fading to "pinkish buff" on disc first, and marginal area violaceous, with darker streaks and spots, glabrous, lubricous in age, general color cinnamon buff and marginal area more or less avellaneous. Context pallid, soft; odor when crushed farinaceous.

Lamellae adnate, grayish pallid, becoming avellaneous, finally more or less wood brown, close, broad, edges becoming serrate.

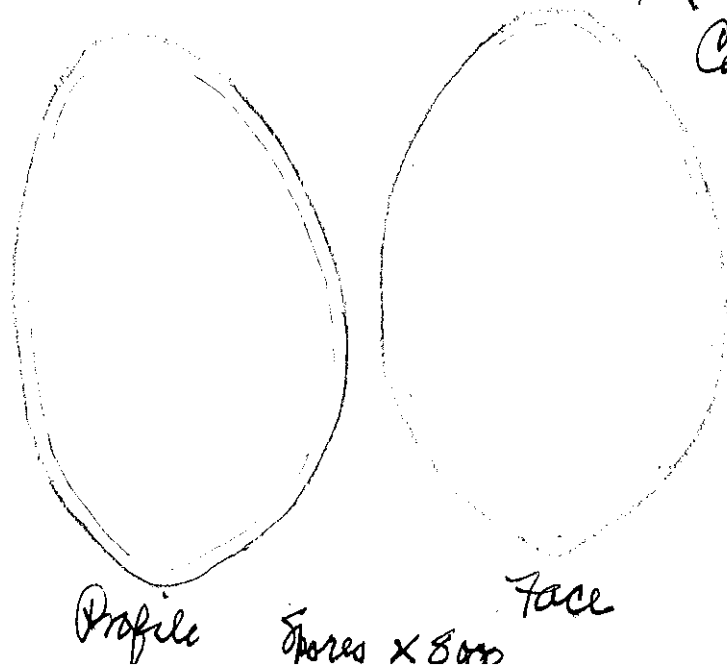
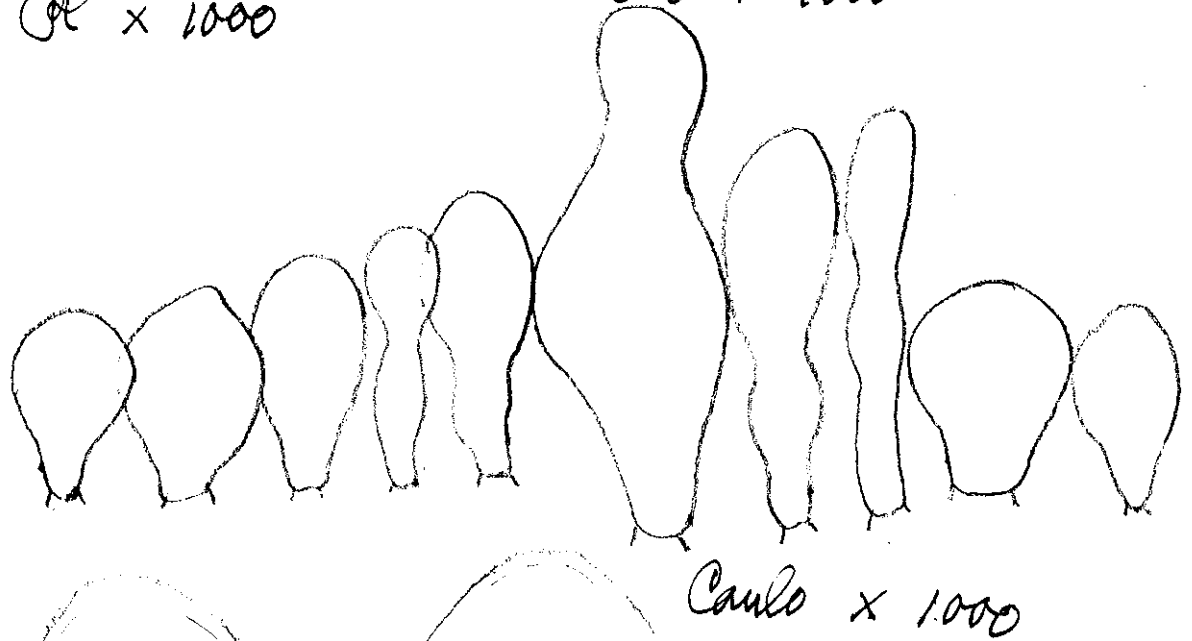
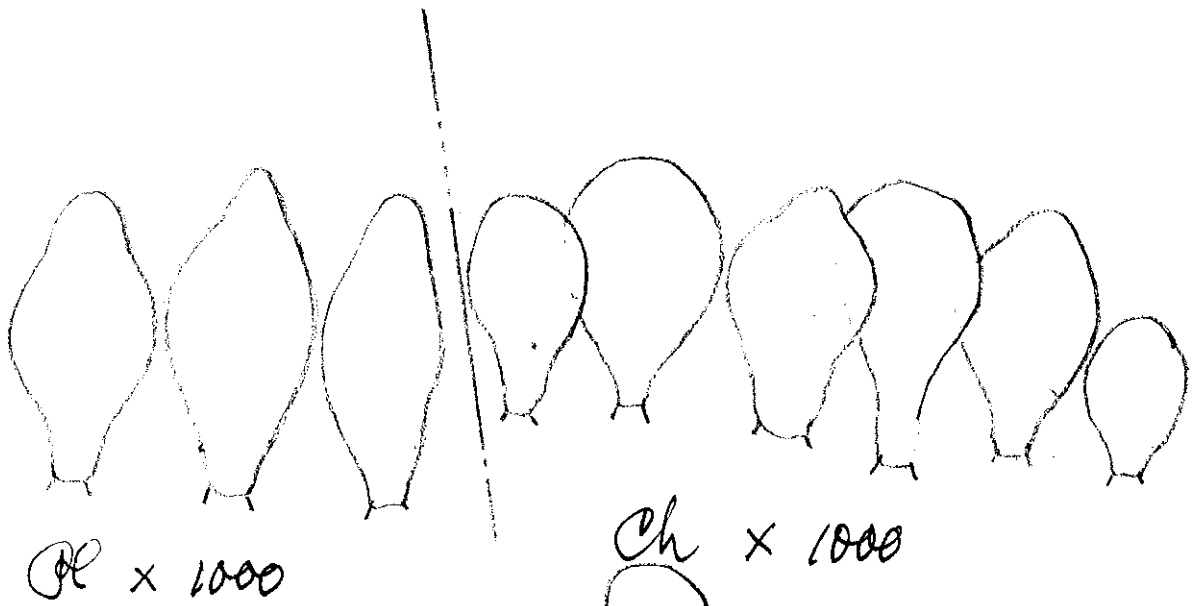
Stipe 6-11 cm long, 8-12 mm thick, at first pallid overall at first, then discoloring to cinnamon buff when handled, equal to base slightly bulbous, appressed-silky, not pruinose. Veil tiller buff before breaking, slightly pruinose, forming a ragged, apical annulus. Rhizomorphs present.

Notes by Hesler

Spores 7.5-9.0 x (4.5)5-6.5 μ , a few obscurely inequilateral in profile, ellipsoid in face view, a few spores faintly rhomboid, smooth, truncate to slightly so, wall medium thick (double), yellowish brown. Pleurocystidia 36-44 x 16-20 μ , ventricose, scattered; cheilocystidia 20-42 x 12-24 μ , ventricose to subspathulate or ellipsoid, rather sparse. Pileus cuticle of brick- or loaf-shaped cells, surface dry. Pileocystidia none found. Stipe cuticle of repent, dry hyphae. Caulocystidia rather conspicuous, often gregarious, found near apex, 23-35 x 10-22 μ , ~~07~~ occasionally much larger (up to 70 x 26 μ).

Near A. acericola, but the violaceous margin of the pileus is unusual. It seems to differ from A. howeana in its more slender stipe, dry pileus (?), ⁱⁿfar~~ma~~aceous odor, and possibly its abundant and conspicuous caulocystidia.

Agrocybe
Nimke - 340



Spores x 800

AGROCYBE *sp. nov.*

Nimke-341

on spruce duff, Ann Arbor, Michigan, June 7, 1973.

Notes by Smith

Pileus 3-5 cm broad, plane to broadly convex, rarely with a low umbo, whitish, no violet umber tint, disc soon pinkish buff to cinnamon buff, marginal area at first whitish with fibrillose streaks, glabrous, moist, hardly lubricous. Context thin, soft, whitish; odor strongly farinaceous, taste rancid-farinaceous.

Lamellae adnate, avellaneous to wood brown, then becoming more or less wood brown, close, broad, edges crenulate.

Stipe 4-6 cm long, 4-7 mm thick, pallid, discoloring below, equal, silky, apex striate. Veil lilac buff, forming a thin, superior, ragged annulus which is soon colored by the spores.

Notes by Hesler

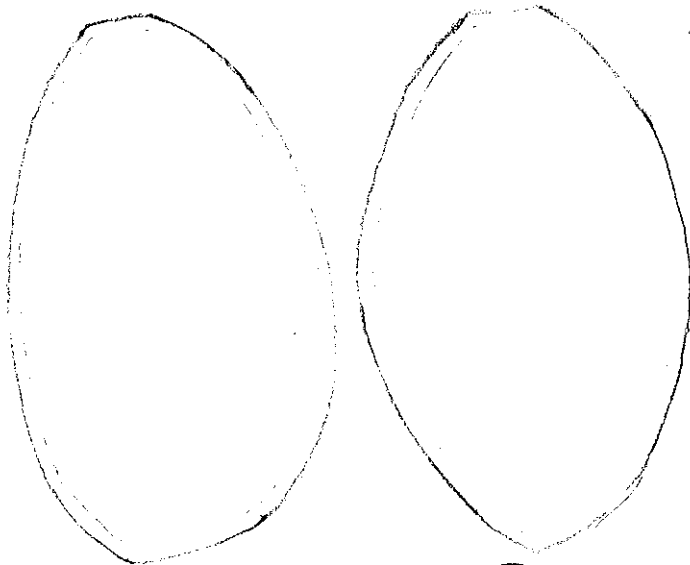
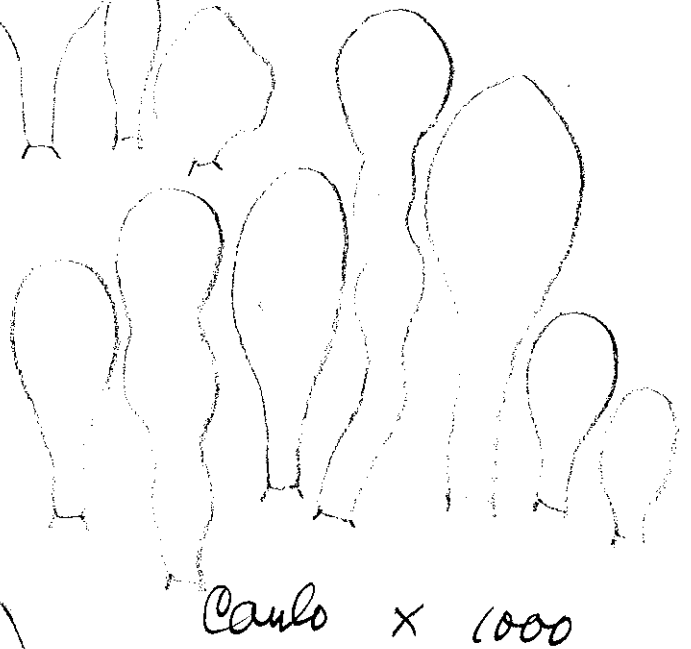
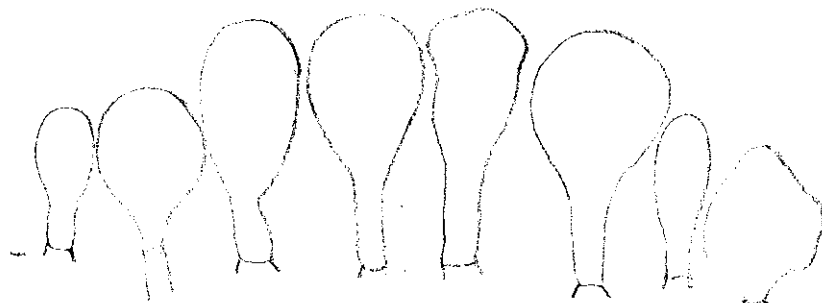
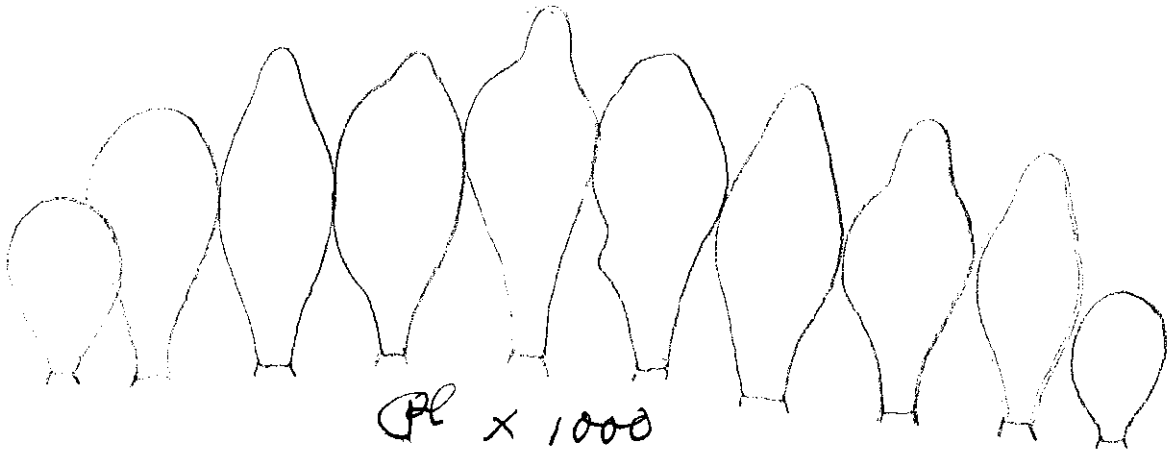
Spores 7-9.5 x 5-6 μ , very slightly inequilateral or not at all in profile, ellipsoid in face view, truncate, smooth, moderately thick (double), yellowish brown in 2% KOH. Pleurocystidia 20-43 x 12-20 μ , scattered, ventricose, at times with a very short but distinct neck, often sub-ellipsoid; cheilocystidia 22-33 x 7-20 μ , clavate to clavate-spathulate and usually stipitate, in clusters (numerous) and conspicuous. Pileus cuticle dry, of vesiculose to loaf-shaped or ellipsoid cells. Stipe of dry, repent hyphae. Caulocystidia 20-68 x 10-20 μ , scattered or more often in tufts or gregarious, clavate, spathulate, sometimes constricted, usually stipitate (somewhat resembling the cheilocystidia).

Cf. A. vermifluus which has larger spores, and slightly different pleurocystidia. Dried, it suggests A. acericola, which has (in Type) small pleurocystidia.

cf. Nimke-340.

Agrocybe

Nimke - 341



AGROCYBE *sp. nov.*

Nimke-344

gregarious on chip dirt, Ann Arbor, Michigan, June 7, 1973.

Notes by Smith

Pileus 3-9 cm broad, obtusely umbonate, expanding to plano-umbonate or plane, margin uplifted in age, at times hygrophanous, buttons bright cinnamon buff to honey tan (no gray, buff, or violet umber), fading on margin to more ochraceous (more or less "pinkish buff" over yellow and disc pale tawny), margin finally striatulate when moist. Context watery buff, fading to whitish; odor when crushed farinaceous, taste bitter.

Lamellae adnate, buffy pallid becoming avellaneous, close, broad, edges aroded.

Stipe 4-9 cm long, 5-8(10) mm thick, pallid throughout, silky, whitish and slightly discoloring variously, long striate, equal, solid, rhizonorpha at base. Veil forming an apical, thin, ragged, membranous annulus.

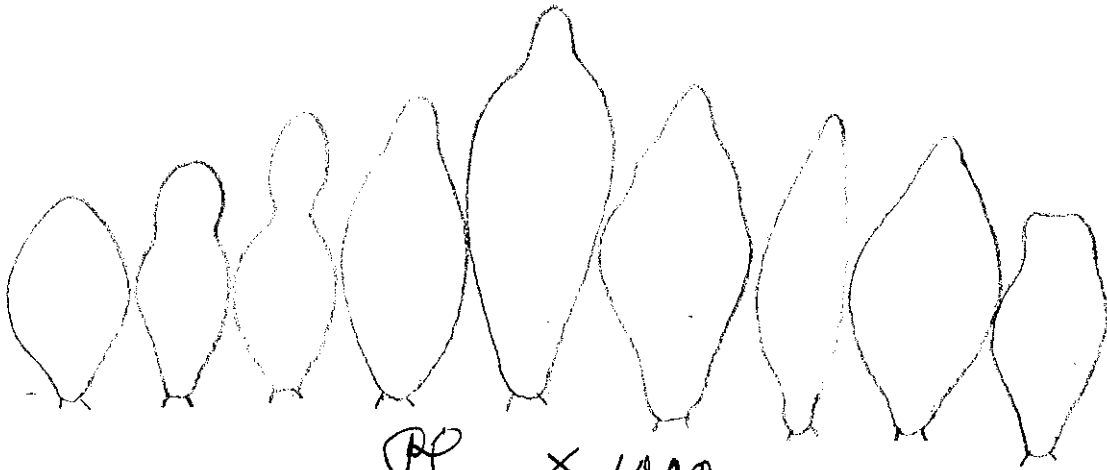
Notes by Hesler

Spores 8-10 x (5)5.5-6 μ , at times obscurely inequilateral in profile, ellipsoid in face view, smooth, truncate, yellowish brown in 2% KOH. Pleurocystidia 26-48 x 12-20 μ , ventricose, sometimes subampullaceous, apices subacute to rounded-blunt, scattered, conspicuous; cheilocystidia 18-30(40) x 6-17 μ , clavate, in tufts, abundant. Pileus cuticle cellular, cells cuneiform to subglobose, surface dry, in mature pilei often pushed out of normal position. Stipe of repent, dry hyphae surface bearing at the apex abundant caulocystidia 26-37(63) x 8-14 μ , clavate to stipitate-capitate, often with a septum at base of enlarged portion.

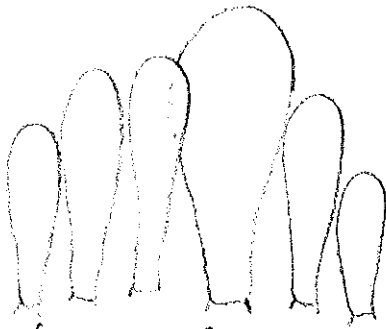
The bitter taste suggests A. howeana, but it also appears related to A. acericola.

Agrocybe

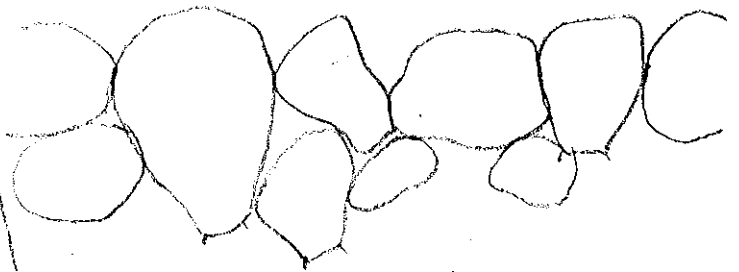
Nimke - 344



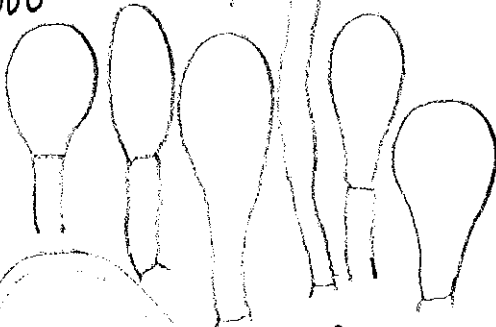
Sp - X 1000



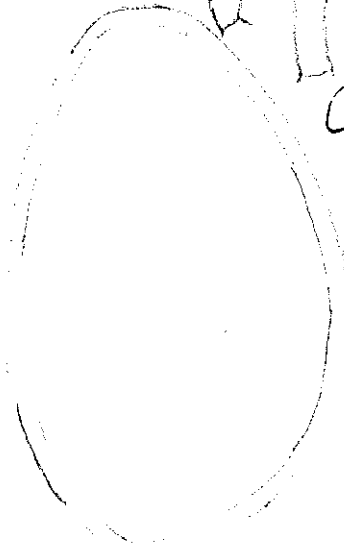
Ch - X 1000



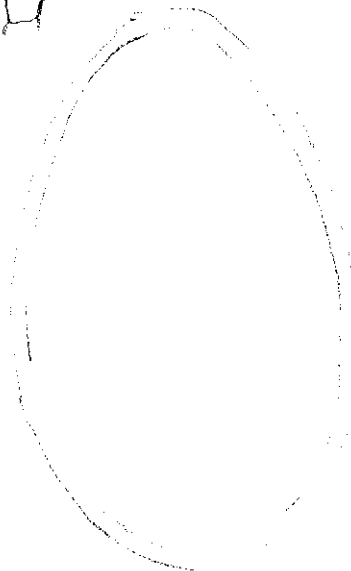
Pileus cuticle
X 1000



Caulo
X 1000



Profile



Face

Spore X 8000

AGROCYBE *sp. nov.*

(Barrows?)-1785

on soil, in grass, Sangre de Christos, 8000 ft., June, 1965.

Notes by Barrows (?) [supplemented by Hesler]

Pileus 3-4.5 cm broad, convex, buff to rusty buff, surface cracked, glabrous, dry. Context whitish, thick; taste slightly saponaceous with a slightly bitter after-taste.

Lamellae pallid buff to brown, edges whitish, broad, medium close or nearly subdistant.

Stipe 5-8 cm long, 4-8 mm thick, pallid, dry, equal or with a sub-bulbous base, hollow. Veil forming a membranous annulus which soon breaks and clings to cap-margin.

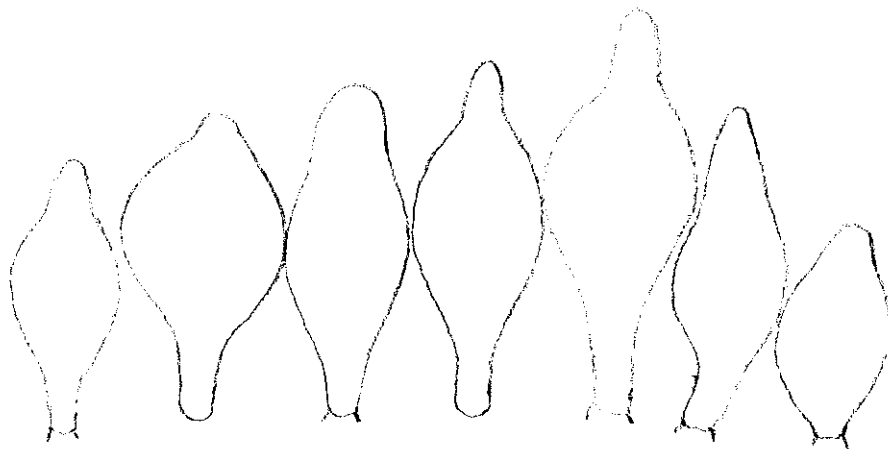
Notes by Hesler

Spores 7-9 x 4.5-5.5 μ , a few obscurely inequilateral in profile, ellipsoid in face view, smooth, truncate, yellowish brown in 2% KOH. Pleurocystidia 28-46 x 15-22 μ , ventricose, more or less stipitate, with more or less of a beak, scattered; cheilocystidia 20-35 x 11-16 μ , somewhat similar to pleurocystidia, smaller, not abundant. Pileus cuticle dry, cellular: (1) in young pileus slender-clavate; (2) in mature pileus broader. Stipe cuticle of dry, repent hyphae. No caulocystidia found at apex.

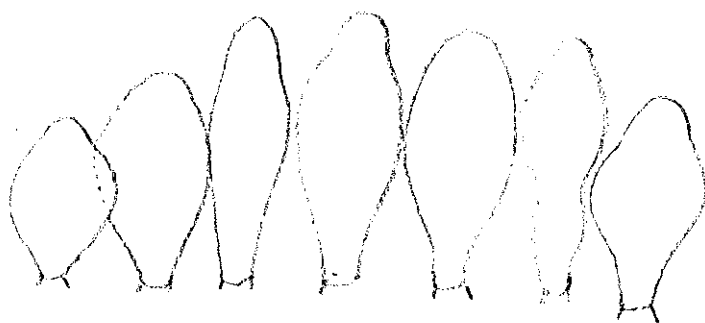
The collector (Barrows?) labelled it Pholiota praecox.

Agrocybe

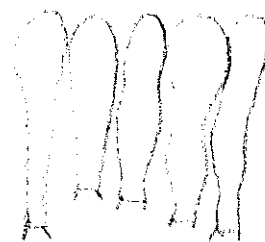
[Barrows?]- 1785



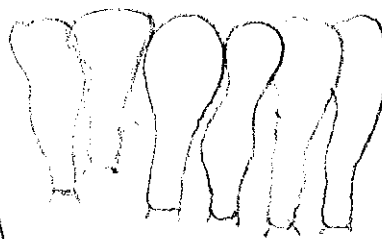
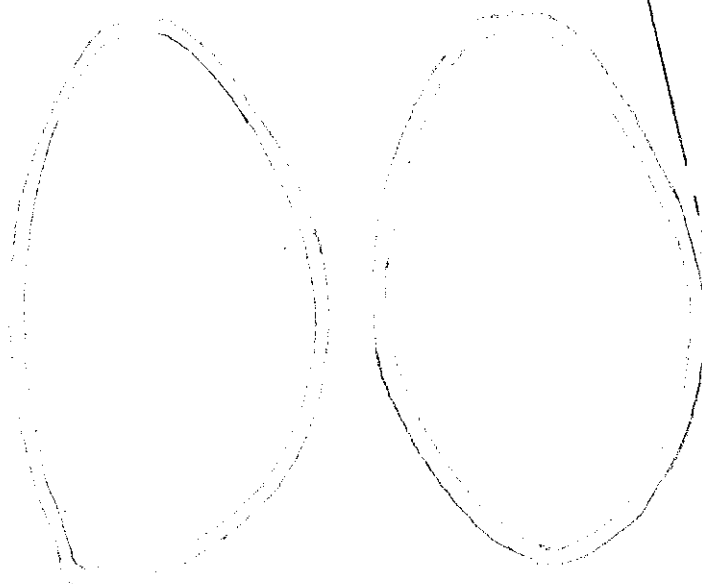
Sp x 1000



Ch x 1000



Pileus cuticle x 1000
[very young pileus]



Pileus cuticle x 1000
[mature pileus]

AGROCYBE *sp. nov.*

Barrows-1797

among grass and weeds, in mixed forest of aspen and pine,
Sangre de Chrostos, July 1965.

Notes by Barrows (Supplemented by LRH)

Pileus 5-7 cm broad, convex then plane, shades of buff, dry,
glabrous, even. Context thin, fragile; taste not distinctive.

Lamellae broad, close, light to dark buff.

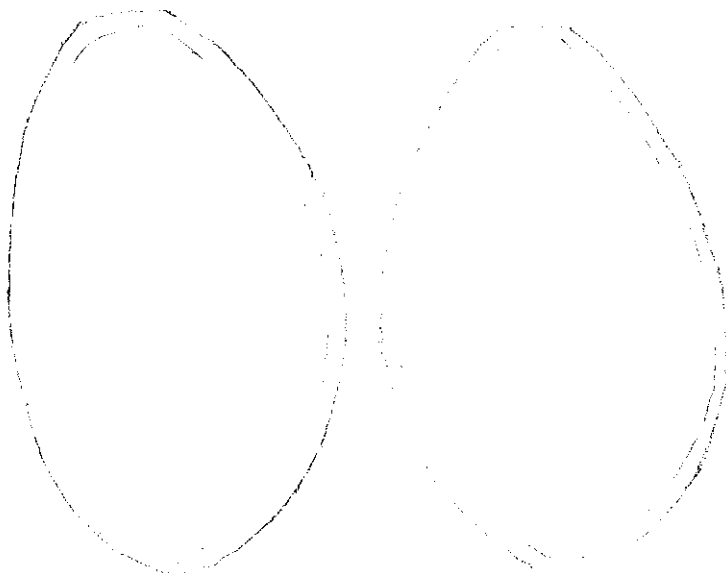
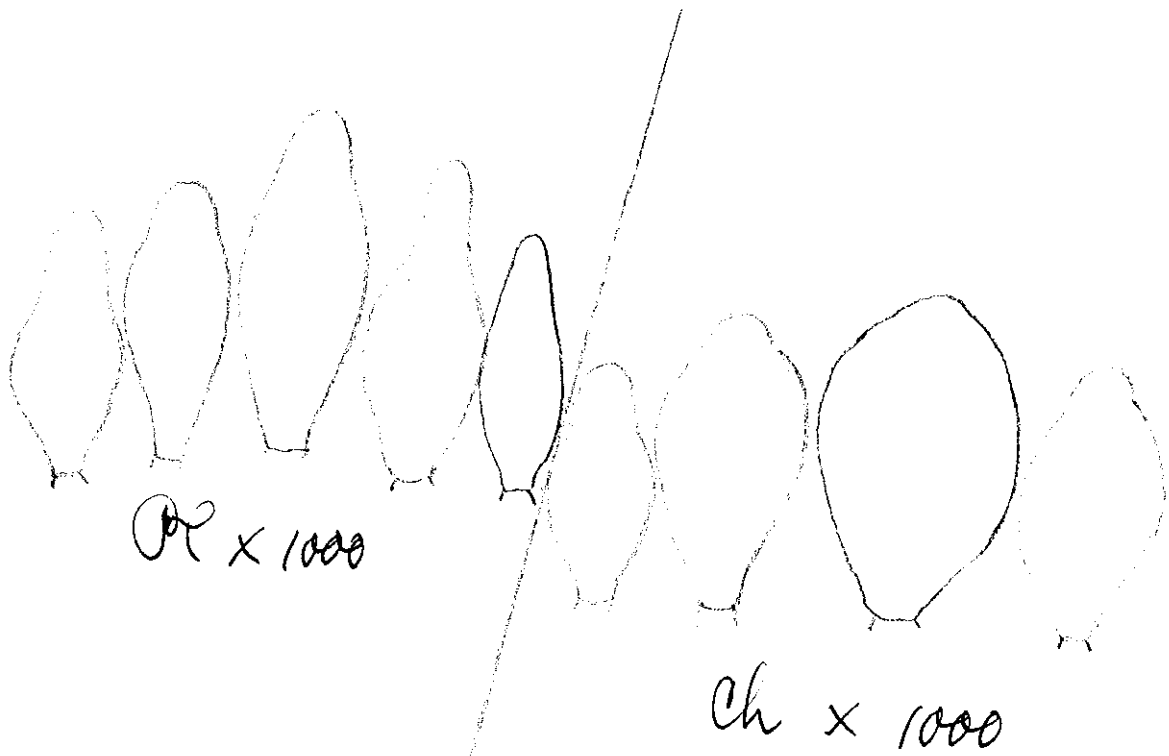
Stipe 4-7 cm long, 4-6 mm thick, dry, light buff. Veil forming a
slight annulus, no remnants remain at maturity.

Notes by Hesler

Spores 8-10 x 5-6 μ , obscurely inequilateral in profile, ellipsoid
in face view, smooth, truncate, wall medium thick (double), yellowish
brown in 2% KOH. Pleurocystidia 36-45 x 14-18 μ , ventricose, widely
scattered, inconspicuous; cheilocystidia 32-40 x 15-27 μ , shorter and
broader than pleurocystidia, otherwise similar, sparse. Pileus cuticle
of ^{to subconnate}vesciculose cells, surface dry. ^{Cells at margin of cap similar to those toward center.}Stipe cuticle of dry, repent hyphae.
Caulocystidia not seen.

Labelled Pholiota praecox by Barrows, but he says nothing of dark
brown (fuscous) color when young, and, in A. praecox, the odor and taste
are described as farinaceous (and Barrows says taste not distinctive).

Agropyre
Barrows - 1797



Spores x 8000

fruit - please color?

AGROCYBE *sp.*, nov.

Hoseney-2520

gregarious on an old bale of hay, Ann Arbor, Michigan, June 8, 1973.

Notes by Smith

Pileus 4-8 cm broad, broadly convex to plane, or margin uplifted, not umbonate, glabrous except for appendiculate margin, not hygrophanous, slightly viscid (when wet). Context white; odor none, taste slight, fungoid.

Lamellae adnate, pallid becoming more or less "warm sepia", close, broad.

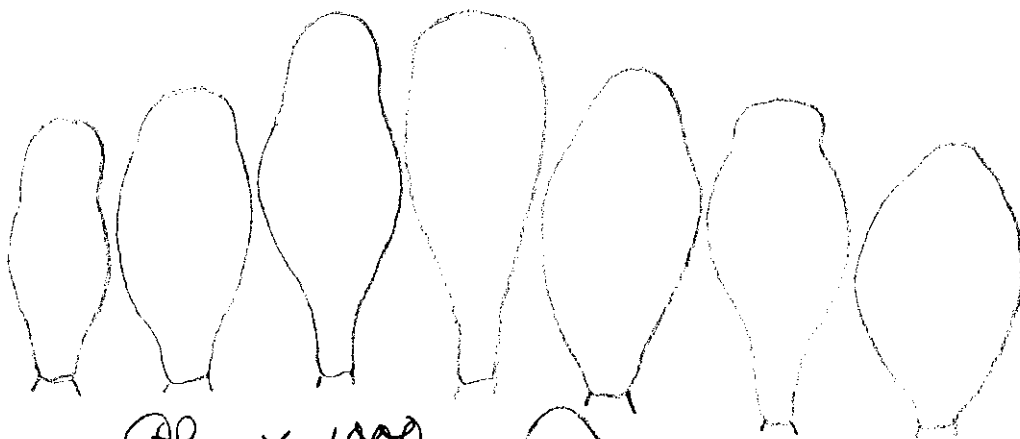
Stipe 10-20 cm long, 4-10 mm thick, whitish overall, discoloring to brownish overall, base usually remaining white, equal above a slight ovoid bulb, becoming hollow, longitudinally fibrillose-striate, in some slightly scurfy. Veil very thin, membranous, adhering to cap margin as fragments, only a faint zone on the stipe.

Notes by Hesler

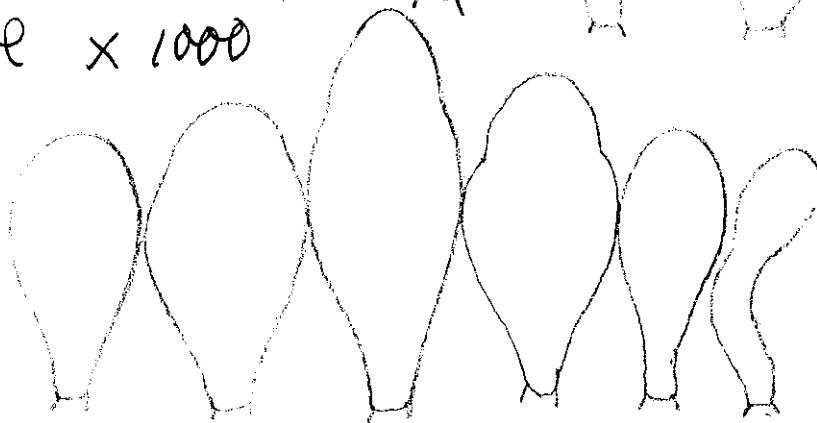
Spores (Smith says: in deposit more or less warm sepia), 9.5-12 x (5.5)6-8 μ , obscurely inequilateral in profile, ellipsoid in face view, many plainly truncate, smooth, wall double (moderately thick), brownish with a tint of yellowish in 2% KOH. Pleurocystidia 34-48 x 12-22 μ , ventricose, scattered, sometimes not found in several sections; cheilocystidia 33-50 x 10-22 μ , similar but a few pyriform-clavate, at times abundant, again not found on some sections. Pileus cuticle of clavate to ellipsoid cells, but pushed out of position in mature pilei; surface a slightly viscid zone. Stipe cuticle of dry, repent hyphae. Caulocystidia 30-52 x 7-22 μ , scattered or in tufts, clavate, ventricose, pyriform.

Smith says: it has the "aspect of Stropharia ambigua". Pileus color not given; dried, the pileus appears that it might have been more or less ochraceous. In my key, it appears somewhat near A. Tenn-24869, or even closer to Tenn-9101.

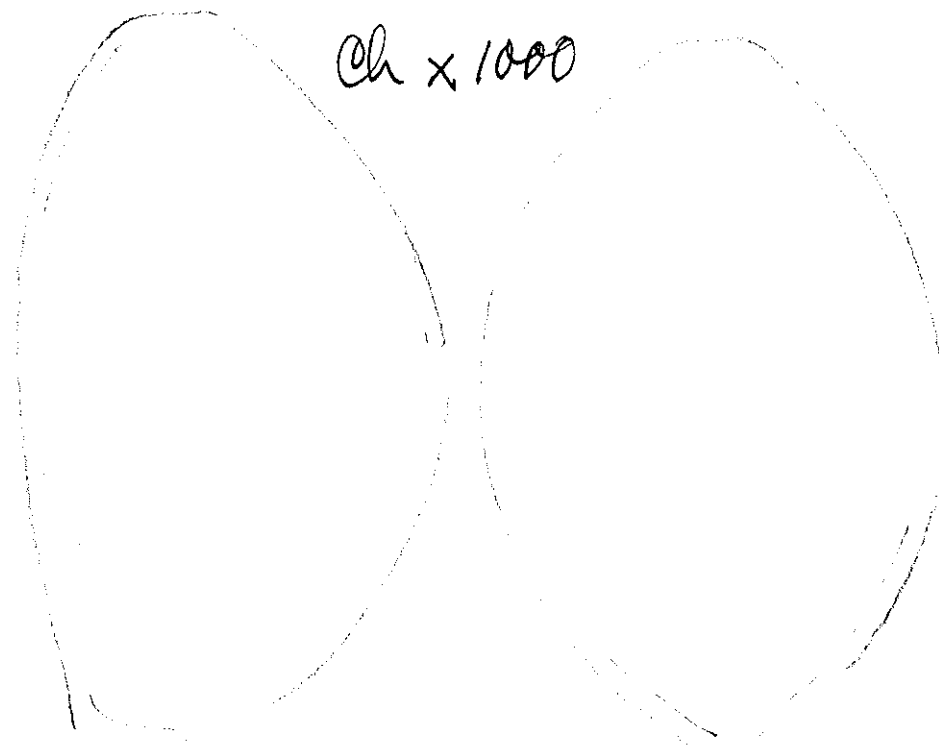
Agrocybe
Horsene - 2520



Sp x 1000



Ch x 1000



Profile

Face

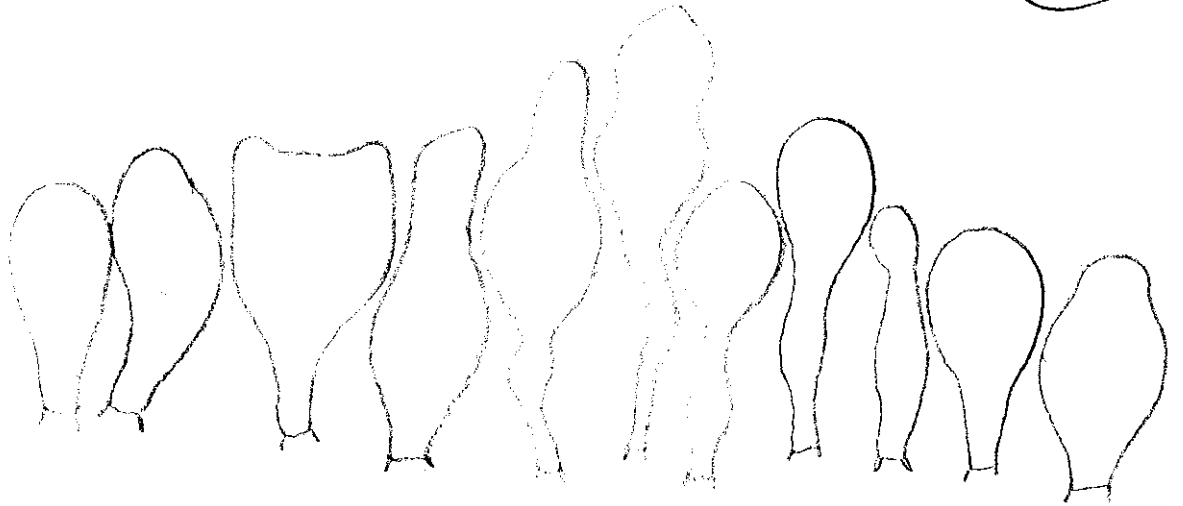
Spores x 8000

more

Agropyre

Hosney - 2520

more



Cauls x 1000

Tenn-3692

AGROCYBE *sp. nov.*

On soil, under tulip, University Campus, Knoxville, May 22, 1934

Pileus 2-4 cm broad, convex, slightly viscid, "ochraceous buff", margin incurved and even. Context white, thick on disc, thin on margin; odor suggesting radish, disagreeable; taste of radish becoming bitter.

Lamellae adnate-decurrent to emarginate, ^{to distant,} subdistant, rather broad, pallid or whitish at first, finally near "cinnamon," edges white-fimbriate.

Stipe 3-5 cm x 3-6 mm, whitish to somewhat concolor to pileus, fibrillose-squamulose, solid, subbulbous. Veil none.

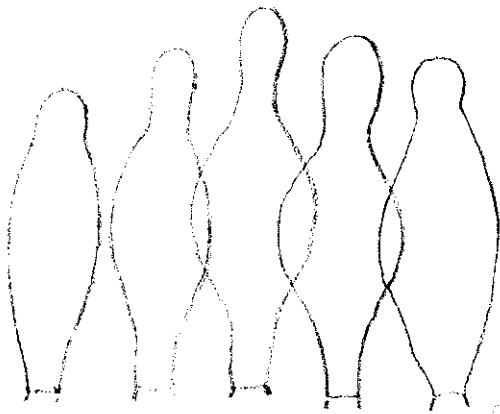
Spores 10-14 x 7-9 μ , ellipsoid, truncate, smooth, thick-walled, ~~very~~ ~~very~~ ~~very~~. Basidia 34-42 x 9-11 μ , 4-spored. Pleurocystidia 37-48 x 10-17 μ , ventricose, scattered to rare; cheilocystidia 28-47 x 6-10 μ , variable, but mostly ventricose and appendiculate, or with a neck, or obclavate, at times capitate, rarely forked. Gill trama parallel, hyphae 5-11 μ broad. Pileus trama loosely interwoven, hyphae 6-12 μ broad. Pileus cuticle cellular, cells isodiametric, ovoid, or at times clavate-pyriform-not always distinct in mature caps. Clamp connections present. Pileus and gill trama pale in KOH; dingy brown in Melzer's reagent. Caulocystidia 40-58 x 8-12 μ , ventricose, flask-shaped, or irregularly clavate.

This is near dura (vermiflua) ^{which} but has different cheilocystidia, ~~and~~.

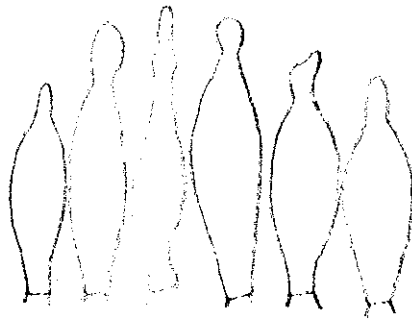
different gill-spacing, and a veil.

The rather small size; broad and distant to subdistant gills give it a distinct appearance, and the raphanoid odor + taste are distinctive.

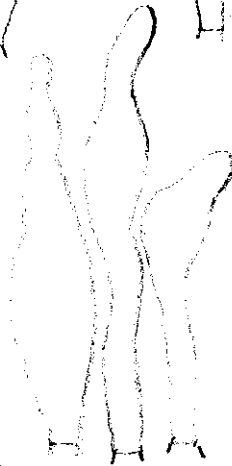
Agrocybe
3692



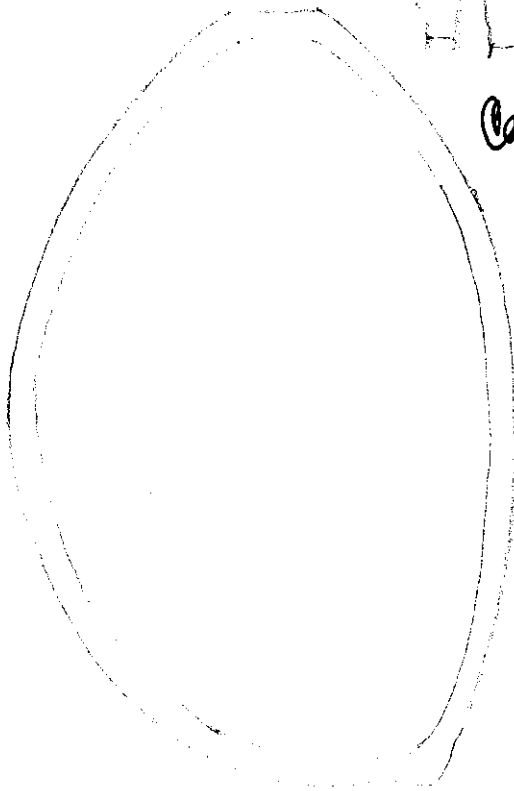
Sp $\times 1000$



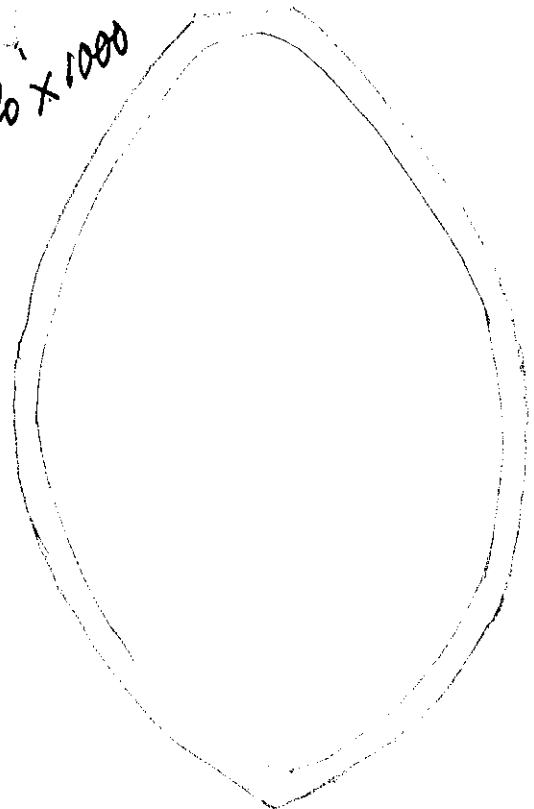
Sp $\times 1000$



Sp $\times 1000$



Profile



Face

Spores $\times 8000$

5010

AGROCYBE
~~XXXXXXXXXXXXXXXXXXXXXXX~~

on soil, roadside, New Market , Virginia, ~~xxxxxx~~
leg H. R. Milliken, May 3, 1959

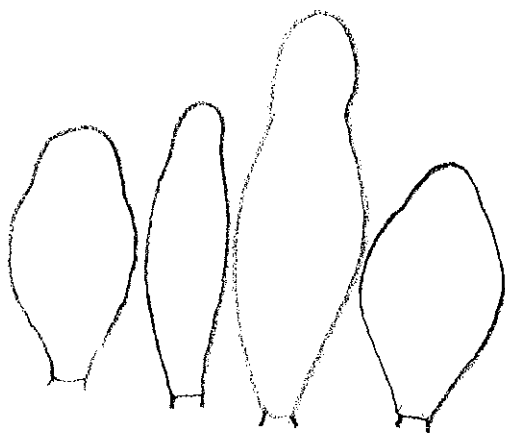
Notes by Milliken

Pileus 1 - 3.4 cm broad, surface cracked in age. Odor none.
Lamellae adnate, decurrent by a line, close.
Stipe 4-7.5 cm long, 4-7 mm thick, equal. Annulus
not found.

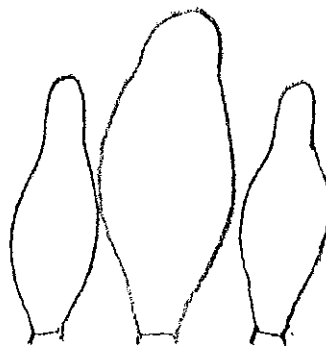
Notes by Hesler

Spores 10-15(16) x 7-9 μ , ellipsoid, truncate. Pl
33-52 x 10-18 μ , ventricose, subcapitate, few; ch 32-42 x
12-17 μ , similar, moderately abundant. Pileus cuticle of
clavate to subspheric cells, scattered, and mostly dissolved.

Agroclype
5010



Pl x 1000



Ch x 1000

5477

Agrocybe

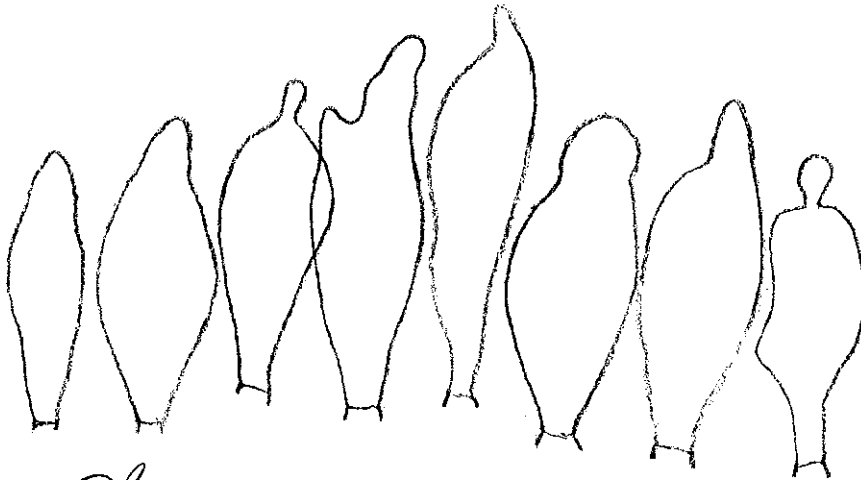
on soil, woods, Cedar Grove, GSNHP, Aug 14, 1934

Spores $8-9 (10) \times 5-5.5 (6.5) \mu$, at times slightly inequilateral in profile, ellipsoid to subovoid in face view, smooth, truncate, wall medium thick, brown in 2% KOH. Pleurocystidia $35-50 \times 10-17 \mu$, ^{at times} ventricose, apices tapering or subcapitate, ~~to~~ mucronate, scattered and moderately abundant, conspicuous; Ch $30-40 \times 10-17 \mu$, ventricose, sparse. ~~Gill~~ Pileus cuticle cellular. ~~Cap~~ ~~Pile~~ Stipes cuticle dry, of repent hyphae. Canlocystidia not found.

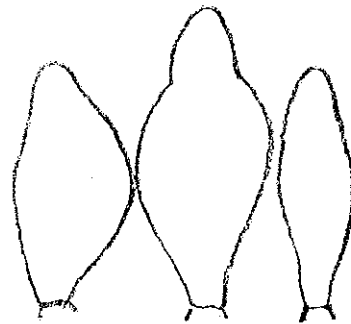
The spores, cystidia, and cuticle all suggest *Agrocybe*.

No notes on macro features; it may not be possible to identify without notes.

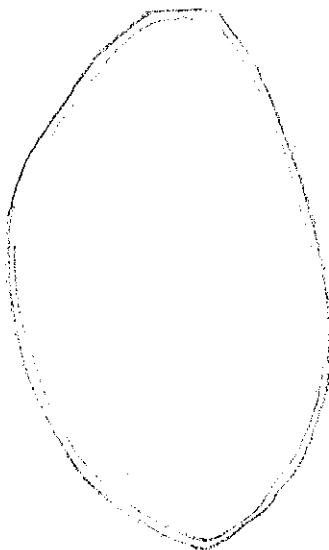
~~Stropharia~~ Agrocyphe
5477



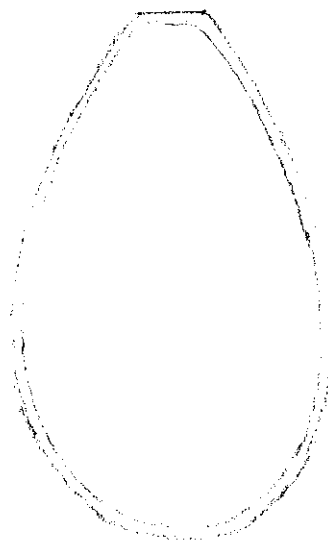
Pl x 1000



ch x 1000



Profile



Face

Spores x 8000

Tenn-8318

AGROCYBE *sp. nov.*

On Acer negundo, Mericort Station, Clarksville, Tenn.,

Coll. J. K. Underwood & P. R. Miller, September 19,
1935

Pileus 6-13 cm broad, slightly convex to plane, somewhat moist but scarcely hygrophanous, rough with many anastomosing ridges and well-marked depressions, unevenly colored, ~~more or less~~ ^{or sometimes paler,} "carob-brown" ^x the darker portion consisting of a thin cuticle which tends to disintegrate with age. Context white, comparatively thin; odor and taste mild, ~~unpleasant~~ ^{not} distinctive.

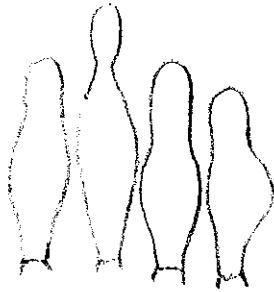
Lamellae adnate-seceding, broad, close to subdistant, becoming pallid brownish and spore stained, minutely rough on the edge.

Stipe 7-14 cm long, 6-15 mm thick, somewhat curved, minutely fibrillose, whitish, later becoming stained by the spores. Annulus present, inconspicuous, adhering to the stem, evanescent.

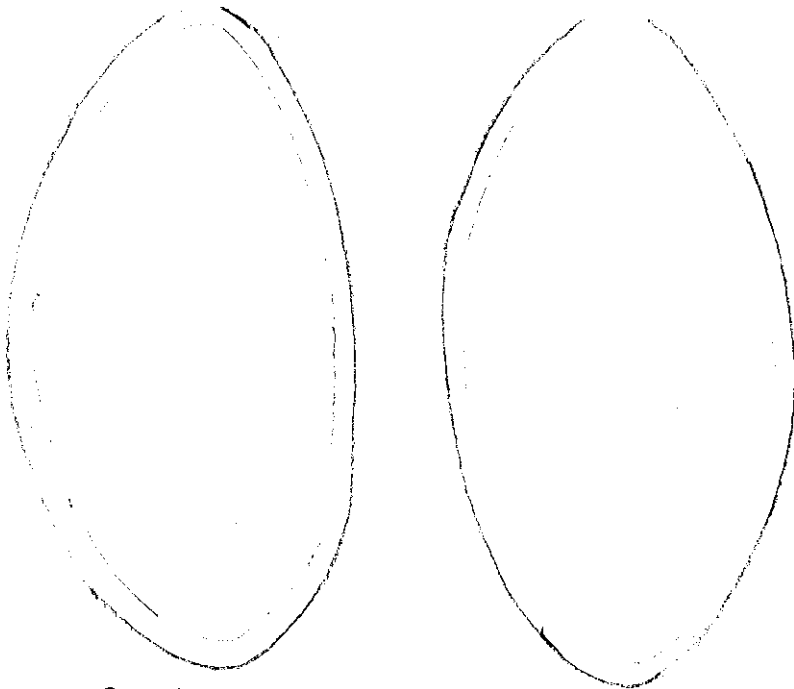
Spores 8-12 x 5-6 μ , slightly inequilateral in profile, ellipsoid in face view, wall 0.5 μ thick, smooth, some obscurely truncate, a few rather distinctly so, brown in KOH. Pleurocystidia none; cheilocystidia 25-38 x 7-9 μ , ventricose (or 9-pin-shaped), not abundant. Gill trama of subparallel hyphae 5-8 μ broad. Pileus cuticle of ^{some} clavate or mostly subglobose to irregularly-shaped cells, apparently dry.

Pileus color. + anastomosing ridged surface, and lack of pl. exclude it from auricula.

Agrocybe
8318



Ch x 1000



Profile

Face

Spores x 8000

On soil, open woods (lawn), Woodson (Daniel's yard), Knoxville,
May 13, 1950.

Pileus 18-30 mm broad, convex-hemispheric, expanding-convex, broadly umbonate, neither viscid nor hygrophanous, glabrous, slightly rugose, somewhat plush-like, at first "clove brown" or blackish, becoming "buffy brown" to "antique brown," firm, margin even. Context thick on disc, thin on margin, white; odor slight, taste farinaceous.

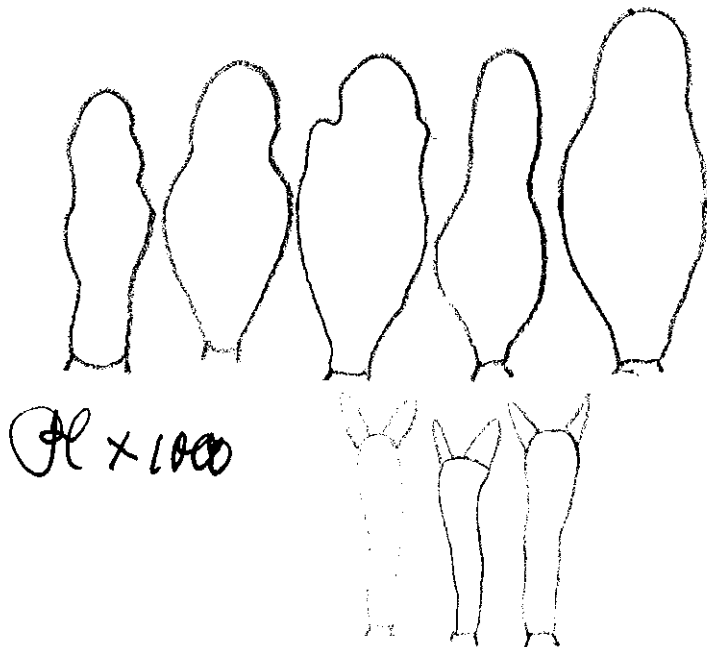
Lamellae rounded-adnate, becoming emarginate, pallid at first, then "drab," crowded, narrow, edges floccose.

Stipe 3-6 cm x 4-10 mm, white above, somewhat dingy downward, dry, equal, base sub-bulbous, surface matted-fibrillose, hollow, with coarse white rhizomorphs. Veil white, fibrillose-membranous, leaving an ample, apical annulus.

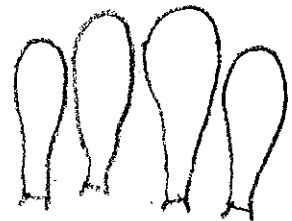
Spores 8.5-10(11) x 5-5.5(6) μ , smooth, slightly inequilateral in profile, ellipsoid-ovoid in face view, apex often truncate, pale olive-brown in KOH. Basidia 24-26 x 5-6 μ , often (usually?) 2-spored, the sterigmata broad. Pleurocystidia 35-48 x 11-20 μ , scattered, inconspicuous, sometimes forked; cheilocystidia 20-24 x 6-9 μ , clavate, clustered. Pileus cuticle of pyriform cells, 20-24 x 9-12 μ , dry.

May be near A. aegerita, in which the pleurocystidia are smaller (20-27 x 6-11 μ); also A. firma in which (according to Peck) the only evidence of a veil is the presence of a slight pruinosity on the young pileus-margin.

Agrocybe ~~praeceps~~
19633

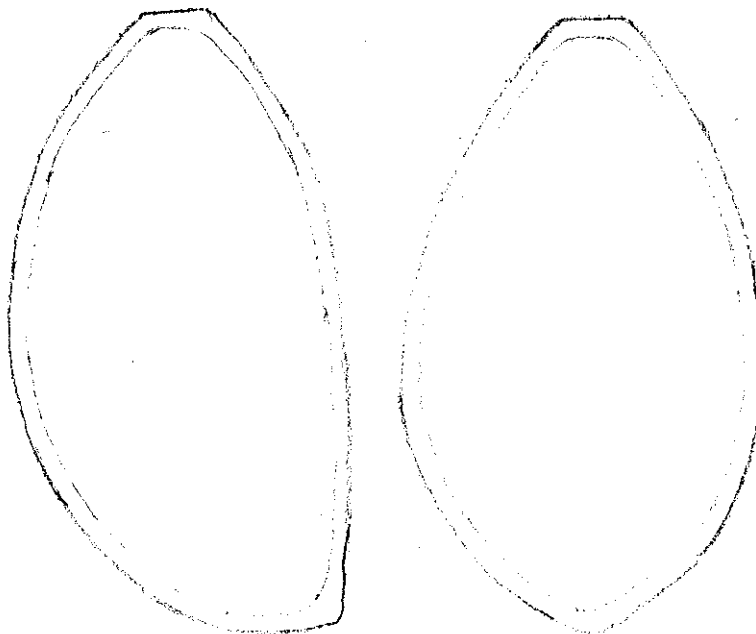


Pl $\times 1000$



Ch $\times 1000$

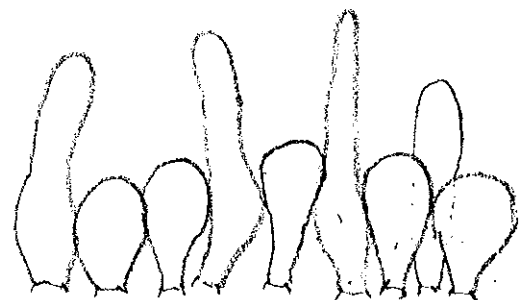
Basidia
 $\times 1000$



Profile

Face

Spores $\times 8000$



Filament cuticle and pilocryptidia
 $\times 1000$



19633. *Agaricus praecox* (Fr.) Fayod. (?)

20484

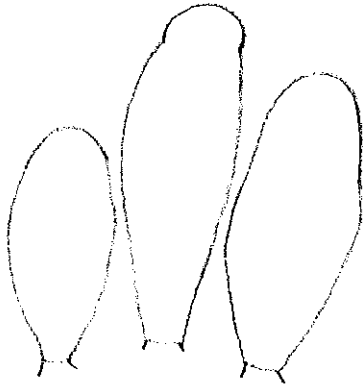
AGROCYBE

on soil, Univ. Campus, Knoxville, June 14, 1952
(resembles Stropharia semiglobata)

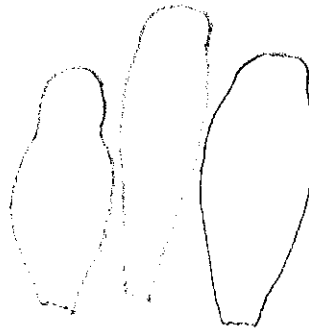
Spores 12-17 x 7-8(10) μ , slightly inequilateral in profile, ellipsoid in face view, smooth, truncate, brown in KOH. Pl 32-42 x 15-18 μ , widely scattered, not very conspicuous, ventricose, scarcely capitate; ch 32-28 x 11-15 μ , similar but moderately abundant. Pileus cuticle of clavate to cuneiform cells, many partially dissolved, 22-32 x 7-11 μ .

Agropyre

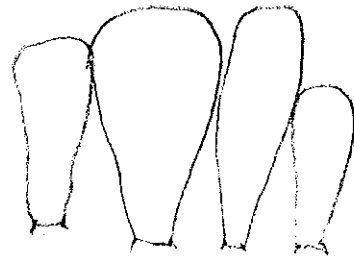
20484



Pl $\times 1000$



Ch $\times 1000$



Pileus cuticle $\times 1000$

Tenn-20843

AGROCYBE *sp. nov.*

On soil and debris, under rhododendron, Highlands, N. C.,

May 19, 1953

Pileus 25 mm broad, convex, broadly umbonate, not viscid, hygrophanous, disc "cream buff," elsewhere pallid, plush-like, margin even. Context white, firm, thick on disc, thin on margin; odor farinaceous, taste bitter.

Lamellae adnate-decurrent, ~~medium~~ ^{close, sub medium broad,} young gills not seen, finally "drab," edges serrulate.

Stipe 4.5 cm long, 4 mm thick, equal, dingy white, dry, stuffed then hollow. Veil white, membranous, adhering to gills and margin of pileus, - hence no annulus.

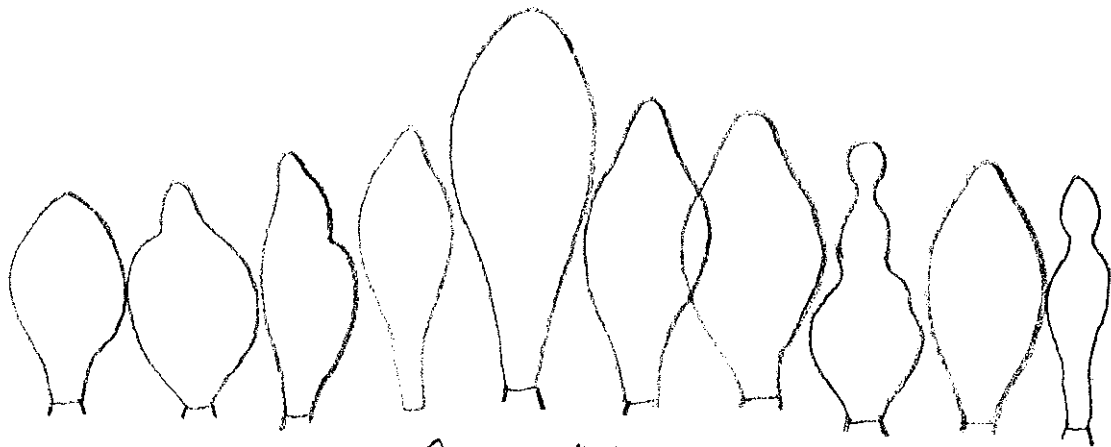
Spores 7-9(10) x 4.5-5.5 μ , ovoid or ellipsoidal, not inequilateral, smooth, truncate, ~~very rarely truncate~~.

Pleurocystidia scattered, buried, some projecting 7-10 μ , broadly ventricose, 27-50 x 12-22 μ ; cheilocystidia of two general types: (1) more or less similar to pleurocystidia, 23-38 x 16-20 μ ; (2) cylindric-capitate, 30-38 x 7-10 μ .

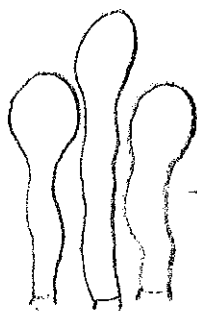
Pileus cuticle a palisade of clavate to subclavate or subpyriform cells, 18-30 x 7-11(15) μ , becoming disarranged and more or less flattened.

Agrocybe

20843



$\phi \times 1000$

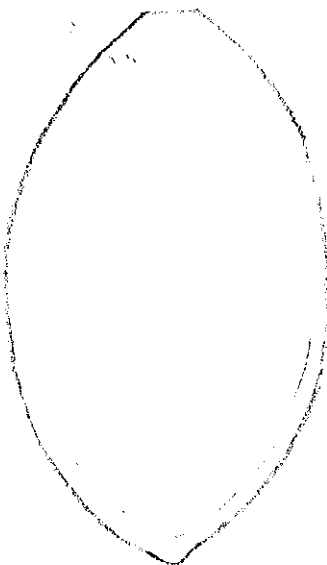
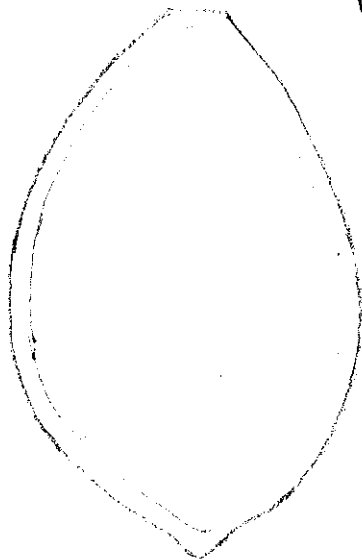


Type 1



Type 2

$Ch \times 1000$



Spores $\times 8000$

This has some features of Conocybe!

20873

AGROCYBE *sp. nov.*

PHOTO

On sawdust and rich soil, Timberlake Rd. (Boarts' place),

Knox Co., June 30, 1953

Pileus 2-3 cm broad, convex, expanding-wavy, finally more or less upturned, "warm buff," plush-like but glabrous, slightly viscid when wet, slightly hygrophanous, margin even (wet and dry). Context thin, dingy buff; odor and taste farinaceous, not bitter.

Lamellae round-adnate to emarginate, "snuff brown," medium close, rather broad, ventricose, edges fimbriate.

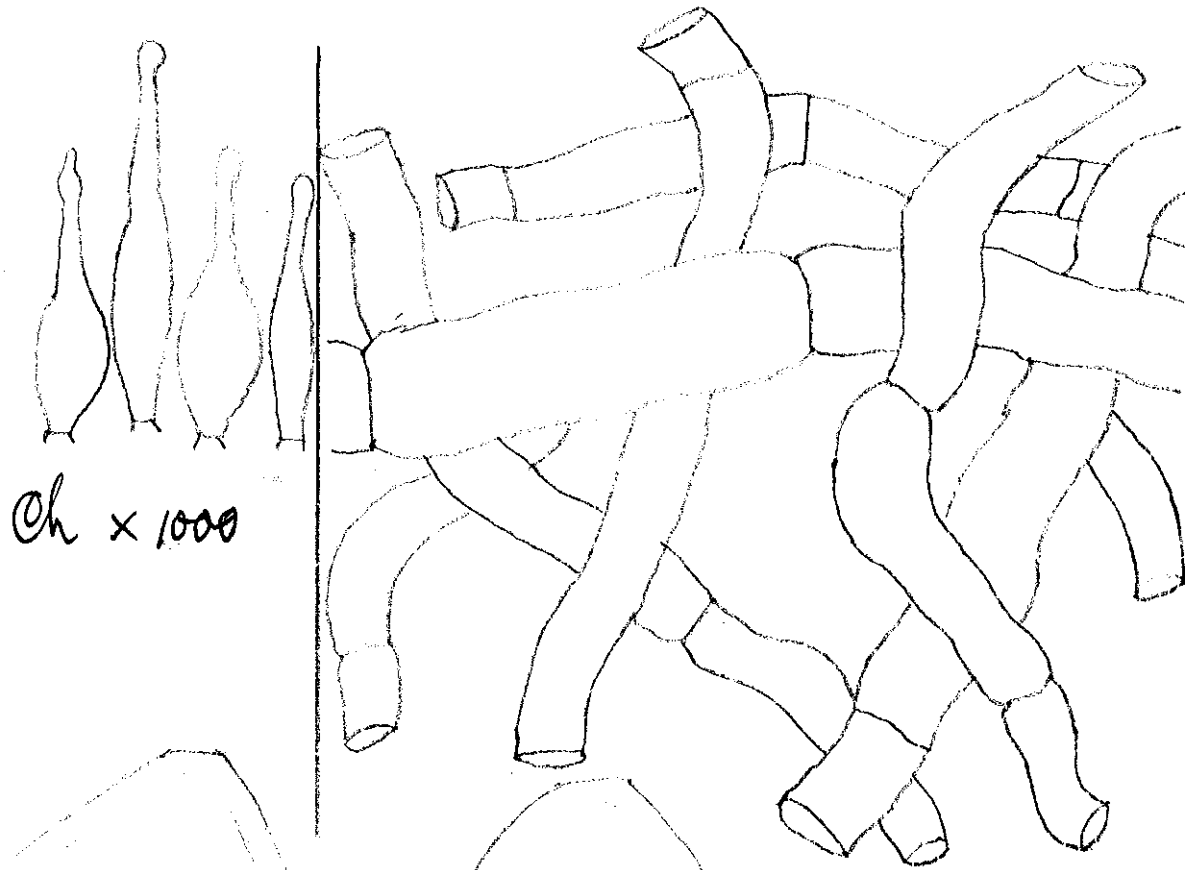
Stipe 2.5-4 cm long, 1.5-2 mm thick, dingy, apex floccose-scaly, fibrillose downward, equal, dry, solid with a pith, finally hollow. Veil none found.

Spores ¹²⁽¹⁴⁾ 9.5-~~14(12)~~ x 6-8(9) μ , slightly inequilateral in profile, ellipsoid in face view, smooth, apex more or less truncate (in some, rather distinctly, in others obscurely, in still others no truncation; observed best by focusing up and down), brown in KOH, wall 0.6 μ thick. Basidia 30-34 x 7-9 μ , 4-spored. Pleurocystidia none; cheilocystidia 34-50 x 6-10 μ , ventricose, with a neck, the apices sometimes subcapitate ^(then leathiform). Pileus trama of broad (7-16 μ), loosely interwoven hyphae. Pileus ^{cuticle} of small (14-17 x 5-7 μ), clavate cells, which become repent, with a thin covering gelatinous zone. Stipe of repent, more or less angular, pallid hyphae.

*The lack of pileocystidia and the even pileus - margin
Near Smith-12094.*

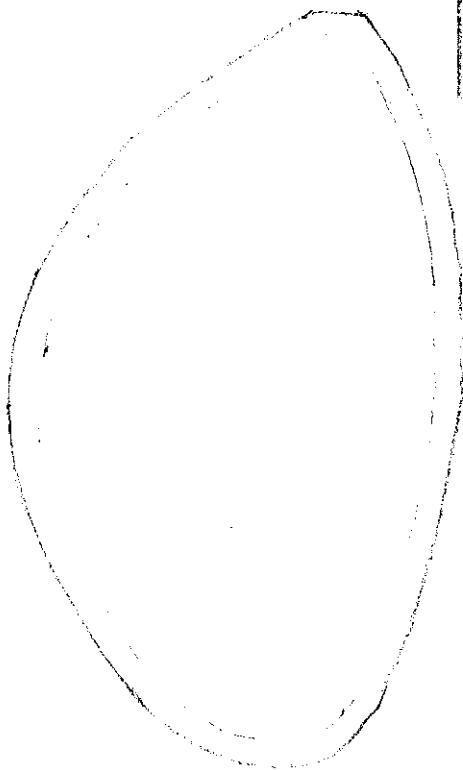
suggest Agrocybe.

Agrocybe
20873

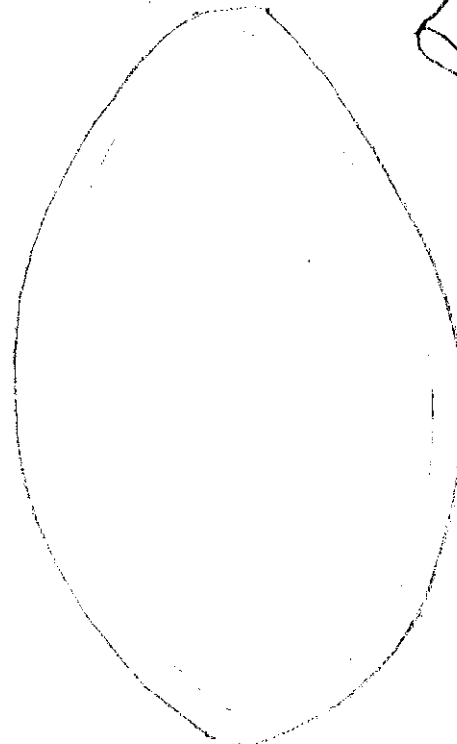


Ch x 1000

Pileus trama
x 1000



± Profile



Face

Spores x 8000

20873



20873 - *Agrocybe*

X $\frac{4}{3}$

on soil, in beech woods, Cumberland State
Park, Tenn., October 22, 1955

Pileus 6 cm broad, convex-flattened, white or whitish (ground color), but surface covered well with "zinc orange" fibrils aggregated to form scales over the central portion ^{(seen under lens, on dried specimen),} becoming more or less rimose. Context white, thick, abruptly thin on the margin; odor and taste not distinctive.

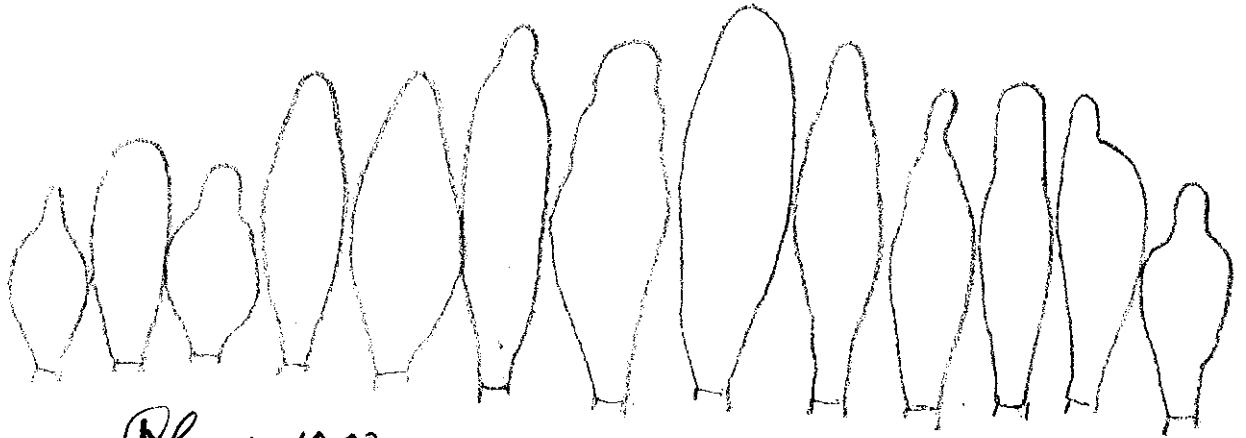
Lamellae adnexed, "light drab", close, broad, thin, many lamellulae, edges fimbriate.

Stipe 7 cm long, 10 mm thick, basic color whitish but covered with zinc orange fibrils (as in the pileus), dry, equal above the pointed, curved base. Annulus superior, membranous, collapsing.

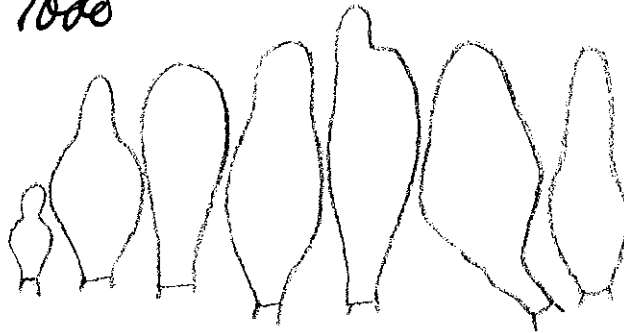
Spores $5.5 - 7.5(8) \times 4.5 - 5.5\mu$, slightly inequilateral in profile, ^{to subovoid,} ellipsoid/in face view, smooth, no evidence of a germ pore, brownish in KOH, wall medium thin, but appearing double. Pl $24-52 \times 9-16\mu$, ventricose, at times somewhat subfusoid, some ~~with~~ short-appendiculate, scattered, conspicuous when found; ch (12) $27-36 \times 6-16\mu$, not abundant, ventricose, sub-flask-shaped, clavate, occasionally appendiculate. Gill trama of slightly interwoven hyphae. Pileus trama of loosely interwoven hyphae. Pileus cuticle with scattered ~~xxxxx~~ clavate cells (out of position; no young pilei available), with a slight gelatinization (ixocutis). Stipe cuticle of dry repent hyphae. Caulo not found. Surface of stipe with orange-brown hyphal tufts (scales).

Agroclype

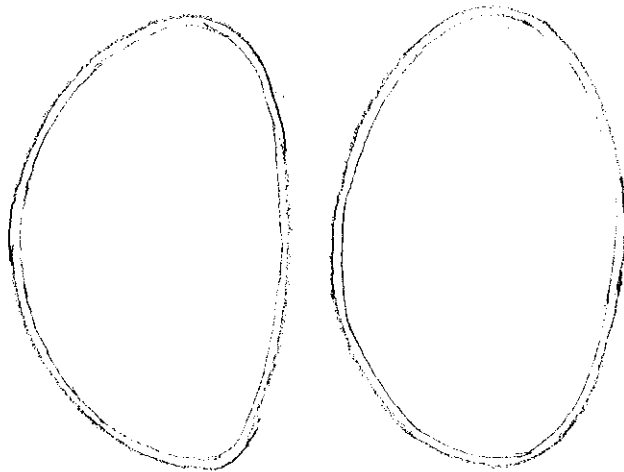
22207



Pl x 1000



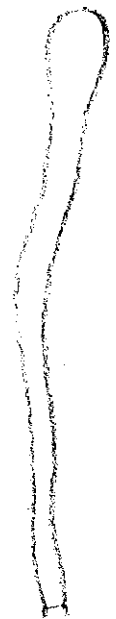
Ch x 1000



Profile

Face

Spores x 8000



Caulo
x 1000

Tenn-24338

AGROCYBE (*sp. nov.*)?

On sawdust, Cashiers, N. C., June 15, 1961

Pileus 1.5-3 cm broad, convex, expanding more or less umbonate, moist, "Van Dyke brown," fading to "bister," glabrous, margin striate. Context thin, brown; odor and taste mild or slight.

Lamellae pallid, finally "saya brown" to "snuff brown," rounded narrowly adnate, close, medium broad, many lamellulae of three ranks, edges fimbriate.

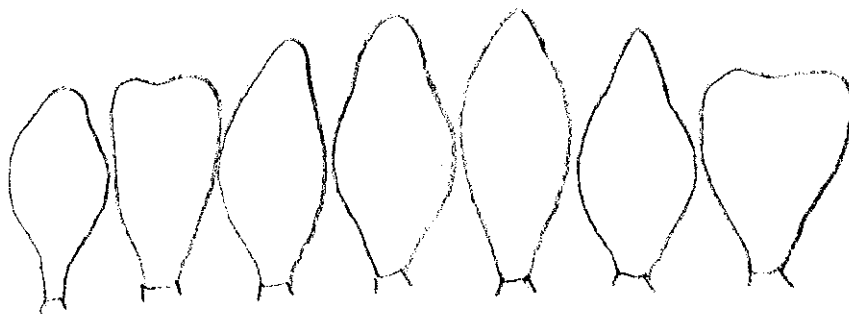
Stipe 2.5-4 cm long, ²⁻~~2.5~~-3.5 mm thick, apex pallid and pruinose, brownish below and fibrillose-scaly, equal, hollow. Veil white, forming a whitish, superior, floccose-membranous, more or less persistent annulus.

Spores near "hazel" in deposit, 7.5-9.5 x 4-5 μ , ellipsoid, slightly inequilateral, smooth, some distinctly truncate, pore present. Basidia 22-25 x 6-7 μ , 4-spored. Pleurocystidia 25-36 x 13-20 μ , ventricose or cuneiform, scattered; cheilocystidia of two general types: (1) similar to pleurocystidia, 22-35 x 12-15 μ , (2) slightly of the Conocybe-type, 24-38 x 4-8 μ , neck with a capitellum or not. Gill trama slightly interwoven, cells short, 4-9 μ broad. Pileus trama interwoven. ^{Pileus} Cuticle of subglobose to ovoid, cuneiform, or isodiametric cells, 15-22 x 13-22 μ . Clamps present. Caulocystidia 30-52 x 4-8 μ , subcylindric, aciculate, to flask-shaped, scattered or in tufts.

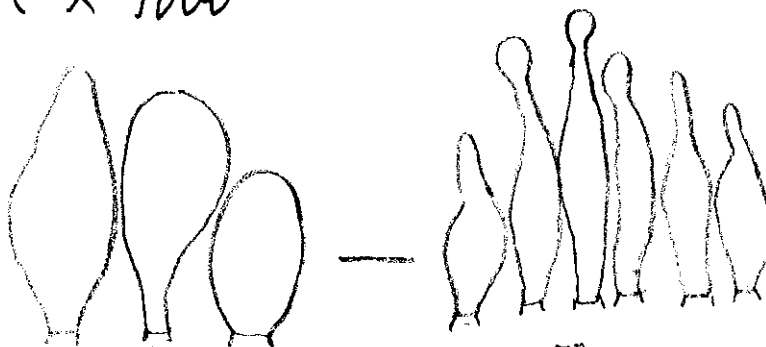
This has the aspect as well as the red-brown spores in KOH of a Conocybe, but has the lamellar cystidia of Agrocybe. One type of the cheilocystidia, ~~and~~ and thin flesh also slightly suggest Conocybe.

Except for small size + thin flesh, this has some resemblance to A. aegerita.

Agave
24338



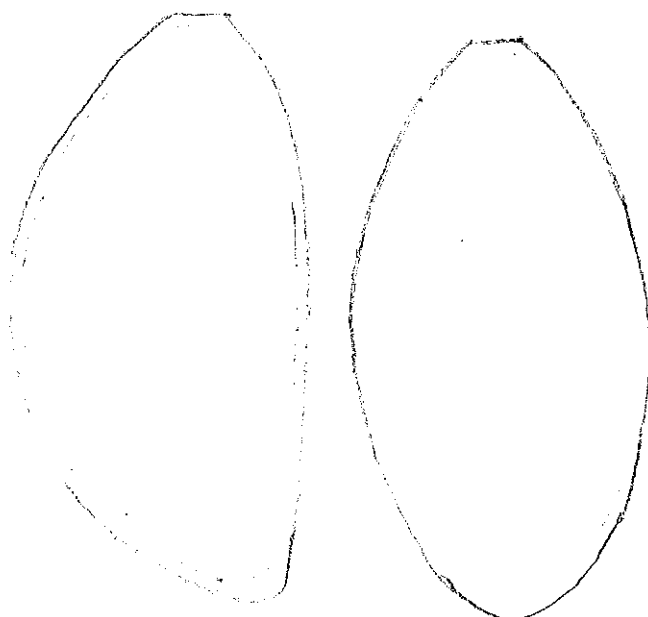
Pl x 1000



Type 1

Type 2

Ch x 1000



Profile

Face

Spores x 8000

Material sparse; exclude for additional collection!

Tenn-26279 AGROCYBE ACERICOLA (Pk.) ~~Singer~~

On soil, mixed woods, Cades Cove, Aug. 3, 1964

3 cm broad, ~~plano~~-convex,

Pileus [^] "mustard yellow" to "Naples yellow," disc rugose, margin even. Context white; odor mild, taste farinaceous.

rather narrow or

Lamellae emarginate, close, [^] medium broad, "buffy brown" or paler.

Stipe dingy brown, striate, tapering upward. Veil slight, superior, evanescent.

Spores 8-10.5 x 5.5-6(6.5) μ , ellipsoid, a few subrhomboid, smooth, truncate, brown. Pleurocystidia and cheilocystidia as in 26049.

28586

AGROCYBE ~~thuring~~ ~~(H. J. O. J.)~~

On lawn, Kentville, Nova Scotia, leg. Petersen and
Olexia, July 30, 1965

Pileus 3-4.5 cm broad, convex-conic, expanding, white, then yellowish, not viscid, glabrous, even. Context white, firm; odor and taste mild.

Glamellae adnate, usually with a decurrent line, grayish-ocher then dark ocher, finally dark brown, close, rather broad, edges white-fimbriate.

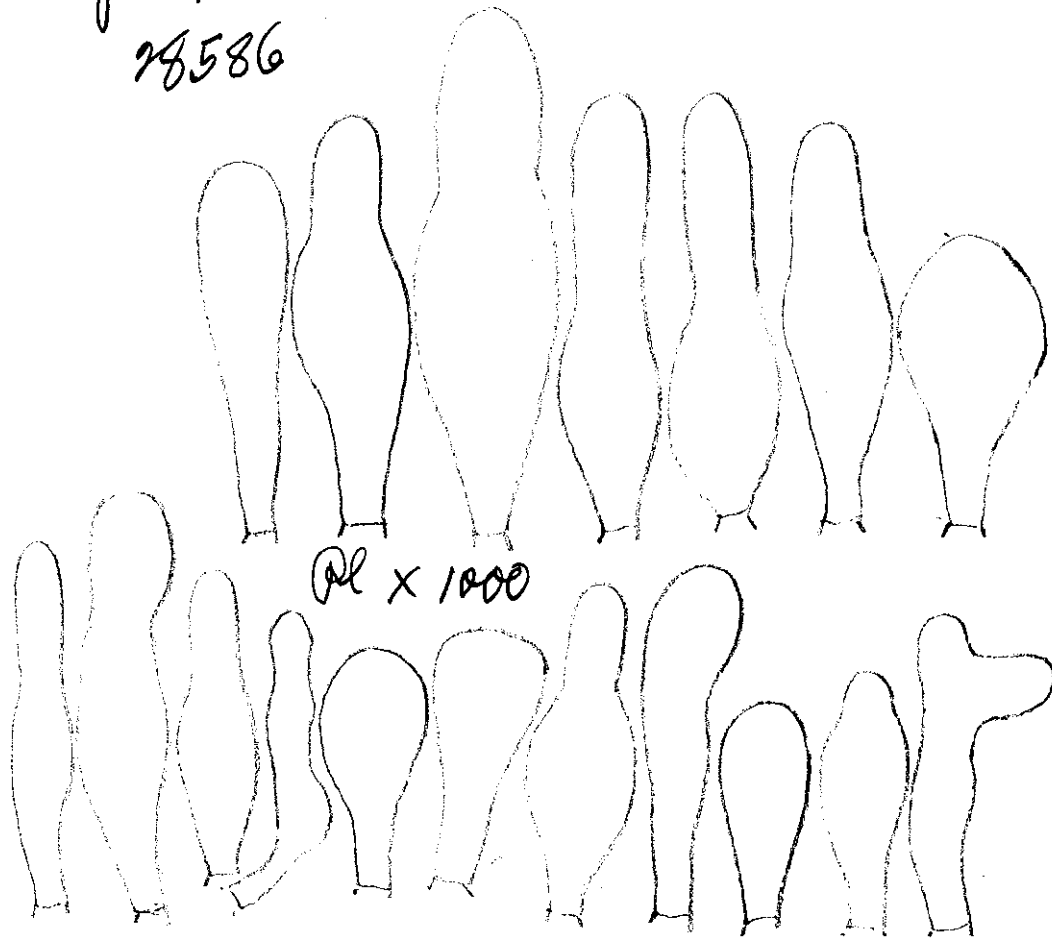
Stipe 5-9 cm long, 3-5 mm thick, nearly concolorous but paler, dry, apex slightly pruinose, elsewhere glabrous, solid, base sub-bulbous. Veil membranous, forming an evanescent, superior annulus.

Spores 11-15 x 7-8 μ , obscurely inequilateral in profile, ellipsoid in face view, noticeably long and slender, wall smooth and 0.6 μ thick, truncate, brown in 2% KOH. Pleurocystidia 48-68 x 12-20 μ , ventricose to clavate, widely scattered (sparse); cheilocystidia 28-56 x 7-16 μ , mostly clavate-vesiculose, subspathulate, subpyriform, some very narrowly ventricose. Gill trama of subparallel hyphae, 4-15 μ broad. Pileus trama of loosely interwoven, broad (8-22 μ) hyphae. Pileus cuticle of clavate cells, 16-20 x 3-5 μ , with pileocystidia inserted among these cells, clavate to subventricose, 33-38 x 5-6 μ . Stipe cuticle of repent hyphae. Caulocystidia not found. Clamp connections none.

This seems rather close to A. dura (vermiflua), but No. 28586 has noticeably longer, more slender spores, cheilocystidia which are more clavate-vesiculose although accompanied at times by the usual ventricose type, the pileus apparently is not viscid, taste (and odor) mild. Whether this is merely a variant of dura (vermiflua), or a separate species, I can not say now.

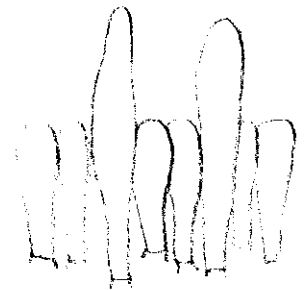
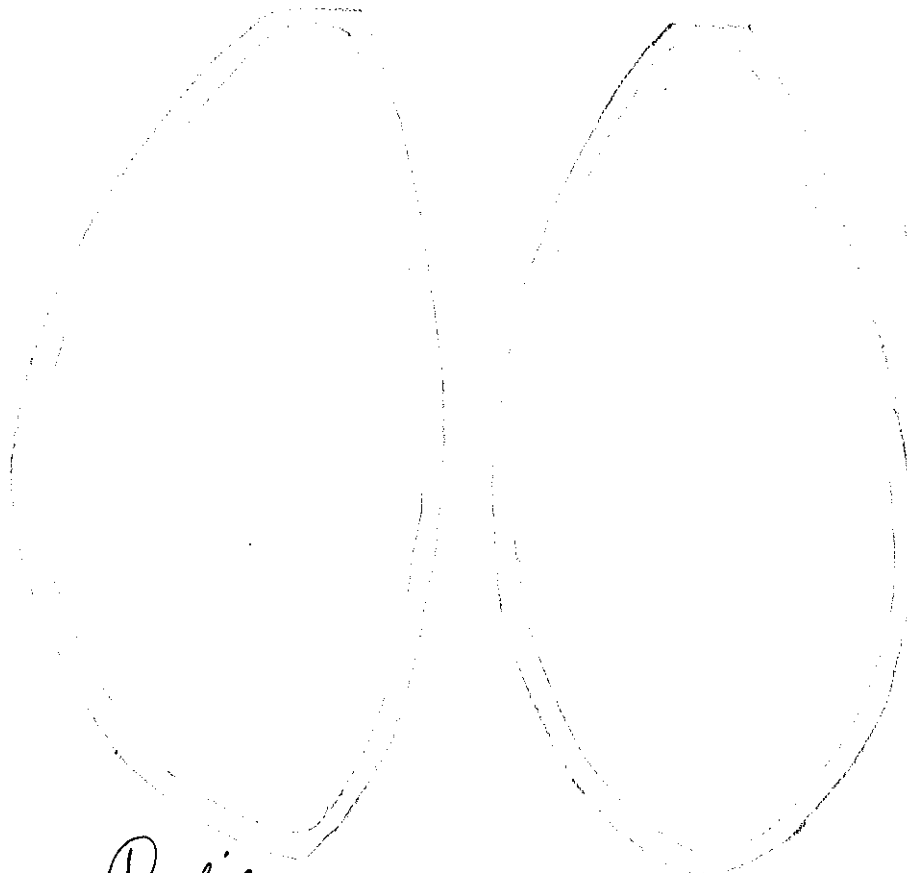
Agropyre awca (Fr.) Sm.

28586



Pl x 1000

Ch x 1000



Pileus cuticle
x 1000

Profile Spores x 8000 Face

On soil and humus, Idaho, leg. Ellen Trueblood - 2118,
(date coll. not given).

Pileus 3.5-6 cm broad, hemispheric, expanding-convex, ochraceous buff, glabrous, viscid, even. Context thick, whitish.

Lamellae adnexed, rather dark brown, close, broad, edges concolorous ~~ad~~ and even.

Stipe 4.5-9 cm long, 8-10 mm thick, dry, concolorous but paler, pruinose above, elsewhere glabrous, hollow. Veil fibrillose, leaving a fugaceous zone above on the stipe.

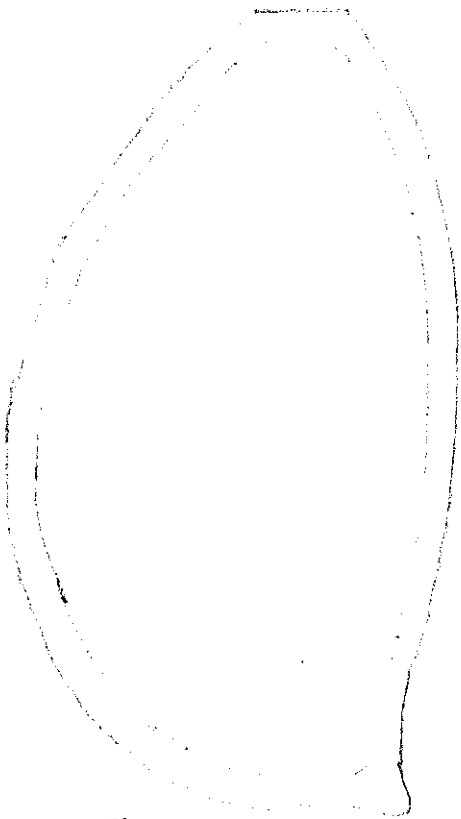
Spores 11-14(15) x 7-8 μ , slightly inequilateral in profile, ellipsoid in face view, smooth, truncate, brown in 2% KOH. Basidia 28-32 x 7-10 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama of broad (6-15 μ), subparallel hyphae. Pileus trama of broad (8-25 μ), loosely interwoven hyphae. Pileus cuticle of irregularly shaped cells, with a thin gelatinous zone over the surface.

This ~~fungus~~ resembles A. dura which, however, has pl. + ch.

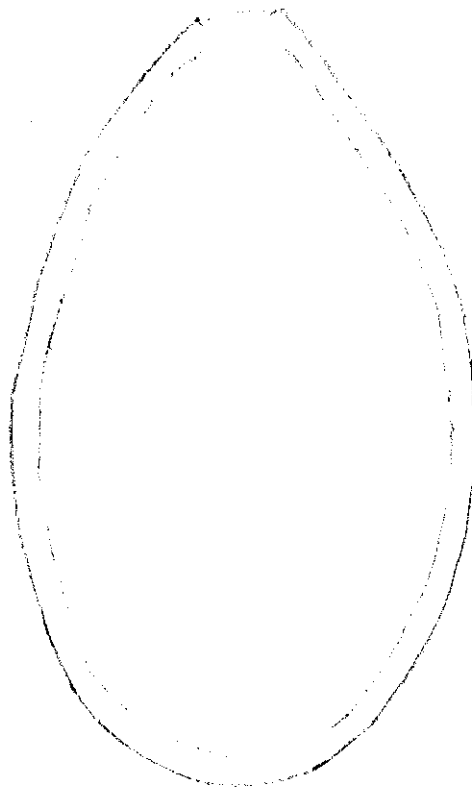
* A second study failed to reveal pl. + ch.

Agrocybe

28783



Profile



Face

Spores x 8000

28993

AGROCYBE *sp. nov.*

On soil, in deciduous woods, under oak, Winnsboro, S. C.,
leg. Caroline Lyles, May 7, 1966

Pileus 1.5-3 cm broad, caespitose, grayish-purple-
tawny, ~~to convex~~ ^{convex then expanding, dark brown when young, then} expanding, ~~dec skin gray~~ ^{disc darker, dry,}
glabrous, margin even. Context white; odor ^{and taste} mild, ~~taste~~ ^{not especially distinctive.}

Lamellae adnexed to adnate-subdecurrent, pallid, then
brownish, edges white, close, medium broad.

Stipe 4-7 cm long, 3-6 mm thick, pallid to dingy
brownish, apex pruinose, elsewhere glabrous, striate, hollow,
equal, dry. Veil none.

Spores in deposit: "cinnamon drab," 7.5-9.0 x
4-4.5 μ , slightly inequilateral and subreniform in profile,
ellipsoid to oblong-ellipsoid in face view, wall smooth,
0.25 μ thick, no germ-pore evident, pale brownish in 2%
KOH. Pleurocystidia 48-56 x 11-16 μ , ^{apices tapering - acute,} ventricose, wall
slightly flexuous, thickened especially in upper half,
conspicuous; cheilocystidia (27) 36-48 x (7) 10-16 μ , similar,
conspicuous. Gill trama of subparallel, rather short-celled
hyphae, 4-12 μ broad. Pileus cuticle of cells, irregularly
shaped, 18-40 x 15-35 μ , the zone one- to two-cells deep,
dry. Pileocystidia rather widely scattered, between cuticular
cells, irregularly-shaped, conspicuous. Stipe cuticle of
repent, dry hyphae, the apex with densely arranged, numerous
caulocystidia, 52-75 x 7-20 μ , subcylindric, or ventricose and

then similar to pleurocystidia and cheilocystidia, wall thickened above less than in the pleurocystidia or cheilocystidia.

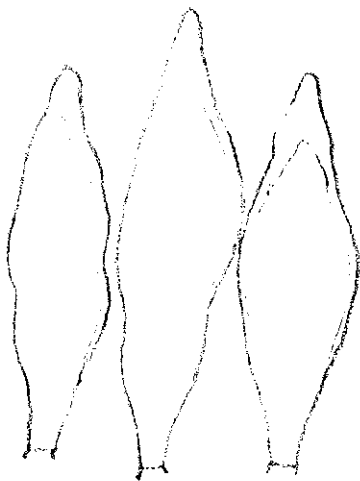
and/or A. firma,

May be near A. illicita, in which the stipe is scabrous, the spores smaller and not subreniform, the pleurocystidia and cheilocystidia different.

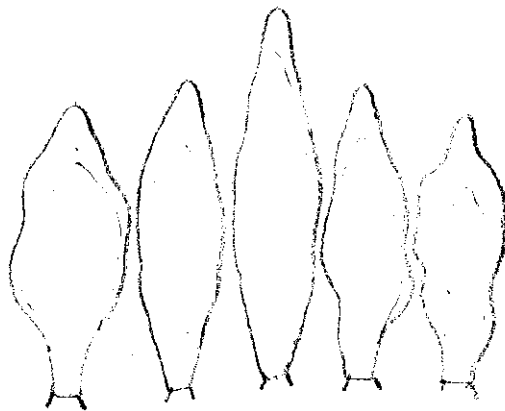
In 29420 (same as 28993), the pileus cuticle cells are more pyriform-stipitate, and with large pileocystidia, 47-120 x 10-28 μ , subcylindric to ventricose-appendiculate.

Agrocybe

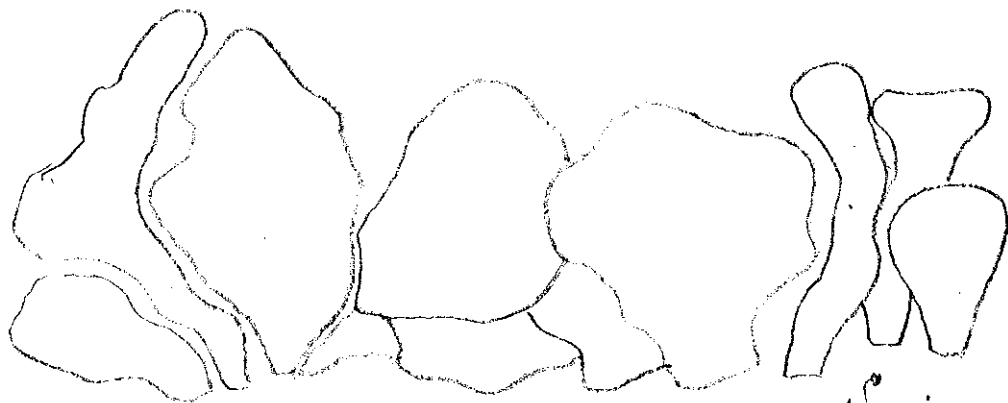
Tenn - 28993 [same as 29420]



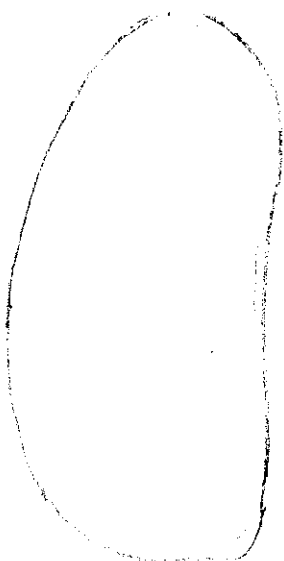
Pl x 1000



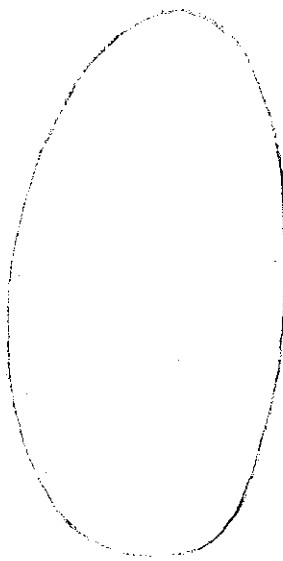
Ch x 1000



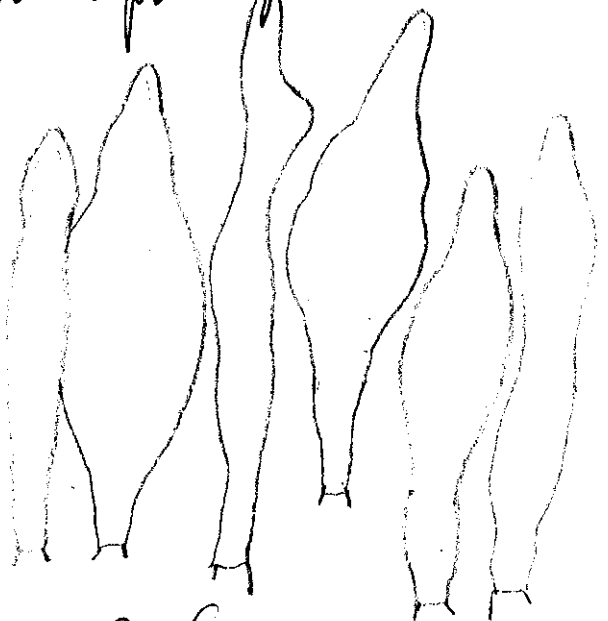
Pileus cuticle, with pleocystidia - x 1000



Profile



Face



Conls x 1000

Spores x 8000

29420

AGROCYBE

on soil, under deciduous trees, Winnsboro, S.C., leg.
Mrs. Carolyn Lyles(No. 98), Sept. 17, 1966

Mrs. Lyles' Notes

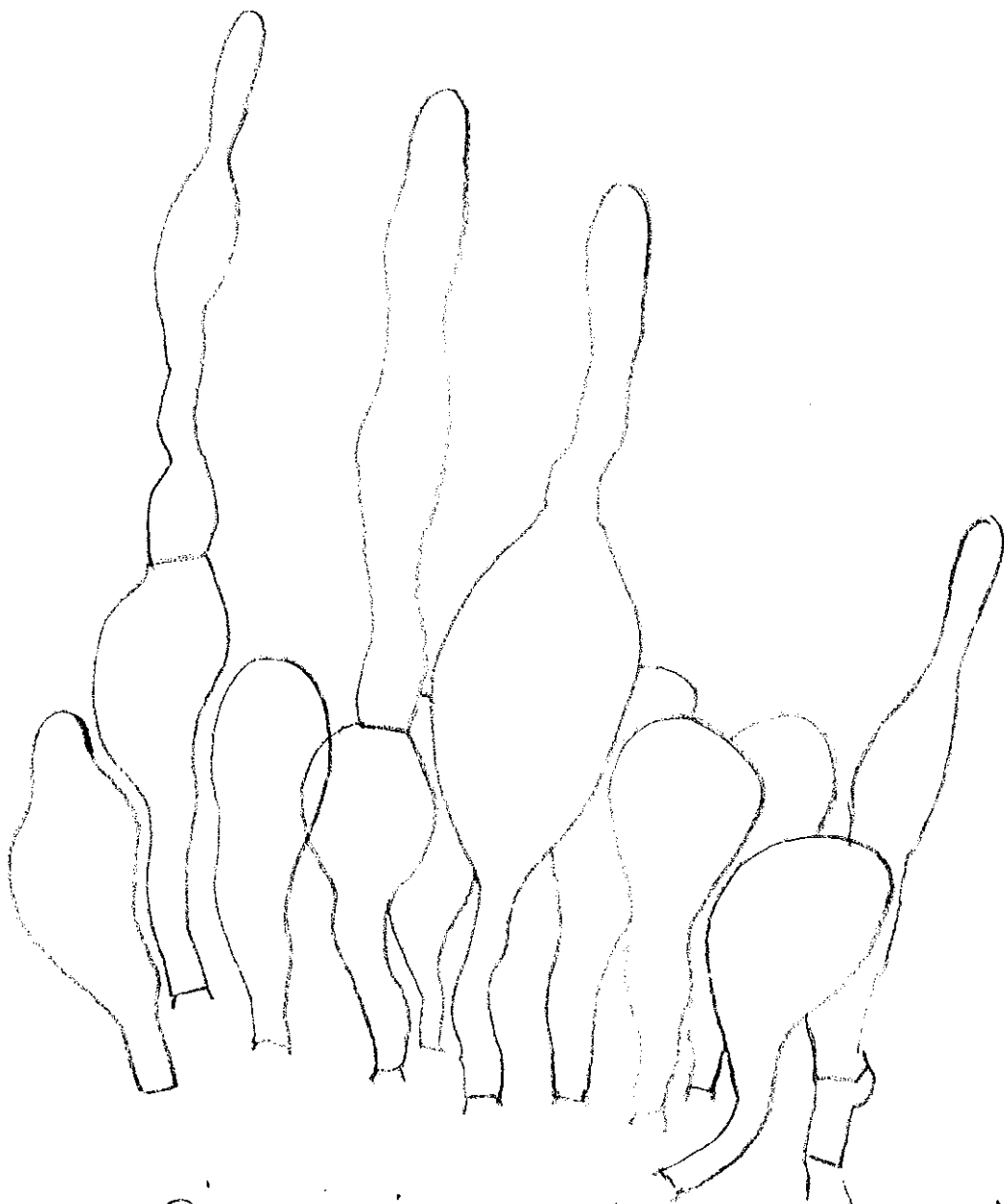
Pileus greyish purplish tan with disc darker, younger
pilei dark brown.

Hesler's Notes

Micro characters similar to those of Tenn-28933(leg.
Mrs. Lyles, without a number), except that the pileocystidia
are more developed and larger.

Agaveybe

29420 (Winnabow, S.C.)
[same as 28993]



Pileus cuticle cells (pyriform-stipitate) with
large pilocystidia X 1000

30546

AGROCYBE

on lawn, Knoxville, leg. A J Sharp, Apr. 21, 1969

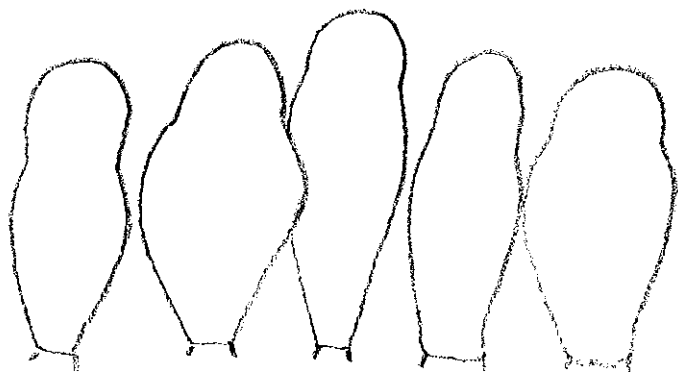
(at first called Stropharia semiglobata)

Spores 10-15 x 7-8 μ , ellipsoid, smooth, truncate, brown in KOH. Pl 37-44 x 15-23 μ , ventricose, more or less capitate, few; ch 37-56 x 10-16 μ , similar, at times rather abundant. Pileus cuticle of subpyriform to subglobose cells, gelatinized(dissolved) and shifted out of position(no young pilei available).

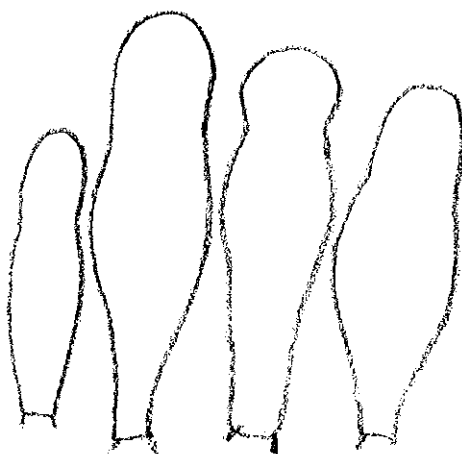
cf. A. dura.

Agave

30546



Pl x 1000



Ch x 1000

AGROCYBE *sp. nov.*

Smith-65022

gregarious along trail, Lake Fork Station, McCall, Idaho, June 23, 1962 (Smith says: see 13663).

Notes by Smith

Pileus 3-6 cm broad, convex-expanding to slightly convex umbonate, buffy brown to olive gray, becoming dingy clay color, glabrous, lubricous, smooth to areolate-pitted or areolate, margin at times appendiculate from a few veil fragments. Context thick, punky; odor disagreeable, taste strongly rancid (not truly farinaceous); KOH dingy yellowish, FeSO_4 - 0.

Lamellae adnate, becoming adnexed, brownish olive buff, dark wood brown, broad, close, edges even.

Stipe 4-8 cm broad, 8-15 mm thick, grayish pallid becoming slightly brownish, equal, solid, white within. Annulus thin, membranous to ragged, at times as fragments on the pileus margin.

Spore deposit dull rusty brown.

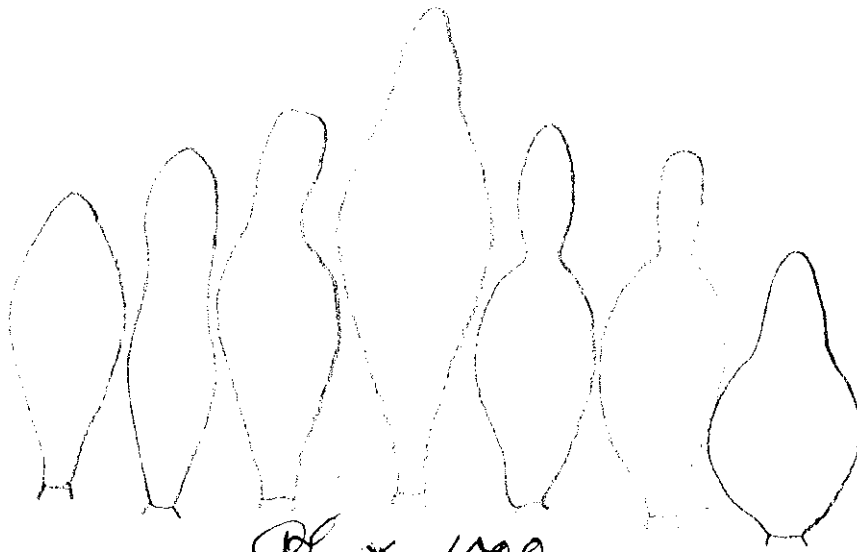
Notes by Hesler

Spores $7-9.0 \times 5-5.5 \mu$, obscurely inequilateral in profile, ellipsoid in face view (sometimes subvoid), wall double, rather thick, smooth, truncate, yellowish brown. Pleurocystidia $36-64 \times 11-16 \mu$ ventricose or ampullaceous, sometimes sub-spathulate, scattered but rather conspicuous; cheilocystidia $38-64 \times 12-20 \mu$, ampullaceous to subcylindric-capitate. Pileus cuticle of clavate to subpyriform cells, at maturity pushed out of normal position. Stipe cuticle of dry, repent hyphae. Caulocystidia clavate, scattered, sparse.

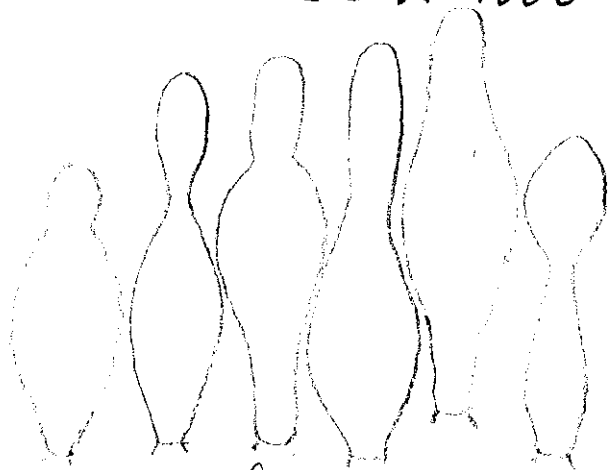
Cf. A. praecox.

probably different

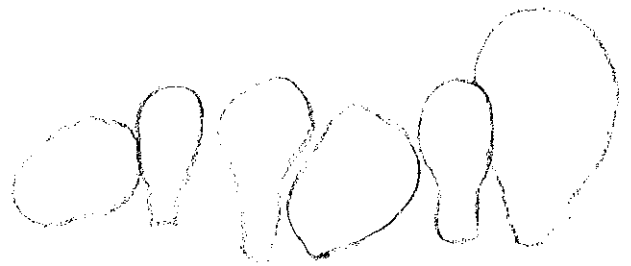
Agrocybe
Sm - 65022



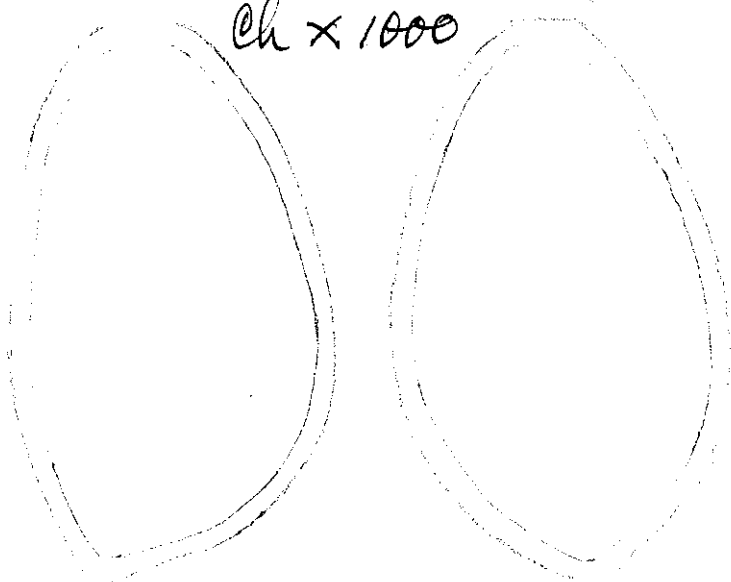
Sp × 1000



Sp × 1000



Pileus cuticle × 1000



Profile

Face

Spores × 800

AGROCYBE *sp. nov.*

Smith-68255

gregarious in debris, along road, Granit Creek, Priest Lake,
Idaho, July 5, 1964.

Notes by Smith

Pileus 3-9 cm broad, broadly convex and expanding to nearly plane, *subvoid*, hygrophanous, when fresh and moist olive buff, when faded the disc cinnamon buff and margin pinkish buff, becoming rimose. Context taste farinaceous. KOH: yellowish; FeSO₄: olive grey.

Lamellae adnate to adnexed, thin, brownish when young, dull cinnamon brown in age, broad, close.

Stipe 4-7 cm long, 5-9 mm thick, pallid olivaceous above, dingy brownish below but strongly darkened, thinly fibrillose below the thin, membranous annulus, silky and pallid olivaceous above the annulus.

Spore deposit: "Mars brown".

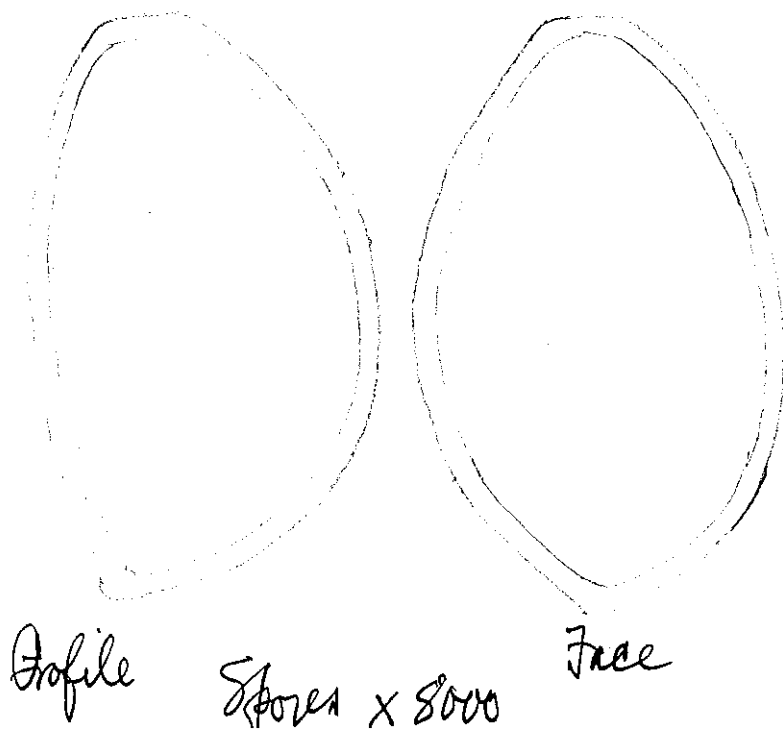
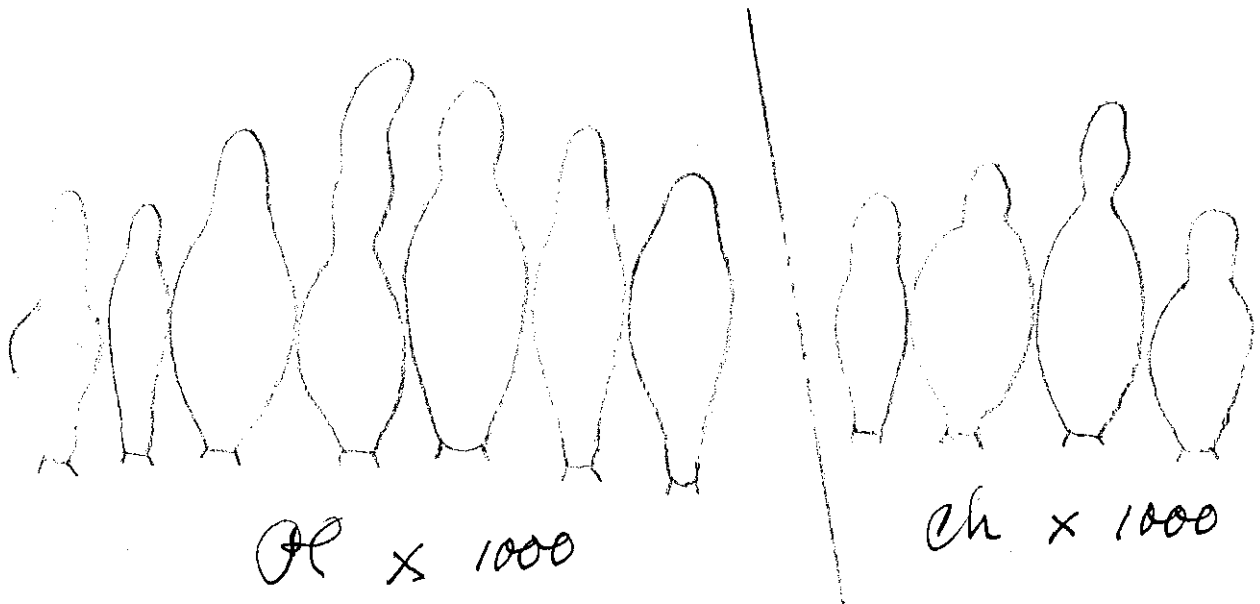
Notes by Hesler

Spores 8-10 x (4.5)5-7 μ , slightly inequilateral in profile, ellipsoid to obscurely subovoid in face view, wall smooth, double, medium thick, truncate, yellowish-brown in 2% KOH. Pleurocystidia 33-52 x 7-18 μ , ventricose, or ampullaceous, scattered, conspicuous; cheilocystidia 30-44 x 9-16 μ , similar, sparse. Pileus cuticle cellular, cells subglobose to ellipsoid, usually with a very thin, subgelatinous zone. Stipe cuticle of dry, repent hyphae. Caulocystidia not found.

Smith says it is not A. praecox, *but it seems to be somewhat near that species (as in Sm-65022).*

Agrocybe

Smith - 68255



AGROCYBE *sp. nov.*

Smith-69406

gregarious, Hazard Lake, McCall, Idaho, leg. Nancy Smith,
August 15, 1966.

Notes by Smith

Pileus 5-10 cm broad, convex, becoming broadly convex, hygrophanous,
when fresh dingy "pale pinkish buff", or the disc pinkish buff, and
disc becoming minutely but distinctly areolate, ^{margin even.} glabrous, Context thick,
white; odor and taste strongly farinaceous.

Lamellae adnate, pallid, becoming pallid vinaceous brown, broad,
close, edges even.

Stipe 6-9 cm long, 10-20 mm thick, pallid with pale rusty brown
stains around worm holes, pruinose the entire length, dull cinnamon brown
from handling, somewhat bulbous. (No notes on veil or annulus. Specimen
shows no remnants of a veil, and no trace on an annulus.)

Notes by Hesler

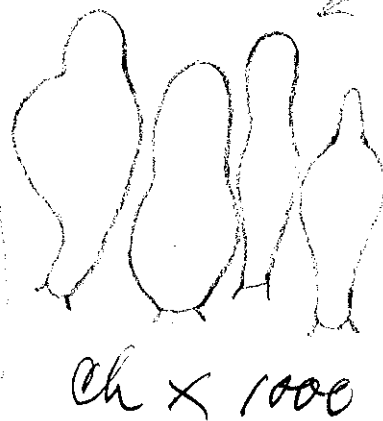
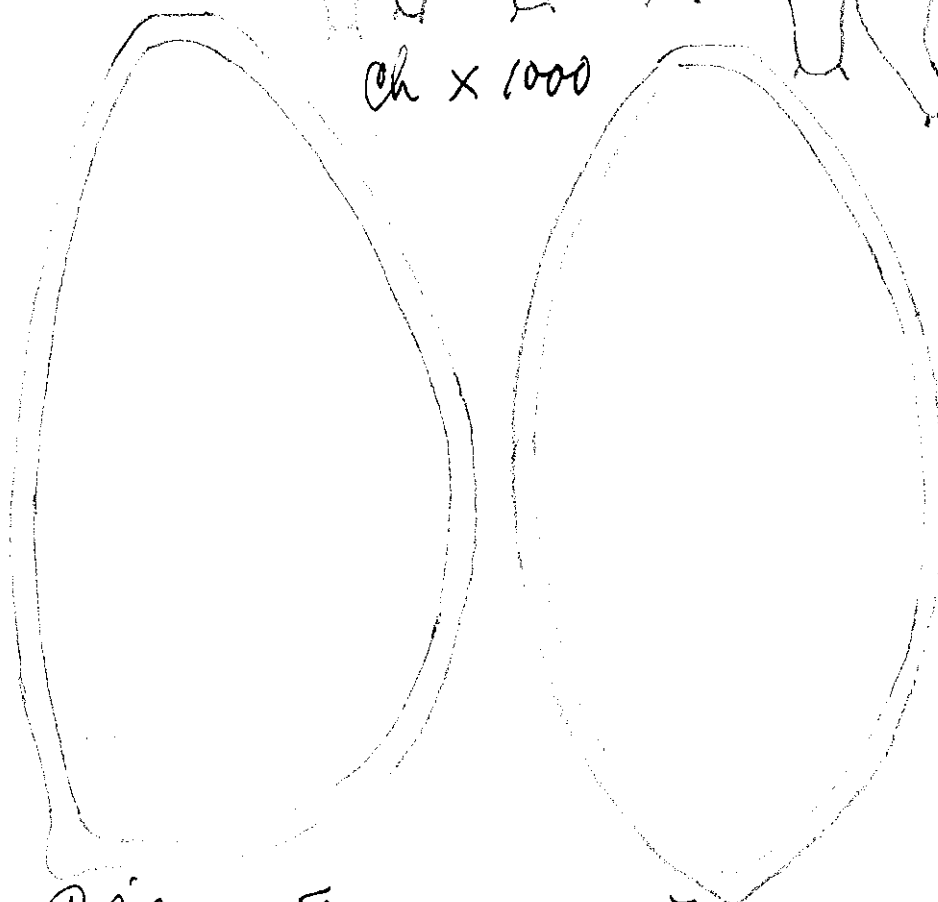
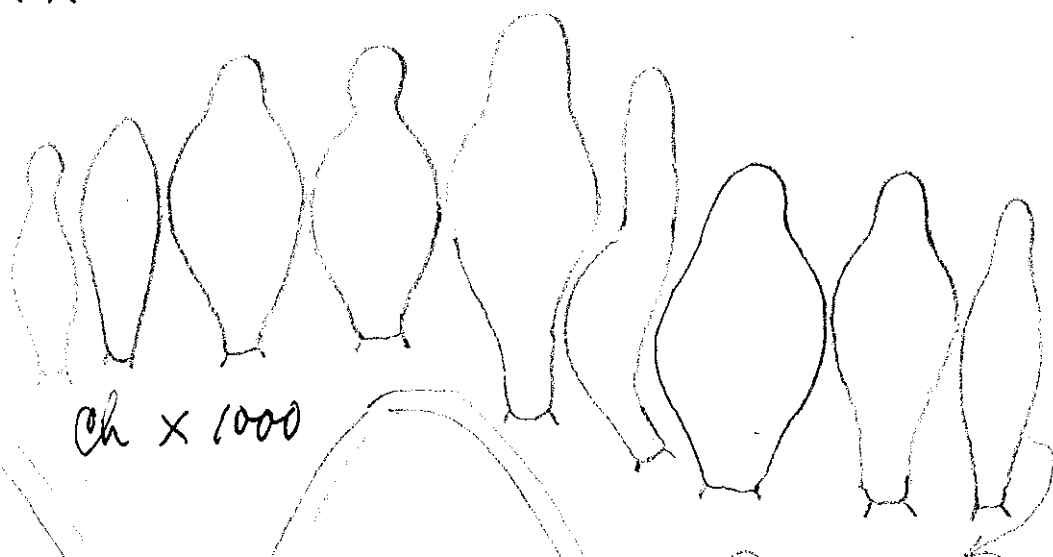
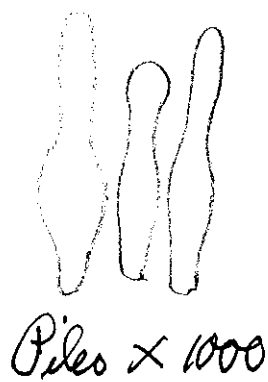
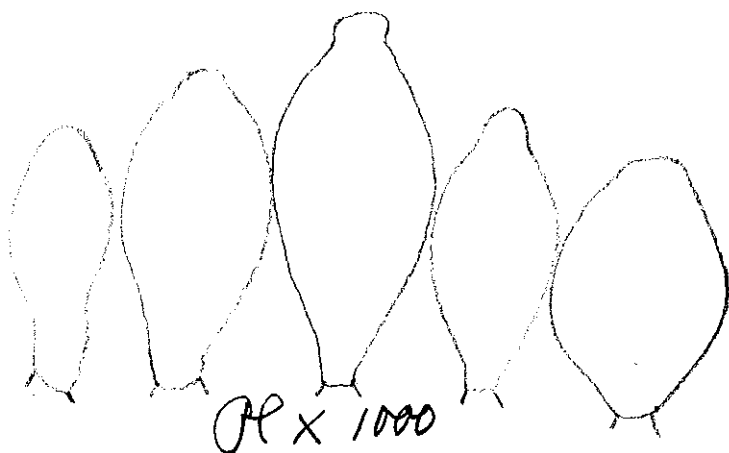
Spores 12-15.5 x 7-8 μ , obscurely to slightly inequilateral in
profile, ellipsoid to elongate-ellipsoid in face view, smooth, truncate
to narrowly so, yellowish brown in 2% KOH. Pleurocystidia 32-48 x 14-22 μ ,
ventricose, with little or no neck, and usually only short-stipitate,
scattered, at times buried and inconspicuous; cheilocystidia 28-52 x
7-22 μ , ventricose, usually with a neck, rarely capitate, a stipe commonly
present, in tufts, abundant and conspicuous. Pileus cuticle of clavate
^{to subglobose} ~~on~~ subcuneiform cells, becoming pushed out of position in age; Pileo-
cystidia scattered, inconspicuous, 26-35 x 5-9 μ , ventricose. Stipe
cuticle of dry, repent hyphae. Caulocystidia not found.

Close to Sm-34994, from Wyoming. Smith says see 1950 (McCall, Idaho)
and 69625.

The cell-structure on the margin similar to that elsewhere on pileus.

Agrocybe

Sm - 69406



Profile

Spores X 8000

Face

AGROCYBE *sp. nov.*

Smith-71503

scattered on sandy soil, under maple, Douglas Lake, Michigan,
leg. Nancy and A. H. Smith, May 29, 1965.

Notes by Smith

Pileus 3-6 cm broad, obtuse to convex expanding to plane or with a broad low umbo, hygrophanous when young, pale to medium olive-brown, the disc soon dingy pink buff, fading to white or disc remaining tinged cinnamon buff, gradually yellowish after fading, and finally pale ochraceous to dingy tan, margin at first incurved, rarely slightly appendiculate from veil remnants, glabrous. Context white; odor none, taste bitter-farinaceous. $C_2H_5O_{16}$ plus $FeSO_4$ - 0.

Lamellae depressed-adnate, pallid becoming pinkish-avellaneous and finally dull wood brown, in age the edges eroded and darker than faces, close, broad.

Stipe 4-9 cm long, 4-9(12) mm thick, equal or slightly bulbous at base, with white rhizomorphs, pallid at first, in age bister at base or on the lower half, apex striate, and dull down to superior ring, the surface merely thinly appressed fibrillose-silky.

Notes by Hesler

Spores (7)8-10 x 5-6 μ , sub-inequilateral in profile, ellipsoid in face view, truncate, smooth, wall double but moderately thin, yellowish brown in 2% KOH. Pleurocystidia 20-55 x 10-20 μ , scattered to abundant, conspicuous, ventricose, spathulate, ovoid (non-stipectate), with only a slight neck, occasionally capitate; cheilocystidia 28-42 x 12-18 μ , ventricose, subpyriform or rarely with an obscurely forked apex, rather abundant. Pileus cuticle of subclavate, subpyriform to slightly

ventricose cells, in more or less of a palisade (at maturity). Lactifers often prominent in gill trama. Stipe cuticle of dry, repent hyphae. Caulocystidia scattered or in small aggregates (of 3 or 4), or at times as terminal elements of epicuticular hyphae, subcylindric-capitate to ventricose, 32-50 x 8-11 μ .

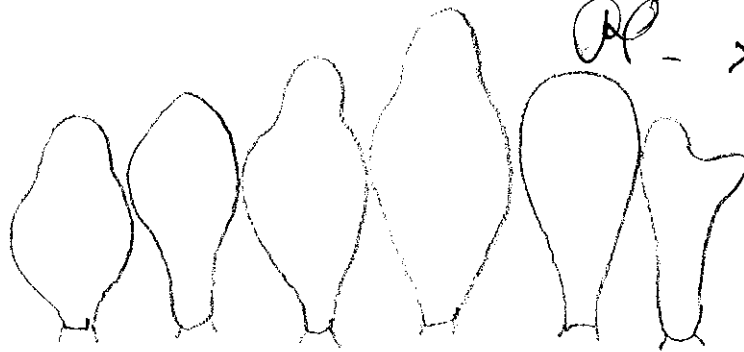
Smith labelled it doubtfully A. praecox. It keys out fairly well to A. praecox (in Smith's, Singer's, and my Keys).

Agrocybe

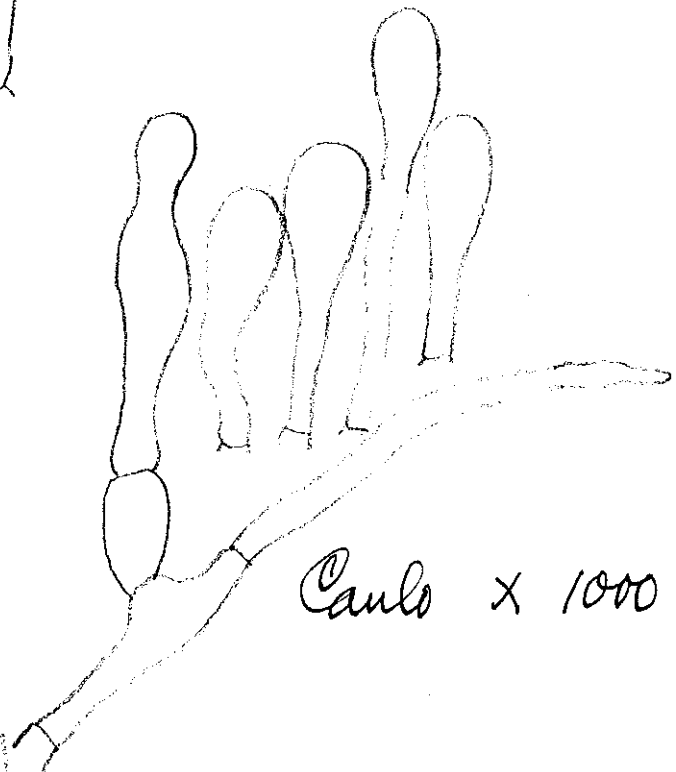
Sm - 71503



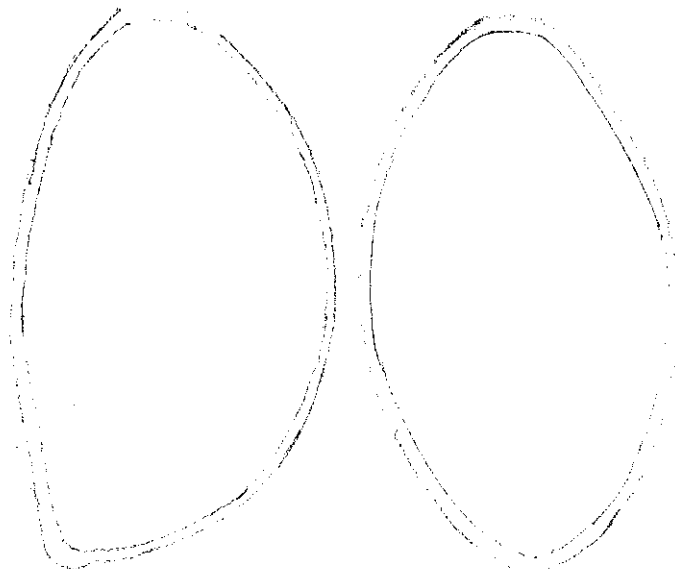
Sp - x 1000



Ch x 1000



Cono x 1000



Profile Spores x 8000 Face

AGROCYBE *sp. nov.*

Smith-71507

on chip-dirt, UMBS, Cheboygan Co., Michigan, leg. Helen Smith.

Notes by Smith

Pileus 3-8 cm broad, obtuse to convex expanding to plane or with a low umbo, pinkish buff, slowly pale cinnamon tan in age, often areolate-rinulose over the margin, if hygrophanous very soon faded. Context white, unchanging, odor fungoid, taste mild (young specimen). KOH: pale tan slowly; FeSO_4 plus $\text{C}_2\text{H}_5\text{OH}$; slowly olive on cuticle.

Lamellae adnate with decurrent lines, seceding in age, white becoming avellaneous, finally dull cinnamon, edges even or nearly so, broad, close.

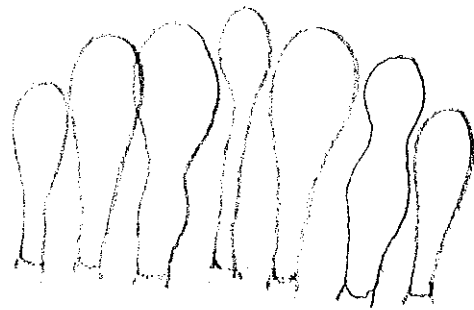
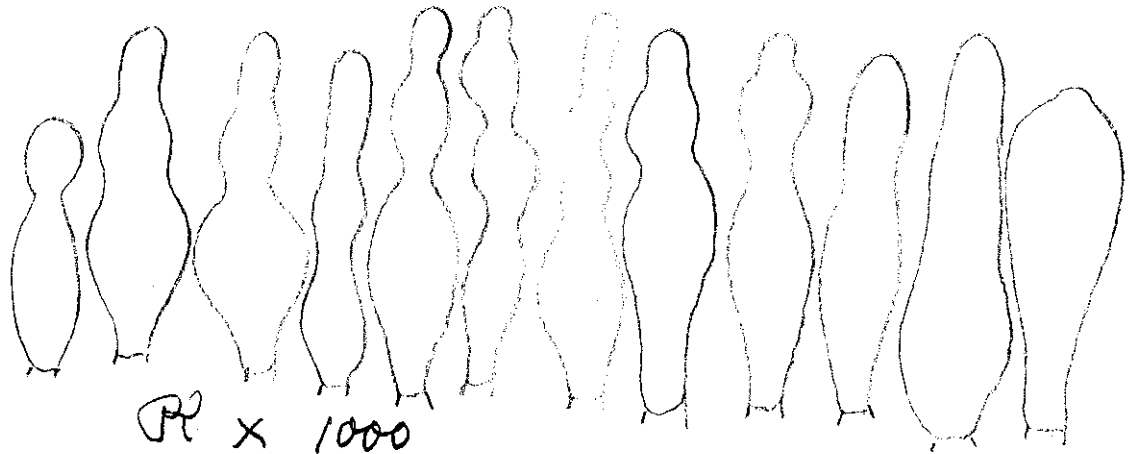
Stipe 5-10 cm long, 12-17 mm at apex, white and bulbous at base with white rhizomorphs, white within, surface thinly appressed silky, pale pinkish buff, or finally "cinnamon buff", apex striate from gill lines. Annulus apical, membranous, decumbent.

Spores in deposit: dark cinnamon.

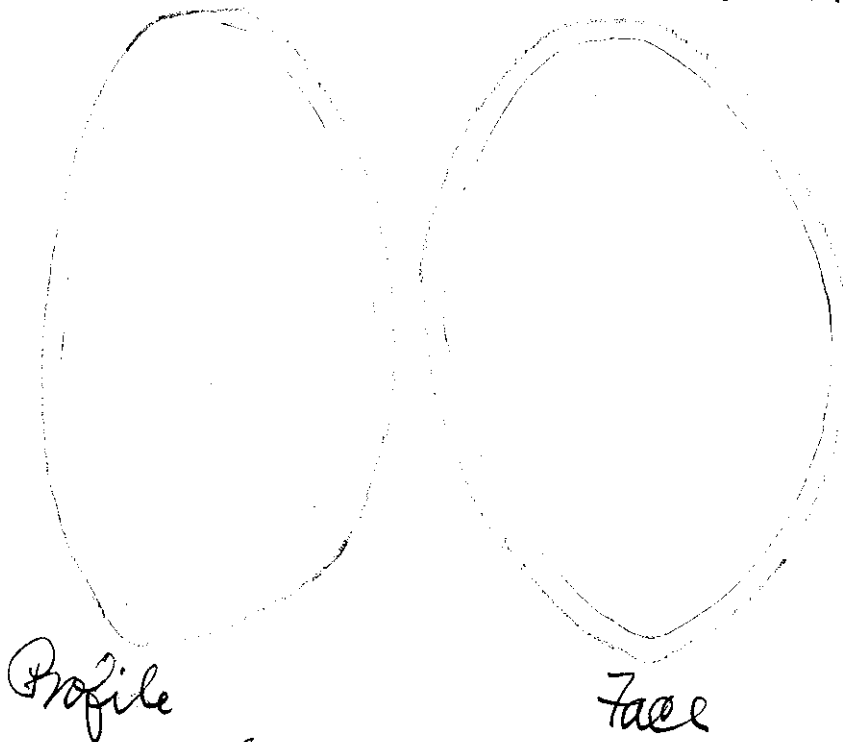
Notes by Hesler

Spores 8-11.5 x (5)5.5-7(7.5) μ , obscurely inequilateral in profile, ellipsoid in face view, yellowish brown in 2% KOH, truncate, smooth, wall moderately thick. Pleurocystidia 32-50 x 8-17 μ , ventricose, ampullaceous, usually with a neck, often conspicuously constricted; cheilocystidia 24-36 x 7-12 μ , clavate, more rarely ventricose, in tufts. Pileus cuticle of subglobose to subpyriform cells. Stipe cuticle of dry, repent hyphae. Caulocystidia short, clavate, coarse.

Agrocybe
Sm - 71507



Ch x 1000



Spores x 8000

AGROCYBE ~~sp.~~ *sp.*

Smith-71514

on chip dirt, Eckerman, Michigan, leg. N. J. Smith, June 1, 1965.

Notes by Smith

Pileus 3-5 cm broad, obtuse to convex, becoming plane, or with a low umbo, hygrophanous, watery cinnamon buff when moist, but soon faded to pinkish buff, in age pale tan over all, margin splitting, glabrous. Context soft, white; odor fragrant, taste bitter. FeSO_4 and $\text{C}_2\text{H}_5\text{OH}$ on cuticle; KOH no change.

Lamellae adnate to adnexed, pallid then brownish, then wood brown, finally cinnamon brown, edges eroded, close.

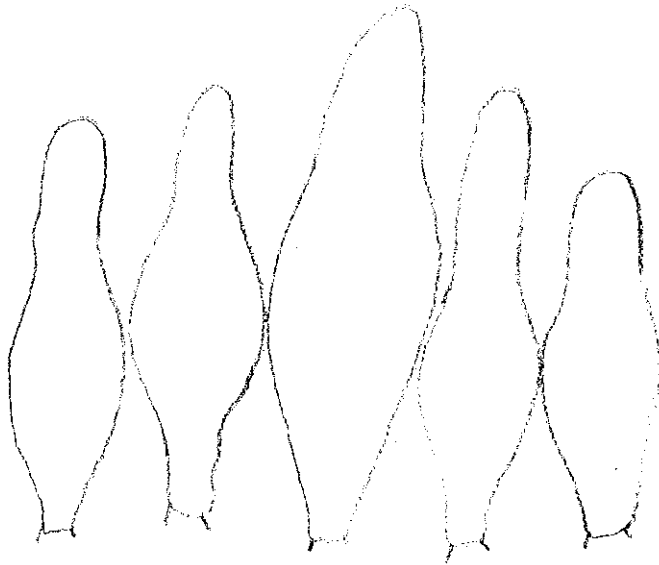
Stipe 2-4 cm long, 5-10 mm thick, pallid to pinkish buff, but base slowly dark brown, apex striate, equal or base subbulbous, with rhizomorphs. Veil thin, mostly adhering to cap margin, ring when present apical. Spore deposit near russet.

Notes by Hesler

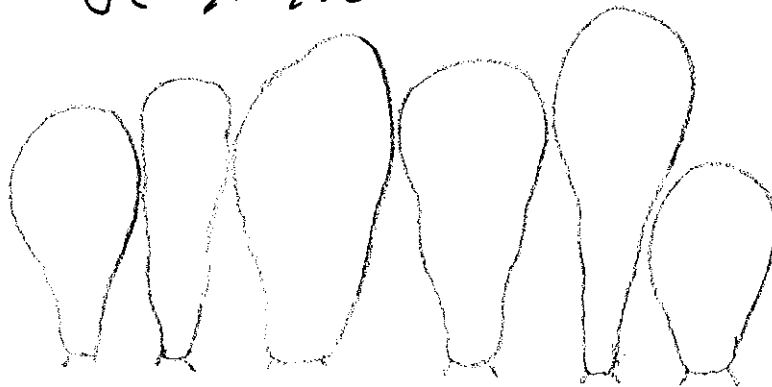
Spores (7.5)¹⁰~~8~~ x 5-6(7) μ , slightly inequilateral in profile, ellipsoid to subovoid in face view, smooth, truncate. Pleurocystidia 48-67 x 15-22 μ , ventricose; cheilocystidia 28-48 x 11-22 μ , more or less clavate to subspathulate, in tufts, often extending up the gill-sides up to 200 μ . Pileus cuticle a layer of 3-5 irregular to vesiculose cells. Stipe cuticle of repent hyphae. Apex bearing caulocystidia, 20-33 x 6-8 μ , clavate.

Smith says it is near Sm-71507, but taste is bitter and stipe darkens below.

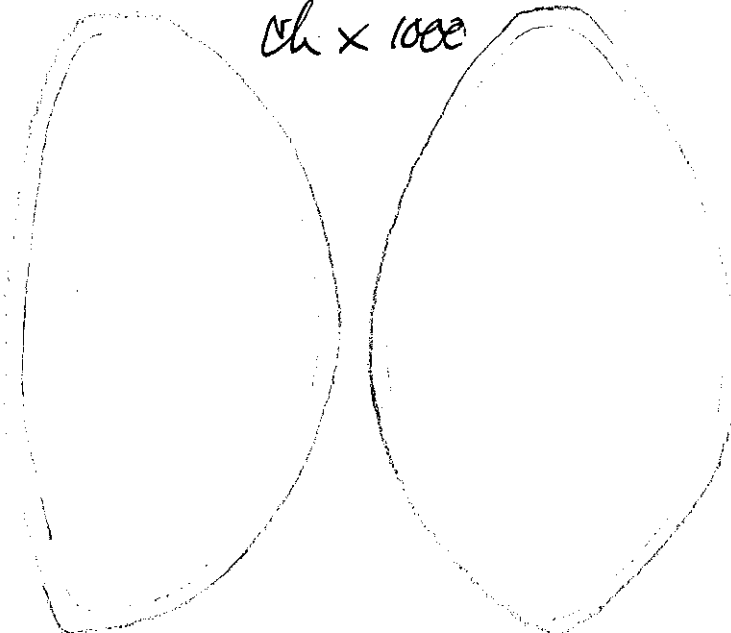
Agrocybe
Sm. 71514



Sp x 1000



Sp x 1000



Profile Spores x 8000 Face

Sm-71521

Naucoria

[Notes filed in Naucoria folder.]

It is ~~not~~ ^{is} ~~not~~ an Agrocybe (the
pileus cuticle is hyphoid).

The material is very sparse!

Smith-80194

AGROCYBE *sp. n.*

PHOTO

Ann Arbor, Michigan, leg. AHS

Notes by Smith

Pileus 3-8 cm broad, obtusely conic with an incurved margin, with a broad umbo or nearly plane, moist, hygrophanous, near buckthorn brown in moist old caps, fading to pale pinkish buff, young buttons olive brown to dark olive buff, glabrous, moist. Context whitish, weakly brownish when cut, thick; odor and taste disagreeable-farinaceous.

Lamellae adnate to depressed-adnate, pallid-brownish when young, "sage brown" at maturity, thin, edges even, broad, close.

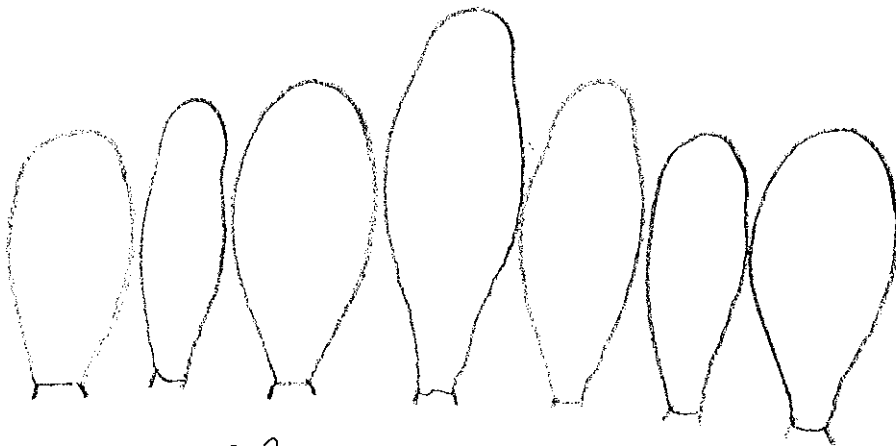
Stipe 4-10 cm long, 3-17 mm thick, near pinkish buff, watery, longitudinally striate, slightly darker at base in age, nearly equal, solid. Veil none.

Notes by Hesler

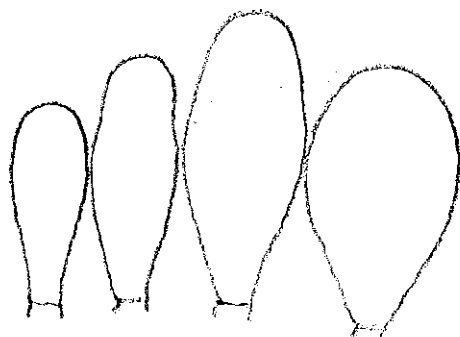
Spores 9.5-¹⁴~~11~~ x 6-7.5 μ , slightly inequilateral in profile, ellipsoid in face view, smooth, truncate, wall thick (double), brownish in 2% KOH. Pleurocystidia 32-50 x 11-20 μ , ventricose, apex rarely obscurely constricted, often subpyriform to subellipsoid, scattered, and often inconspicuous; cheilocystidia 26-38 x 10-20 μ , similar to pleurocystidia, not abundant, in some sections none, in others one, or two. Pileus cuticle a cellular palisade, cells 22-25 x 9-15 μ , clavate to subpyriform to cuneiform. Stipe cuticle of repent hyphae, dry. Caulocystidia scattered or at times closely arranged, somewhat variable in shape: ventricose, pyriform, clavate.

Smith labelled A. firma, then changed it to A. sororia; In firma, the spores are 5.5-8 x 4.5-5 μ ; in sororia, 8-11 x 6-7.5 μ

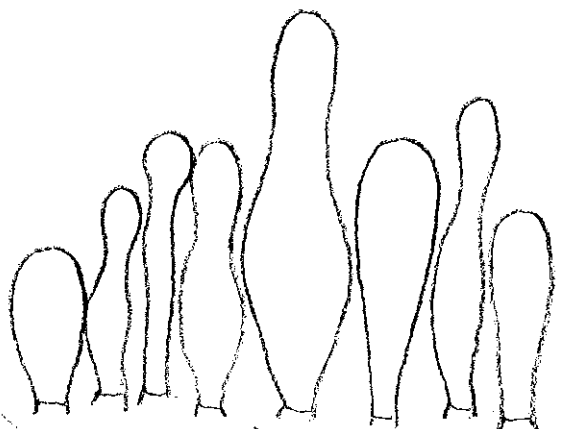
Agrocybe
Smith - 80194



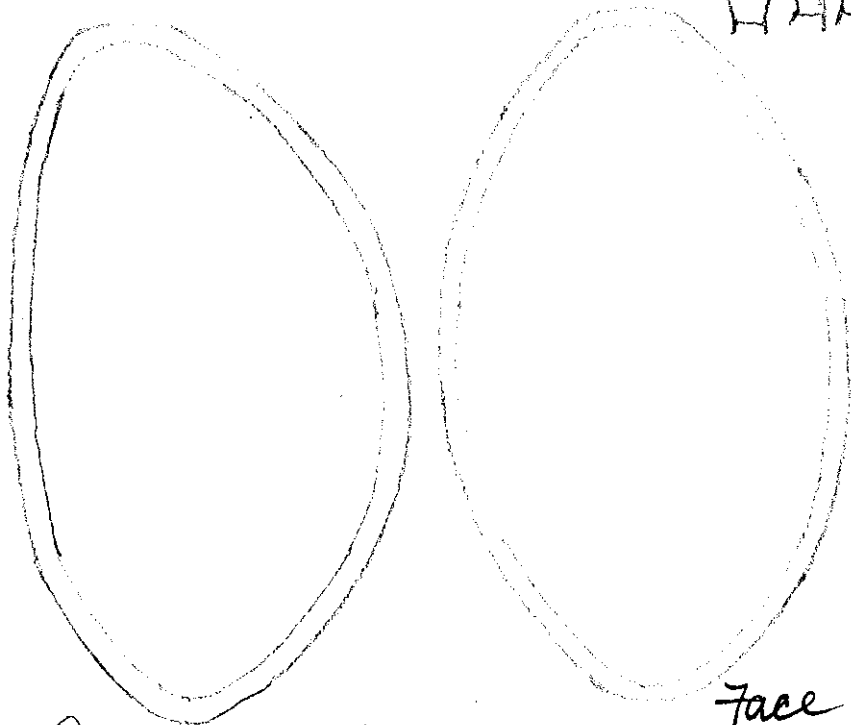
Pl x 1000



Ch - x 1000



Caulo - x 1000



Profile

Spores x 8000

Face

Smith-82699

AGROCYBE *sp. nov.*

Color Photo

on rotting conifer log, Mt. Hood, Oregon, Oregon Mycological Society
(Foray), October 8, 1972.

Notes by Smith

Pileus 5-6.5 cm broad, convex with an inrolled margin, margin long remaining inrolled, finally becoming broadly convex, subhygrophanous, moist, "mummy brown", fading to dull reddish brown. Context pale pinkish buff, possibly whitish at first; odor pungent, taste slight. FeSO_4 -0; KOH dark brown.

Lamellae bluntly adnate, when young dark olive gray, more or less sepia when spores mature, thin, edges even, close, moderately ~~broad~~ ^{broad} ~~convex~~.

Stipe 7-10.5 cm long, 10-14 mm thick, dark bistre, densely and conspicuously pruinose over all, cortex near "bistre". Veil none present.

Spore deposit near "bistre"

Notes by Hesler

Spores ¹³9.5-~~10~~ x 5.5-7.5 μ , inequilateral in profile, ellipsoid in face view, often slender to elongate-ellipsoid, smooth, truncate, wall thick (double), yellowish-brown in 2% KOH. Pleurocystidia 45-74 x 9-23 μ , ventricose, at times obscurely capitate, other times distinctly so, a few tending to fork or branch at apex, rather numerous, conspicuous; cheilocystidia 46-66 x 12-17 μ , ventricose, some with a rather long neck, often abundant, conspicuous. Gill trama parallel or nearly so. Pileus cuticle a palisade of dry, clavate to subpyriform or ventricose cells; pileocystidia scattered, conspicuous when present, of two kinds: (a) colorless, cylindrical to cuneiform-irregular; (b) with brown contents, cylindrical to subfusoid, 36-42 x 6-14 μ . Stipe cuticle of repent, dry

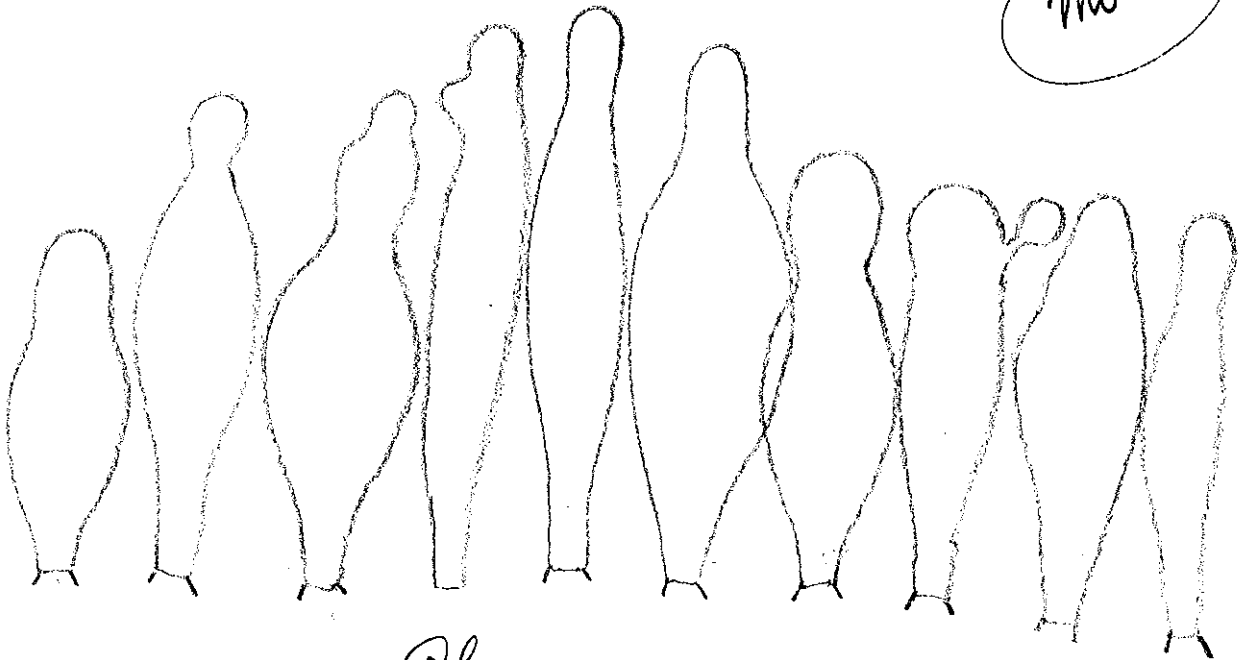
hyphae; caulocystidia 45-102 x 8-20 μ , ventricose to cylindrical-capitate, often resembling pleurocystidia and cheilocystidia, numerous and forming a turf.

~~cf. A. undulata Peck~~

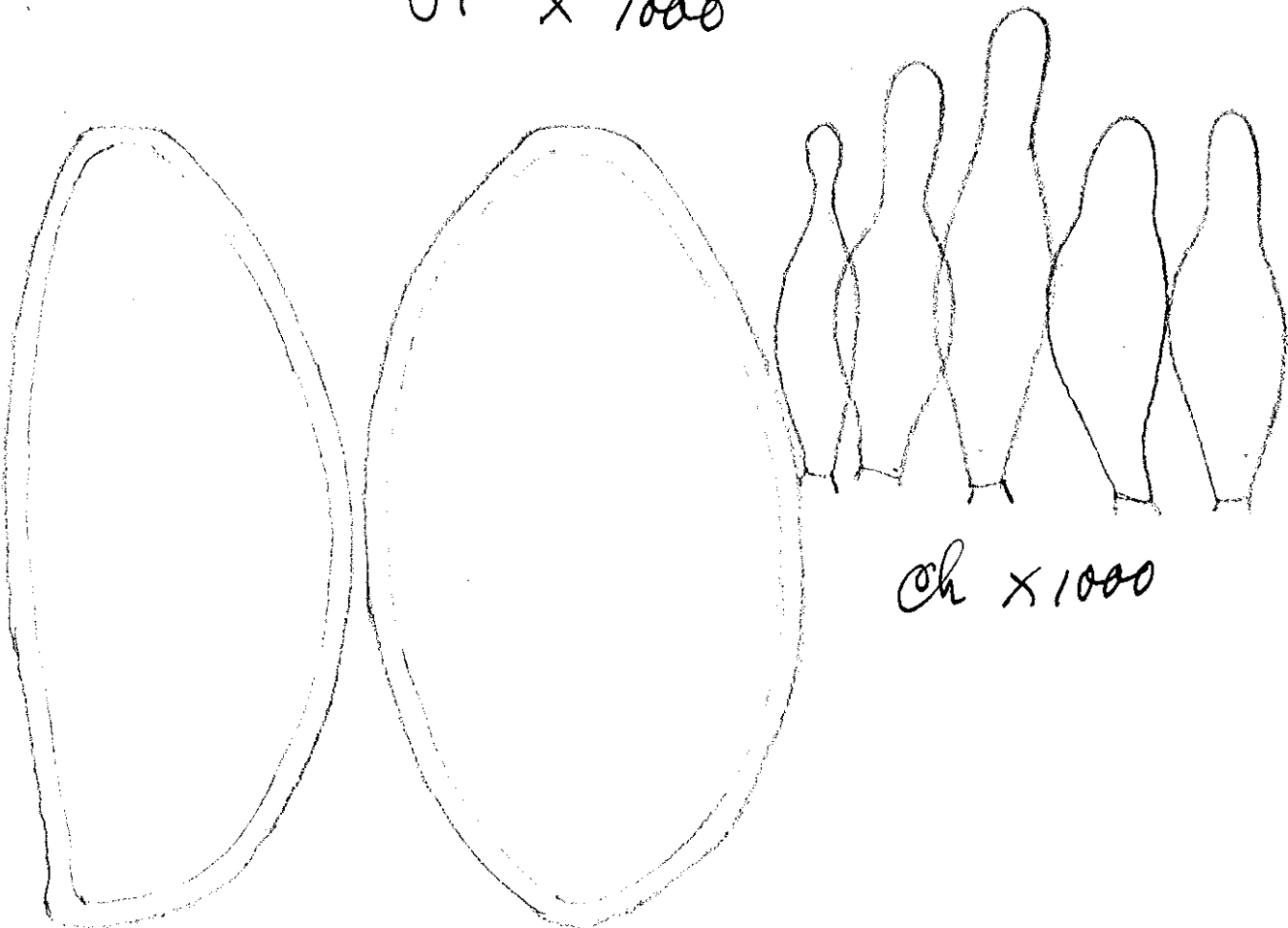
Agrocybe

Sm - 82699

more



Pl x 1000



Ch x 1000

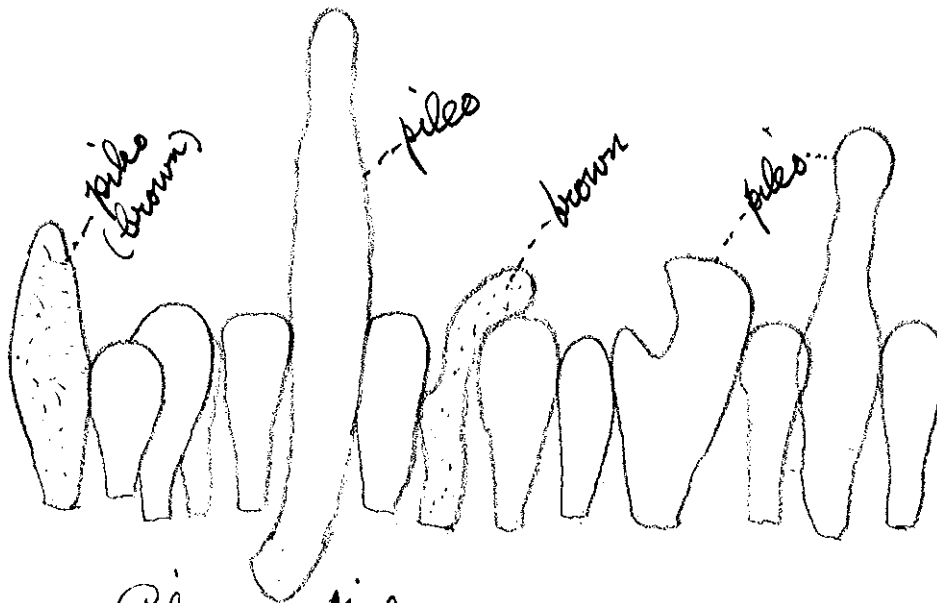
Profile

Spores x 8000

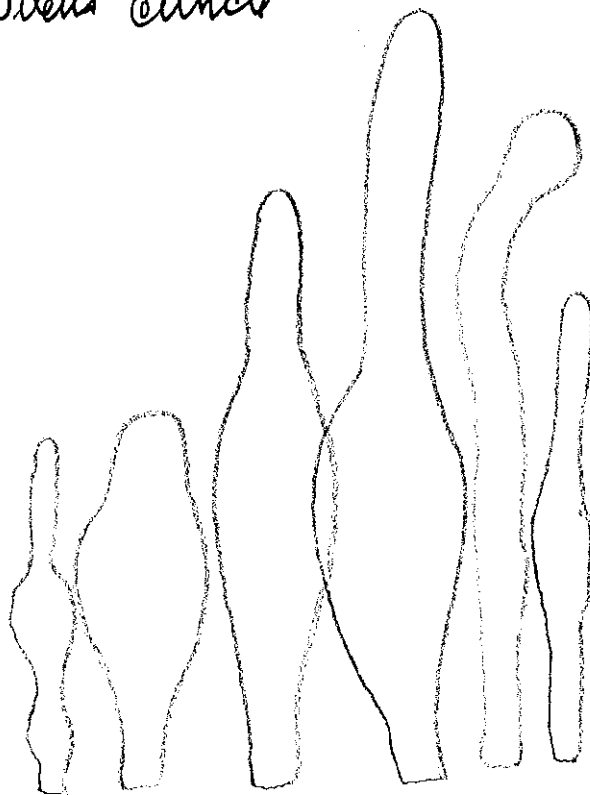
Face

Agrocybe
Sm - 82699

(more)



Pileus cuticle



Capulo (\pm palisade (turf))

x 1000

AGROCYBE *aff. ped. 1973*

Smith-84039

gregarious on chip-dirt, Ann Arbor, Michigan, June 4, 1973
(near A. pediades, but cap broad & thin)

Notes by Smith

Pileus 1.5-3.5 cm broad, convex with an incurved margin, expanding to broadly convex to plane (not pulvinate), more or less "cinnamon buff", becoming dingy ochraceous (near pinkish buff or paler), opaque at all stages, in age the margin olive-buff, viscid. Context thin, pallid, pliant; odor more or less mild, taste disagreeable.

Lamellae adnate, grayish becoming bister, more or less narrow, close to subdistant (ventricose when subdistant), edges even.

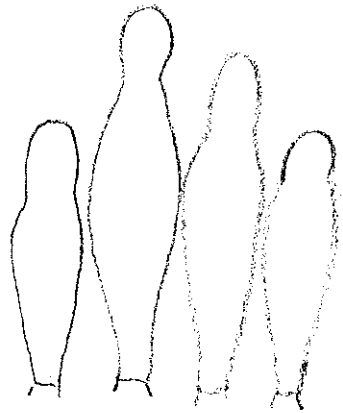
Stipe 2-3.5(4) cm long, 2-3 mm thick, dingy ochraceous tan over all, equal, undulating, rhizomorphs not well developed. Veil none observed.

Notes by Hesler

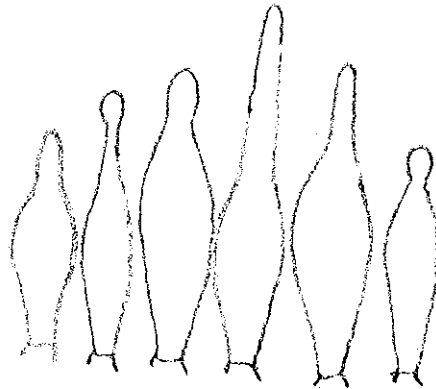
Spores 10-12 x 7-9 μ , slightly inequilateral in profile, ellipsoid to subovoid in face view, smooth, brown in 2% KOH, truncate, or more often obscurely so. Pleurocystidia 36-48 x 8-12 μ , ventricose, subcapitate or often not so, scattered, inconspicuous; cheilocystidia 28-50 x 7-11 μ , ventricose, often with a long neck which may be subcapitate or not, moderately abundant. Pileus cuticle of subclavate to vesciculose cells, pushed out of position (at maturity), with a thin gelatinous zone. Stipe cuticle of repent hyphae. Caulocystidia very sparse, clavate.

Agarocyte

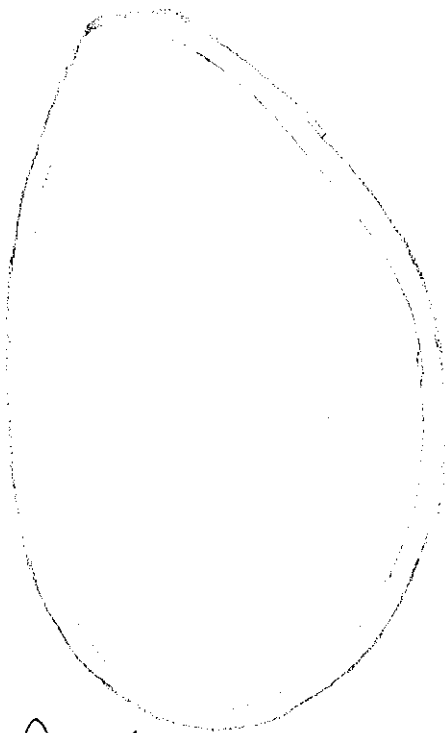
Sm - 84039



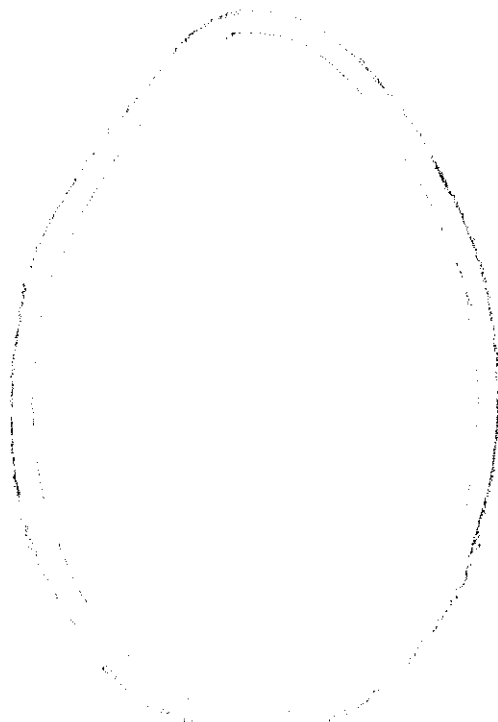
Pl x 1000



Ch x 1000



Profile



Face

Spores x 8000

AGROCYBE *A. ...*

Sm-84145

on manured garden soil, Univ. Mich. Botanical Garden, July 4, 1973
(near A. pediades but larger & with a veil)

Notes by Smith

Pileus 2-6 cm broad, convex with an inrolled margin, becoming broadly convex to more or less depressed, "raw sienna" to "clay color" to "cinnamon buff", or finally dingy pale to "pinkish buff", at first thinly viscid, margin at first decorated with particles of a rudimentary veil. Context soon pallid; odor fungoid, taste slightly farinaceous; FeSO_4 - 0.

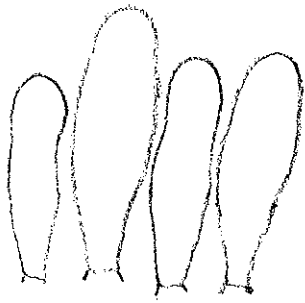
Lamellae adnate, or with a decurrent tooth, "cinnamon buff" when young, becoming "wood brown", more or less subdistant to distant, more or less broad.

Stipe 2-6 cm long, 4-12 mm thick, more or less concolor with young gills, more or less furfuraceous from rudimentary veil, naked and dingy brown in age, base not darkening appreciably, equal in age or more or less enlarged above. *Veil as particles on the pileus margin.*

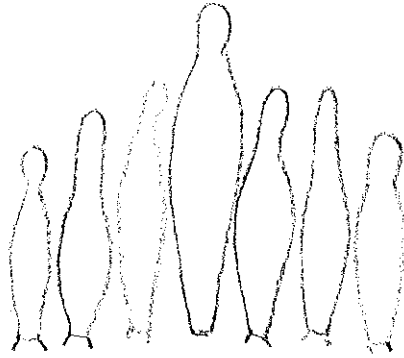
Notes by Hesler

Spores 10.5-13.5 x 7-8.5 μ , slightly inequilateral in profile, ellipsoid to subovoid in face view, smooth, truncate or obscurely so, brown in KOH. Pleurocystidia 26-38 x 7-10 μ , subclavate to subventricose, scattered, inconspicuous; cheilocystidia 25-44 x 5-9 μ , ventricose, usually with more or less of a neck, apices often subcapitate. Pileus cuticle of vesiculose cells pushed out position, with a thin gelatinous zone. Stipe cuticle of dry, repent hyphae. Caulocystidia in scattered turfs, quite similar to cheilocystidia.

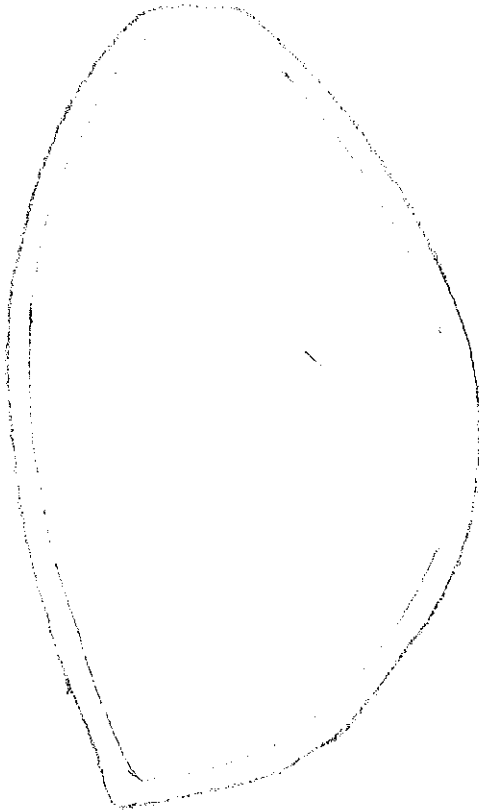
Agrocybe
Sm - 84145



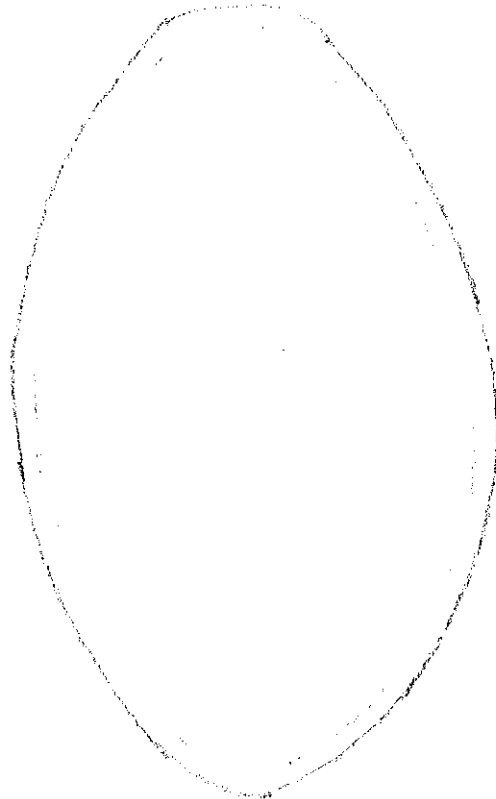
Pl x 1000



Ch x 1000



Profile



Face

Spores x 8000