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Gomphidius Notebook 1

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Miller, O. K. Monograph of *Chroogomphus*
(*Gomphidiaceae*). 56:526-549. 1964

Kauffman, C. H. The genus *Gomphidius* in the
United States. *Mycologia* 17:113-125. 1925.

Gomphidius

alachuanus

flavipes

foliiporus

nigricans

rutilus

vinicolor

No. 18858

No. 18876

No. 19361

Gomphidius alachuanus Murrill

Study cap +
gill structure in
microscope!

Murrill's description (Elisha Mitch. Sci. Soc. Jour.
55:367-368. 1939.)

"Pileus convex to slightly depressed, cespitose,
4.5 cm. broad; surface smooth, shining, glabrous,
avellaneous-isabelline, vinose when dried, margin even,
entire or undulate; context pallid, vinose when dried,
odorless, mild to astringent, very thin except at the
center; lamellae decurrent, very broad, distant, inserted,
entire, yellowish to avellaneous, black when dried; spores
elongate, vacuolate, pale-brownish under the microscope,
about 18-20 x 6 μ ; cystidia none; stipe tapering downward,
distinctly grooved, cremeous, vinose when dried, about
5 x 1 cm.

"Type collected by E. West and W. A. Murrill on the
ground in oak-pine woods at Newnan's Lake, Florida,
Nov. 15, 1938 (F 18402)/ Noteworthy because of its
change from pale colors to vinose when dried. It occurs
rarely about Gainesville in mixed woods during December
and January."

Gomphidius flavipes Pk.

was known
near by
likely pileus + gills
in coating

Pileus 3-4 cm., plane, then upturned wavy, "light vinaceous cinnamon," viscid when moistened, soft-tomentose, somewhat hygrophanous, margin becoming rimose.

Flesh soft, white, pink under cuticle; odor and taste mild or none.

Lamellae adnate-decurrent, not broad, narrowed behind, "drab," to "hair-brown," dotted with spores, edge even.

Stipe 5-7 cm. x 10-14 mm., compressed, apex white, elsewhere "naples yellow," not viscid, with black fibrils which form a reticulation below, tapering downward, solid, yellow within.

Spores 20-26 x 7-8 μ .

Pleurocystidia long-cylindrical, 112-168 x 12-14 μ ;
cheilocystidia none.

On soil,

Highlands, North Carolina, September.

^

flavipes
GOMPHIDIUS NO. 24770

on soil, hemlock woods
Harbisan Lake, June 14-62

Pileus 3 cm., convex, obtusely umbonate, "buff pink",
umbo smoky, more or less rimose. Context thin, white; odor
and taste mild.

Lamellae short-decurrent, "pale ecru-drab", somewhat
waxy, medium broad, distant.

Stipe 6 cm. x 10 mm., apex white, elsewhere yellow,
deeper yellow downward, more or less fibrillose-scaly.

Gomphidius foliiporus Murrill

he longer.
determine he put this in
Phylloporus

Murrill's description (Mycologia 35:432. 1943):

"Pileus circular, convex to plane or slightly depressed, solitary or gregarious, 6-7.5 cm. broad; surface dry, smooth, subtomentose, uniformly testaceous-fulvous, sometimes with bay center in age; margin even, entire, hispid-tomentose, dark-blue where bruised; context 1-2 cm. thick, odorless, sweet and nutty, pallid, slightly bluish when cut; lamellae decurrent, broad, inserted, subdistant, entire, often anastomosing to form large pores, pallid, dark-blue when bruised, at length dark-brown; spores boat-shaped, smooth, pale-umbrinous, umbrinous or purplish-brown in mass, about 12 x 5 μ ; cystidia none; stipe central, equal, solid, striate, dry, tomentose, pale testaceous or yellowish-white, often fulvous below, 3-5 x 0.6-1 cm.

"Type collected by E. West, L. Arnold and W. A. Murrill under an oak in Sugarfoot Hammock, near Gainesville, Fla., July 11, 1938 (F 17747). Also collected the next day near the same place by the same persons on a rotten pine stump under oaks (F 17774), and the day following in soil under a pine (F 17775).

"This species is one of those puzzles that cause loss of sleep. When first sighted I thought of Stropharia, but the gills were too decurrent. Although showing kinship with Phylloporus and Paxilus, the spores were far too dark. I am

placing it with Gomphidius temporarily because there is no other place for it to go, brushing aside for the moment several obvious and good reasons for not doing so."

Gomphidius nigricans Pk.

Check iodine
reaction on cap &
gill trama

Pileus 2-7 cm. broad, convex, then expanded, at first basically whitish but with tints of brownish-red to pinkish-vinaceous when fresh, black on drying, glutinous. Flesh firm, whitish. Lamellae decurrent, distant or nearly so, white then smoky, black on drying, medium broad, at times forked, easily separable from flesh. Stipe 5-8 cm. x 5-8 (12) mm., glutinous, apex whitish above "ring," darker downward, often reddish at base, entirely black on drying, often tapering downward. Veil cortinate, viscid, forming a superior "ring."

Spores 16-18 (20) x 5-5.5 (6.5) μ , oblong.

Pleurocystidia cylindrical, 100-120 x 11-14 μ , projecting 70-80 μ ; cheilocystidia similar.

On soil, in pine and mixed woods, Sevier (Park) County, Tennessee; Highlands, North Carolina, August-October.



12310 - *Gomphidius nigricans* PK.

*got isolated
microchlores*

Gomphidius rutilus (Schaeffer ex Fr.) L. and N., ssp.
alabamensis Earle ex Singer (in ed.)

Pileus 3-5 (7) cm. broad, subconic, campanulate to convex, not umbonate, viscid, glabrous; color somewhat variable: "auburn," "bay," "army brown," "Hays brown," darker when wet ("dark vinaceous brown," "chocolate," "Indian red").

Flesh thick on disk, thin on margin, firm, white.

Lamellae decurrent, often arcuate, broad in middle, narrowed toward ends, forking none or rare; first "avellaneous," "clay color," "ochraceous-tawny," later darker, smoky ("snuff brown," to "snuff brown"), close to subdistant.

Stipe 2.5-5 (7) cm. x 8-18 mm. (up to 25 mm. when compressed), equal, base often more or less pointed, viscid, fibrillose; color variable: dingy white, reddish or brownish tinged, the very base yellowish, solid.

Veil remnants usually forming a more or less distinct apical zone.

Spores 16-25 x 5.5-6.5 μ , mostly 18-21 x 6 μ , oblong-cylindric to subfusiform.

Pleurocystidia 100-150 x 12-14 (18) μ , abundant, large, cylindrical to clavate, often capitate, projecting beyond hymenium 40-90 μ .

On soil, pine woods, Knox, Blount (Park), and Anderson Counties, Tennessee, October-June.

constant
reproduction

Gomphidius vinicolor Pk.

Pileus 2.5-8 (11) cm. broad, convex-hemispherical, expanding, "vinaceous fawn," "cameo brown," to "avellaneous," with orange-colored patches, at times olive with a rosy tint, viscid, margin tomentose.

Flesh "pale cinnamon pink," to orange, thick on disk, thin on margin; odor and taste mild.

Lamellae decurrent, "avellaneous" at first, finally "saya brown" to "Kaiser brown," moderately close, broad, few if any forked, edge fimbriate.

Stipe 3-7 (12) cm. x 4-22 (30 mm.), yellowish to "apricot orange" or "zinc orange," ^{base not yellow,} viscid, scattered-fibrillose, solid, base attenuated.

Veil orange yellowish, leaving an evanescent apical annulus.

Spores ellipsoidal, 15-23 x 5-7 μ .

Pleurocystidia cylindrical, somewhat capitate, 80-135 x 12-16 μ , protruding 60-100 μ ; cheilocystidia similar, slightly smaller.

After being dried, the pileus and stipe are "russet-vinaceous" to "ocher red." The olive tints are unusual.

On soil, pine woods, Knox and Blount (Park) Counties, Tennessee, September-November.



18286 - *Gomphidius rinicolor* PK.

gel coating underneath
of flesh + gills

Gomphidius No. 18858

Pileus 2.5-4.5 cm. broad, convex, viscid, "mikado brown" (color after being dried: "Indian red.").

Flesh "pinkish buff," thick on disk, thin on margin; odor and taste mild.

Lamellae decurrent, nearly close, medium broad, "avellaneous," studded with pleurocystidia visible under lens.

Stipe 4-6 cm. x 7-12 mm., dingy buff, scattered-fibrillose, solid.

Spores (14) 18-20 x 5.5-7 μ .

Pleurocystidia abundant, cylindrical, at times subcapitate, 96-133 x 12-17 μ .

In pine woods, Knox County, Tennessee, December.



18858 - *Gomphidius*

Gomphidius 18876 *rutilus* (Fr.) Fendell + Namphlett.

Pileus 3-9 cm., viscid, "benzo brown" with a livid or pale lavender tint.

Lamellae adnate to decurrent.

Stipe "ochraceous buff," 5-8 cm. x 12-27 mm., tapering at base.

Spores 18-23 x 5-5.5 μ .

Pleurocystidia 85-110 x 11-13 μ .

On soil in pine woods, Sevier County (Park), Tennessee, December.

40035

GOMPHIDIUS RUTILUS (Fr.) L. & N.

Near Maryville, under pine, October 21, 1975.

Pileus 3-7 cm broad, "wood brown" at first, darkening as it matures to a smoky vinaceous brown (not matched), viscid, glabrous. Context thick on disc, thin on margin, pallid with an orange tint; odor and taste mild.

Lamellae adnate-subdecurrent, at first pale brown, darkening as spores mature to a smoky vinaceous, close or nearly subdistant, few forking behind, lamellulae short, alternating.

Stipe 4-6 cm x 7-12 mm, "light pinkish cinnamon" with an ochraceous tint, fibrils above with a reddish tint, equal, base pointed, solid, viscid. Veil white, webby.

Spores in deposit: "deep olive gray"; spores (12)14-20 x 5-6 μ , oblong and slightly fusoid, smooth pleurocystidia 74-108 x 11-15 μ , subcylindric, slightly subventricose, wall thin; cheilocystidia similar, somewhat shorter. Pileus cuticle an ixocutis. All parts vinaceous in 2% KOH.

Gomphidius No. 19361

Set instead
on sections of
flank & gills.

Pileus 6-8 cm., "chamois," laved with lavender, viscid.

Stipe 8-10 cm. x 13-20 mm., tapering below, "chamois,"
basal mycelium yellow.

Spores 16-18 x 4.8-6.5 μ .

Cystidia 85-94 x 16-20 μ , cylindric, sub-capitate.

Under pine, Knox County, Tennessee, September.



19361 - *Gomphidius*

23440

Gomphidius Photo
in pine woods, near Park Office
A. J. Sharp and L. R. Hesler, Oct. 11, 1959

Pileus 3-6.5 cm., convex, viscid, mottled "buckthorn brown" and clay to orange when young, finally "auburn" with a brownish-orange disk, reddish brown in age, glabrous. Flesh ochraceous orange to dingy brown, medium thick; odor and taste mild. Lamellae decurrent, at first "pinkish cinnamon," finally "buckthorn brown" to "dresden brown," close, broad, sub-arcuate, edges nearly even. Stipe 3-7.5 cm. x 5-15 mm., "ochraceous orange," glutinous, with agglutinated fibrils, tapering downward, solid. Veil webby, ochraceous orange.



23440 - Gomphidius

vinicolor?