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Gymnopilus Notebook 1

L. R. Hesler

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Analytical Key to the North American Species of Gymnopilus

by Paul R. Harding, Jr.

- A. Carpophores terrestrial.
 - B. Cheilocystidia lacking..... 1. G. sticticus
 - B. Cheilocystidia present
 - C. Pileus context with bitter taste..... 2. G. humicola
 - C. Pileus context with mild taste..... 3. G. Abramsii
 - A. Carpophores on charred remains of hummocks of Polytrichum or Sphagnum, or on peat soil or burned-over ground which has supported Polytrichum or Sphagnum..... 4. G. fulgens
- A. Carpophores on wood
 - D. Apexes of cheilocystidia neither capitate nor subcapitate (scattered capitate elements present in G. Earlei).
 - E. Pilei up to 10 cm. broad
 - F. Cheilocystidia all non-capitate at the apexes and of one size range; stipe with prominent longitudinal-ridges for 1-2 cm. at the apex and these ridges exactly continuous with the gills..... 5. G. depressus
 - F. Cheilocystidia of two types, one type abundant, non-capitate, 17-22 x 6-7 μ , the other type scattered, capitate, 26-32 x 7-9 μ ; stipe without decurrent ridges from the gills..... 6. G. Earlei
 - E. Pilei not exceeding 5 cm. broad
 - G. Stipe becoming fuscous from the base up in age; pileus with pilose squamules on a tomentose surface..... 7. G. aureobrunneus
 - G. Stipe scarcely discoloring; pileus with hispid or floccose squamules on a smooth surface.. 8. G. filiceus
 - D. Cheilocystidia typically capitate or subcapitate
 - H. Basidia two-spored; pileus tough as in G. Lentinus..... 9. G. areolatus
 - H. Basidia four-spored or a mixture of four-spored and two-spored elements; pileus not Lentinus-like in texture

- I. Pileus cuticle equipped with cystidioid elements
- J. Pileus and stipe some shade of dull green over all; cystidioid elements of the pileus cuticle filiform-capitate..... 10. G. punctifolius
- J. Pileus and stipe red-brown or bay-brown
- K. Cystidioid elements of the pileus cuticle saccate-clavate; spores 4-5.5 x 2.6-3.3 μ 11. G. bellulus
- K. Cystidioid elements of the pileus cuticle a mixture of saccate-clavate elements and elements which are fusoid-ventricose with filiform neck and capitate apex; spores 7-9 x 5-6 μ 12. G. picreus
- J. Pileus fulvous; stipe yellow-ocher to ferruginous; pileus cuticle equipped with brown lactiferous cystidioid cells which are subcylindric to somewhat fusoid-ventricose and sometimes with capitate or subcapitate apex..... 13. G. liquiritiae
- I. Pileus cuticle composed entirely of filamentous hyphae
- L. Stipe annulate
- M. Pileus conspicuously scaly
- N. Pileus echinately hispid-squamose; stipe bulbous at the base..... 14. G. praefloccosus
- N. Pileus not echinately hispid-squamose; stipe not bulbous at the base
- O. Pileus areolate-scaly and often with green spots, sometimes hispid-squamulose on the disk, imbricate-scaly and deep vinaceous-red in the button stage; carpophores on hardwoods and conifers.. 15. G. Harmoge
- O. Pileus floccose-squamulose, ochraceous, never vinaceous-red or spotted with green; stipe scarcely discoloring on drying; carpophores on palms..... 16. G. palmicola
- O. Pileus with appressed fibrous or coarsely fibrillose squamules formed by the cuticle breaking up radially, ochraceous, never vinaceous-red or spotted with green; stipe becoming ferruginous on drying; carpophores also on palms.. 17. G. pholiotoides

- M. Pileus not conspicuously scaly, but appressed-fibrillose or with minute appressed scales.
- P. Context lavender in fresh carpophores and sometimes becoming greenish when cut or in age..... 15. G. Harmoze
- P. Context yellow or yellowish in fresh carpophores and ~~xxx~~ never becoming greenish when cut or in age
- Q. Spores verruculose, ellipsoid to sub-amygdaliform, 7-10 x 4.5-6 μ ; stipe solid, compact and rather hard, pale yellow, not changing color appreciably on drying..... 18. G. Junonius
- Q. Spores coarsely verrucose, subglobose to broadly ellipsoid, 8-10 x 7-8.5 μ ; stipe hollow, fleshy-fibrous, luteous-cinnamon to fulvous, becoming deep brown on drying..... 19. G. imperialis
- L. Stipe not annulate
- R. Pileus vinaceous-pink, yellowish-red, pinkish-ochraceous, pinkish-buff or pallid, often with green spots; stipe concolorous or vinaceous, typically central 15. G. Harmoze
- R. Pileus fulvous to ferruginous; stipe pallid to yellow-ocher or ferruginous, central to eccentric
- S. Pileus glabrous or with minute brown dots composed of brown lactiferous hyphae; cuticle hyphae non-incrusted; veil lacking..... 13. G. liquiritiae
- S. Pileus innately silky, appressed-fibrillose or minutely floccose-scaly, rarely truly glabrous; cuticle hyphae incrusted at least in part; veil present in young carpophores... 20. G. sapineus
- R. Pileus orange or yellow; stipe pallid or pale yellow, typically central
- T. Pileus yellow, glabrous; stipe fragile, not solid..... 21. G. flavidellus

T. Pileus yellow to orange, appressed
silky-fibrillose or appressed silky-
squamulose; stipe compact and rather
hard, solid..... 18. G. Junonius

R. Pileus red-brown or bay-brown; stipe
concolorous, central

U. Spores 7-9 x 5-6 μ ; stipe blackening
on drying..... 12. G. picreus

U. Spores 4-5.5 x 2.6-3.3 μ ; stipe
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Gymnopilus luteifolia (Pk.) Singer?

~~PHOLIOTA FLAMMANS (Fr.) Kummer~~

Der Führer in die Pilzkunde, p. 84. 1871

Illustrations:

Plate

Pileus 2-4 cm. broad, hemispheric-convex, finally expanding convex, not viscid, somewhat hygrophanous, "mustard yellow" when dry, watery olive-brown when wet, with numerous, "clay color" to "tawny olive" floccose scales, the scales erect on disk, flattened elsewhere, margin even, at first appendiculate. Flesh firm, yellow, reddish-brown in 15% KOH; odor slight, taste slightly bitter. Lamellae adnate with a decurrent line, becoming sinuate, "honey yellow" when young, "mars yellow" at maturity, medium broad behind, narrowed in front, close, edges fimbriate. Stipe 3-5 cm. x 4-8 mm., bases connate, pale or dingy yellow, not scaly, appressed-fibrillose-rimose, striate, often reticulated, equal or ventricose, dry, stuffed. Veil webby, yellow, fugacious, forming a webby, fugacious annulus.

Spores 4.5-6.5 (7) x 3.5-4 (4.5) μ , ellipsoid, ^{rough? check} smooth, color in mass: "amber brown." Pleurocystidia of two types: (1) clavate, brown, apex usually rounded, not projecting, 24-37 x 5-7 μ ; (2) hyaline, bottle-shaped, apex at times sub-capitate or acute, similar in size; cheilocystidia hyaline, of two types: (1) clavate 17-20 x 4-5 μ ; (2) bottle-shaped, 20-26 x 4-6 μ .

This is near P. flammans (Fr.) Kummer, but differs in being hygrophanous, having no scales nor floccosity on stipe, spores larger (Overholts gives spores 3-5.5 x 2-3 μ).

Habitat and Distribution. - On saw-dust, North Carolina,
June.

76 21001
Pholiota (flammans? Fr.)

Pileus 2-4 cm., convex, expanding, viscid, pale orange, darker orange when rubbed, with squarrose, yellow scales, margin strongly appendiculate with yellow fibrils until maturity. Flesh thick on disk, thin elsewhere, yellow; odor slight, taste slightly bitter. Lamellae adnate, at first bright orange yellow, then yellowish-tawny, brown when bruised, crowded, narrow, thin, edge entire or rough. Stipe 3-5 cm. x 3-7 mm., yellow, decorated with squarrose, yellow scales, up to annulus, equal, solid, dry. Annulus apical, fibrillose-floccose, fugacious.

Spores 3.5-5 x 2-2.5 μ , ellipsoidal, ~~smooth~~, nearly colorless under 'scope; color in mass: pale brown.

Pleurocystidia none; cheilocystidia few, 17-21 x 6-8 μ , cylindrical. Gill trama parallel.

Overholts reports cystidia 30-40 x 6-12 μ (N.A.F. 10:278).

On conifer logs and stumps, Sevier (Park) County, Tennessee; Macon County, North Carolina, September-October.



21810 - ~~Poliota flavumans (Fr.) Kuntze~~
Gymnopilus luteifolius (Pk.) Singer



21001 - *Pholiota* (*flammans* Fr.?)

If vivid, this is not flammans.