

## Tsuguo HONGO\*: Notes on Japanese larger fungi (6)

本郷次雄\*: 日本産きのこ類の研究(6)

27) **Hygrophorus pseudococcineus** Hongo, sp. nov. (*Hygrocybe pseudococcinea* Hongo)

Pileus 1-2.5 cm or more broad, convex to broadly convex, then expanded and often slightly depressed at the center, margin sometimes irregularly undulated; sur-

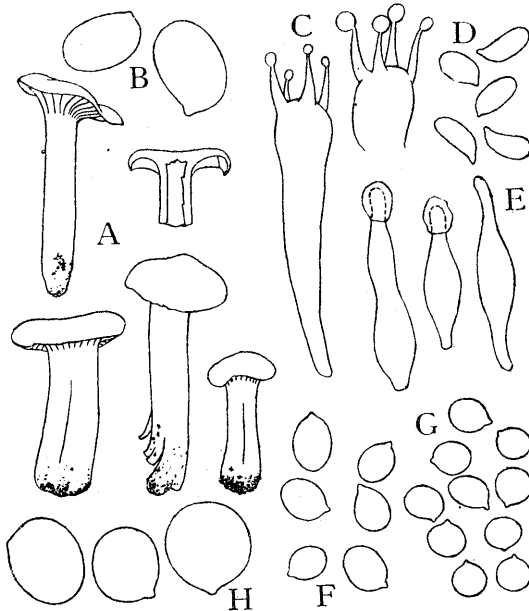


Fig. 1. *Hygrophorus pseudococcineus*: A, carpophores; B, spores; C, basidia. *Mycena adonis*: D, spores; E, pleurocystidia. *Filoboletus hanedai*: F, spores. *Resupinatus rhacodium*: G, spores. *Amanita longistriata*: H, spores. (A  $\times 1$ ; B, D, F-H  $\times 1000$ ; C, E  $\times 600$ )

face subhygrophanous, minutely and densely floccose all over or at least in the depression, then becoming somewhat squamulose, color brilliant scarlet when moist, becoming vermilion to orange when dry, hardly striatulate. Context thin, soft, yellow within, reddish under the pellicle, taste and odor none. Lamellae decurrent (arcuate when young), thickish, distant ( $L=27-42$ ;  $l=(0)1(3)$ ), yellowish-orange to cream-yellow, often whitish behind, edge even, 2-3mm wide. Stipe 2-5cm long, 3-6mm thick, equal or slightly

thickened toward the base, often compressed, substriate, concolorous with the pileus, yellowish below, hollow. Spores hyaline under the microscope, broadly ellipsoid, smooth,  $11-19 \times 7.5-10 \mu$ , nonamyloid; basidia four-spored,  $46-63 \times 11-14 \mu$ ; cheilo-

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and pleurocystidia not differentiated; gill-trama of parallel to subparallel hyphae; pileus-trama homogeneous beneath a turf-like covering of surface hyphae; clamp connections present.

Hab. Gregarious (to subcespitose), on the ground in mixed woods, Zeze-Kami-beppo-chō, Ōtsu, June 5, 1954 (type\*).

Distr. Endemic (Ōmi).

This is a beautiful, very distinct species, characterised by the floccose-squamulose cap and the very large spores, and it probably lies near to *H. miniatus* Fr., *H. cantharellus* Fr., etc. Inai's *H. macrosporus* (Trans. Sapporo Nat. Hist. Soc. **16**: 14 (1939)) appears to be somewhat near, but it is said to have emarginate or free gills and white to yellowish stem.

**Hygrophorus pseudococcineus.** Pileo 1-2.5 cm lato, convexo-plano, minute floccoso-squamuloso, e coccineo expallente; carne tenui, pellicula coccinea, contexto flava; lamellis decurrentibus, crassis, distantibus, flavis aurantio-tinctis; stipite 2-5 cm longo, 3-6 mm crasso, aequali vel ad basim subincrassato, saepe compresso, pileo concolore, infra flavido, cavo; sporis hyalinis, late ellipsoideis, laevibus,  $11-19 \times 7.5-10 \mu$ . In silvis ad terram.

28) **Mycena adonis** (Fr.) S. F. Gray, Nat. Arr. Brit. Pl., **1**: 620 (1821).

*Marasmiellus adonis* Singer (1949).

Pileus 7-10 mm broad, canico-campanulate, minutely and almost obsoletely papillate, not expanding; surface glabrous, deep pink, paler at the margin, pellucidly striate when moist. Context thin, membranous, concolorous with the surface, fragile. Lamellae ascending adnate or attached by a tooth, subdistant, narrow, white. Stipe 3-4.5 cm long, 1-1.2 mm thick, equal, flexuose, tubular, fragile, shining white, smooth, base hardly strigose. Spores hyaline under the microscope, subcylindric with a tapered apiculus, smooth, nonamyloid,  $7-8.5 \times 3-3.5 \mu$ ; basidia four (or two-) spored,  $19-24 \times 6-7 \mu$ ; pleurocystidia numerous, fusoid-ventricose with a long acuminate neck, hyaline, smooth, thin-walled, often with an amorphous incrustation at the apex,  $50-60 \times 7.5-10 \mu$ ; cheilocystidia abundant, similar to pleurocystidia.

Hab. Gregarious, among fallen leaves in woods, Agekawa-mura, Echigo, Oct. 15, 1954.

Dist. Europe, North America. New to Japan.

Ill. Cooke, Ill. Brit. Fungi, **2**: pl. 185 (1881-1883); Lange, Fl. Agar. Dan., **2**: pl.

\* The type specimens are deposited in the writer's institute.

53. f. A (1936); Smith, North Am. Sp. Mycena, pl. 19, f. B and text fig. 17, nos. 7, 9 (1947).

A pretty, delicate species. The spores of the writer's specimen were more or less narrower than those of the European and the American ones. The measurements of the spores for this species given by different authors are as follows:

Rea (1922)	7-8×4 $\mu$	Lange (1936)	9×5 $\mu$ (or 9 $\frac{1}{2}$ ×5 $\frac{1}{2}$ $\mu$ )
Smith (1947)	6-7×3-3.5 $\mu$		

29) **Filoboletus hanedai** (Kobayasi) Hongo, comb. nov.

*Poromycena Hanedai* Kobayasi, in Journ. Hattori Bot. Lab. 5: 1 (1951).

Pileus 1-3 cm broad, convex to broadly convex, then nearly plane; surface glabrous, not viscid, dark gray when young, then cinereous to olive buff, or watery white, hygrophanous, translucent-mammillate when moist, becoming opaque and white when dry (except for the central area which becomes yellowish or buffy and somewhat wrinkled); margin incurved when very young, then straight, entire or slightly serrulate. Pores adnate to adnexed, often with subdecurrent tooth, subradially arranged, surface plane, whitish, equal or larger toward the center, oblong-angulate or nearly circular, 0.7-1.5 mm in diam.; tubes 4-5 mm long near the stipe, shorter toward the margin. Context thin, watery white, odor slight, taste none. Stipe central, 1.5-4 cm long, 1-2 mm thick, equal or somewhat tapering upward, often more or less thickened at the base, grayish, then watery white, pruinose, cartilaginous, fragile, tubular, often compressed. Spores ovoid to short ellipsoid, hyaline, smooth, amyloid, 6-9 5-6 $\mu$  (or 6.5-7×5.5-6 $\mu$ ); basidia four-spored, 21-23×7-7.5 $\mu$ ; hymenophoral trama regular, nonamyloid; pileustrama with a differentiated pellicle.

Hab. Subcespitate or densely gregarious, on rotten wood of frondose tree (*Machilus?*), Isl. Kashima, Shinjō-mura, Kii, Aug. 29, 1954.

Distr. Japan (Hiuga, Kii), Tawau, North Borneo, and Ponape.

Ill. Kobayasi, l. c., f. 1, A and f. 2.

It is a matter for regret that the writer did not observe the luminescence of this species. It is better to consider the present species as belonging to the genus *Filoboletus* rather than the *Poromycena* because of the truly poroid hymenophore and the amyloid spores.

30) **Resupinatus rhacodium** (Berk. et Curt.) Singer, Agaricales, 253 (1949).

Pileus 5-12 mm broad, fastened horizontally to the vertical substratum, orbicular, dimidiate or flabellate, more or less convex; surface cinereous, disc covered

with the dense, dark brown to blackish, strigose-velutinous tomentum, margin often radially wrinkled-striate. Context thin, concolorous with the surface, upper layer gelatinous. Lamellae subdistant, thin, radiating from a lateral or very excentric point behind, cinereous, whitish at the edge, narrow. Spores hyaline under the microscope, globose, smooth, nonamyloid,  $4.5-5.5\mu$  in diam.; basidia four-spored,  $18-22 \times 4-5\mu$ .

Hab. On dead trunks of *Fraxinus*, Bot. Gard. of Kyoto Univ., Kyoto, June 15, 1954; June 22, 1954.

Distr. North America, Europe (Denmark). New to Japan.

Ill. Lange, FL. Agar. Dan. 2: pl. 66, f. A.

The blackish hairs of the disc readily separate this species from *R. applicatus* (Fr.) S. F. Gray.

31) **Marasmius ohshimae** Hongo et Matsuda, sp. nov. (*Pseudohiatula ohshimae* Hongo et Matsuda).

Pileus 1-5 cm broad, convex, then expanded, often gibbous, at length slightly lepressed at the center; surface glabrous (hairy under a lens), subhygrophanous, not viscid, sometimes radially wrinkled especially at the center, color pure white, or tinged with cinereous or mouse-gray toward the center; margin even, slightly striatulate when moist. Context rather thin, white, or grayish under the pellicle in the pileus, pale ochraceous in the stipe, odor faint, taste mild. Lamellae adnexed, close to subdistant ( $L=27-40$ ;  $1-3-7$ ), white, edge even, subventricose, 1-4 mm wide. Stipe 3-7 cm or more long, 1.5-4 mm thick, equal, sometimes compressed, often long-rooting, tubular, cartilaginous, pulverulent to minutely velvety, fulvous to ocher, apex white. Spores hyaline under the microscope, ellipsoid to cylindrical, smooth, nonamyloid,  $4.5-6.5 \times 2-3\mu$  (or  $3.5-5.5 \times 1.5-2.5\mu$ ); basidia four-spored,  $15-21 \times 5-5.5\mu$ ; cheilo- and pleurocystidia similar, scattered, elliptical with an abruptly narrowed pedicel, or sometimes broadly clavate, the enlarged portion thick-walled, encrusted,  $32-50 \times 15-29\mu$ ; gill-trama of subparallel hyphae, 6-12.5  $\mu$  in diam.; epicutis of the pileus consisting of a hymeniform layer from which long dermatocystidia arise; dermatocystidia of the pileus (pilocystidia)  $80-230 \times 10-29\mu$ , attenuated upward, apex usually capitate, somewhat thick-walled; those of the stipe (caulocystidia)  $22-225 \times 4.5-18\mu$ .

Hab. Solitary or gregarious, on buried twigs of conifers (especially of *Cryptomeria japonica*), Kurama-yama, Yamashiro, Oct. 27, 1953; Mt. Hiei, Ōmi, Nov. 3,

1954 (type); Tsugawa-chō, Echigo, Sept. 25, 1953 (I. Matsuda); Agekawa-mura, Echigo, Oct. 19, 1954.

Distr. Endemic (Yamashiro, Ōmi, Echigo).

Common. Autumn to early winter. This species is very closely related to *M. conigenus*, (Fr. sensu Favre) Favre, but is readily distinguished by its habitat and large pilocystidia.

**Marasmius ohshimae.** Pileo 1–5 cm lato, convexo dein plano, glabro, subhygrophano, albo vel centro cinereo-griseo, margine leviter striatulo; carne subtenui, odore obsoleto; lamellis adnexis, subconfertis vel subdistantibus, albis, subventricosis; stipite 3–7 cm longo, 1.5–4 mm crasso, aequali, basi saepe radicato, subtiliter fistuloso, pulverulento, fulvo-argillaceo apice

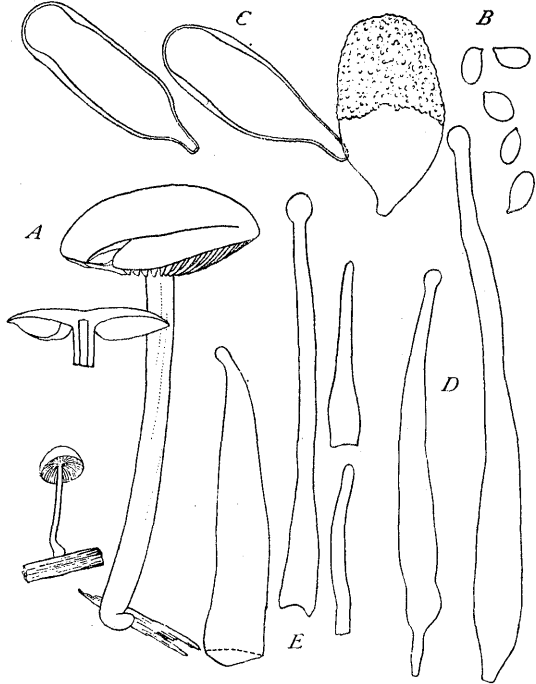


Fig. 2. *Marasmius ohshimae*: A, carpophores ( $\times 2/3$ ); B, spores ( $\times 1000$ ); C, cheilo- and pleurocystidia ( $\times 600$ ); D, dermatocystidia on the pileus ( $\times 400$ ); E, dermatocystidia on the stipe ( $\times 400$ ).

albo; sporis hyalinis, ellipsoideis vel cylindraceutis, laevibus,  $4.5\text{--}6.5 \times 2\text{--}3 \mu$  (vel  $3.5\text{--}5.5 \times 1.5\text{--}2.5 \mu$ ); cystidiis ellipticis pedicellatis vel late clavatis,  $32\text{--}50 \times 15\text{--}29 \mu$ . Ad ramulos dejectos *Cryptomeriae japonicae*.

32) **Amanita longistriata** Imai, Agar. Hokk. I: 11 (1938).

Spores white in deposits, globose to subglobose, smooth, with a large central gutta, nonamyloid,  $11\text{--}15 \times 10\text{--}13 \mu$ ; basidia four-spored,  $36\text{--}40 \times 14\text{--}15 \mu$ ; hymenophoral trama bilateral.

Hab. On the ground in pine woods, Yoshida-yama, Kyoto, Sept. 22, 1952.

Distr. Endemic (Ishikari, Yamashiro).

Uncommon. The present species appears to be quite close to *A. spreata* Peck, but is readily distinguished by the subcarnescent gills.

33) ***Russula subnigricans*** Hongo, sp. nov.

Pileus 5–11.5 cm or more broad, convex, then plane and depressed, at length infundibuliform; margin incurved at first; surface dry, appearing minutely velvety, fuliginous-umber, slightly paler toward the margin, pellicle hardly separable, not tuberculoso-striate. Context thick, compact, white, becoming reddish when broken, but *not blackening*; taste and odor none. Lamellae adnate, or with a slightly de-

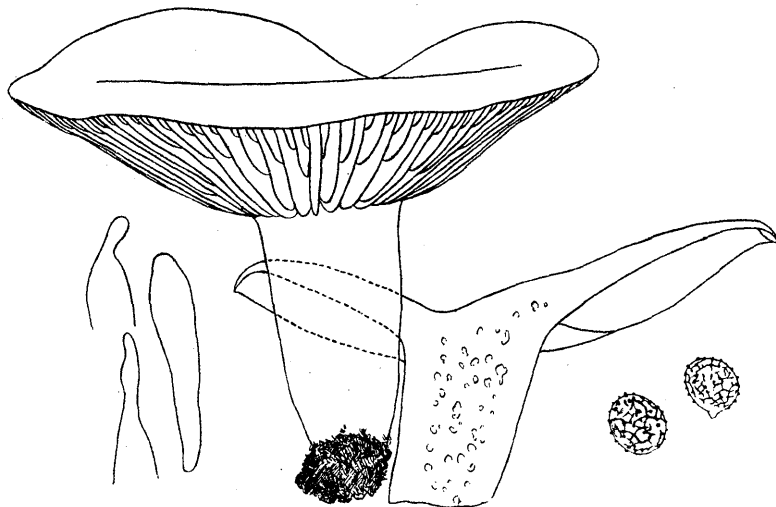


Fig. 2. *Russula subnigricans*. Carpophores ( $\times 1$ ), spores ( $\times 1500$ ), and pleurocystidia ( $\times 900$ ).

current tooth, distant, sometimes more or less intervenose, scarcely forked, pale cream, becoming reddish when bruised, rather thick, moderately broad (6–9 mm), brittle. Stipe 3–6 cm long, 1–2.5 cm thick, equal or attenuated downward, indistinctly rugoso-striate, paler than the pileus, whitish at the base, solid (or stuffed). Spores hyaline under the microscope, subspherical or subspheric-oval, somewhat verrucose, with a minute reticulation, amyloid, 1-guttulate,  $7-9 \times 6-7 \mu$ ; basidia four-spored,  $38-50 \times 8-9.5 \mu$ ; cheilo- and pleurocystidia similar, scattered, lanceolate basidiiform or narrowly fusiform, thin-walled,  $53-88 \times 9.5-12.5 \mu$ ; gill-trama intermixed; pellicle of pileus made up of interwoven, dark umbrinous,  $4-13.5 \mu$  broad hyphae.

Hab. Gregarious or scattered, on the ground in woods of *Shiia*, Miidera, Otsu, Sept. 4, 1954; Kiyomizu-dera, Kyoto, Sept. 4, 1954 (M. Hamada, type).

Distr. Endemic (Oni, Yamashiro).

This species is apparently very close to *R. nigricans* Fr., but its flesh never blackens though a rubescence takes place when broken, and its gills are not so wide as those of the latter. Poisonous?

**Russula subnigricans.** Pileo 5–11.5 cm lato, e convexo expanso-depresso, sicco, fuligineo-umbrino, margine primo involuto, astriato; lamellis adnato-subdecurrentibus, distantibus,  $\pm$ latis, cremeis; stipite 3–6 cm longo, 1–2.5 cm crasso, aequali vel deorsum attenuato, pileo pallidior, solido; sporis subsphaeroideis,  $7-9 \times 6-7 \mu$ , verrucis brevibus, subreticulatis; cystidiis  $53-88 \times 9.5-12.5 \mu$ .—*Caro alba, fracta rubescens, sed non nigricans.* In silvis frondosis.

27) **オオアカヌマベニタケ**(新種) 傘, 茎共にあざやかな赤色を呈し, 傘の表面は微細なる鱗被を密に有する。胞子は極めて大形。大津市膳所上別保町の山林内にてとる。

28) **コウバイタケ**(新種) ピンク色の傘を有する繊弱なきのこである。越後国東蒲原郡揚川村の林内にて採集した。

29) **アミヒカリタケ**(小林) 全体類白色にて菌孔を有し, 暖地の林内朽木(タブノキ?)上に東生ないし群生する。紀伊国西牟婁郡新庄村神島にて採集した。本菌の発光性につき, 残念乍ら筆者は観察することができなかつた。

30) **クロゲシジミタケ**(新種) シジミタケ *Resupinatus applicatus* に近縁の菌なるも, 表面基部に黒毛を密生する点で区別せられる。京都大学植物園でトネリコ類の枯幹に群生せるものを得た。

31) **スギエダタケ**(新種) マツカサシメジ *Marasmius conigenus* に酷似するも針葉樹とくにスギの落枝上に生ずる。京都市鞍馬山, 近江比叡山, 越後津川町及び揚川村にて採集。種名 *ohshimae* は動物学者たる九大名誉教授大島広博士を記念して命名した。

32) **タマゴテングタケモドキ**(今井) 北海道で今井博士が立てられた種類で褶が最初白色なるも後淡い肉色を帯びてくるのが著しい特徴である。京都市吉田山にて採集。

33) **ニセクロハツ**(新種) クロハツ *Russula nigricans* に近縁の種類であるが, 肉が赤変するも黒色とならざる点に於て区別せられる。1954年9月上旬, 京都市にて本菌らしききのこを食して死亡した例があるので警戒を要する。京都市清水寺, 大津市三井寺境内のシイ林内に生ずる。

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