

Tsuguo HONGŌ*: Notes on Japanese larger fungi (8)

本郷次雄*: 日本産きのこ類の研究(8)

42) *Hygrophorus turundus* Fr. var. *macrosporus* Hongo var. nov.
(*Hygrocybe turunda* Karst. var. *macrospora* Hongo).

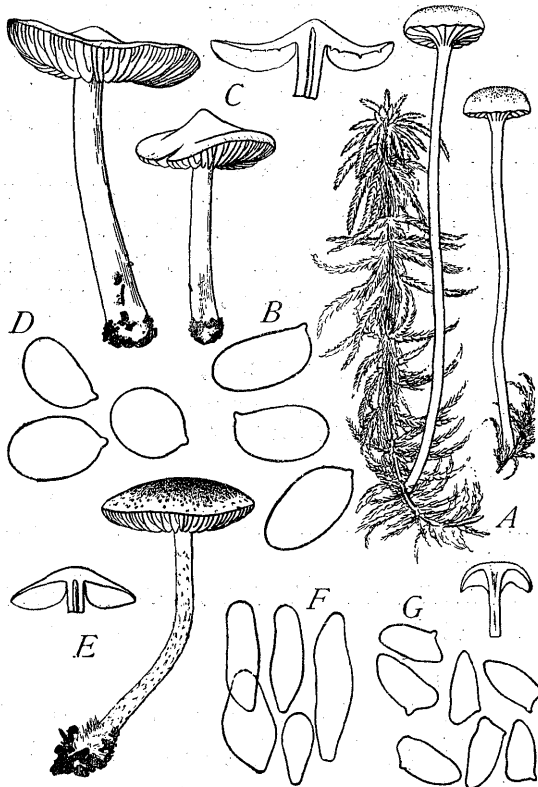


Fig. 1. *Hygrophorus turundus* Fr. var. *macrosporus* Hongo: A, carpophores; B, spores. *Hygrophorus acutoconicus* Sm. f. *japonicus* Hongo: C, carpophores; D, spores. *Lepiota subcitrifolia* Hongo: E, carpophores; F, cheilocystidia; G, spores. (A, C, E $\times 2/3$; B, D, G $\times 1000$; F $\times 600$).

Totus fragilis; pileo 8–23 mm lato, late convexo, demum expanso vel centro leviter depresso, non viscido, arido, e auratio flavo. (“orange chrome” **, “orange”, “cadmium yellow”, or “lemon chrome”), squamulis minutis tomentosis disco magis aggregato ornato, margine astriatulo, crenato; carne tenui, pellicula aurantiaca, contexto flavida, inodora et insipida; lamellis decurrentibus, subarcuatis, latis (1.5–4mm), distantibus [L = 13–16; l = 1–3 (6)], pallide luteis vel cremeis, crassis; stipite 6–11.5cm longo, 1.5–3 mm crasso, aequali, glabro, tereti, pileo concolore, basi pallidiore, farcto vel solido; sporis ellipsoideis vel subcylind-

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** All color names within quotation marks are taken from R. Ridgway: Color standards and color nomenclature (1912).

draceis, $10-15 \times 6-7.5 \mu$ vel $12-16.5 \times 6-7.5 \mu$.

Microscopic characters: Spores hyaline under the microscope, ellipsoid to subcylindric, smooth, nonamyloid, $10-15 \times 6-7.5 \mu$ or $12-16.5 \times 6-7.5 \mu$; basidia four-spored, $40-48 \times 10-11 \mu$; cheilo- and pleurocystidia none; gill-trama subparallel; pileus-trama homogeneous beneath a turf-like covering of the surface hyphae.

Hab. Gregarious to scattered, among *Sphagnum cymbifolium*, Ishiyama-Hiratsuchi, June 11, 1955; Ishiyama-dera, July 4 (-type*) and July 14, 1955; Ishiyama-Imodani-chō, Ōtsu-city, Aug. 24, 1955. Distr. Endemic (Ōmi).

This variety is easily recognized by the non-fuscescent squamules on the cap as well as by its large spores. *H. turundus* var. *lecidus* Boud. is somewhat close to the present variety, but it is very likely conspecific with *H. cantharellus* Schw. judging from Boudier's illustration [Bull. Soc. Myc. Fr. **13**: pl. 1, f. 2 (1897)]. In many respects the present variety also approaches to *H. miniatus* var. *sphagnophilus* Peck.

43) **Hygrophorus acutoconicus** (Clem. in Woods) A. H. Smith f. **japonicus** Hongo f. nov. (*Hygrocybe acutoconica* Singer f. *japonica* Hongo).

A typo differt sporis late obovatis, $11-13.5 (14) \times 7-9.5 (10.5) \mu$.

Pileus 3-4 cm broad, subacutely conic when young, soon campanulate, at length expanded and with a conic umbo; surface glabrous, viscid when moist, "lemon chrome" to "empire yellow", nearly "orange" at the top, not or faintly striatulate at the margin. Context rather fragile, thin, pale yellow, not blackening, taste and odor none. Lamellae nearly free, subdistant, rather thin, subventricose, 3-4 mm or more wide, edges entire or slightly eroded, intervenose, pale yellow. Stipe 4-5.5 cm long, 3.5-6 mm thick (at the middle portion), more or less attenuated upward, terete or compressed, somewhat fibrilloso-striate, often twisted, "lemon chrome" to "lemon yellow", white at the base, stuffed to hollow. Spores hyaline under the microscope, broadly ovate, smooth, nonamyloid, $11-13.5 (14) \times 7-9.5 (10.5) \mu$; basidia two-spored, $33-39 \times 7.5-11 \mu$; cheilo- and pleurocystidia none; gill-trama of subparallel hyphae; pileus-trama homogeneous under a gelatinous pellicle.

Hab. Gregarious, on the ground in forest, Shimonagafusa, Hachiōji-city, Sept. 18, 1955 (-type). Distr. Endemic (Musashi).

Smith and Hesler [Lloydia **5**: 55 (1940)] described the spores of the typical

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

H. acutoconicus (sub. nom. *H. Langii* Kühner) as "9-12×4.5-6 μ or 11-15×6-7 μ ". Those of the writer's specimen, however, well coincide with the original description of Britzelmayr's *H. persistens* (10-16×6-10 μ) which is synonymous with *H. acutoconicus* according to Singer.

44) ***Xerula chrysopepla*** (Berk. et Curt.) Singer in *Mycologia* **35**: 156 (1943).

Lentinus chrysopeplus B. et C. (1868)—*Agaricus scabriusculus* Peck (1872)—*Agaricus* (*Tricholoma*) *lacunosus* Peck (1873)—*Marasmius aculeatus* Pat. (1900)—*Gymnopus chrysopeplus* Murrill (1916)—*Collybia Costesi* Speg. (1917).

Pileus 17 mm broad, brilliant orange ("cadmium orange"); stipe 15×2 mm,

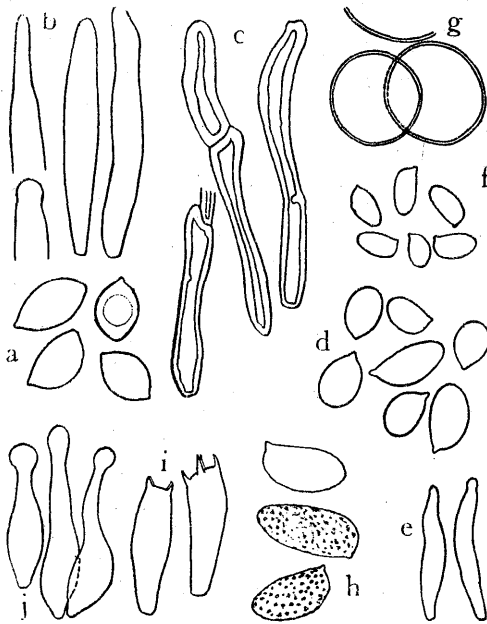


Fig. 2. *Xerula chrysopepla* Sing.: a, spores; b, cheilocystidia; c, hyphae from cap surface. *Mycena amicta* Quél.; d, spores; e, cheilocystidia. *Melanophyllum echinatum* Sing.; f, spores; g, globular cells from cap surface. *Galerina clavata* Kühner; h, spores; i, basidia; j, cheilocystidia. (a, d, f, h ×1000; b, c, e, g, i, j ×630).

(Cape). New to Japan.

Illustration: Pearson, *Trans. Brit. Myc. Soc.* **33**: pl. 17 (as *Collybia chrysopepla*).

yellowish, base concolorous with the pileus. Spores hyaline under the microscope, very broadly lemon-shaped, smooth, 1-guttulate, non-amyloid, 6.7-9.3×5.7-6.4 μ ; basidia four-spored; cheilocystidia abundant, pleurocystidia sparse, cylindric to subventricose, with blunt or subcapitate apex, thin-walled, 50-83×7-9 μ ; flocci on the cap surface made up from thick-walled, golden yellow hyphae with bladder-like swellings; clamp connections present.

Hab. On fallen branches (of *Shiia* ?), Ishiyama-dera, Ōtsu, Nov. 1, 1955.

Distr. North, Central and South America, Philippine Islands, South Africa

Rare. This is a beautiful, collybioid to marasmioid species. It is well described and illustrated by Pearson.

45) **Mycena amicta** (Fr.) Quélet, Champ. Jura et Vosges: 243 (1872).

Spores ellipsoid, smooth, amyloid, $5.5-7.5 \times 3-4.5 \mu$; basidia four-spored; cheilocystidia crowded, subcylindric to narrowly fusoid with obtuse to subacute apices, hyaline, thin-walled, $29-35 \times 4-6 \mu$.

Hab. Around stumps of conifers in forest, Agekawa-mura, Echigo, Oct. 15, 1954.

Distr. Europe, North America. New to Japan.

Illustrations: Cooke, Ill. Brit. Fungi, pl. 286 and pl. 161 [as *Agaricus* (*Mycena*) *iris*]; Lange, Fl. Agar. Dan. 2: pl. 50, f. C (as *M. iris*); A. H. Smith, Mycologia, 28: 416, f. 2, no. 3; North Amer. Sp. of *Mycena*, pl. 3, A-B and text fig. 2, nos. 6-8; Jossierand, Bull. Soc. Myc. Fr. 49: 346, f. 2.

Bluish color, thick gelatinous pellicle over the cap, and finely pubescent stem are the outstanding common characteristics of this species and its near relatives (e. g. *M. cyanescens*, *M. subcaerulea*, etc.). In regard to the identification of the species of this group, see Smith's key [North Amer. Sp. of *Mycena*: 61 (1947)].

46) **Melanophyllum echinatum** (Fr.) Singer, Agaricales: 436 (1949).

Pileus 1-2.5 cm or more broad, conico-convex to convex, then expanded, often gibbous, surface dry, "orange cinnamon", "cinnamon", "mikado brown" or "saya brown", slightly paler at the margin, granulate-mealy all over, often obscurely rugulose: margin appendiculate with fragments of the veil. Context thin, whitish in the pileus, testaceous ("Japan rose") in the stipe, taste none, odor rather distinctive, agreeable. Lamellae free, rounded behind, subventricose, entire on the edges, close ($L = \pm 24$; $l = 3-7$), (2)3-4 mm wide, "testaceous" to "cacao brown" at first, soon discoloring and becoming "fawn color" to "Natal brown". Stipe 1-4 cm long, 1-2 mm thick, equal or slightly thickened at the base, covered with evanescent, "pinkish cinnamon" meal below the ring, white tomentose at the base, tubular, cartilaginous. Ring superior, floccose-granular on the outside, torn, fugacious. Spores fuscous-brown in deposits (on drying), pale grayish ochraceous under the microscope (in KOH), elliptic, minutely punctate under oil immersion lens, $5.4-6.4 \times 2.6-3.2 \mu$; basidia four-spored, $16-18 \times 5.5-6 \mu$; cheilo- and pleurocystidia absent; hyphae with clamp connections; granular made up of globular, slightly ochraceous, 18-30 μ broad cells.

Hab. Scattered to gregarious, on humus or among mosses in woods of *Chamaecyparis*, Ishiyama-Hiratsu-chō, Ōtsu, Oct. 8 and 27, 1955.

Distr. Europe, North and South America. New to Japan.

Illustrations: Gillet, Hyménomycètes, pl. 327 (as *Pratella echinata*); Cooke, Ill. Brit. Fungi, pl. 395 [as *Agaricus* (Inocybe) *echinatus*]; Kühner, Bull. Soc. Myc. Fr. 52, pl. 72, f. 1 (as *Lepiota echinata*); Lange, Fl. Agar. Dan. 1, pl. 14, f. C. (as *Lepiota haematosperma*) and f. E (f. *gracilis*); A. H. Smith, Pap. Mich. Acad. Sc. Arts Lett. 25: 134, f. 4, a (spores—as *Agaricus echinatus*).

Rare. As described above, the writer's fungus differs from the descriptions of various authors in the brighter color, but it agrees very well with them in all other respects. The main features of *M. echinatum* are the powdery coating of cap and stem, the reddish gills and the dark spores.

47) ***Lepiota subcitrrophylla*** Hongo sp. nov.

Pileo 2.5–3 mm lato, conico-convexo, dein expanso, saepe gibboso, sicco, subcitrino, squamulis minutis cinereo-brunneis dense obtecto, centro squamulis continuo, margine astriato; carne tenui, pallide lutea, fracta cyanescente, odore saporeque nullo; lamellis liberis, citrinis, cyanescentibus, subdistantibus (L=30–43; 1=1–3), ventricosis, 4–5 mm latis; stipite 3–5.5 cm longo, 2–3 mm crasso, aequali vel basi leviter incrassato, pallide citrino, squamulis cinereo-brunneis punctato, basi strigoso, fistuloso; annulo superiore, flocculoso, inconspicuo et evanido; sporis truncato-cuneatis, 8.5–10.5(12.5)×3.5–4 μ .

Microscopic characters: Spores hyaline under the microscope, truncate, wedge-shaped, pseudoamyloid, 8.5–10.5(12.5)×3.5–4 μ ; basidia four-spored; cheilocystidia crowded, clavate to subcylindric, or somewhat fusoid, thin-walled, hyaline or pale yellowish, 19–31×6–14 μ ; cuticle of the pileus (squamules) with a palisade as the uppermost layer; dermatocystidia cylindric to clavate, thin-walled, gray-brownish, 35–70×9.5–16 μ ; clamp connections present.

Hab. on the ground in woods of *Abies*, Shimonagafusa, Hachiōji, Oct. 7, 1953; Sept. 18, 1955 (-type). Distr. Endemic (Musashi).

Uncommon. The present fungus has a superficial likeness to *L. citrophylla* (Berk. et Br.) Sacc., but it is macroscopically easily distinguished from the latter in the quick change to blue when bruised or broken. There is no room for doubt that this species should be placed in sect. *Stenosporae* along with *L. grangei* (Eyre) Lange, *L. pseudofelina* Lange, *L. castanea* Quéél., etc., because of the wedge-

shaped spores and the cuticle of the cap with a palisade.

48) **Galerina clavata** (Vel.) Kühner, Galera: 171 (1935).

Spores ochraceous to rusty fulvous under the microscope, oval-ellipsoid to long ellipsoid, minutely rough, without a plage, $9-15 \times 5.5-7 \mu$; basidia four-spored, $22-34 \times 7-8 \mu$; cheilocystidia fasciculate, $27-51 \times 7-14 \mu$, ventricose or flask-shaped with a shorter or longer neck, apex usually capitate ($4-6.5 \mu$ in diam.).

Hab. Scattered to gregarious, among mosses (such as *Ctenidium* sp.), Ishiyama-Hiratsu-chō, Dec. 15, 1954; Mii-dera, Ōtsu, Nov. 25 and Dec. 3, 1955.

Distr. Europe. New to Japan.

Illustration: Kühner, l. c. 172, f. 56; Lange, Fl. Agar. Dan. 4, pl. 130, f. B.

A winter fungus. Rather common.

42) **キミズゴケノハナ** (新変種) だいだい色ないし黄色の美しいきのこで、ザラツキキヤマタケ *Hygrophorus turundus* Fr. よりも大形の胞子を有する。大津市内各地の湿地、沼沢のオオミズゴケの間に夏期発生する。

43) **トガリツキミタケ** (新品種) 欧州、北米に産する *Hygr. acutoconicus* (Clem. in Woods) Smith の広卵円形の胞子を有する一品種である。農林省林業試験場浅川分室の実験林で採つた。

44) **ダイダイガサ** (新称) 最初キューバで発見された種類で、後南北両アメリカ大陸、フィリピン、南阿などにも分布することが知られた。筆者は大津市石山寺境内でシイ(?)の落枝上に生じたものを採つた。

45) **アオミノアシナガタケ** (新称) 越後国東蒲原郡楊川村で採集。

46) **アカヒダカラカサタケ** (新称) 本種の胞子は最初緑色を帯びているといわれるが、筆者はそれを確認し得なかつた。ひだがはじめ赤色を呈しているのが著しい特徴である。大津市石山平津町のヒノキ林で採つた。

47) **キヒダカラカサタケ** (新種) 傘は黄色の地に、灰褐色の小鱗被を密に有し、ひだは黄色である。傷つくと青変する。浅川実験林で採集。

48) **フユノコガサ** (新称) 大津市石山平津町及び三井寺山内、蘚類の間に発生する。

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