パプア・ニューギニア産きのこ類報告 III

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Agarics from Papua-New Guinea III

Tsuguo HONGO*

35. ***Lentinus papuanus*** HONGO sp. nov. (Fig. 1: 1～3)

Pileo 2～3 cm lato, e convexo applanato, mox subdepresso, sicco, ±fibrilloso vel squamuloso, subcinnamomeo, margine leniter sulcato-striata in maturis; carne alba, tenui, lenta, sapore odoreque nullo; lamellis decurrentibus, albis, subdistantibus, 3～4 mm latis, acie fimbriata; stipite 3.5～6 cm longo, 3～5 mm crasso, aequali vel sursum attenuato, basi subradicato, pileo concolori, pruinoso substriatoque, farcto; sporis hyalinis, 7～10×3～4.5 μm, subcylindraceis, levibus, inamyloideis; hyphis fibulatis.

Pileus 2～3 cm broad, convex then plane, at length slightly depressed, surface dry, more or less fibrillose or squamulose, grayish orange (near 6B6**), margin slightly sulcate-striate when old. Flesh white, thin, tough, taste and odor none. Lamellae decurrent, white, subdistant, 3～4 mm broad, the edge fimbriate. Stipe 3.5～6 cm long, 3～5 mm thick, equal or tapering upward, somewhat rooting at the base, somtimes compressed, concolorous with the pileus, pruinose and somewhat striate, stuffed, tough. Spores hyaline, 7～10×3～4.5 μm, subcylindrical, smooth, nonamyloid; basidia four-spored, 22～26×7.5～8 μm; metuloids absent; hymenophoral trama subregular, consisting of moderately thick-walled, 2～9 μm broad hyphae; clamp connections present.

HAB. On burnt ground, Timni (between Bulolo and Lae), Nov. 30, 1971 (no. 6022–***Type*** in TNS***).

DISTR. New Guinea.

A small fungus characterized by its somewhat cinnamon colored pileus, slender build, together with the habitat.

36. ***Panus verruciceps*** HONGO sp. nov. (Fig. 1: 4～7)

Pileo 3～7 cm lato, convexo, dein subinfundibuliformi, margine involuta et barbata, subviscido, e olivaceo brunneo, verrucis albidis vel atro-olivaceis, erectis ornato et atro-punctato; velo albido, appendiculato; carne moderate crassa, lenta, albida, sapore miti, inodore; lamellis decurrentibus, subdistantibus, dichotomis, pallide cremeis, dein pallide griseo-brunneis, 4～6 mm latis; stipite 3～3.5 cm longo, ca. 1.3 cm crasso, ad basim attenuato, pileo pallidiori, squamis revolutis squarroso, solido; sporis hyalinis, 4～5.5×2～2.5 μm, oblongo-ellipsoideis vel subcylindraceis, levibus, inamyloideis; cystidiis 17～26×

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** Color notations are from A. KORNERUP & J. H. WANSCHER, Methuen Handbook of Colour (1967): e.g. 6B6 refers to plate 6, color block B6.

*** TNS: Herbarium of the National Science Museum, Tokyo.

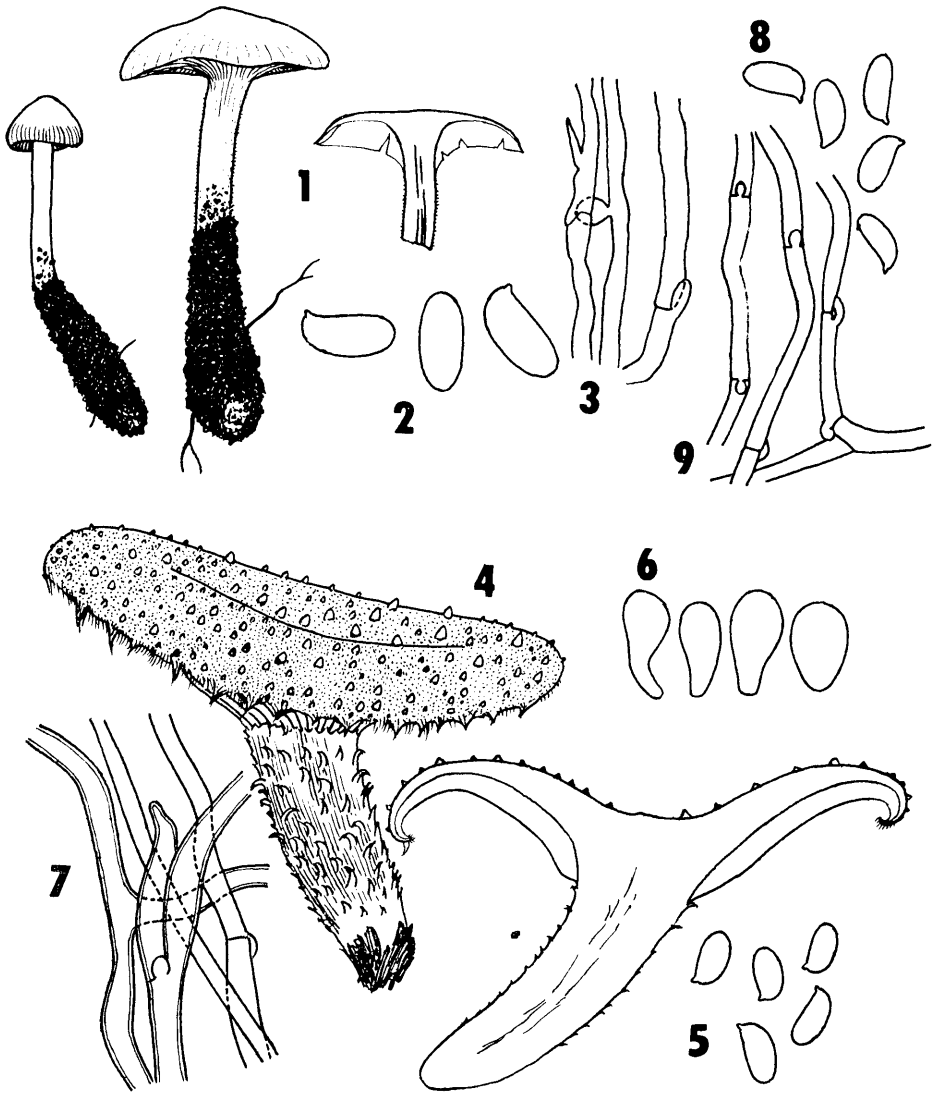

Fig. 1. *Lentinus papuanus*: 1. Fructifications ×1; 2. Spores ×1,500; 3. Hyphae from gill-trama × 900. *Panus verruciceps*: 4. Fructifications ×1; 5. Spores ×1,500; 6. cystidia ×900; 7. Hyphae from gill-trama ×900. *Schizophyllum commune*: 8. Spores ×1,500; 9. Hyphae from gill-trama ×900.

6.5~7.5 μm, clavatis vel late clavatis, ±crasse-tunicatis; hyphis omnibus fibulatis.

Pileus 3~7 cm broad, convex then somewhat funnel-shaped but with the edge strongly incurved, surface subviscid, olive brown, linoleum brown, or cognac (4E7~5E7~6E7) in color and beset with whitish or dark olivaceous, erect warts and dark punctiform squamules, the edge shaggy with fibrils and often bearing whitish fragments of the veil. Flesh moderately thick, tough, whitish, olivaceous under the pellicle, taste mild, odor none.

Lamellae decurrent, subdistant, dichotomously forked, pale cream then pale grayish brown, 4~6 mm broad, the edge even. Stipe 3~3.5 cm long, ±1.3 cm thick, narrowed at the base, colored like the pileus but paler, covered with recurved scales, the extreme apex with whitish veil remains, solid. Spores hyaline, 4~5.5×2~2.5 μm, oblong-ellipsoid or subcylindric, smooth, nonamyloid; basidia four-spored, 16~20×4.5~5 μm; cystidia scattered, 17~26×6.5~7.5 μm, clavate to broadly clavate, more or less thick-walled; gill-trama irregular, of thick-walled, 2.5~5.5 μm broad hyphae; all hyphae with clamp connections.

HAB. On fallen trunks in *Castanopsis-Lithocarpus* forest, Oksapmin, Dec. 15, 1971 (no. 6075, coll. Y. BOBAYASI); Dec. 16, 1971 (no. 6085-***Type*** in TNS).

DISTR. New Guinea.

Recognizable by the warty, olivaceous to brown cap and the scaly stem.

37. ***Schizophyllum commune*** FR. (Fig. 1: 8, 9)

Syst. Mycol. **1**: 330 (1821).

Spores hyaline under the microscope, 4.5~7×1.8~2.3 μm, subcylindric to sausage-shaped, smooth, nonamyloid; basidia four-spored, 17~26×3.5~5 μm; cheilo- and pleurocystidia none; gill-trama regular, of parallel, thick-walled hyphae; all hyphae with clamp connections.

HAB. On fallen trunks of various trees, near Markham Bridge, Lae, Nov. 27, 1971 (no. 6001); Tomba, Mt. Hagen, Dec. 8, 1971 (no. 6050); Oksapmin, Dec. 15, 1971 (no. 6078), Dec. 18, 1971 (no. 6113) and Dec. 19, 1971 (no. 6120); Mt. Wilhelm, Dec. 27, 1971 (no. 6164).

DISTR. Wide-spread in the world.

Very common throughout New Guinea.

38. ***Delicatula dorotheae*** (STEVENSON) HORAK (Fig. 2: 4, 5)

New Zeal. J. Bot. **9**: 417 (1971).

SYN. *Resupinatus dorotheae* STEV. Kew Bull. **19**: 23, pl. 6, 1 (1964).

Spores hyaline, 8~12×5~5.5μm, almond-shaped, smooth or minutely rough, nonamyloid; basidia four-spored, 21~32×6~8 μm; gill-trama of interwoven, somewhat thick-walled, 2.5~8 μm broad hyphae; clamp connections present.

HAB. On fallen twigs in *Nothofagus* forest, Mt. Hagen, Dec. 9, 1971 (no. 6060, coll. Y. KOBAYASI).

DISTR. New Zealand, New Guinea.

A small, dull whitish species, recognizable by its pleurotoid habit and the almond-shaped spores.

39. ***Armillariella fellea*** HONGO sp. nov. (Fig. 2: 1~3)

Pileo 4~6 cm lato, convexo, dein expanso, interdum subumbonato, non viscido, primum e melleo-brunneo olivaceo, dein melleo, squamulis fusco-brunneis, in medio magis stipatis punctato; carne pallida, in margine tenui, subfragili, odore farinaceo, sapore mox

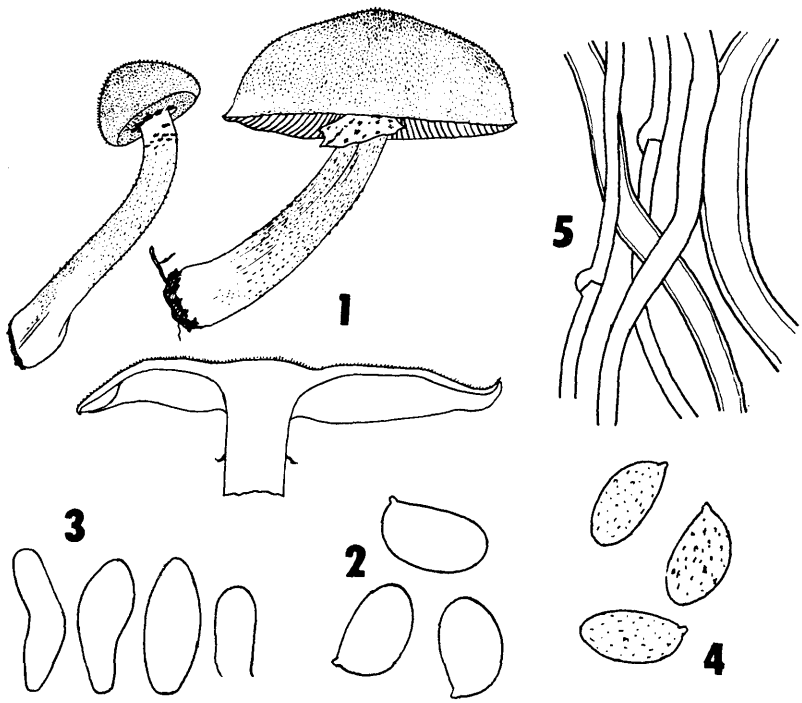

Fig. 2. *Armillariella fellea*: 1. Fructifications ×1; 2. Spores ×1,500; 3. Cheilocystidia ×900. *Delicatula dorotheae*: 4. Spores ×1,500; 5. Hyphae from gill-trama ×900.

felleo; lamellis adnato-subdecurrentibus, subconfertis vel subdistantibus, ±5 mm latis, albis, demum brunnescenti-maculatis; stipite 5~6 cm longo, 5~7 mm crasso, aequali vel apicem versus attenuato, inferne incrassato, e pallide argillaceo rubello-brunneo, infra annulum squamulis minutis subfuscis ornato, solido vel farcto; rhizomorphis nigris praesentibus; annulo membranaceo, e albido flavido, inferne griseo-flocculoso-squamuloso; sporis sub microscopio dilute flavidis, 7.5~10×5~6 μm, ellipsoideis vel ovoideis, levibus, inamyloideis; cheilocystidiis 20~26×5.5~10 μm, late clavatis vel subcylindraceis; hyphis defibulatis.

Pileus 4~6 cm broad, convex then expanded, sometimes subumbonate, surface not viscid, melleous brown to olivaceous at first, then honey yellow, with small, almost punctiform, fuscous to dark brown squamules, which are usually concentrated in the center. Flesh pallid, thin toward the pileus margin, somewhat fragile, odor farinaceous, taste slowly becoming very bitter. Lamellae adnate with a decurrent tooth, subclose or subdistant, ±5 mm broad, white, often brown-spotted with age. Stipe 5~6 cm long, 5~7 mm thick, equal or tapering upward, with a thickened base, pinkish buff to reddish brown, beset below the ring with minute, dark squamules, solid or stuffed; rhizomorphs blackish, rather thin. Ring membranous, persistent, whitish to yellowish, adorned below with gray, flocculose-granulose squamules. Spores slightly yellowish under the microscope (in KOH), 7.5~10×

5~6 μm, ellipsoid to ovoid, smooth, nonamyloid; basidia four-spored, 23~26×7~8 μm; cheilocystidia scattered, 20~26×5.5~10 μm, broadly clavate or subcylindric, thin-walled; pleurocystidia absent; all hyphae without clamp connections.

HAB. Cespitose on fallen trunks in mossy forest, Mt. Hagen, Dec. 8, 1971 (no. 6051, coll. Y. DOI-***Type*** in TNS); Dec. 9, 1971 (no. 6054).

DISTR. New Guinea.

Characterized by the entirely punctate-scaly cap and stem and the very bitter-tasting flesh. Differs from *A. montangei* SING. in the bitter taste of the flesh and the presence of blackish rhizomorphs. *A. limonea* STEV. is a somewhat larger species of New Zealand, with a lemon yellow cap and a strongly astringent taste [according to SINGER: Mycofl. Austr. 41 (1969)].

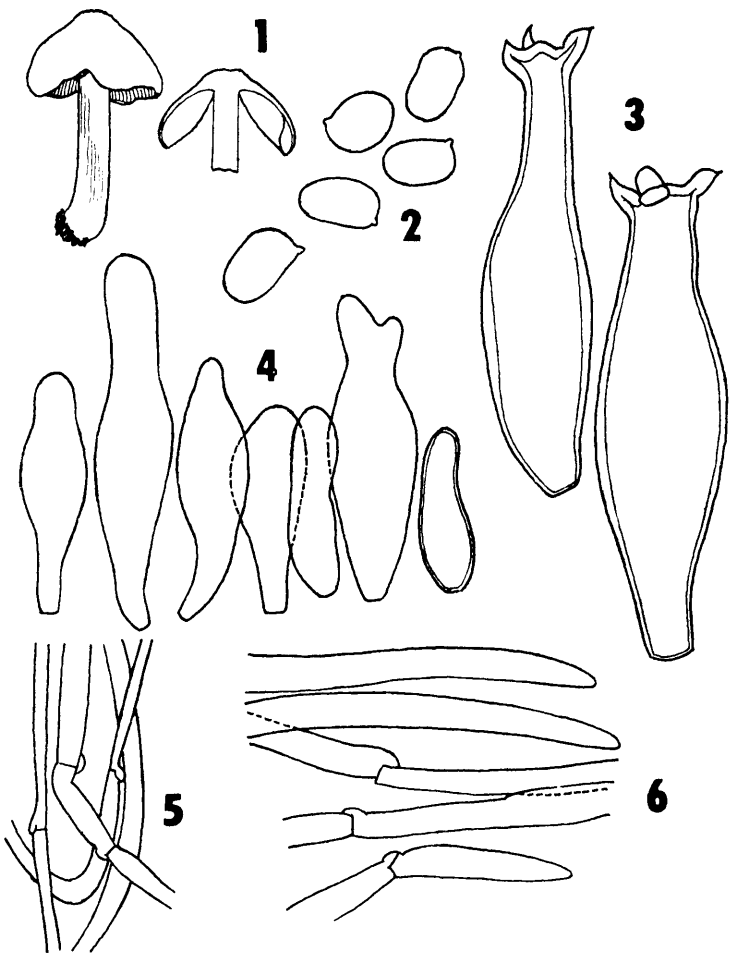

Fig. 3. *Pluteus kobayasii*: 1. Fructifications ×1; 2. Spores ×1,500; 3. Pleurocystidia ×900; 4. Cheilocystidia ×900; 5. Hyphae from gill-trama ×600; 6. Elements of epicutis of pileus ×600.

Said to be edible.

40. ***Pluteus kobayasii*** HONGO sp. nov. (Fig. 3)

Pileo 1.8~3 cm lato, convexo dein plano, subumbonato, leviter innate fibrilloso, obscure brunneo, subnigro in centro; carne alba, inodora; lamellis liberis, albis, dein roseolis, confertis; stipite 2.5~3 cm longo, 3~4 mm crasso, ad apicem subattenuato, basi subincrassato, innate fibrilloso, pallide griseolo, solido; sporis pallide stramineis, 6~8.5×4.5~5 μm, ellipsoideis, levibus, saepe substrangulatis; pleurocystidiis numerosis, 46~80×12.5~22 μm, metuloidiformibus, hyalinis; cheilocystidiis numerosis, 27~63×8~16 μm, hyalinis, versiformibus, tenui- vel crasse-tunicatis; hyphis fibulatis.

Pileus 1.8~3 cm broad, convex then applanate, subumbonate, surface somewhat innately fibrillose, dark brown (5F8~6F7), almost blackish at the center, often indistinctly rugulose in the center. Flesh white, blackish brown beneath the pellicle, moderately thick at the disc, inodorous. Lamellae free, white then pinkish, close. Stipe 2.5–3 cm long, 3–4 mm thick, slightly attenuated upward, somewhat thickened at base, innately fibrillose, pallid grayish or pale grayish brown, solid. Spores pale stramineous, 6~8.5×4.5~5 μm, ellipsoid, smooth, often somewhat constricted at middle, 1– or multi-guttulate, somewhat thick-walled; basidia four- or two-spored, 25~37×(5) 7.5~10 μm; pleurocystidia (metuloids) numerous, 46~80×12.5~22 μm, fusoid-ventricose, moderately thick-walled, hyaline, with 3 or 4 acute apical prongs; cheilocystidia numerous, 27~63×8~16 μm, subcylindrical, clavate, ventricose-ampullaceous, or fusoid with broadly rounded apex, intermixed with few transitions toward the metuloids, hyaline, thin- or slightly thick-

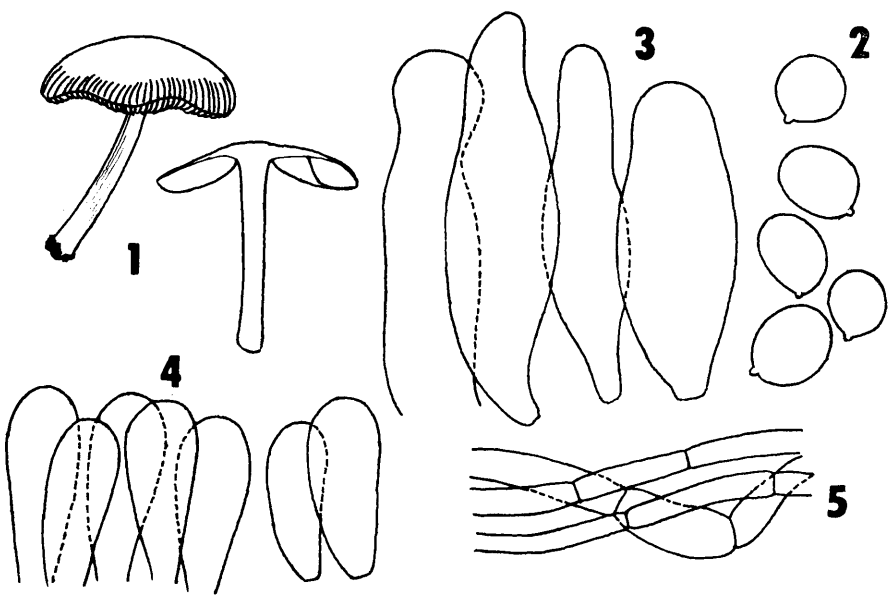

Fig. 4. *Pluteus* sp.: 1. Fructifications ×1; 2. Spores ×1,500; 3. Pleurocystidia ×900; 4. Cheilocystidia ×900; 5. Elements of epicutis of pileus ×600.

walled; epicutis consisting of filamentous hyphae, those with dissolved brown pigment and 4~13 μm thick, the terminal members with subacute apex; all hyphae with clamp connections.

HAB. On rotting wood in *Castanopsis-Lithocarpus* forest, Oksapmin, Dec. 15, 1971 (no. 6081, coll. Y. DOI); Dec. 16, 1971 (no. 6093, coll. Y. KOBAYASI & Y. DOI-***Type*** in TNS).

DISTR. New Guinea.

Nearest to *P. brunneidiscus* MURR., *P. washingtoniensis* MURR., etc., but differing in the smaller size, often somewhat constricted spores and shape of marginal cystidia.

41. ***Pluteus*** sp. (Fig. 4)

Pileus 2~3 cm broad, convex then expanded, sometimes subumbonate, surface dark brownish gray, appressed-fibrillose, more or less sulcate-striate at the margin. Flesh thin, white, grayish under the pellicle, taste and odor none. Lamellae free, white then flesh-colored, close, 2.5~4 mm broad, ventricose. Stipe 2.5~3 cm long, 2~3 mm thick, equal, silky-fibrillose, white above, grayish from the base upward, solid. Spores pale stramineous, 5.5~7.5×5~6.5 μm, subglobose, smooth, 1- or multi-guttulate; basidia four-spored; pleurocystidia scattered, 42~64×14.5~22 μm, fusiform to lageniform with broad apex, hyaline, more or less thick-walled; cheilocystidia abundant, 29~41×10~14.5 μm, clavate, thin-walled, hyaline; epicutis of pileus consisting of fibrils composed of cylindric hyphae which are 5~10 μm broad and filled with intracellular dissolved brown pigment, the terminal members with rounded tips; clamp connections absent.

HAB. On dead trunk in tropical rain forest, Baiyer River, Dec. 7, 1971 (no. 6049).

42. ***Pluteus*** sp. (Fig. 5)

Pileus 4~5 cm broad, convex then expanded, at length slightly depressed, surface nearly glabrous, lemon yellow (somewhat duller than 2A6), translucent-striate almost to the disc. Flesh thin, fragile, pale yellow; taste mild, odor none. Lamellae free, white, then pinkish, close to subdistant, ±5 mm broad. Stipe 3.5~5 cm long, 2.5~3.5 mm thick, equal or slightly tapering upward, with subbulbous base, fibrillose, pale yellow, at base more or less darker, whitish within, solid or hollow. Spores pale stramineous, 5~6.5 ×4~5.5 μm, subglobose, smooth; basidia four-spored; pleurocystidia scattered, 42~66× 17~23 μm, clavate or vesiculose, hyaline, thin-walled; cheilocystidia numerous, 21~49× 7.5~12.5 μm, acutely fusiform or clavate-mucronate, hyaline, thin-walled; epicutis of the pileus consisting of an epithelium of globose, subglobose or short-clavate-vesiculose cells 7.5~22 μm in diam.

HAB. On rotten trunk in tropical rain forest, Baiyer River, Dec. 7, 1971 (no. 6048).

Differs from *P. chrysophlebius* (BERK. & RAV.) SACC. in the shape of the cystidia and the color of the cap.

43. ***Panaeolus subbalteatus*** (BERK. & BR.) SACC. (Fig. 6: 1~4)

Syll. Fung. **5**: 1124 (1887); HONGO, J. Jap. Bot. **26**: 25 (1951).

Pileus 8~22 mm broad, campanulate to convex, soot brown (5F5) to grayish brown

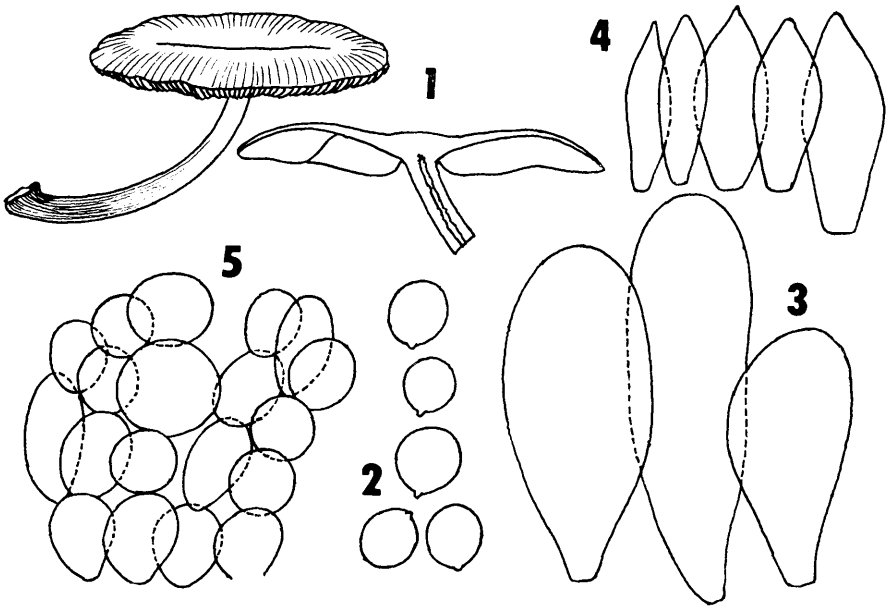

Fig. 5. *Pluteus* sp.: 1. Fructifications ×1; 2. Spores ×1,500; 3. Pleurocystidia ×900; 4. Cheilocystidia ×900; 5. Elements of epicutis of pileus ×900.

(6E4), showing marginal belt when partly dry. Flesh thin, grayish brown, fragile. Lamellae adnate, subdistant, pale brown, then mottled, finally almost blackish, the edge whitish, broad, ventricose. Stipe 5.5~8.5 cm long, 1~2 mm thick, equal, pale brown, hollow, cartilaginous. Spores black in deposits, dark brown under the microscope, 10.5~15×8~9.5×6~8 μm, flattened, smooth, broadly ovate in face view, nearly elliptic in side view, pore apical and distinct; basidia four-spored, hyaline, 20~25×8.5~10.5 μm; cheilocystidia abundant, 27~38×7~13 μm, fusoid-ventricose to subvesiculose, with a broadly rounded, slightly enlarged apex, hyaline, thin-walled.

HAB. On lawn, Civic Guest House, Boroko, Port Moresby, Jan. 5, 1972 (no. 6196).

DISTR. Europe, Africa, Japan, New Guinea, North America.

This fungus has probably been introduced from overseas.

44. ***Conocybe*** sp. (Fig. 6: 5~8)

Pileus 1.5~3 cm broad, obtusely conical to campanulate, then somewhat expanded-convex, not hygrophanous, glabrous, Pompeian yellow (5C6) to yellow ocher (5C7). Flesh thin, fragile, pale ochraceous, taste and odor none. Lamellae adnate, or nearly free, ventricose, subdistant, 3.5~5 mm broad, brownish yellow (5C8). Stipe 5.5~7.5 cm long, ±3 mm thick, equal, concolorous, finally tinged rusty, entirely pruinose-striate, fistulose, cartilaginous. Spores rusty-fulvous under the microscope, 10~12(14)×5.5~6.5(7.8) μm, ellipsoid, smooth, with an apical hyaline germ pore; basidia four-, two-, or one-spored, 22~32×7~9 μm; cheilocystidia 21~27×7~8 μm, lecythiform, head 3~5 μm diam.;

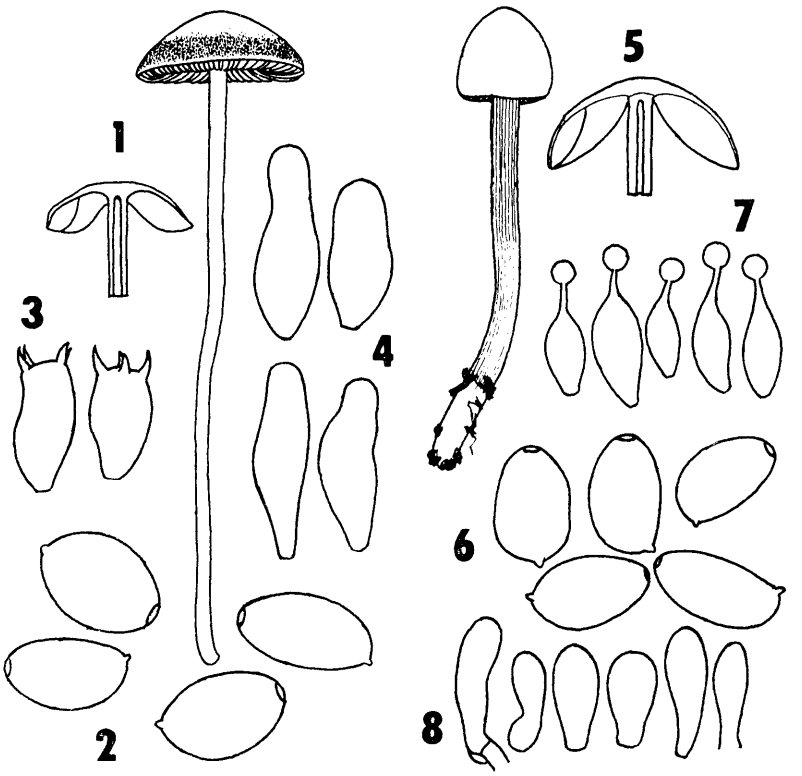

Fig. 6. *Panaeolus subbalteatus*: 1. Fructifications ×1; 2. Spores ×1,500; 3. Basidia ×900; 4. Cheilocystidia ×900. *Conocybe* sp.: 5. Fructifications ×1; 6. Spores ×1,500; 7. Cheilocystidia ×900; 8. Caulocystidia ×900.

caulocystidia 15~25×4.5~8.5 μm, clavate; clamp connections present.

HAB. In grassland, Mt. Wilhelm, ca. 3600 m alt. (near Pindaunde), Dec. 28, 1971 (no. 6172).

Appendix:

Xeromphalina tenuipes (SCHW.) A.H. SMITH
Pap. Mich. Acad. Sci. Arts Lett. **38**: 84 (1952, published in 1953).

SYN. *Agaricus tenuipes* SCHW. Trans. Am. Phil. Soc. **II, 4**: 147 (1822). *Collybia tenuipes* (SCHW.) SACC. Syll. Fung. **5**: 213 (1887). *Heimiomyces tenuipes* (SCHW.) SING. Mycol. **35**: 159 (1943). *Marasmius amabilipes* PK. Bot. Gaz. **4**: 216 (1879). *Collybia neovelutipes* HONGO, Rept. Tottori Mycol. Inst. **11**: 33 (1974) (syn. nov.).

DISTR. North and South America (especially in the tropics), New Guinea.

和 文 摘 要

パプア・ニューギニア産きのこ類報告 (3)

本 郷 次 雄

35. *Lentinus papuanus* HONGO (新種) —本属としてはやせ形の小形種で，かさはニッケイかっ色，茎は細長く，焼けあとに発生する。

36. *Panus verruciceps* HONGO (新種) —かさはややじょうご形，オリーブ色〜かっ色で，多数のいぼと細点におおわれる。縁部には粗毛と被膜の破片が付着する。また，茎にはささくれ状のりん片をそなえている。高地のシイ属，マテバシイ属などのまじった林内の倒木上に発生。

37. *Schizophyllum commune* FR. スエヒロタケ—普遍種で，ニューギニア各地にきわめて普通。

38. *Delicatula dorotheae* (STEV.) HORAK—小形，類白色のヒラタケ型のきのこで，最初ニュージーランドから記載されたものである。

39. *Armillariella fellea* HONGO (新種) —ナラタケに類似しているが，小片をかむとあと味がきわめて苦く，30 分あまり口のなかから苦味が消えない。しかし，ハーゲン山付近では食用にするといって多量に採集されている。

40. *Pluteus kobayasii* HONGO (新種) —小形，暗かっ色の種類で，かぎ状突起をそなえた厚膜の側シスチジアを有し，胞子はしばしば多少くびれている。縁シスチジアは多くは薄膜であるが，やや厚膜の，側シスチジアへの移行型をまじえている。

41. *Pluteus* sp. —暗かつ灰色の小形種で，シスチジアはすべて薄膜，胞子はほぼ球形。

42. *Pluteus* sp. —レモン色の中形種で，かさの表皮は球形細胞より成る。シスチジアは薄膜，胞子は類球形。

43. *Panaeolus subbalteatus* (BERK. & BR.) SACC. センボンサイギョウガサ—北半球に広く分布。ニューギニアへはおそらく人為的に渡来したものと思われる。

44. *Conocybe* sp. —黄土色の可れんなきのこで，ウィルヘルム山の海抜 3600 m 付近の草原にて採集。