

RESEARCH NOTE

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Tectella patellaris from Korea

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One rare and interesting species collected from Gyeryong-san, Chungnam Province is described and illustrated in detail. The species “*Tectella patellaris* (Fr.) Murr.” and genus “*Tectella* Earle” is a first record for Korean fungal flora. Specimens cited here have been deposited in the Herbarium Conservation Center of National Academy of Agricultural Sciences.

KEYWORDS : Fungal flora, *Tectella*, *Tectella patellaris*, Unrecorded genus, Unrecorded species

The genus *Tectella* is a decomposer characterized by a small size. Descriptions and photographs of the fruiting bodies, which were taken primarily during a mushroom survey, were restudied. For the microscopic features, the segments of dried basidiocarps were transferred in vials with 70% alcohol or distilled water, until the cells swelled to near their original size and shape. Then, the gill sections or trama were placed on a slide glass, stained with staining reagents, covered with a coverslip, and observed under a microscope. The macroscopic and microscopic features are described in detail and illustrated with their habits and habitats. In the following descriptions, color names given in quotations and color notations, e.g., 4A2~8F4, are from those of Kornerup and Wanscher [1].

Genus *Tectella* Earle, in Bull. N. Y. Bot. Gard. 5: 433 [2].

Korean name. Golmubeoseosok.

Position in classification. Mycenaceae, Agaricales, Agaricomycetidae, Agaricomycetes, Agaricomycotina, Basidiomycota, Fungi [3].

Type species. *Tectella operculata* (Berk. & M. A. Curtis) Murrill, N. Am. Flora 9: 247 [4].

Pileus non stipitate, attached laterally or at some point of surface. Veil present. Spores up to 5 µm long, small, weakly amyloid, smooth. Basidia normal, 4-spored. Cystidia

none. Cheilocystidia present and typically dimorphic, often thick-walled. Trama of the pileus in upper layer strongly gelatinized, in lower layer non-gelatinous with thick walled, with clamp connection, interwoven sclerified generative hyphae inamyloid, pigment present but incrusting. Hymenophore lamellate. Lamellae not anastomosing. Hymenophoral trama subregular, most ± thick-walled. Epicutis not a Rameales or astromelloid structure, non gelatinous, brownish. Carpophores with veil andpendulous.

This genus differs from other stipeless veiled agarics in having the amyloid spores and monomitic trama.

Development of the carpophores. Hemiangiocarous, Bivelangiocarous and pileocarous [5].

***Tectella patellaris* (Fr.) Murr., in N. Am. Flora 9: 247.**

Korean name. Golmubeoseos.

Synonymy.

Panus operculatus Berk. & M. A. Curtis, Ann. Mag. Nat. Hist., Ser. III 4: 296 [6].

Pocillaria operculata (Berk. & M. A. Curtis) Kuntze, Rev. Gen. Planta (Leipzig) 3: 506 [7].

Pocillaria patellaris (Fr.) Kuntze, Rev. Gen. Planta (Leipzig) 3: 506 [8].

Macroscopic features (Fig. 1).

Pileus 8~15 mm wide, at first cylindrical turbinate to cup-shaped, then convex, shell-shaped, cup-like. Pendulous margin strongly incurved, slimy to tacky, smooth, fibrous,

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Fig. 1. A, B, Carphophores of *Tectella patellaris*.

brown to ochre brown, brownish yellowish brown (10YR 5/4~8) to reddish yellow (7.5YR 6/4~6) or strong brown (7.5YR 5/4~6), becoming paler in mature. Context leathery-tough.

Lamellae arranged from stublike stalk or point of attachment distant, narrow, buff brown to light brown, when young covered with cream to whitish membranous inner veil.

Stipe 2~7 × 2~3.5 mm, subcylindric, curved, excentric, smooth, dry, concolorous with pileus or paler. Veil, membranous, very thin, pinkish-buff.

Microscopic features (Fig. 2).

Spore print white. Spore 3.45~4.4 × 1~1.3 μm, sausage-shaped, smooth, hyaline, amyloid.

Basidia 19.14~20 × 4.4 μm, 4-spored, cheilocystidia 17.4~26.1 × 7.8~11.3 μm. pileipellis composed of at times thick, flexure, hyphoid cells with clamp connection 20~34.8 × 4.35~5.2 μm, 130 μm thick, substrata layer gelatinous, cylindric ixotrichoderm, 17.4~73.95 × 2.6~3.5 μm with clamp connection up to 820 μm, Trama layer up to 840 μm with clamp.

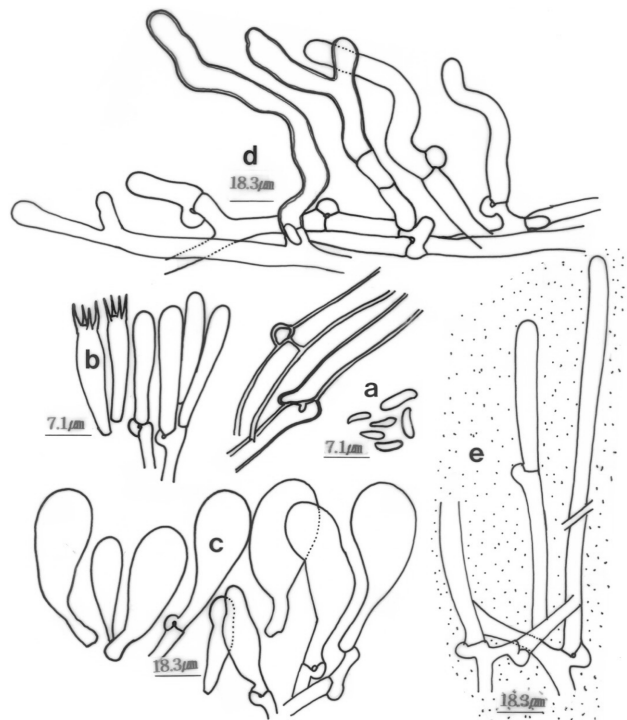


Fig. 2. Microscopic structures of *Tectella patellaris*. a, Spores (×1,000); b, Basidia (×1,000); c, Cheilocystidia (×1,000); d, Pileipellis (×400); e, Marginal cell gelatinous layer (×400).

Habit and habitat. Solitary or a few caespitose, on the logs or fallen branches and twigs of broadleaves tree.

Specimens examined. Gyeryong-san, Gongju-si, Chungcheongnam-do, September 28, 1995 (HCCN3050G); Jikjisa, Gimcheon-si, Gyeongsangbuk-do, October 10, 1996 (HCCN6068A), July 4, 2007 (HCCN15267A); Chiak-san, Wonju-si, Gangwon-do, September 15, 2000 (HCCN8621A).

Remarks. This taxa without stipe is easily recognized and differs from other stipeless veiled agarics by the small fruit body, lamellae being enclosed with membranous inner veil when young, color of lamellae when young and amyloid spores [9].

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