
Micropsalliota albofelina

Fungal Planet 1365 – 24 December 2021

Micropsalliota albofelina D. D. Ivanova & O.V. Morozova, *sp. nov.*

Etymology. From Latin '*albus*' (white) and '*felis*' (cat), referring to the surface of the basidiomata, covered with white hairs that resemble white feline fur.

Classification — *Agaricaceae*, *Agaricales*, *Agaricomycetes.*

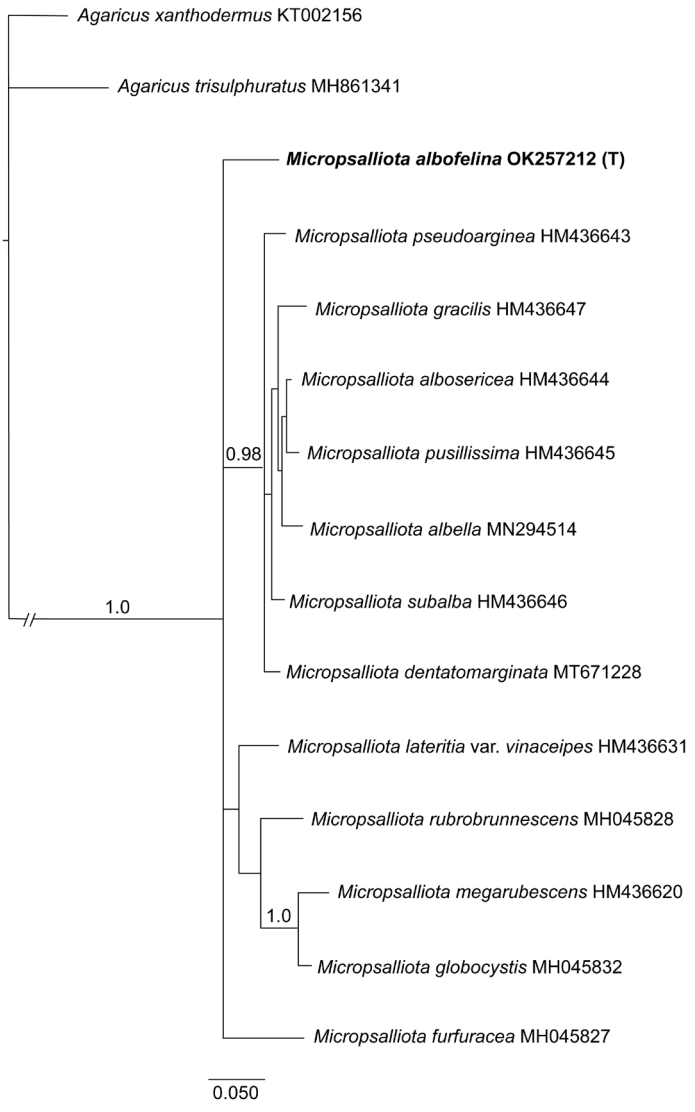
Basidiomata delicate and tiny, pristine white when fresh, discolouring to brown, brown in exsiccata, reddish brown (6C5, 6D5–6; Kornerup & Wanscher 1978) when bruised or cut. *Pileus* 4–5 mm diam, convex, surface hirsute due to presence of thin hairs, pure white. *Context* less than 1 mm. *Lamellae* free, with 1–2 series of lamellulae, 0.5–0.7 mm broad, white as the whole basidiomata. *Annulus* absent. *Stipe* 17–29 × 1.0–1.5 mm, cylindrical, similarly thick across the whole length, concolourous with the pileus, surface hirsute. *Odour* faint, *taste* not reported. *Basidiospores* 5.5–7.5 × 3.5–4 µm, Q = 1.4–2, Qav = 1.8 (n = 21) ellipsoid, with apical thickening. *Basidia* 12.5–17.5 × 6.5–8 µm, 4-spored, clavate, hyaline, smooth (in the light microscope). *Cheilocystidia* 33–34.5 × 10–13 µm, irregularly lecythiform, capitate, with a long, narrow and fragile neck (3–4 µm diam) and thickened base (10–13 µm diam), capitulum 4–6 µm diam, pigment absent. *Pleurocystidia* none. *Pileipellis* a cutis with transition to a trichoderm, composed of cylindrical hyphae 8–15 µm wide, a bit constricted in septa, slightly incrusted. *Stipitipellis* of cylindrical hairs 5–15 µm wide, some with capitate apices.

Habit, Habitat & Distribution — On naked soil in tropical evergreen mixed forests. Known from Vietnam.

Typus. Vietnam, Binh Phuoc Province, Bu Gia Map District, Bu Gia Map National Park N12.19155° E107.20422°, 520 m a.s.l., on naked soil of bank of stream in tropical evergreen mixed forests with the participation of palms, 20 Aug. 2011, *O.V. Morozova* (holotype LE 312536, ITS and LSU sequences GenBank OK257212 and OK257209, MycoBank MB 841774).

Notes — *Micropsalliota albofelina* is characterised by the following features: delicate, tiny pristine white discolouring to brown basidiocarps, convex pileus, cylindrical stipe without annulus, and cheilocystidia with long neck and well-distinguished capitulum. The most distinctive feature of this species is the presence of thin white hairs which cover the entire basidioma.

There are some species of *Micropsalliota* with tiny white basidiocarps: *M. alba*, *M. albella*, *M. albocericea, M. dentatomarginata*, *M. pudica*, and *M. pusillissima*. However, none of them is marked by so peculiarly a fuzzy surface and most of them (with the exception of *M. pudica*) possess the stipe with an annulus. Besides, *Micropsalliota alba* (described from India) differs by having wider conical pilei (4–8 mm diam), although has similar cheilocystidia with a capitulum and long neck to that of *M. albofelina* (Heinemann & Little Flower 1983). *Micropsalliota albella* (from Thailand) is distinguished by non-capitate cheilocystidia (He et al. 2020). *Micropsalliota albosericea* (known from India and Thailand) is characterised by distant ventricose lamellae, cymbiform spores and ventricose-capitate cheilocystidia (Zhao et al. 2010). *Micropsalliota dentatomarginata* (from China) has convex pilei and cheilocystidia with thickened base, long neck and capitate apex, but differs by wider pilei (12–15 mm diam) with appendiculate dentate margin (Li et al. 2021). *Micropsalliota pusillissima* (from Thailand) differs by smaller size of basidiomata (pileus 1–3 mm, stipe 5–12 × 0.2 mm with annulus), and ventricose-capitate cheilocystidia (Zhao et al. 2010). *Micropsalliota pudica* (from India) lacks an annulus and possesses capitate cheilocystidia, but is distinguished from *M. albofelina* by a convex-campanulate silky smooth pileus with appendiculate margin and yellow-orange discolouring of the basidiomata (Heinemann & Leelavathy 1991).



Phylogenetic tree derived from a Bayesian analysis, based on nrITS1-5.8S-ITS2 data. Analysis was performed under a GTR model of evolution, for 3 M generations, using MrBayes v. 3.2.1 (Ronquist et al. 2012). Posterior probability (PP > 0.95) values from the Bayesian analysis are shown at the nodes. The scale bar represents the expected number of nucleotide changes per site. The novel species is shown in **bold**.

Colour illustrations. Vietnam, Binh Phuoc Province, Bu Gia Map District, Bu Gia Map National Park, evergreen mixed forest, type locality. Spores; basidium; stipitipellis; cheilocystidia; pileipellis; basidiomata *in situ*; discolouring basidiomata (all from holotype). Scale bars = 1 cm (basidiomata), 10 µm (all others).

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