

## ***STROBILOMYCES MIRANDUS*, A SPECIES NEW TO CHINA**

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### **松塔牛肝菌属中国一新记录种——黄纱松塔牛肝菌**

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*Strobilomyces* is one of the most common genera in the subtropical and tropical areas (Singer, 1986). To date, about 20 species have been reported in China (Ying & Ma, 1985; Ying, 1987; Zang, 1997; Wen & Ying, 2001; Huang, 2002). Here we report a new record discovered in the survey of the specimens deposited in HKAS (Herbarium of Cryptogams, Kunming Institute of Botany of the Chinese Academy of Sciences). In the description, macro-morphology is based on the field notes and color slides of the materials; micro-morphology is based on observation of the materials under microscope. For microscopic studies, 5% KOH was used as mounting medium to rehydrate the tissue. For the size of the basidiospore, the reticulum is not included. The abbreviation  $n/m/p$  means  $n$  basidiospores measured from  $m$  fruitbodies of  $p$  collections. The notation of the form  $(a) b-c (d)$  stands for the dimensions of basidiospores; the range  $b-c$  contains a minimum of 90% of the measured values,  $a$  or  $d$  given in parentheses stands for extreme values.  $Q$  is used to mean "length/width ratio" of a basidiospore in side view;  $Q$  means average  $Q$  of all basidiospores  $\pm$  sample standard deviation.

*Strobilomyces mirandus* Corner, Boletus in Malaysia: 61, 1972.

Pileus convex, 2.5-6.0 cm in diam., dry, golden tawny to brownish yellow, becoming brown to blackish when over mature, covered with yellowish or brownish, then blackish, felty to verrucose, conical or patched squamules; pileal margin appendiculate with yellow to dull yellow veil remnants. Hymenophore adnate to subdecurrent, surface white to greyish pink when mature, but becoming grey-brown to dark brown with reddish tinge on bruising; pores angular, 1-2 pores per mm. Stipe central,  $6-10 \times 0.5-0.8$  (1.2) cm, subcylindrical, sometimes somewhat expanded toward the base, whitish to yellowish, upper half shallowly reticulate, covered with yellowish or brownish squamules or fibrils which often form an upper rudimental ring. Context of pileus and stipe whitish but turning rubescent then black when cut; odor indistinct.

Basidia  $27-45 \times 16-19 \mu\text{m}$ , clavate, 4-spored; sterigmata  $3-4 \mu\text{m}$  long. Basidiospores  $[43/3/3]$  (7.0-)  $7.5-8.5 \times (6.0-) 6.5-7.5 \mu\text{m}$ , [ $Q = 1.13-1.23(-1.25)$ ,  $Q = 1.18 \pm 0.04$ ], subglobose to broadly ellipsoid in side or ventral view, yellowish brown in KOH, covered with complete reticulum (about  $1 \mu\text{m}$  in height); meshes angular,  $1-2.5 \mu\text{m}$  in diam; plage proportionally large, nearly smooth, without reticulum. Pleurocystidia abundant, fusiform to subfusiform ( $33-49 \times 13.5-19 \mu\text{m}$ ), with a subacute apex or a short obtuse appendage, thin-walled, often with fuscous contents. Cheilocystidia numerous, mostly subfusiform to subclavate ( $32-45 \times 15-17 \mu\text{m}$ ), rarely with a subacute apex, thin-walled, hyaline to slightly brownish. Squamules on pileus composed of slightly thick-walled, seldom branching, slightly interwoven filamentous hyphae, which are more

or less perpendicular to the surface of the pileus, often with yellowish to brownish vacuolar pigment; the end cells cylindrical to narrowly clavate,  $35-85 \times 7-15 \mu\text{m}$ .

Habit, habitat, and distribution: Solitary to scattered in humus under trees of *Lithocarpus* in tropical to southern subtropical forests in southwestern Yunnan, China, at 1200–1700 m elev. Described from Malaysia. New to China.

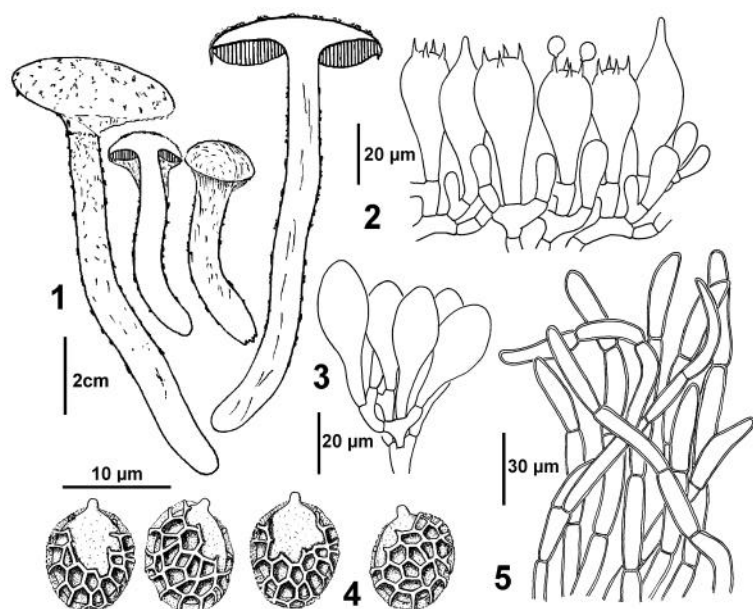


Fig. 1-5 *Strobilomyces mirandus*

1. Basidiocarps;
2. Basidia and pleurocystidia;
3. Cheilocystidia;
4. Basidiospores;
5. Apical part of a squamule on the pileus

Specimens examined: China. Yunnan Province: Yingjiang County, in the vicinity of Tongbiguang, alt. 1400 m, growing under trees of *Lithocarpus*, 13 July 2003, Z. L. Yang 3653 (HKAS 42847); Tengchong County, Qushi, alt. 1700 m, growing under trees of *Lithocarpus*, 23 July 2003, L. Wang 228 (HKAS 43322); Longchuan County, Menggong, alt. 1200 m, in a tropical monsoon forest, 23 July 2003, H. Luo 33 (HKAS 43572).

Remarks: *Strobilomyces mirandus* is characterized by its brownish yellow to golden tawny basidiocarp, reticulate basidiospores, and shortly beaked pleurocystidia (Corner, 1972). The color of the pileus surface, the squamules on the pileus and the surface of the stipe are golden tawny to yellowish when young, but usually become darker when over mature. However, the veil remnants hanging on the pileal margin remain yellow to dull yellow even over mature according to our field observations.

*Strobilomyces sanmingensis*, described from central Fujian of southeastern coastal China by Huang (2002), is very close to *S. mirandus* if they are not conspecific.

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