

# 环柄菇属东亚一新记录种——锥鳞环柄菇\*

梁俊峰<sup>1,2\*\*</sup>

(1 中国科学院昆明植物研究所生物多样性与生物地理学重点实验室, 云南 昆明 650204;

2 中国科学院研究生院, 北京 100049)

**摘要:** 报道东亚环柄菇属的一个新记录种——锥鳞环柄菇 *Lepiota jacobi* Vellinga & Knudsen, 标本采自中国云南。该种的鉴别特征是菌盖密被灰色至暗褐色的锥状鳞片; 担孢子椭圆形, 腹部近平直, 极小; 囊状体缺如。

**关键词:** 锥鳞环柄菇; 新记录种; 东亚

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## *Lepiota jacobi* (Agaricaceae), a Species New to East Asia

LIANG Jun-Feng<sup>1,2\*\*</sup>

(1 Key Laboratory of Biodiversity and Biogeography, Kunming Institute of Botany, Chinese Academy of Sciences,

Kunming 650204, China; 2 Graduate University of Chinese Academy of Sciences, Beijing 100049, China)

**Abstract:** *Lepiota jacobi* Vellinga & Knudsen, a species new to East Asia, is reported and illustrated. It is characterized by its small spores, the absence of cystidium, and the more or less acute spines on pileus made up of inflated cells in short chains.

**Key words:** *Lepiota jacobi*; New record; East Asia

*Lepiota* (Pers.: Fr.) S. F. Gray is one of the most common genera in Agaricaceae, Agaricales, basidiomycetes. Up date, nearly 70 species have been reported in East Asia (Bi *et al.* 1990, 1994; Chiu, 1948; Hongo, 1986; Imai, 1938, 1939; Ito, 1959; Li *et al.* 1993; Mao, 1998; Teng, 1936, 1939, 1996; Wang, 2004; Wang and Yang, 2005a, b; Yang, 1990; Yang *et al.* 2005; Yuan, 1995). *L. jacobi* Vellinga & Knudsen is reported and illustrated from East Asia for the first time herein. In the description, macro-morphology is based on the field notes and color slides of the material; micro-morphology is based on observation of the material under microscope. For microscopic studies, 5% KOH was used as mounting medium to rehydrate the tissue. For the size of the basidiospore, the apiculus is not included. The abbreviation n/m/p means n basidiospores measured from m basidiomata of p collections. The notation of the form l-b-c stands for the dimensions of the basidiospores. Q is used to mean "length/width ratio" of a basidiospore in side view; Q means average Q of all basidiospores ± sample standard deviation.

*Lepiota jacobi* Vellinga & Knudsen, in *Persoonia* **14**: 407. 1992.

*Lepiota langei* Knudsen in *Bot. Tidsskr.* **75**: 130. 1980, non

*Lepiota langei* Locq., in *Bull. Soc. Linn. Lyon* **14**: 95. 1945.

*Lepiota eriophora* auto. non Peck in *Bull. Torr. Bot. Club* **30**: 95, 1903.

*Cystolopiota eriophora* auto. non Knudsen in *Bot. Tidsskr.* **73**: 127, 1978.

*Echinodema eriophorum* auto. non M. Bon in *Doc. Mycol.* **21** (82): 63. 1991.

Basidioma (Fig. 1: 1) small-sized. Pileus 55 mm in diam., plane-convex with low, broad umbo, pale sordid brown, beige to whitish, covered with small discrete, grey to dark brown, acute spines up to 1 mm high and less 1 mm wide at the base, towards margin spines more or less concentrically arranged and slightly bigger and more adnate and fibrillose; margin of pileus undulating, with remnants of annulus. Lamellae free, crowded, whitish. Stipe 55×9 mm, cylindrical, slightly broadened towards base, hollow, with superior annular zone, pale pinkish above annular zone, sometimes with orange-tinge, fibrillose-flocculose, below annular zone with girdles and zones of woolly, brown squamules on paler background. Context whitish to white.

Basidiospores (Fig. 1: 2) [3Q √ 1] 3.0-4.5×2.0-2.5 μm, Q= 1.2-2.0, Q= 1.50±0.20, ellipsoid, mostly with parallel sides in side-view, the same or slightly ovoid in frontal

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\*\* 现工作单位: 中国林业科学院热带林业研究所

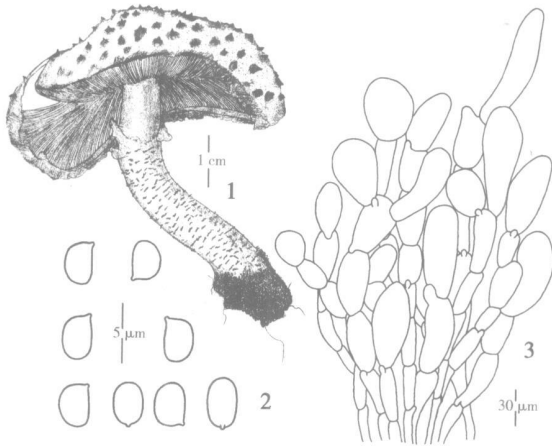


Fig. 1 *Lepiota jacobii* (HKAS 48802)

1. Basidioma; 2. Basidiospores; 3. Structure of spines on pileus

view, dextrinoid, not metachromatic in Cresyl Blue, often in tetrads. Basidia  $13-18 \times 4-5.5 \mu\text{m}$ , narrowly clavate, sometimes cylindrical, 4-spored. Lamellae edge fertile. Cheilocystidium and Pleurocystidium absent. Spines on pileus (Fig. 1: 3) made up of more or less regular chains of inflated elements: terminal elements subglobose, pyriform, ellipsoid or subclavate,  $21-81 \times 11-31 \mu\text{m}$ , with brownish and thickened walls; intermediate elements somewhat inflated to cylindrical,  $8-18 \mu\text{m}$  wide, with brown walls; basal elements cylindrical to slightly inflated,  $4-10 \mu\text{m}$  wide, with brown, non-encrusted walls. Clamp connections present in all tissues.

Habitat & Distribution: Solitary on lawn. Rather rare, only found in southwestern China.

Specimen examined: China: Yunnan Province, Lijiang City, Yulong Snow Mountain, alt. 3 100 m, 4 VIII 2005, J. F. Liang 186 (HKAS 48802).

Remarks: *Lepiota jacobii* is characterized by its umbonate pileus covered with grey to dark brown acute spines, small basidiospores and the absence of cystidium (Knudsen, 1978, 1980; Enderle and Kriegersteiner, 1989; Vellinga, 2001). The name of the species was originally described as *Lepiota langei* by Knudsen (1980), but he overlooked *Lepiota langei* validly published by Locquin (1945). Thus, the new name, *Lepiota jacobii* Vellinga & Knudsen in honour of Jacob E. Lange, was proposed by Vellinga (1992).

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