

DOI: 10.3969/j.issn.1000-3142.2014.05.015

黄明忠,王清隆,刘芝龙,等. 中国巾唇兰属(兰科)一新记录种——鸵鸟巾唇兰[J]. 广西植物,2014,34(5):670—672

Huang MZ, Wang QL, Liu ZL, et al. A new record of *Pennilabium* (Orchidaceae), *P. struthio* Carr from China[J]. *Guihaia*, 2014, 34(5):670—672

A new record of *Pennilabium* (Orchidaceae), *P. struthio* Carr from China

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Abstract: *Pennilabium struthio* Carr (Orchidaceae) is reported as a new record from China. The detailed morphological descriptions and photos are also provided. It is subsimilar to *P. yunnanense* S. C. Chen & Y. B. Luo, from which it differs by having non-resupinate flowers, elliptic sepals, slightly toothed tip of elliptic-ovate petals, dilate below the narrowly obtuse apex of spur.

Key words: *Pennilabium*; *P. struthio*; Orchidaceae; new record; China

CLC number: Q948.5 **Document code:** A **Article ID:** 1000-3142(2014)05-0670-03

中国巾唇兰属(兰科)一新记录种——鸵鸟巾唇兰

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摘要: 报道中国兰科(Orchidaceae)巾唇兰属一新记录种——鸵鸟巾唇兰(*Pennilabium struthio* Carr), 并提供了详细的形态描述和照片。该种与巾唇兰(*P. yunnanense* S. C. Chen & Y. B. Luo)较接近, 区别点在于花梗和子房不旋转, 萼片为椭圆形, 花瓣为卵状椭圆形, 花瓣外端具短齿, 距近末端膨大。

关键词: 巾唇兰属; 海南巾唇兰; 兰科; 新记录种; 中国

During our field work on investigating Orchidaceae in Hainan, China, from 2012 to 2013, a species of *Pennilabium* was found. Based on a careful morphological examination, it was identified as *P. struthio* Carr, a new record to Chinese flora (Seidenfaden *et al.*, 1992; Wood, 2003; Chen *et al.*, 2009; O'Byrne, 2011).

The genus, *Pennilabium* J. J. Smith, consists about 15 species, manily distributed from northern India (Assam) through Thailand, Vietnam, China (Yun-

nan), Malaysia to Indonesia and the Philippines (Chen *et al.*, 2009; Pridgeon *et al.*, 2014). It is characterized by the usually distichous, ephemeral flowers that open in succession, usually with relatively large, spreading lateral lobes and a slender spur. The column lacks a foot, the stipe is markedly dilated near the pollinia, and the rostellum is long and narrow (Pridgeon *et al.*, 2014).

鸵鸟巾唇兰 新拟 Plate I, Plate II

Pennilabium struthio Carr, Gard. Bull. Str. Settl.

收稿日期: 2013-12-17 修回日期: 2014-02-28

基金项目: 公益性行业(农业)科研专项(201203071); 海南省科技成果示范推广(SQ2013CGSF0006); 农业部生物资源保护与利用项目(2130135)。

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Plate I Habit of *Pennilabium struthio* A. Ventral view; B. Apical view.

5: 151, Pl. 4, 1930. — Holttum 1953: 700; Vaughan 1983: 7; Seidenfaden 1988: 330, Fig. 214, Pl. XXXVIII b.; Wood 2003: 180, Fig. 75, Pl. 15 C. Type: Peninsular Malaysia, Pahang, Kuala Teku, c. 150 m, Aug. 1928, Carr 174 (Holotype, K).

Herbs, epiphytic, small, monopodial. Stems 2–4 cm, with 5–9 close leaves. Leaves spreading; blade (5–9) cm × (1–2) cm, linear-lanceolate, falcate, fleshy, base often twisted, jointed and sheathing, apex unequally laterally bilobed. Inflorescences lateral, racemose, usually rather short, with 1 or 2 flowers open at a time, placed in 2 rows; rachis somewhat thickened and complanate; floral bracts distichous. Flowers opening successively, lasting one day, non-resupinate, sepals and petals semi-transparently orange-yellow, petal tips white, with red spots, lip side lobes pure white, base with red stripes, mid-lob white, spur yellowish or orange-yellow, lamellate callus white, semi-transparent, with a dark red margin, lip white, column greenyellow with 2 red stripes at the base; Pedicel and ovary about 1.2 cm long. Dorsal sepal 0.8 cm × 0.5 cm, elliptic, acute, concave, 3- to 5-nerved. Lateral sepals 1.0 × 0.5 cm, obliquely oblong, acute, concave, 5-nerved. Petals (0.8–1.0) cm × (0.4–0.5) cm, elliptic-obovate, shortly clawed at base, erose, concave, incurved, 3-nerved. Lip 3-lobed; side lobes 0.7 cm × 0.4 cm, fanshaped, reflexed from base, apex truncate, erose; mid-lob fleshy,

ligulate blade, ca. 0.2 cm long; dic with 2 erect, bidentate, triangular, parallel lamellae above spur entrance; spur 1.0 cm long, narrowly cylindrical, dilate below the narrowly obtuse apex, straight, porrect. Column 0.3 mm, slightly dorsiventrally compressed; stigma very large, suborbicular; rostellum long, narrow; pollinia waxy, 2, subglobose, entire, attached by a common long subcuneate or spatulate stipe to a very small viscidium. Fruit transection triangle, 7 cm × 0.6 cm. Fl, Apr. –Sep.

Habitat: Hill forest; Riverine forest. Alt. 500–800 m.

General Distribution: Peninsular Malaysia and Borneo (Wood, 2003).

Distribution in China: Hainan: Wuzhishan Mountain and Shengmaoling Mountain, Wuzhishan City; Xian'an stone forest, Baoting Country.

Specimens examined: China: Hainan Province, Wuzhishan Country, Shengmaoling Mountain, tree trunk in the vantage, 800 m, 19 April 2012, Huang 120419001 (ATCH). Malaysia: Kuala Teku, K000891589 (Syntype, K, Photo!).

Taxonomic discussion: *Pennilabium struthio* Carr is subsimilar with *P. yunnanense* S. C. Chen & Y. B. Luo, but can be easily distinguished in having non-resupinate flowers, elliptic sepals, slightly toothed tip of elliptic-obovate petals, dilate below the narrowly obtuse apex of spur. The specimens found from Hainan

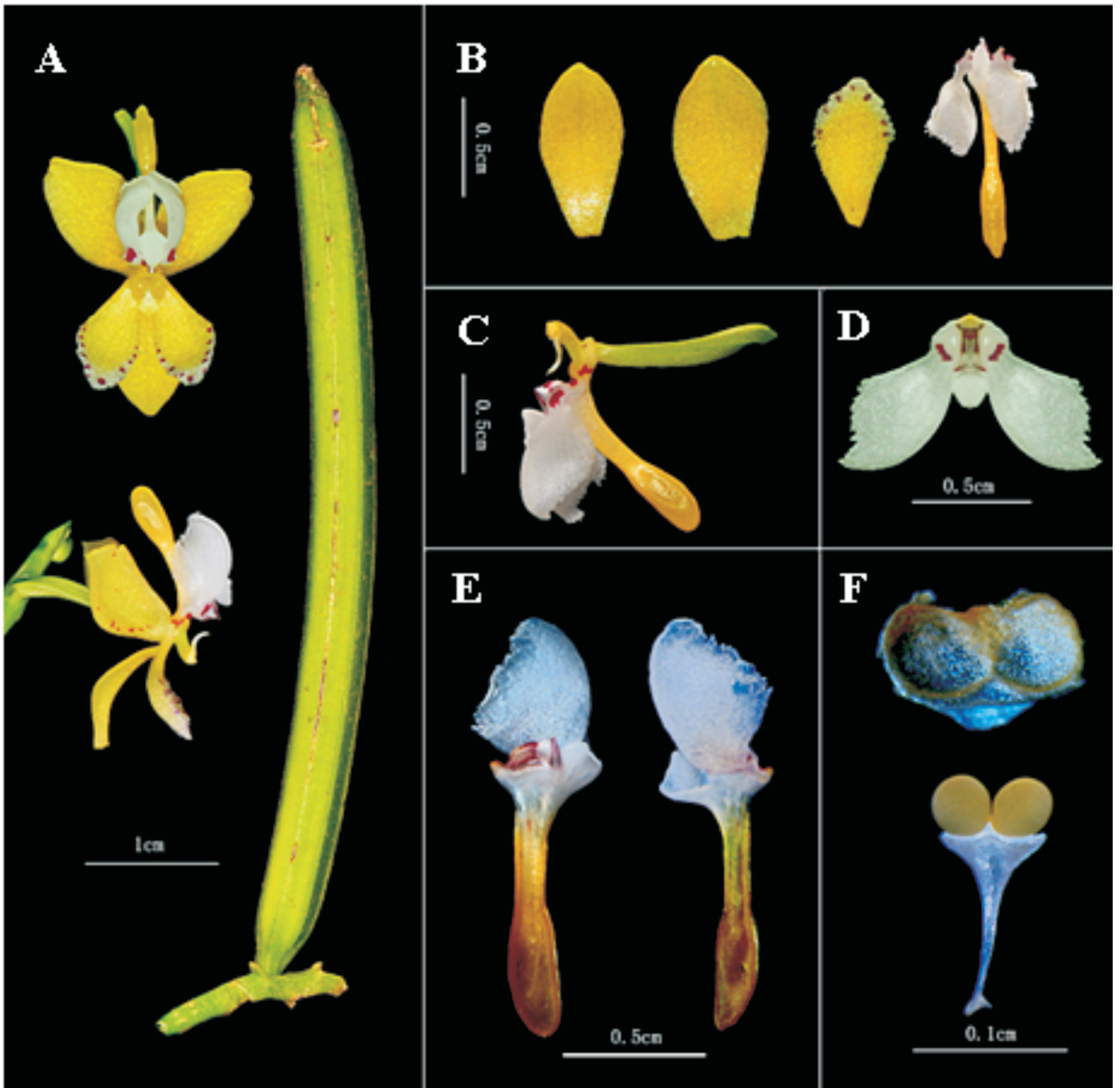


Plate II Flower detail and Fruit **A.** Face view and side view of flower, Fruit; **B.** Perianth; **C.** Flower removed sepals and petals; **D.** 3 lobes of lip (side lobes open and flat); **E.** Lip buttock; **F.** Anther cap and pollinia.

Province, is a little different from the typical species, which the shape of lip side-lobes is fanshaped of the former, while the typical species is linear-cuneate. If it should be treated as a new variety or new subspecies, needs more research.

Acknowledgements We thank Mr. Deng Qi-Hui and Mr. Deng Hai-Liang for their assistance during the fieldwork; Assistant Researcher Zheng Li-Cheng for revising the manuscript.

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