## 中国兰科植物一新记录种及一新异名

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摘要:报道了中国兰科植物 1 新记录种,即苏瓣石豆兰(Bulbophyllum dayanum Rchb. f.),本种的花序具 2~5 朵花,萼片和花瓣的边缘被流苏状丝质毛,可与该组的其他种相区别。将 Dendrobium menglænsis X. H. Jin & H. Li 归并为杓唇扁石斛(D. chrysocrepis Parish & Rchb. f. ex Hook. f.)的新异名,该种的花单生于压扁状的茎上,唇瓣勺状,与其近缘种易于区别。

关键词:石豆兰属;石斛属;兰科;新记录;中国;新异名

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## A Newly Recorded Species and A New Synonym of Orchidaceae from China

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**Abstract**: A newly recorded species of Orchidaceae from China, *Bulbophyllum dayanum* Rchb. f. is reported. It is distinguished from the others of section *Sestochilos* (Breda) Benth. & Hook. f. by its inflorescence with  $2 \sim 5$  flowers, sepals and petals with ciliate fringe of silky hairs at edges. *Dendrobium menglaense* X. H. Jin & H. Li is reduced to *D. chrysocrepis* Parish & Rchb. f. ex Hook. f. as a synonym, and characterized by solitary flowers with spoon-like lip which are borne on the flattened stem. Images and descriptions of the two species are provided.

Key words: Bulbophyllum; Dendrobium; Orchidaceae; New record; China; New synonym

During our fieldwork on investigating wild orchids in Pu'er Prefecture, Yunnan Province from 2007 to 2008, *Bulbophyllum dayanum* Rchb. f. was found as a new record to China and reported herein. In addition, *Dendrobium menglæns menglænse* X. H. Jin & H. Li is reduced to *D. chrysocrepis* Parish & Rchb. f. ex Hook. f. as a synonym.

1 Bulbophyllum dayanum Rchb. f., Gard. Chron. 434. 1865; Hook. f., Bot. Mag. 3: t. 6119. 1874; Hook. f., Fl. Brit. Ind. 5: 756. 1890; Seidenf., Dansk Bot. Ark. 33(3): 25, fig. 8. 1979.

Phyllorchis dayana (Rchb. f.) Kuntze, Revis. Gen. Pl. 2: 677. 1891. Type: Myanmar: Probably Moulmein, imported by Day (not seen). 苏瓣石豆兰 Fig. 1: A~D

Lithophytic, rarely epiphytic herbs. Rhizome creeping, stout, smooth, woody, annulate. Pseudobulbs  $5 \sim 8$  cm apart, globose-ovoid, ca. 2.5 cm long, deeply sulcate. Leaf shortly petiolate, solitary at apex of pseudobulbs, thickly coriaceous, almost fleshy, oblong,  $8 \sim 10$  cm long,  $3 \sim 5$  cm wide, apex obtuse, deep green above and purple below. Flowers semi-

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nodding, ca. 2.5 cm in diameter, 3 ~ 5 arranged in a very shortly peduncled raceme or umbel borne from the base of the pseudobulb. Ovary and pedicel curved, stout, short sigmoid. Sepals broadly ovate,  $1.6 \sim 1.7$  cm long, obtuse, ciliate, with long spreading hairs, yellow-green, with dark purple spots. Petals linear-oblong,  $8 \sim 9$  mm long, obtuse, ciliate, purple with green edges. Lip small, tongue-shaped, warty, shortly clawed, ca. 8.5 mm long, purplish red or blood-red edged with green; lateral lobes tooth-like near the base, uncinate incurved; middle lobe broadly oblong, apex obtuse, margin crenate, disk with three longitudinal crests, of which the lateral one raised towards the base into flat erect crenate plates and with three rows of spinous processes on each side of the lip. Column 8 mm long, with column foot  $6\sim7$  mm long.

**Distribution:** Cambodia, China, India, Myanmar, Thailand and Vietnam. New record to China.

China: Yunnan (云南), Pu'er (普洱), Ximeng Wazu Autonomous Xian (西盟佤族自治县), lithophytic in damp shady and cool areas in tropical rain forest, rarely on shrubby tree, east slope, alt. 1 000 m. 2008 –05 –23, L. Li 101 (IBSC).

Conservation status: The populations of this species are rather small as we investigated, and it is such a remarkable beautiful species, probably under particular collecting pressure. We hope that our findings will draw attention to the status of this species and help to conserve these populations in the region.

According to Seidenfaden<sup>[1]</sup>, Bulbophyllum dayanum belongs to section Sestochilos (Breda) Benth. & Hook. f., characterized by well developed pseudobulbs with one leaf; scape usually shorter than 1 cm; inflorescence with medium to large flowers<sup>[1-2]</sup>. This species is a distinct species and easily distinguished from its allies by its inflorescence with  $2 \sim 5$  flowers, sepals and petals with ciliate fringe of silky hairs at edges and other species in this Section are all with one-flowered inflorescence, sepals and petals with entire edges.

2 Dendrobium chrysocrepis Parish & Rchb. f.

ex Hook. f., Bot. Mag. 98: t. 6007. 1872; Seidenf., Opera Bot. 83: 43. 1985. — *Callista chrysocrepis* (Parish & Rchb. f. ex Hook. f.) Kuntze, Revis. Gen. Pl. 2: 654. 1891. Type: Myanmar: Moulmein, Parish 309 (holotype, K).

— D. menglænse X. H. Jin et H. Li, Ann. Bot. Fenn. 43: 296. f. 2. 2006. 'menglænsis'. syn. nov. Type: China. Yunnan Province, Xishuangbanna Prefecture, Mengla County, X. H. Jin 6954 (holotype KUN; isostype PE) 村唇扁石斛 Fig. 1: E~H

Lithophytic herbs. Stems clustered, rigidly flexuous, obscurely compressed below,  $10 \sim 22$  cm long, with the internodes ca. 2.5 cm long, contracted in the middle, and dilated into a narrowly elliptic flattened leafy pseudobulb above, 5~12 cm long. Leaves arising from apex of stem, narrowly ellipticlanceolate, 5~8 cm long, 1.5 cm wide, apex acuminate. Inflorescence borne from nodes near apex of stem, with 1 tubular sheath at base. Flowers solitary, borne on the old leafless stems, 2.5~3.5 cm in diameter, goldenyellow, with a deeper, more orange-coloured lip. Ovary and pedicel small and slender. Dorsal sepal concave, obovate-cuneate, 1.3~1.4 cm long; lateral sepals obliquely oblong-elliptic, 1.7~1.8 mm long; petals spatula-shaped, rounded at apex, 1.2 ~ 1.3 cm long. Lip spathulate or slipper-shaped, ventricose, adhered to column foot with a movable joint, velvety with fimbriate flattened processes, densely clothed with crisped reddish hairs inside, 1.6~1.8 cm long. Column short, hairy adaxially; column foot  $7 \sim 8$  mm long.

Distribution: Myanmar, NE India and China.

China: Yunnan (云南): Pu'er (普洱), Menglian Xian(孟连县), Jingxin Village(景信乡), lithophytic in damp shady areas in monsoon forest, north slope, alt. 1 200 m, 2008 –03 –28, L. Li 102 (pickled specimen, IBSC).

Conservation status: Dendrobiums are commonly used as traditional medicine and also cut flowers in China because of their sturdy stems and distinctive coloring, and the numter of wild populations shows an obviously decreasing tendency. This species is so special and has been subject to more collecting pressure for vendition as we investigated. We hope

our findings could warrant conservation attention, and regional conservation strategy could be used to take into account how to maintain and increase its populations concerning future developments.

This species was first found from Moulmein, Myanmar, by Mr. Parish who sent it to the Royal Botanic Gardens, Kew in 1871 where it flowered in March, 1872<sup>[3]</sup>. Reichenbach has communicated a note upon the type and emphasized its remarkable character of stem development by stating that: "The young stem is homomorphous, with wide leaf-sheaths, when the stem gets older, the upper leaf-

bearing internodes flatten, and lateral shoots appear, which root immediately."

Jin described *D. menglænse* X. H. Jin et H. Li in 2006<sup>[4]</sup>, however, our further research indicated that it is conspecific with *Dendrobium chrysocrepis*, based on the description and illustration of the holotype. So, the latter should be regarded as the synonym of the former. Indeed, this species is very special in the genus *Dendrobium* by having solitary flowers with spoon-like lip which are borne on the flat compressed stem. Recently, a book of the Dendrobiums has provided us with color photos of this species<sup>[5]</sup>.

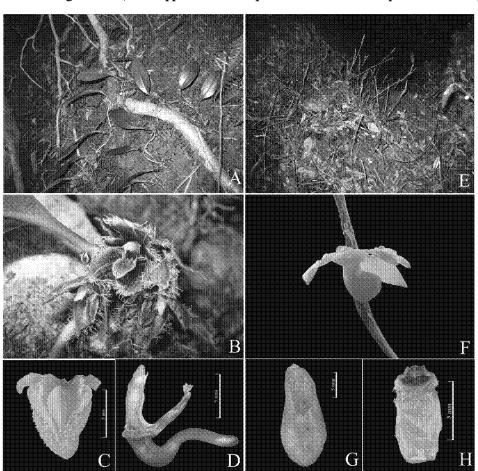


Fig. 1 Bulbophyllum dayanum (A~D) and Dendrobium chrysocrepis (E~H)

A. Habitat; B. A raceme; C. Lip; D. Column (side view); E. Habitat; F. Flower; G. Lip; H. Column (front view).

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