

# 中国石豆兰属 (兰科) 二新记录

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**摘要:** 报道了中国兰科石豆兰属 2 新记录种, 即普洱石豆兰 (*Bulbophyllum didymotropis* Seidenf.) 和版纳石豆兰 (*Bulbophyllum protractum* Hk. f.), 并提供描述和图片。

**关键词:** 石豆兰属; 兰科; 新记录; 中国

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## Two Newly Recorded Species of *Bulbophyllum* (Orchidaceae) from China

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**Abstract** *Bulbophyllum didymotropis* and *B. protractum* are newly reported to Chinese flora. Their descriptions and photos are also provided.

**Key words** *Bulbophyllum*; Orchidaceae; New records; China

*Bulbophyllum* Thou. has a pantropical distribution, which is the largest genus of the family Orchidaceae, comprising more than 2000 species distributed worldwide<sup>[1]</sup>. In China, this genus is also the largest which is represented by 103 species, 33 endemic in 18 sections<sup>[2]</sup>. During our floristic investigation on wild orchids in Yunnan Province from 2008 to 2009, two unrecognized entities belonging to *Bulbophyllum* were found. A thorough scrutiny of literature revealed that these two species are hitherto new to the orchid flora of China and reported herein.

*Bulbophyllum didymotropis* Seidenf., Dansk Bot. Ark. 33(3): 53. Fig. 28. 1979. Type: Thailand, Chiang Mai, Mae Sa Valley, North Ridge, alt. 1500 m, GT 8400 (holotype C). (普洱石豆兰 Fig. 1: A-E)

Epiphytic herbs. Rhizome creeping, each node bearing 3 to 5 roots. Pseudobulbs closely spaced, flat, ovoid or irregularly globular, 4–6 mm in diameter, somewhat oblique with the single leaf. Leaf persistent, oblong-ligulate or oblong-lanceolate, 7–10 mm by 3–5–6 mm, sessile. Inflorescence 18–30 mm long, 1-flowered. Floral bracts tubular, c. 1.5 mm. Pedicel and ovary c. 8–5 mm long. Flower fully open, with sepals and petals translucent white with orange-red veins, tip yellowish green, and a vermeil lip. Dorsal sepal oblong-lanceolate, 4–0–4–5 mm long, 1–4–1–6 mm broad, 3-veined, usually with the lateral veins forked into two. Lateral sepals ovate-triangular, slightly oblique, 4–0–4–5 mm long, 1–6–2–2 mm broad, acute towards the apex, 5-veined (three veins of which the lateral ones often fork into two); mentum rather short. Petals ovate-oblong, 1–6–2–2 mm long, 0–8–1–0 mm

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broad 1-veined lip recurved tongue-shaped, 4–5 mm long joined at base to column foot adaxially distinctly sulcate with longitudinal groove or recessed channel and two more or less parallel high keels at the middle; column c. 1 mm long with erect subulate stylids; column foot c. 1.5 mm long; pollinia 2; stipes absent.

**Distribution:** Thailand. New record to China.

**China:** Yunnan, Pu'er, Simao District, epiphyte among mosses on the tree-trunk near the edge of river in rather exposed circumstances in wet montane rainforest, alt. 1350–1400 m. 2008–07–09, L. Li 110 (spirited specimen, IBSC).

**Conservation status:** This species has restricted distribution in this location as we investigated, and it is such a pretty little plant, probably under particular collecting pressure. We hope our findings could make this rare species under the conservation attention.

According to J. J. Smith and J. J. Verveulen, this species belongs to sect. *Monilbulbus*<sup>[3–4]</sup>, characterized by small or rather small plants, creeping rhizomes, distinct pseudobulbs, usually close together, bearing one leaf, inflorescence with one flower and thin scape; petals and lip small; lip at base concave, convex towards the apex; column with subulate stylids.

It is similar to *Bulbophyllum menghaienses* Tsi<sup>[5]</sup>, the other species in this section from Yunnan, but the latter differs in smaller vegetative parts, distinctly shorter inflorescence (7–10 mm); larger flowers (sepals 5–7 mm long); lanceolate lateral sepals and a lanceolate lip with a fleshy thickened tip without any keels.

***Bulbophyllum protractum*** Hk. f., Fl. Brit. Ind. 5: 758, 1890; Ic. Pl. 2037, 1890; Seidenf., Dansk. Bot. Ark. 33 (3): 86, Fig. 53, 1979. Type: Sikkim: Andaman Island, Tenasserim, in tropical valleys, Helfer 244, Kew Distr. 5164 (holotype K). (版纳石豆兰 Fig. 1: F–J)

Epiphytic herbs. Rhizome elongate, woody, vaginate; pseudobulbs more or less conical, tapering apically, 2.5–3.2 cm long, 3.0–3.5 cm apart,

enveloped basally by a triangular sheath and carrying a single leaf; leaves oblong-lanceolate, recurved, acute, narrowed to the shortly petioled at base, thinly coriaceous, 7–10 cm long, 1.5–3.2 cm broad. Scape filiform, minutely bracteate, umbellately four to six flowered, slightly longer than the pseudobulbs, much shorter than the leaves, rising from the rhizome at the bases of the pseudobulbs; floral bract lanceolate, transparent, more than half the length of the stalked ovary. Flowers very small, 6–8 mm in diameter, white or yellowish, with the perianths in the upper half and the concavity of the lip are orange; sepals subequal, lanceolate, entire, 3-nerved, acuminate, 3–4.5 mm long; dorsal sepal slightly shorter than the lateral sepals; petals narrowly oblong-lanceolate, 3-nerved, 2.5 mm long; lip ovate-lanceolate, obtuse, very small, 1.3–1.5 mm long, concave at the middle and somewhat recurved towards the apex; the base joined by a point to the apex of the short stout curved column-foot; column short, stout, with two slender stylids at apex; pollinia 2, compressed.

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

**China:** Yunnan, Xishuangbanna, Mengla, epiphytes in the tropical broad-leaved evergreen rainforest, alt. 800–1000 m. 2009–08–06, L. Li 152 (spirited specimen, IBSC).

**Conservation status:** This species is very rare in the fields. Considering its extremely restricted distributed areas, this species must be regarded as the species with high conservation priority.

Following J. J. Verveulen, this species belongs to sect. *Desmosanthes*<sup>[3]</sup>, characterized by creeping or hanging rhizomes, distinct pseudobulbs, usually apart from each other, bearing one leaf, rachis very short with two or more flowers most often arranged in a subumbellate inflorescence (a few species have a more or less elongate raceme); flowers white, yellow, orange or bright red, without purple; sepals and petals glabrous or papillose, not ciliate.

It is similar to *Bulbophyllum concinnum* Hk. f.<sup>[6–7]</sup>, the other species in this section from Thailand, but the latter differs in distinctly smaller plants with pseudobulbs not much more than 2 cm

long leaves 3– 4 cm long smaller flowers ( sepals 3– 4 mm lng); distinctly broader petals with only one vein and different lip

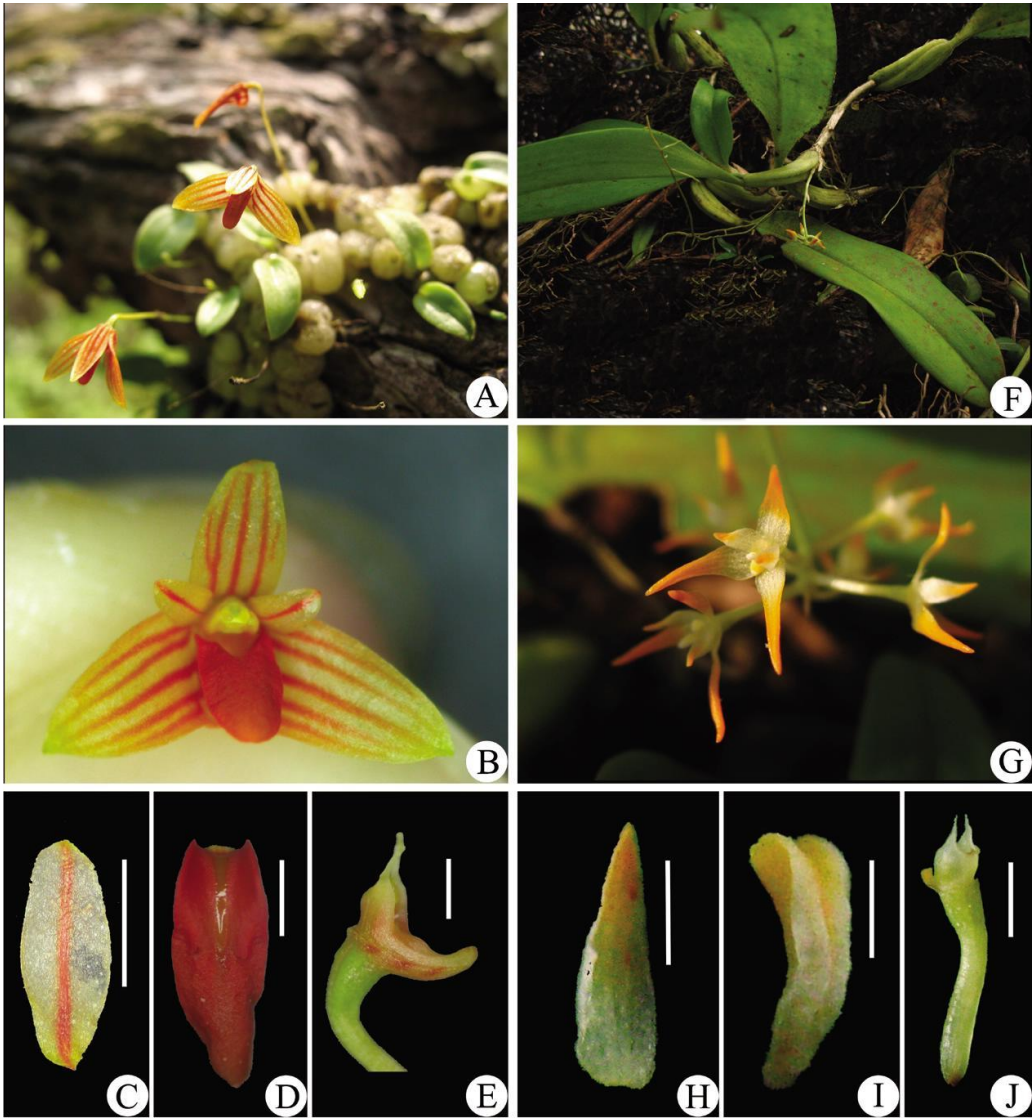


Fig 1 *Bulbophyllum didymotropis* (A– E) and *B. protractum* (F– J)

A. Habitat; B. Front view of flower; C. Petal; D. Front view of lip; E. Lateral view of column; F. A flowering plant; G. Inflorescence; H. Petal; I. Lateral view of lip; J. Lateral view of column. C, D, H, J Bars= 1 mm; E, I Bars= 0.5 mm

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