



Bulbophyllum salweenensis (Orchidaceae; Epidendroideae; Malaxideae), a new species from Yunnan, China

TING-TING ZHOU & XIAO-HUA JIN

State Key Laboratory of Systematic and Evolutionary Botany and Herbarium, Institute of Botany, Chinese Academy of Sciences, Nanxincun 20, Xiangshan, Beijing, 100093, China; E-mail: xiaohuajin@ibcas.ac.cn

Bulbophyllum Thouars (1822: tab. 3) is among the largest genera of Orchidaceae, comprising about 2200 species widely distributed in tropical Africa, Asia and America (Pridgeon *et al.* 2014). There are several centres of species diversity, including Madagascar (200 species), New Guinea (600 species), and continental Asia (400 species). There are about 120 species in China, out of which 45 species (Tsi 1999, Li 2003, Chen & Vermeulen 2009). During fieldwork in northern Yunnan, a new species of *Bulbophyllum* described below was found.

Bulbophyllum salweenensis X.H.Jin, *sp. nov.* (Fig. 1,2)

Type:—CHINA. Yunnan Province: Gongshan County, epiphytic on trunk, rocks in the evergreen broadleaf forest, 1400 m, 10 April 2015, Jin 15221 (holotype PE!, isotype PE!).

Diagnosis: *Bulbophyllum salweenensis* is closely related to *B. guttulatum*, but differs from it in having lanceolate petals, lip papillae with a longitudinal pink ridge, deltoid stelidia about 1 mm long, and anther cap with a longitudinal ridge.

Epiphytic herbs with a creeping rhizome enclosed by fibrous sheaths, 2–4 mm in diam. Roots arising from the nodes, 0.3–0.5 mm in diam. Pseudobulbs ovoid-conic, ca. 10–40 × 4–6 mm with sheaths, yellowish-brown and lustrous when dry, spaced about 5–50 mm along the rhizome, apex with 1 leaf. Leaf narrowly oblong, 40–160 × 5–25 mm, apex obtuse, emarginate, base narrowing into a petiole; petiole 10–20 mm. Scape arising from the base of pseudobulb, 40–90 mm long, shorter than leaf; umbellate, often 2–4-flowered; floral bract lanceolate, acuminate, concave, ca. 8 × 2 mm; peduncle and ovary ca. 15 mm long. Flowers greenish yellow, with purplish red spots on sepals and petals; lip whitish purple at base, pink at apex, keel pink. Dorsal sepal ovate, acuminate, ca. 8 × 5 mm, 5-veined; lateral sepals falcate-lanceolate, base attached to column foot, margins not twisted, ca. 10 × 5 mm, 5-veined; petals lanceolate, denticulate, ca. 5 × 2 mm, 2-veined, apex caudate; lip deflexed, lingulate, base subcordate with papillae on the edge, apex obtuse and glossy, with a longitudinal ridge from middle to apex, apex obtuse, ca. 8 × 3 mm; column ca. 2 mm; stelidia deltoid, ca. 1 mm long; column wings broadly triangular; column foot ca. 6 mm long, apex attached to lip; anther cap subglobose with an obvious ridge. Fl. March–April.

Morphologically, *Bulbophyllum salweenensis* is similar to *B. guttulatum* (Hooker 1890: 776) Balakrishnan (1970:66) and shares an umbellate inflorescence and column with triangular wings, but differs from it in having lanceolate petals (petals widely ovate in *B. guttulatum*), lip papillae with a single longitudinal pink ridge (lip with three yellow ridges in *B. guttulatum*), stelidia deltoid about 1 mm long (versus stelidia filiform about 2.8 mm long), anther cap with a longitudinal ridge (ridge absent in anther cap of *B. guttulatum*). *Bulbophyllum salweenensis* is also similar to *B. umbellatum* Lindley (1830: 56), and these two species are sympatric in the valley of Nujiang River (Salween River). However, *Bulbophyllum salweenensis* is readily distinguished from it by having untwisted lateral sepals (lateral sepals twisted in *B. umbellatum*), lanceolate and denticulate petals (petals widely ovate and entire in *B. umbellatum*), lip papillae with a longitudinal pink ridge (lip without ridge in *B. umbellatum*).

Distribution and Habitat:—This new species was found in the Salween River Valley, Gongshan County, northern Yunnan, China. During our 10-day fieldwork, only one population of 50 plants was found. It grows on trunks and rocks under broadleaf evergreen forest at 1400–1500 m elevation.

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