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Habenaria vidua, a new recorded of Orchidaceae from Yunnan, China

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Abstract: *Habenaria vidua* E. C. Parish & Rchb. f (Orchidaceae) is reported from China for the first time. The species is characterized by its special habitat on limestone. It differs from the *H. tonkinensis* Seidenfaden by its green lateral sepals and lip, and the side-lobes of lip sticking up.

Key words: *Habenaria vidua*; Orchidaceae; new recorded

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中国兰科玉凤花属一新记录种——岩生玉凤花

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摘 要: 报道了中国云南兰科植物一新记录种, 岩生玉凤花(*Habenaria vidua* E. C. Parish & Rchb. f)。该种主要特点是生长在腐殖质比较丰富的石灰岩缝隙中, 不同于属内其它物种。在植株和花部特征相似于丛叶玉凤花 *H. tonkinensis*, 但侧萼片与唇瓣绿色、唇瓣侧裂片明显上举而区别于后者。

关键词: 岩生玉凤花; 兰科; 新记录; 中国

Habenaria Willd. (Orchidaceae) is one of the largest genera of terrestrial orchids, well represented in both the new and old world tropics and subtropics, with a few species extending into temperate areas, particularly in eastern Asia (Pridgeon *et al.*, 2001). The main centers of diversity of the genus are in Brazil, southern and central Africa, and East Asia (Kurzweil & Weber, 1992). Current counts estimate the number of *Habenaria* species at about 835 (Govaerts *et al.*, 2010). In China, *Habenaria* is represented about 56 species (Chen & Cribb, 2009; Wang & Wang, 2010; Liu *et al.*, 2012), and the following described species is a

new record of *Habenaria* from China.

Habenaria vidua E. C. Parish & Rchb. f, Trans. Linn. Soc. London 30:140. 1874; Seidenf., Dansk Bot. Ark. 31(3):112. 1977. 岩生玉凤花 (新拟) (Fig. 1)

Epilithic, deciduous. Stems 10-36 cm tall, with a mixture of short glandular hairs and elongate papillae. Leaves 3-5, spreading, cauline, in a cluster well above the ground, oblanceolate-elliptic, subacute, mucronate, (8-14) × (1.3-2) cm, glabrous. Bract-like leaves 1-3, erect or spreading, lanceolate, acute or acuminate, 1.3-2.8 cm long.

Inflorescences lax, 6-11 flowers; rachis 4-14 cm

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Fig. 1 *Habenaria vidua* E. C. Parish & Rchb. f. A. Habitat; B. Inflorescences; C. Plant; D. Flower.

long, shortly hairy; floral bracts lanceolate, acuminate, $(9-19) \times (2.8-4)$ mm, shorter than ovary, glabrous.

Flowers white or whitish yellow with green lateral sepals and lip. Ovary 15–22 mm long. Sepals subacute, 3-veined; median sepal erect, sub-orbicular, $(6.5-9) \times 4$ mm; lateral sepals reflexed, ovate, $(6-7) \times (3.8-4.7)$ mm. Petals erect, cohering with the median sepal, broadly ovate, subacute, 2–3 veins, $(6-8) \times (4-6)$ mm. Lip 8–11 mm long, deeply 3-lobed to the base; mid-lobe recurved below the flower, linear to oblong, $(7-10) \times (0.8-1.5)$ mm; lateral lobes pointing upwards, linear to oblong, $(12-15) \times (0.8-1)$ mm; spur cylindric, to 20–30 mm, much longer than ovary. Anther canals ca. 2 mm long, straight, stigmas clavate.

Distribution: Myanmar, Thailand, China.

China. Yunnan (云南): Mengla (勐腊), Mengyuan (勐远), epiphytic on the limestone, 1 000

m, 2013-09-13, Liu Qiang & Zhang-Wenliu129 (HIT-BC).

Habenaria vidua was first named by Seidenfaden in 1977, and he deemed that the long rachis arrived 10–15 cm was the key character differed from other species (Seidenfaden, 1997). But, Kurzweil did not agree with his view, and pointed out that the rachis was most commonly shorter than this (Kurzweil, 2009). This species unlike any others of *Habenaria* with its unusual habitat on limestone rocks, the characteristic lip shape with the midlobe reflexed under the flower and the lip side-lobes sticking up.

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