

# A new species of *Calanthe* (Orchidaceae) from Yunnan, China

Jin Xiaohua and Li Heng

J. Xiaohua (xiaohuajin@ibcas.ac.cn) and L. Heng, Herbarium, Kunming Inst. of Botany, Chinese Acad. of Sciences, Heilongtang, Kunming, CN-650204, Yunnan, China. JX also at: Herbarium (PE) Inst. of Botany, Chinese Acad. of Sciences, CN-100093, Beijing, China.

A new species of Orchidaceae, *Calanthe fugongensis* X. H. Jin & S. C. Chen, is described and illustrated. The new species is morphologically reminiscent of *C. hancockii* Rolfe, from which it differs by having hamate lateral lobes, and an elliptical middle lobe with three rectangular lamellae.

The genus *Calanthe* comprises about 100 species, distributed in tropical, subtropical and warm temperate regions from Africa to Asia and the Pacific Islands, characterized by pubescent roots, often clustered leaves, petals and sepals similar, spurred lip and eight pollinia (Seidenfaden 1975, Chen 1999, Pearce and Cribb 2002). During our fieldwork in the Hengduan mountains from 2001 to 2005, we discovered about 11 species of *Calanthe*, including *C. alpina*, *C. arcuata*, *C. brevicornu*, *C. davidii*, *C. delavayi*, *C. dulongensis*, *C. griffithii*, *C. hancockii*, *C. mannii*, *C. puberula* and *C. tricarinata*. The new species described below was one of them.

## *Calanthe fugongensis* X. H. Jin & S. C. Chen sp. nov. (Fig. 1)

*Habitu C. hancockii* subsimilis, sed lobis lateralibus hamatis, lobo medio elliptico lamellis tribus rectangularibus differt.

**Type:** China. Yunnan, Fugong, Gaoligong mountains, 16 May 2005, X. H. Jin 6994 (holotype PE!; isotypes KUN!, PE!) (flowering).

Terrestrial. Plant 50–60 cm tall. Pseudobulb conical, 4 cm long, 2 cm in diam. Leaves 3–4, sheathing at base when young, elliptic–lanceolate to oblong–lanceolate, 20–30 cm long, 5–10 cm wide, acuminate, not fully developed at anthesis, petiole 3–10 cm long. Inflorescence terminal, lax, with up to 20 flowers; peduncle very finely puberulent, sheathed, 20 cm long; sheaths 2–3, ovate, acuminate, 2 cm long; rachis finely puberulent, about 30 cm long; floral bracts lanceolate, glabrous. Flowers 4 cm across; pedicel and ovary 2.5 cm long, finely puberulent. Dorsal sepal narrowly elliptic, 2 cm long, 1 cm wide, 7-veined, acuminate; lateral sepals slightly oblique, lanceolate, 2 cm long, 0.8 cm wide, 5-veined; petals oblanceolate, 1.6 cm long, 0.6 cm wide, 3-veined, acuminate. Lip 3-lobed, adnate to column base; lateral lobes, hamate, 0.5 cm wide, 0.8 cm long,

revolute into tube at anthesis; middle lobe elliptic, apex emarginate with an apiculus, base with 0.5 long claw, 1 cm long, 1 cm wide, greenish–yellow, revolute into tube at anthesis; three rectangular lamellae on midlobe, 1–2 mm tall; spur puberulent, 4.5–6 mm long. Column 1 cm long, stout; rostellum bifid. Capsule unknown.

*Calanthe fugongensis* belongs to *Calanthe* sect. *Calanthe* and is somewhat morphologically similar to *C. hancockii* Rolfe and *C. griffithii* Lindl., but it is not difficult to distinguish them. *Calanthe griffithii* is characterized by a broad midlobe with a keel and lateral lobes oblong to spathulate (Fig. 2) (Chen 1999, Pearce and Cribb 2002); *C. hancockii* is characterized by an obovate–oblong midlobe with 3 wavy lamella and falcate–oblong lateral lobes (Fig. 3) (Chen 1999, Pearce and Cribb 2002), whereas the new species has hamate lateral lobes and an elliptic middle lobe with three rectangular lamellae (Fig. 1, 4, 5). This new species grows in subtropical evergreen forest, and flowers in May and June. It is known from several sites on the eastern slopes (2400–3000 m) of Gaoligong mountains along the Nu river (Salween).

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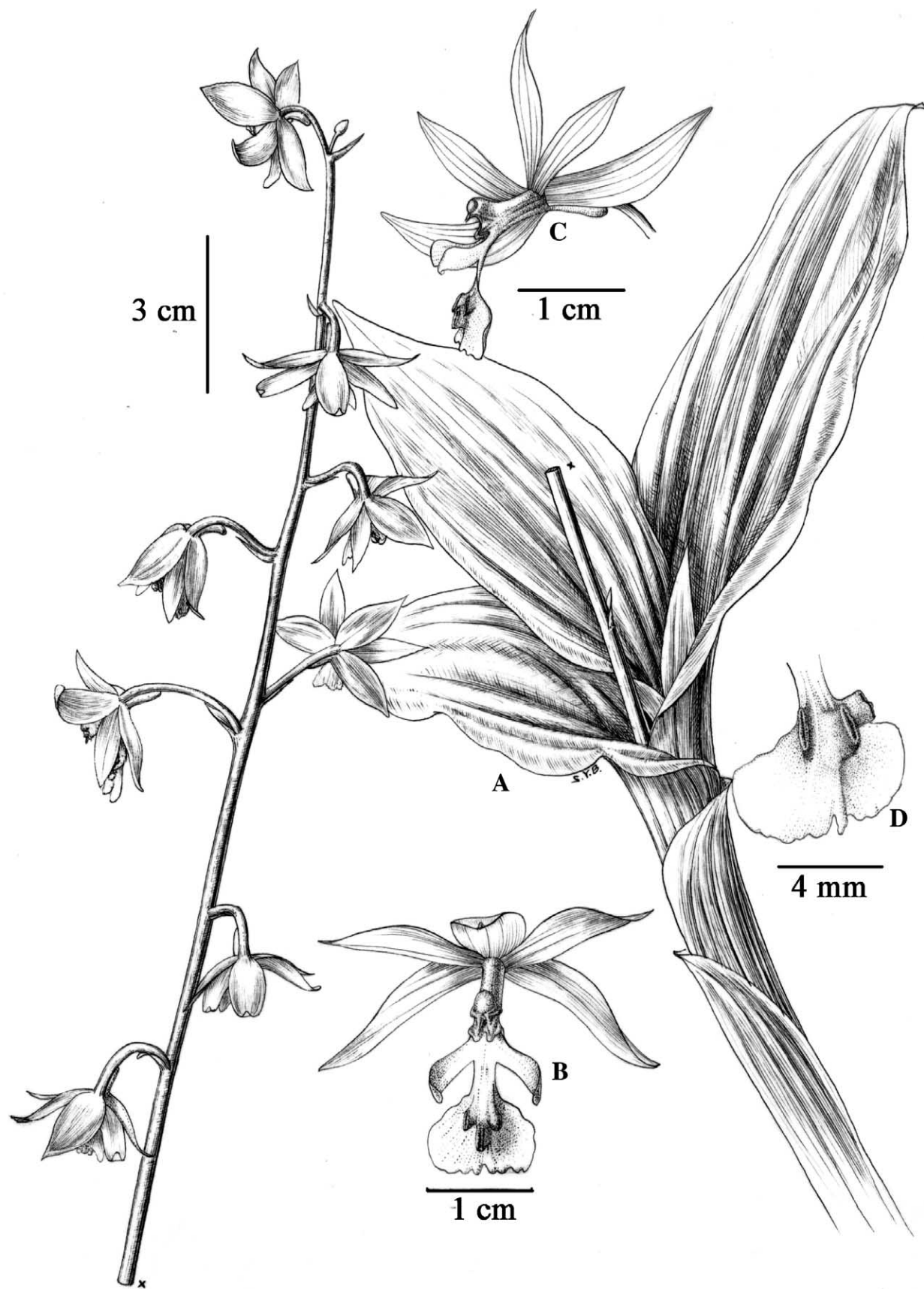


Fig. 1. *Calanthe fugongensis*. (A) plant, (B) front view of flower, (C) lateral view of flower dorsal sepal, (D) front view of lip (all from X. H. Jin 6994, drawn by Sun Yingbao).



Fig. 2–5. Photos of *Calanthe* sp., (2) *C. griffithii*, (3) *C. hancockii*, (4)–(5) *C. fugongensis*.