

***Bulbophyllum wuzhishanensis* (Orchidaceae), a new species from Hainan, China**

Author(s) :Jin Xiaohua

Source: Brittonia, 57(3):255-257. 2005.

Published By: The New York Botanical Garden

DOI: 10.1663/0007-196X(2005)057[0255:BWOANS]2.0.CO;2

URL: <http://www.bioone.org/doi/full/10.1663/0007-196X%282005%29057%5B0255%3ABWOANS%5D2.0.CO%3B2>

BioOne (www.bioone.org) is a nonprofit, online aggregation of core research in the biological, ecological, and environmental sciences. BioOne provides a sustainable online platform for over 170 journals and books published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Web site, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/page/terms_of_use.

Usage of BioOne content is strictly limited to personal, educational, and non-commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

Bulbophyllum wuzhishanensis (Orchidaceae), a new species from Hainan, China

JIN XIAOHUA

Xiaohua, J. (Kunming Institute of Botany of Chinese Academy of Sciences, Kunming, Ciba, Yunnan, 650204, China; e-mail: xiaohuajin@mail.kib.ac.cn). *Bulbophyllum wuzhishanensis* (Orchidaceae), a new species from Hainan, China. *Brittonia* 57: 255–257. 2005.—**Bulbophyllum wuzhishanensis**, a new species from Hainan, China, is described and illustrated. The new species is probably related to *Bulbophyllum ledungense*, but differs from it by having a long inflorescence, a column without stelids, and a longer lip.

Key words: *Bulbophyllum wuzhishanensis*, Orchidaceae, Hainan, China.

Bulbophyllum is one of the largest genera of Orchidaceae and consists of about 1200 species worldwide. Some sections of *Bulbophyllum*, including the section *Desmosanthes* to which the new species belong, have few characters of taxonomic value, which makes decisions at the species level difficult. There are approximately 100 species of *Bulbophyllum* in China and the genus urgently needs a thorough systematic revision. The new species described here, however, is clearly a distinct species based on differences in the inflorescence, column, and size of the lip.

Bulbophyllum wuzhishanensis X.H. Jin,
sp. nov. (Fig. 1)

TYPE: CHINA. Hainan: Wuzhishan City, Shuiman, Wuzhishan Mountains, epiphytic on tree trunks, 6 Oct 2003. Biodiversity of South China, X. H. Jin 5057 (HOLOTYPE: KUN; ISOTYPE: PE).

Habitu *Bulbophyllo ledungensi* subsimilis, inflorescentia longiore, columna sine stelidibus, labello longiore differt.

Epiphytic. Roots terete, arising from nodes of the rhizome, not or rarely branched. Rhizome creeping, with membranous scales. Pseudobulbs erect, short ovoid, 1–4 cm apart, 5 mm long, 3 mm in

diam. Leaf 1, oblong, 1.5–3 × 0.8–1 cm, retuse. Inflorescences erect, arising from the rhizome or the base of the pseudobulb, 3.5–4 cm long, 0.5 mm in diam., slightly higher than the leaves, 1–3-flowered. Bracts 3–5, lanceolate, 2 mm long. Flower white, not fully opening. Ovary with pedicel 1–1.5 cm long. Sepals similar; dorsal sepal slightly shorter than lateral sepals, 6 × 3 mm, acuminate; the lateral sepals lanceolate, 3 veined, 7 × 3 mm, acuminate, free. Petals ovate, 4 × 1.5 mm, rounded. Lip ligulate and sigmoid, fleshy, 4 × 1.5 mm, channeled at the base, with two ridges at each side. Column 1–1.5 mm long, without stelids. Column foot 1.5–2 mm long. Pollinia 2.

The species is epiphytic on tree trunks in moist tropical forests at about 1800 m, on the highest mountain of Hainan. At present, only two populations of this species have been found in the Wuzhishan Mountains in Hainan.

The new species is probably related to three species, *B. cauliflorum* Hook. f., *B. stenobulbon* Par. et Rchb.f., and especially *B. ledungense* T. Tang et F.T. Wang, but it is not difficult to distinguish from them. The inflorescence of *B. cauliflorum* is as tall as the pseudobulb, whereas that of the new species is taller than both the pseudobulb

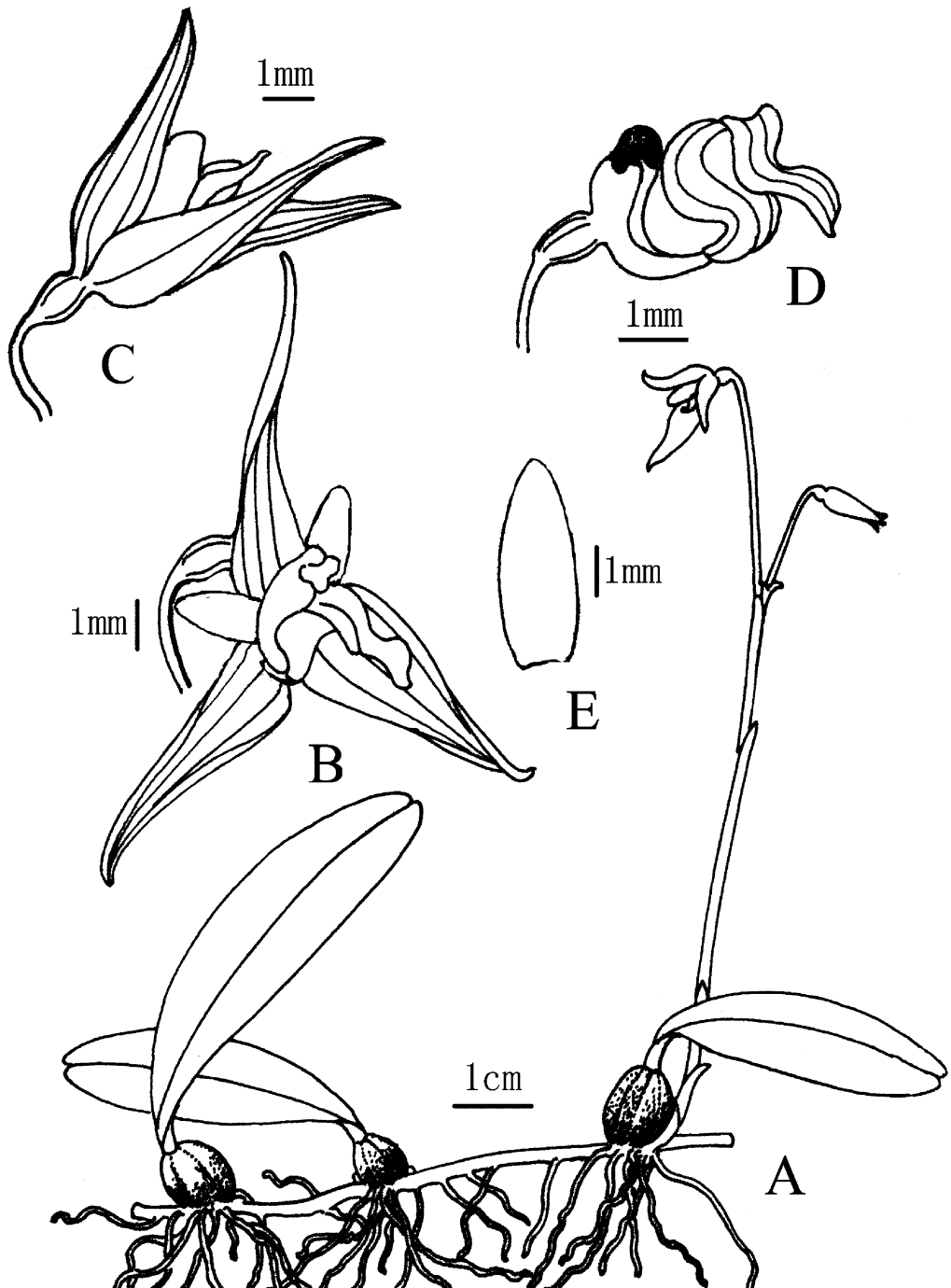


FIG. 1. *Bulbophyllum wuzhishanensis* X.H. Jin (based on Biodiversity of South China, X. H. Jin 5057). A. Habit. B, C. Lateral views of flower. D. Lateral view of column and lip. E. Petal.

and leaf; the stelids of the former are falciform, but stelids are absent in the latter. The inflorescences and roots of *B. stenobulbo* arise only from the base of the pseudobulb, its flowers are yellow, and it has subulate stelids. In contrast, the inflorescences and roots of the new species arise from the base of the pseudobulb and from the nodes of the rhizome, its flowers are white, and it lacks stelids.

Acknowledgments

This finding is a part of the results of the program "Conservation and Reintroduction

of an endangered orchid, *Doritis pulcherrima* in Hainan." The program, designed and coordinated by Gloria SIU Lai Ping (Lpsiucon@kfbg.org), is funded by the Kadoorie Farm and Botanic Garden, Hong Kong Special Administration Region, China. We are indebted to the officials of the Chinese Forest Bureau and the Hainan Forest Bureau for their kind help. We also thank Ling Wang for the excellent illustration.