中国玉凤花属(兰科)一新记录种——宽叶玉凤花

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摘要:报道中国兰科植物(Orchidaceae)玉凤花属(*Habenaria* Willd.)一新记录种——宽叶玉凤花(*H. lindleyana* Steud.),并提供了该种的形态描述和野外照片。凭证标本存放于中国科学院广西植物研究所标本馆(IBK)。

关键词: 兰科; 宽叶玉凤花; 新记录; 石灰岩植物区系; 中国

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Habenaria lindleyana, A Newly Recorded Species of Habenaria (Orchidaceae) from China

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Abstract: *Habenaria lindleyana* Steud., a newly recorded species of *Habenaria* from Guangxi, China is reported. Its morphological description and photos are provided. The vouchers are deposited in the Herbarium of Guangxi Institute of Botany, Chinese Academy of Sciences (IBK).

Key words: Orchidaceae; Habenaria lindleyana; New record; Limestone flora; China

Habenaria Willd. including about 876 species, is one of the largest genera of terrestrial orchids, and mainly distributed in tropical and subtropical areas^[1]. According to Flora of China, 54 species (19 endemic) were reported in *Habenaria*^[2]. Further investigation, has found many new species and newly recorded species from China, such as *H. anomaliflora*, *H. myriotricha*, *H. vidua*, *H. vachangensis* and *H. luquanensis*^[3–7].

During the floristic survey in limestone areas of Guangxi, China, an unfamiliar species of *Habenaria* was found in karst forest in Longgang National Nature

Reserve. It is mainly characterized by the leaves adpressed to ground, the flowers lilly-white, raceme lax, lip spurred and 3-lobed, with low rim around entrance to the spur, side lobes much smaller than median lobe. It is similar to *H. delavayi* in rosulate leaves which are adpressed to ground, but its lilly-white flowers are quite different from the latter. Our results of taxonomic study^[8] indicated that it represented an undescribed species of *Habenaria* in China — *H. lindleyana* Steud., which is reported below.

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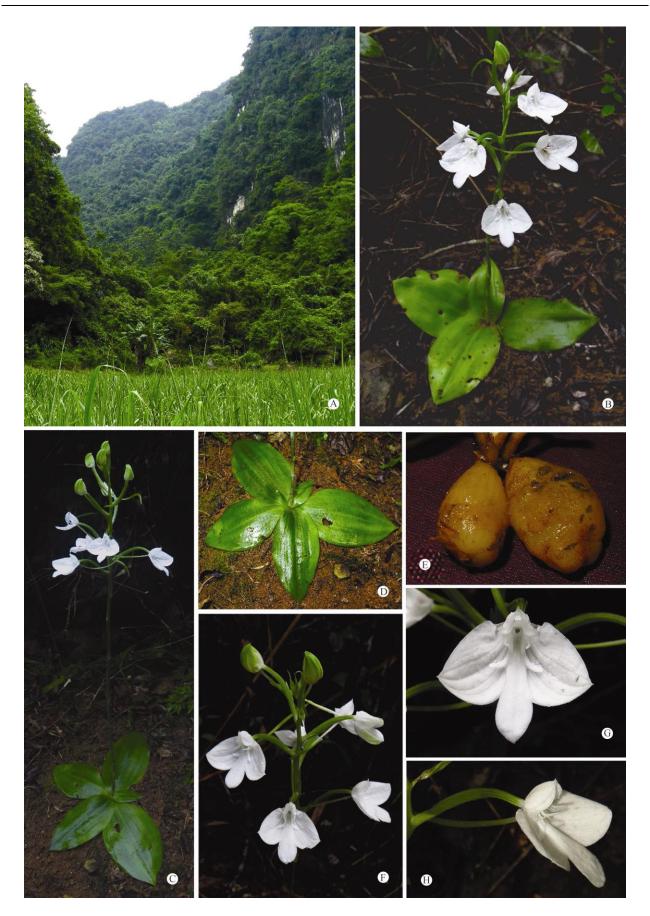


Fig. 1 Habenaria lindleyana Steud. A: Habita; B, C: Habit; D: Leaves; E: Tubers; F: Inflorescence; G: Flower (front view); H: Flower (lateral view).

宽叶玉凤花 新拟 Fig.1

Habenaria lindleyana Steud., Nomencl. Bot. (ed. 2) 1: 717. 1840; Seidenf., Opera Bot. 114: 61. 1992; Aver. Identif. Guide. Vietnam. Orch.: 66. 1994; Aver. et Averyanova. Updated Checklist Orch. Viet.: 38. 2003. — H. latifolia Lindl., Gen. Sp. Orchid. Pl. 321. 1835, non Kunth (1816). Type: Ceylon (Srilanka), Macrae s. n.

—— *H. columbae* Ridl, Gard. Chron. **2**: 390. 1900.

— *H. macroptera* Gagnep., Bull. Soc. Bot. France **78**: 72. 1931.

Herbs, terrestrial, 30-40 cm tall, 3-6 rosulate leaves adpressed to ground, scape with 5-10 small adpressed bracts. Tubers elliptic, oblong or ovoid, 3-5 cm long, 2-2.5 cm wide. Leaf blade ovate to suborbiculate, obtuse, 5-10 cm long, 2-7 cm wide, slightly fleshy, base obtuse-rounded, apex obtuse or acute. Inflorescence racemose, 8-20 cm long, with 6-25 flowers. Floral bracts cuneate, acuminate, 1.5-2 cm long, ca. 4 mm wide, shorter than ovary. Flowers white; ovary fusiform, slightly arching, 2-2.5 cm long, 2-3 mm in diam., glabrous. Median sepal narrowly ovate, obtuse, 7-9 mm long, ca. 5 mm in diam.; lateral sepals ovate, slightly oblique, obtuse, spreading, 1-1.5 cm long, 6-8 mm in diam. Petals lanceolate, 7-8 mm long, ca. 2 mm wide. Lip spurred, 3-lobed, with low rim around entrance to the spur. Median lobe narrowly obovate, 1-1.6 cm long, ca. 0.6 cm wide, rounded at apex; side lobes narrowly lanceolate, much smaller, 2-5 mm long, ca. 1 mm wide, apex acute. Spur filiform, 3-3.5 cm long. Anther 3.5-4 mm tall; thecae broadly divergent toward base; viscidium bent upwards, 4-5 mm long; stigmas straight, narrow, acute.

Distribution: Vietnam (Dong Nai), Thailand, Laos, China (Longzhou County, Longgang National Nature Reserve of Guangxi).

Habitat: Habenaria lindleyana grows on karst limestone hillside with $40^{\circ}-50^{\circ}$ W or SW slope, at an

elevation of 200-300 m. The tree layer is up to 10 m tall, with a canopy cover of 65%, including *Sterculia monosperma*, *Cleistanthus sumatranus*, *Delavaya toxocarpa* and *Radermachera sinica*. The shrub layer cover is 80%, including *Diospyros eriantha*, *D. saxatilis*, *Miliusa chunii*, *Uvaria tonkinensis* and *Desmos chinensis*. The herb layer cover is 90%, consisting of *Microstegium fasciculatum*, *Bidens pilosa*, *Selaginella delicatula*, *S. uncinata*, *Asplenium sampsonii*. At present, the population is mainly distributed in periphery of Longgang National Nature Reserve, the only one locality known in China. Besides, it is very easily affected by the local residents, through forest clearance for cultivation, tree-cutting, digging and grazing, etc.

Additional specimens examined: China. Guangxi: Chongzuo City, Longzhou County, Longgang National Nature Reserve, grows in karst forest, hillside, 300 m, 17 Sep. 2015, Yu-Song Huang and Wei-Bin Xu Y3137 (IBK); the same location, grows in periphery of forest, foot of limestone hill, 250 m, 18 Sep. 2015, Wei-Bin Xu and Yu-Song Huang 12414 (IBK).

Conservation status: *H. lindleyana* is a rare species, and only one population (fewer than 100 individuals) is known in China. More native populations of *H. lindleyana* could be discovered from other limestone areas of Longgang National Nature Reserve, or in the Sino-Vietnamese border area. We therefore consider *H. lindleyana* to be Data Deficient (DD)^[9].

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