Chiritopsis longzhouensis, a New Species of Gesneriaceae from Limestone Areas in Guangxi, China

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ABSTRACT: A new species of Gesneriaceae, *Chiritopsis longzhouensis* B. Pan & W. H. Wu from limestone areas in Guangxi, China, is described and illustrated. The new species is similar to *C. jingxiensis* Yan Liu, W. B. Xu & H. S. Gao in the corolla shape, but differs in its leaf blade 2-4 × 1.3-2.5 cm, appressed pilose on both surfaces, Cymes 5-10, 1-3-branched, each 5-25-flowered, filaments geniculate about 1 mm above base, sparsely glandular-puberulent, staminodes 3.

KEY WORDS: *Chiritopsis*, new species, Limestone flora, Guangxi, taxonomy.

INTRODUCTION

Chiritopsis W. T. Wang was established in 1981 (Wang, 1981), it is represented by 11 species and 3 varieties in China, with majority of them distributed in Guangxi. In the course of investigating limestone plants in southwestern Guangxi Zhuang Autonomous Region, near the border with northern Vietnam, we collected an unusual *Chiritopsis* specimen in Longzhou County, Guangxi in 2008. After morphological research, consulting national floras and relevant literature (Wang et al., 1998, Li et al., 2004, Liu et al., 2006, Wen et al., 2008, Xu et al., 2009), it is concluded that the specimen represented a species new to science.

TAXONOMIC TREATMENT

Chiritopsis longzhouensis B. Pan & W. H. Wu sp. nov. Figs. 1 & 2

Species nova similis C. jingxiensi Yan Liu, W. B. Xu et H. S. Gao, a qua differt foliis 2-4 cm longis, 1.3-2.5 cm latis, utrinque appresse pilosis, cymis 5-10, semel-ter-ramosis, 5-25-flovis, filamentis prope basim geniculatis, sparse glanduloso-puberulis, staminodiis 3.

Type: China. Guangxi, cultivated in Guilin Botanical Garden, introduced from Shuikou Town, Longzhou County, in the crevice of limestone hills, 4 Dec. 2009, Bo Pan & Wang-Hui Wu 091751 (holotype, IBK; isotype, PE).

Herbs perennial; rhizome 5-20 × 4-5 mm diam. Leaves 5-25, basal, carnose, papery when dry; petiole flattened, 2-6 cm × 1.5-4 mm, appressed pilose; blades elliptic or broadly elliptic to suborbicular, 2-4 × 1.3-2.5 cm, appressed pilose on both surfaces, base attenuate to cuneate, margin entire, apex obtuse to rounded; lateral veins inconspicuous. Cymes 5-10, axillary, 1-3-branched, 5-25-flowered; peduncle 4-8 cm long, pubescent; bracts 2, opposite, lanceolate, 4-9 × 1.5-3.5 mm, margin entire, pubescent; pedicel 10-20 mm long, glandular-puberulent. Calyx 5-parted to base, lobes lanceolate, 3-4 × ca. 0.8 mm, apex acute, outside glandular-puberulent, inside sparsely puberulent, margins entire; corolla purplish, 10-14 mm long, outside glandular-puberulent, inside glabrous; corolla tube 8-9 mm long, ca. 5 mm in diam. at the mouth, ca. 3 mm in diam. at the base; limb distinctly 2-lipped, white; adaxial lip 2-parted to the base, lobes oblong or rounded, 2.5-3 × 2-2.5 mm; abaxial 3-lobed to near middle, lobes oblong or rounded, 2.5-3 × 2.5-3 mm; stamens 2, adnate to 3 mm above corolla base; filaments linear, ca. 4 mm long, geniculate 1 mm above base, sparsely glandular-puberulent; anthers ca. 1.3 mm long, glabrous; staminodes 3, lateral ones 1-3 mm long, apex capitate, adnate to ca. 2.5 mm above the corolla tube base, middle one 0.5 mm long, adnate to near the corolla tube base. Disc annular, ca. 0.6 mm in height, margin repand, glabrous; pistil 7-9 mm long, ovary narrowly ovoid, ca. 3.5 mm long, ca. 0.8 mm across, puberulent; style 4-5 mm long, puberulent; stigma triangular, ca. 0.7 mm wide, apex 2-lobed. Capsule narrowly ellipsoidal, 6-8 mm long, 1.5-2 mm across.

Ecology: On shaded rocky limestone slopes in broadleaved forests, ca. 400 m elevation.

Phenology: Flowering from November to December.

Etymology: The specific epithet is derived from the type locality, Longzhou County, Guangxi.

IUCN Red List Category: As far as we know, the population size of this new species is small, and known only from one site. It is estimated that individuals of this new species are no more than 200. We therefore assess *Chiritopsis longzhouensis* as critically endangered (CR) using the IUCN categories and criteria (IUCN 2001).

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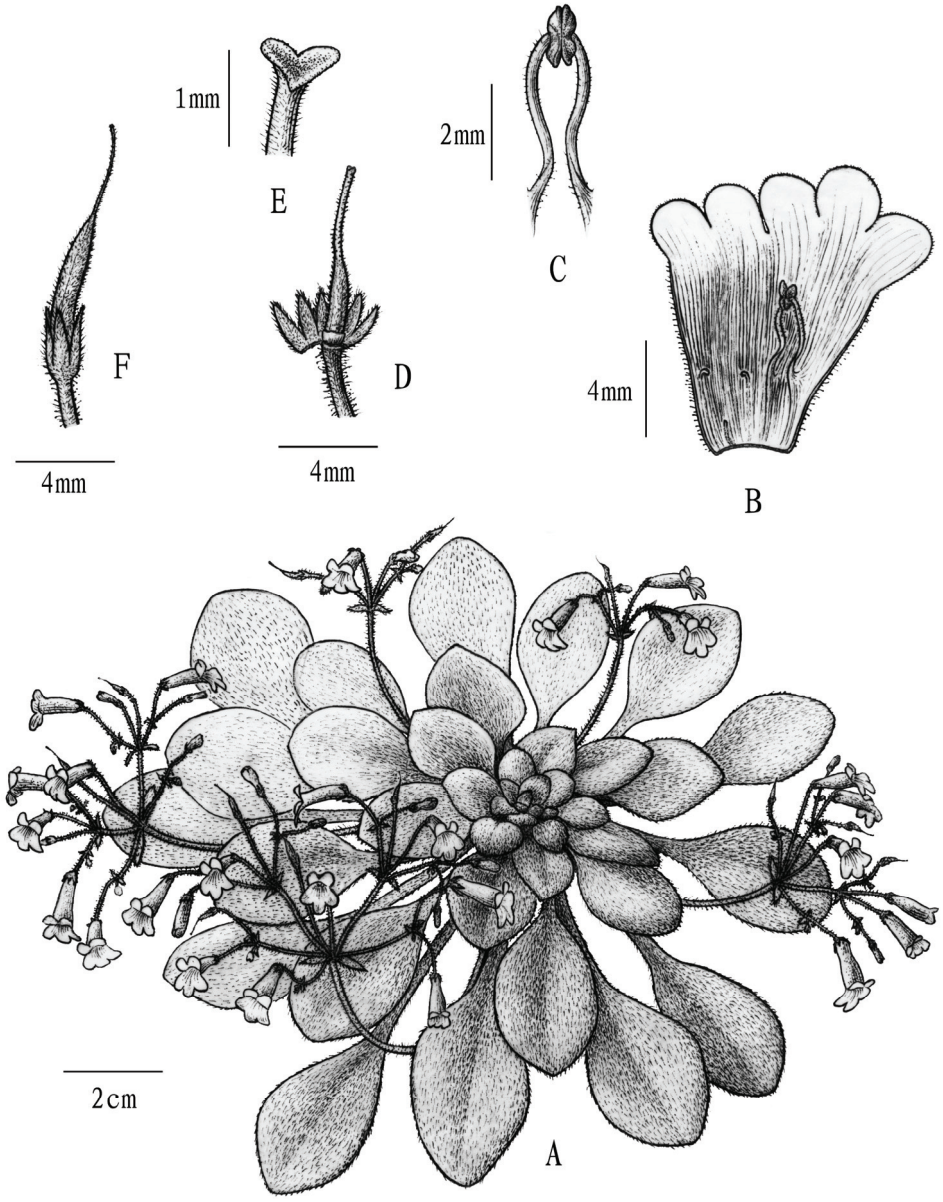


Fig. 1. *Chiritopsis longzhouensis* (Drawn by Y. X. Zhu from B. Pan et W. H. Wu 091751). A: Habit. B: Corolla opened showing stamens and staminodes. C: Stamens. D: Calyx opened showing disc and pistil. E: Stigma. F: Fruit.

Notes: *Chiritopsis longzhouensis* B. Pan & W. H. Wu resembles *C. jingxiensis* Yan Liu, W. B. Xu & H. S. Gao in the corolla shape, but differs in its leaf blade 2-4 × 1.3-2.5 cm, appressed pilose on both surfaces (vs. leaf blade 1-2 × 0.5-1 cm, villous), Cymes 5-10, 1-3-branched, 5-25-flowered (vs. Cymes lax, 2-5 per rosette, 1-branched, 1-3-flowered), filaments geniculate 1 mm above base, sparsely glandular-puberulent (vs. filaments more or less geniculate near middle, glabrous), staminodes 3 (vs. staminodes 2).

Additional specimens examined: CHINA. Guangxi, cultivated in Guilin Botanical Garden, introduced from Shuikou Town, Longzhou County, in the crevice of limestone hills, 20 Nov. 2009, Wei-bin Xu & Bo Pan 091738 (IBK).

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Fig. 2. Habit of *Chiritopsis longzhouensis*. (Photographed by Wang-Hui Wu)

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中國廣西石灰岩地區苦苣苔科一新種—龍州小花苣苔

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摘要：本文報導廣西石灰岩地區苦苣苔科小花苣苔屬 *Chiritopsis* W. T. Wang 一新種—龍州小花苣苔 *Chiritopsis longzhouensis* B. Pan & W. H. Wu。該種在花冠形狀上與靖西小花苣苔 *C. jingxiensis* Yan Liu, W. B. Xu & H. S. Gao 較相近, 但不同在於葉片兩面被貼伏柔毛，長 2—4 厘米，寬 1.3—2.5 厘米，聚繖花序 5—10 條，1—3 回分支，每花序有 5—25 花，花絲在距基部 1 毫米處膝狀彎曲，疏被腺狀柔毛，退化雄蕊 3 枚。

關鍵詞：小花苣苔屬、新種、石灰岩植物區系、廣西、分類學。

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