# *Chirita rongshuiensis*, a New Species of Gesneriaceae from Northern Guangxi, China

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ABSTRACT: *Chirita rongshuiensis* Yan Liu & Y. S. Huang, a new species of Gesneriaceae from Guangxi, China, is described and illustrated. This species is similar to *Chirita shouchengensis* Z. Y. Li, but differs in the following characters: the surface of leaf blade strigose, corolla tube slender, corolla lobes oblong, anthers reniform, cymes 1-2 branched, 3-9-flowered, peduncle 3-7 cm long, the efflorescence is June to July.

KEY WORDS: *Chirita rongshuiensis*, karst cave, limestone flora, new species, Guangxi.

## INTRODUCTION

In the course of investigating the karst cave plants in Rongshui County, Guangxi, China, we discovered a rare plant of *Chirita* (Gesneriaceae). After comparing with all described species of *Chirit*a (Wang et al., 1998; Li and Wang, 2004; Wei et al., 2007; Li and Wang, 2008; Xu et al., 2008; Huang et al., 2009; Li and Moller, 2009; Pan et al., 2009), we found it is different from all the known species of *Chirita*, so we confirmed it is a new species of *Chirita* and described as below.

## TAXONOMIC TREATMENTS

***Chirita rongshuiensis*** Yan Liu & Y. S. Huang, *sp. nov.* Figs. 1 & 2 A-F

*Affinis C. Shouchengensi* Z. Y. Li, *sed differt foliis supra strigosis, tubo corollae gracili elongato, lobis ejus oblongis, antheris reniformibus, cyma semel-bis-ramosa, 3-9-flora, pedunculis 3-7cm longis. Floret Jun. ad Jul.*

Type: China, Guangxi, Liuzhou City, Rongshui County, on moist rock face at the entrance of karst cave, rare, alt. 120 m, 02 July 2009, W. B. Xu & Y. S. Huang 09685 (holotype IBK; isotype PE).

Herbs perennial. Rhizome subterete, 6-10 cm long. Leaves 5-15, petiolate, crowded at the apex of rhizome; leaf blade oblanceolate to oblong, leathery, apex acute to obtuse, base decurrent, sometimes oblique, margin repand or crenate; adaxially strigose, abaxially pubescent; lateral veins 3-5 on each side, unconspicuous; petiole 0.8-2 × 0.2-0.3 cm, strigose. Cymes axillary, 3-10, 1-2-branched, 3-9-flowered, peduncle 3-7 cm long, 2-3 mm across, pubescent; Calyx 5-lobed to near base, lobes linear-lanceolate, 8-10×1 mm, outside and inner pubescent, margin entire, apex acuminate. Corolla 3-3.5 cm long, outside pubescent, inner glabrous, corolla tube slender, white, 1.8-2.3 cm long, orifice diameter 0.8-1.2 cm, limb distinctly 2-lipped, purplish, adaxial lip 2-parted to near the base, lobes oblong, ca. 8 × 5 mm, abaxial lip 3-parted to over the middle, lobes oblong, ca. 8 × 5 mm; stamens 2, adnate to about 1.1 cm above the corolla tube base, filaments filamentose, about 8-10 mm long, geniculate under the medial, glabrous; staminodes 2, linear, adnate to about 6 mm above the corolla tube base, anthers reniform, 2.5-3 mm, dorsad lanuginose. Disc annular, ca. 0.6 mm in height, glabrous. Pistil 2.8-3.4 cm long, pubescent, ovary linear, 1-1.3 cm long, 1.5 mm across, style 1.2-1.5 cm long, pubescent, stigma 2-parted, 2-3 mm long.

Ecology: on moist rock face at the entrance of karst caves.

Phenology: Flowering June to July.

Etymology: The specific epithet is derived from the type locality, Rongshui County, Liuzhou City, Guangxi Zhuang Autonomous Region, China.

IUCN Red List Category: The species are only found from its type locality, Rongshui County, Guangxi. Current information shows that the population size of this new species is fewer than 250 mature individuals, and only known from three limestone hills. We therefore assess *Chirita Rongshuiensis* as endangered degree (EN) using the IUCN categories and criteria (IUCN, 2001).

Note: *Chirita rongshuiensis* Yan Liu & Y. S. Huang is closely relate to *Chirita shouchengensis* Z. Y. Li (Fig. 2G and H), but differs in the following characters: the surface of leaf blade strigose, corolla tube slender, corolla lobes oblong, anthers reniform, cymes 1-2-branched, 3-9-flowered, peduncle 3-7 cm long, the efflorescence is June to July. A comparison of the salient characters of *Chirita rongshuiensis* and *C. shouchengensis* is shown in Table 1.



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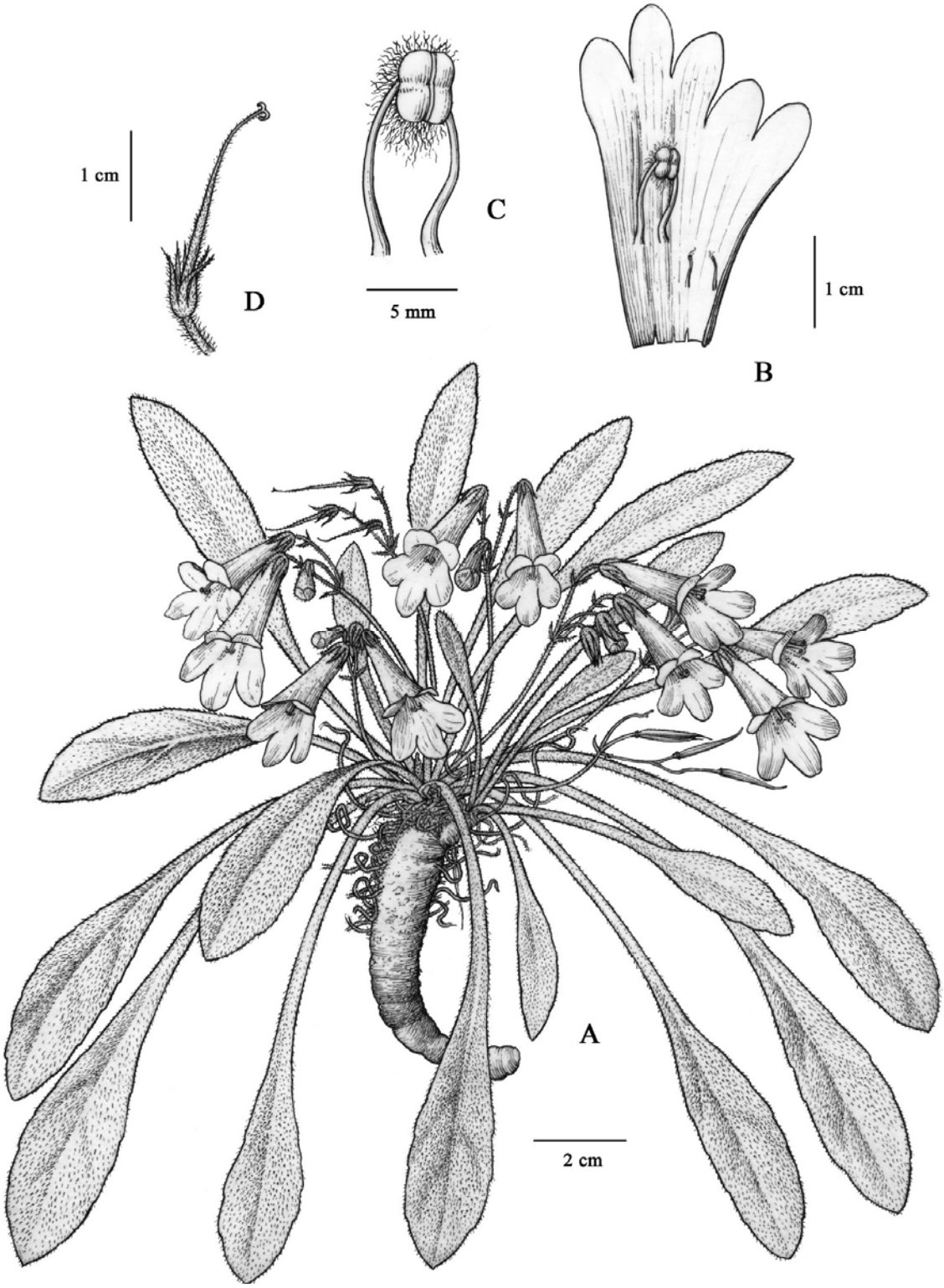



**Fig. 1. *Chirita rongshuiensis* (Drawn by S. Q. He, based on *W. B. Xu & Y. S. Huang 09685*). A: Habit. B: Corolla opened showing stamens and staminodes. C: Stamens. D: Calyx and pistil.**



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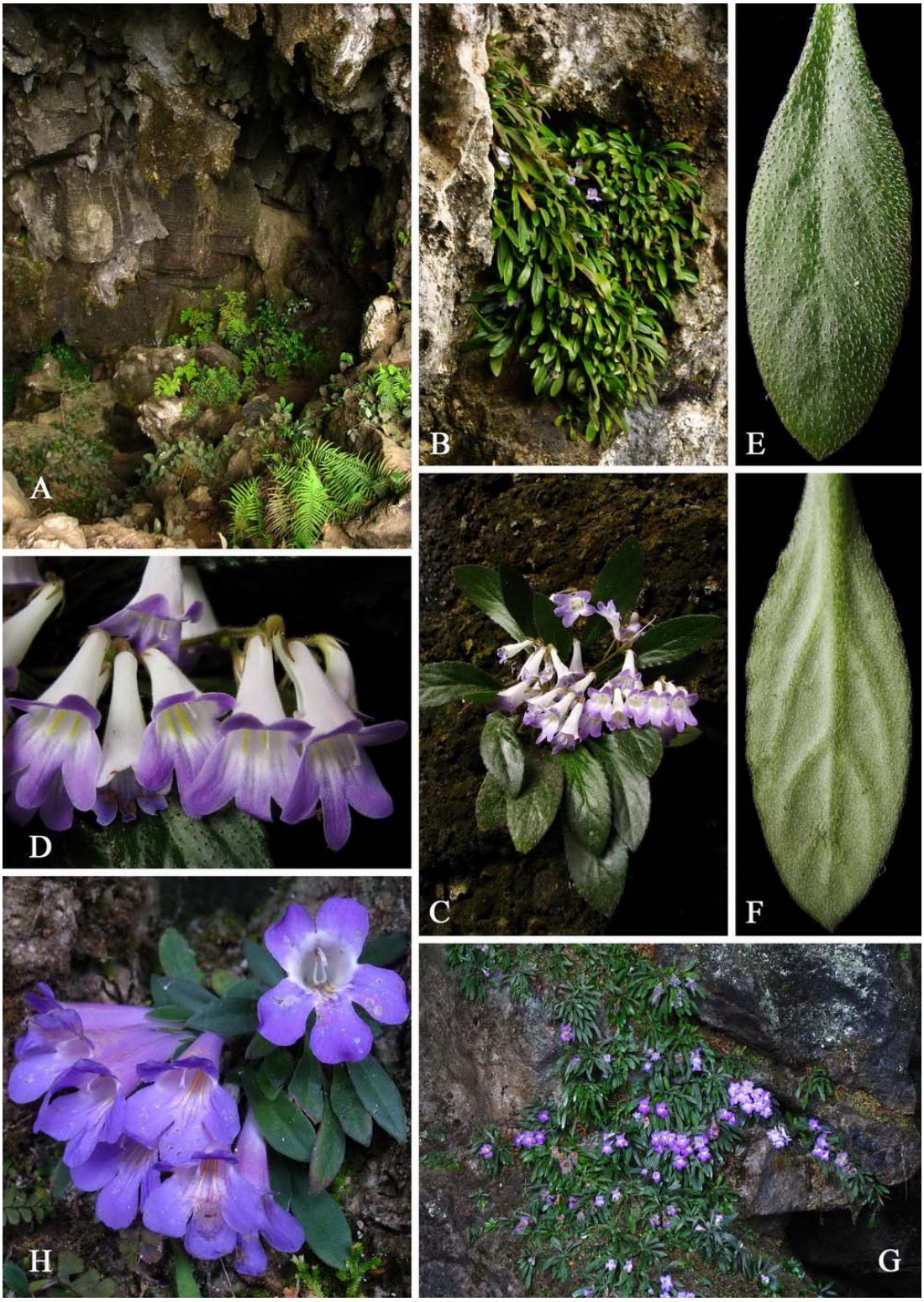



**Fig. 2.** ***Chirita rongshuiensis*** **Yan Liu & Y. S. Huang. A: Habitat. B: Habit. C: Flowering habit. D: Flowers. E: Leaf, adaxial surface. F: Leaf, abaxial surface.** ***Chirita shouchengensis*** **Z. Y. Li. G: Habitat. H: Flowering habit.**



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**Table 1. Comparison of salient characters of *Chirita shouchengensis* and *C. rongshuiensis*.**

| | *Chirita rongshuiensis* | *C. shouchengensis* |
|---|---|---|
| Leaf surface | strigose | puberulent |
| Orifice diameter of corolla tube | 0.8-1.2 cm | about 1.4 cm |
| Corolla lobes | oblong | rounded |
| Anthers | reniform | elliptic |
| Cymes | 3-9-flowers | solitary |
| Peduncle | 3-7 cm long | 0.7-1.1 cm long |
| Efflorescence | June - July | March - April |

Additional specimens examined: CHINA. Guangxi: Rongshui County, on moist rock face at the entrance of karst caves, alt. 120 m, 02 July 2009, *W. B. Xu & Y. S. Huang 09687* (IBK).

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# 中國廣西苦苣苔科一新種－融水唇柱苣苔

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摘要：描述了中國廣西苦苣苔科(Gesneriaceae)一新種—融水唇柱苣苔(*Chirita rongshuiensis* Yan Liu & Y. S. Huang)。該種與壽城唇柱苣苔（*Chirita shouchengensis* Z. Y. Li）相似，但葉面被糙伏毛，花冠筒細長，花冠裂片長圓形，花藥腎形，聚傘花序 1-2 分枝，具花 3-9 朵，花序梗長 3-7cm，花期 6-7 月可與後者區別。

關鍵詞：融水唇柱苣苔、岩溶洞穴、石灰岩植物區系、新種、廣西。



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