

# 假烟叶唇柱苣苔——中国广西石灰岩地区苦苣苔科一新种

盘波, 莫丹, 许为斌, 周太久\*

(广西壮族自治区中国科学院广西植物研究所, 广西 桂林 541006)

**摘要:** 报道了广西石灰岩地区苦苣苔科唇柱苣苔属(*Chirita* Buch.-Ham. ex D. Don) 1 新种——假烟叶唇柱苣苔(*C. pseudoheterotricha* T. J. Zhou, B. Pan & W. B. Xu)。该种在叶型上与烟叶唇柱苣苔(*C. heterotricha* Merr.)较相近, 但不同在于根状茎节间长 2~8 mm, 叶片和叶柄两面密被腺毛, 侧脉 3~4 条, 整个花序被开展的腺毛, 花萼裂片披针形, 花冠裂片长圆形, 花丝在中部扭曲, 密被紫色腺毛。

**关键词:** 唇柱苣苔属; 假烟叶唇柱苣苔; 苦苣苔科; 新种; 石灰岩植物区系; 广西; 中国

中图分类号: Q949.778.4

文献标识码: A

文章编号: 1005-3395(2009)06-0596-04

## *Chirita pseudoheterotricha* T. J. Zhou, B. Pa & W. B. Xu, A New Species of Gesneriaceae from Limestone Areas in Guangxi, China

PAN Bo, MO Dan, XU Wei-bin, ZHOU Tai-jiu\*

(Guangxi Institute of Botany, Guangxi Zhuang Autonomous Region and Chinese Academy of Sciences, Guilin 541006, China)

**Abstract:** A new species of Gesneriaceae, *Chirita pseudoheterotricha* T. J. Zhou, B. Pan & W. B. Xu, from limestone areas in Guangxi, China, is described and illustrated. The new species is similar to *C. heterotricha* Merr. in leaf shape, but differs in its internodes of rhizome 2~8 mm long, leaf blade and petiole densely glandular-pubescent on both surfaces, lateral veins 3~4 on each sides, inflorescence spreading glandular-pubescent, calyx-lobe lanceolate, corolla-lobe oblong, filaments twisted at the middle, densely purple glandular-puberulent.

**Key words:** *Chirita pseudoheterotricha*; Gesneriaceae; New species; Limestone flora; Guangxi; China

There are ca. 200 species of Gesneriaceae recorded from Guangxi, many of which are ornamental. Limestone areas of Guangxi are abundant in Gesneriaceae plants, and some new species of Gesneriaceae are found continuously from limestone areas in recent years<sup>[1-5]</sup>. In the field investigation of the ornamental plants of Gesneriaceae in 2008, an interesting plant of Gesneriaceae was collected from limestone areas of Guangxi. After consulting relevant literature<sup>[6-9]</sup> as well as herbarium specimens, it is identified as a new species of *Chirita*. Therefore it is

described and illustrated here.

*Chirita pseudoheterotricha* T. J. Zhou, B. Pan & W. B. Xu sp. nov. Fig. 1

**TYPE:** China. Guangxi: Hezhou Shi, Zhongshan Xian, Gonggan Zhen, in the crevice, rare, alt. 170 m, 2008-08-01, B. Pan, T. J. Zhou and W. B. Xu 08470 (holotype, IBK; isotypes, IBK, IBSC).

Species nova forma folii similis *C. heterotrichae*, sed differ laminis petiolisque utrinque dense glanduloso-pubescentibus, nervis lateralibus utrinsecus 3~4, inflorescentiis patulis glanduloso-pubescentibus,

Received: 2009-08-09

Accepted: 2009-09-20

**Foundation item:** Supported by Key Technologies Research and Development Program of Guilin (20070311); and Western Program for Fostering Personal Ability, CAS (2007)

\* Corresponding author

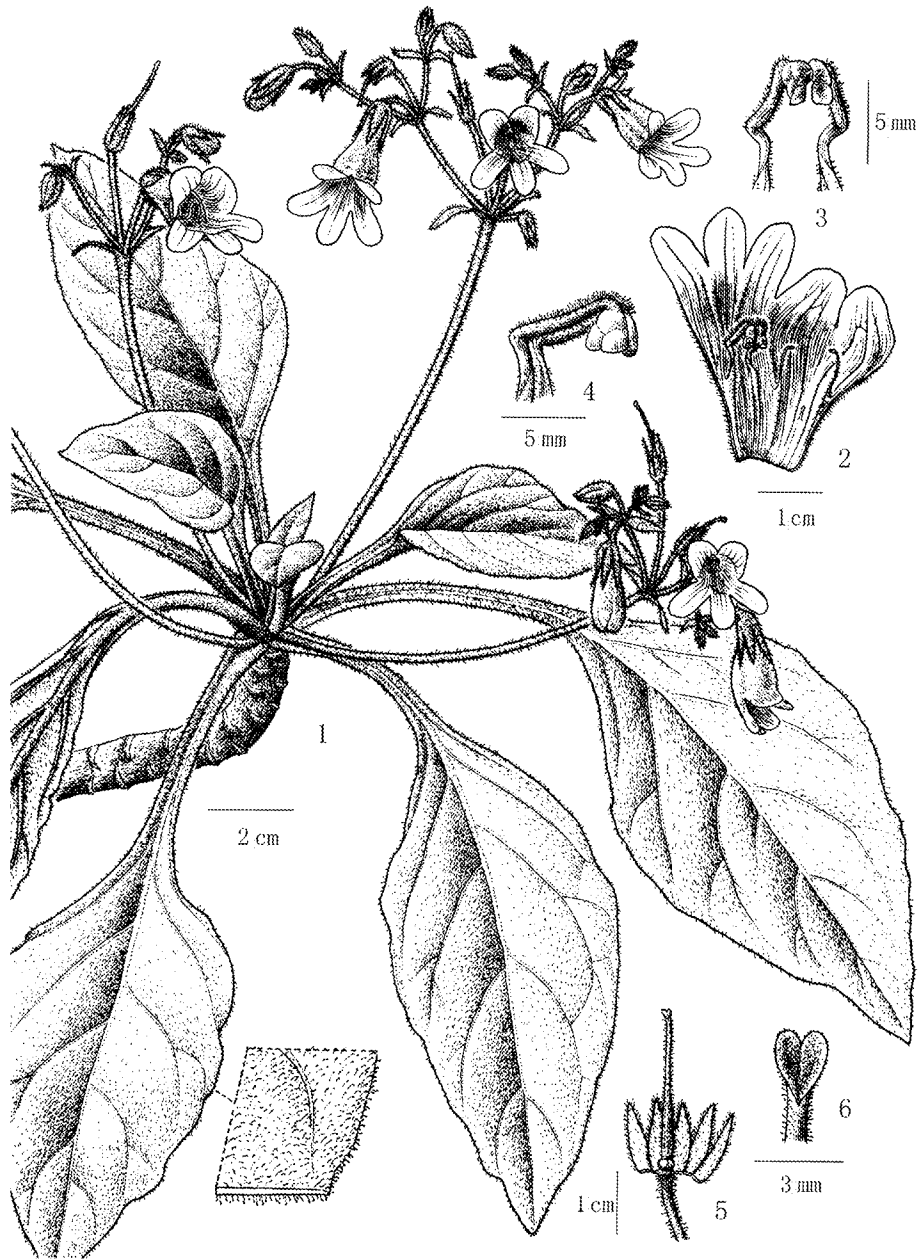


Fig. 1 *Chirita pseudoheterotricha* T. J. Zhou, B. Pan & W. B. Xu

1. Habit; 2. Corolla opened with stamens and staminodes; 3. Stamens (face view); 4. Stamens (side view); 5. Calyx and pistil; 6. Stigma (Drawn by Y. X. Zhu based on B. Pan et al. 08470).

lobis calycii lanceolatis, lobis corollae oblongo, filamentis ad medium tortis, dense purpureo-glanduloso-puberulis.

Herbs perennial. Rhizome subterete, 5 ~ 20 cm long, 1.2 ~ 1.5 cm across, internodes 2 ~ 8 mm long. Leaves 8 ~ 12, crowded at the apex of rhizome, petiolate; petiole 5 ~ 10 cm long, ca. 8 mm across, glandular-pubescent; leaf blade herbaceous, elliptic or ovate to broadly ovate, 5 ~ 18 cm × 3 ~ 12 cm, base attenuate or cuneate, slightly oblique, margin repand,

apex acute, densely glandular-pubescent on both surfaces, lateral veins 3 ~ 4 on each side, impressed adaxially and prominent abaxially. Cymes 4 ~ 8, 1 ~ 3-branched, 5 ~ 15-flowered; peduncle 8 ~ 20 cm long, spreading glandular-pubescent; bracts 2 (~3), opposite, broadly lanceolate, 20 ~ 25 mm × 6 ~ 9 mm, margin entire, apex acute, spreading glandular-pubescent abaxially, sparsely glandular-pubescent adaxially. Pedicel 15 ~ 30 mm, spreading glandular-pubescent. Calyx 5-parted nearly to the base, lobes lanceolate,

10~12 mm × 2.5~3.5 mm, margin entire, apex acute, spreading glandular-pubescent abaxially, sparsely glandular-pubescent adaxially. Corolla pale purple, ca. 3.5 cm long, outside sparsely glandular-pubescent, inside glabrous; tube broadly tubular, 1.8~2.2 cm long, ca. 1.2 cm in diam. at the mouth; limb distinctly 2-lipped, adaxial lip 2-parted to near the base, lobes oblong, 9~10 mm × ca. 8 mm, apex round; abaxial lip 3-parted to near the base, lobes oblong, ca. 10~11 mm × 5~6 mm, apex round. Stamens 2, adnate to ca. 10 cm above the corolla tube base; filaments twisted at the middle, ca. 11 mm long, densely purple glandular-puberulent; anthers subcordiform, ca. 2 mm across, glabrous. Staminodes 3, sparsely glandular-puberulent, lateral ones 4~6 mm long, adnate to ca. 10 mm above the corolla tube base, middle one 1.2~1.5 mm long, adnate to ca. 6 mm above the base of the corolla tube. Disc annular, ca. 1.5 mm high, margin repand. Pistil 2.2~2.5 cm long, ovary linear, 8~10 mm long, ca. 2 mm in diam, glandular-puberulent; style ca. 1.2 cm long, glandular-puberulent; stigmas obtrapeziform, 1~1.5 mm across, apex shallowly 2-lobed. Capsule not seen.

**Ecology.** In the crevice of limestone hills.

**Phenology.** Flowering from July to August.

**Etymology.** The specific epithet is derived from “pseudo” and “heterotricha” because its leaf resembling *Chirita heterotricha* Merr.

**IUCN Red List Category.** Current observations showed that the population size of this new species is small, and the distribution area is narrow. We therefore assess *Chirita pseudoheterotricha* as endangered (EN) using the IUCN categories and criteria<sup>[10]</sup>.

**Additional specimens examined.** CHINA. Guangxi: Hezhou Shi, Zhongshan Xian, alt. 170 m, 2008-08-01, B. Pan, T. J. Zhou and W. B. Xu 08471 (IBK).

**Notes.** *Chirita pseudoheterotricha* T. J. Zhou, B. Pan & W. B. Xu resembles *C. heterotricha* Merr. in leaf shape, but differs in its internodes of rhizome 2~8 mm long, leaf blade and petiole densely glandular-pubescent on both surfaces, lateral veins 3~4 on each sides, inflorescence spreading glandular-pubescent, calyx-lobe lanceolate, corolla-lobe oblong, filaments twisted at the middle, densely purple glandular-puberulent. Table 1 summarizes distinctions between *Chirita pseudoheterotricha* and *Chirita heterotricha*.

Table 1 Comparison of *Chirita pseudoheterotricha* and *Chirita heterotricha*

	<i>Chirita pseudoheterotricha</i>	<i>Chirita heterotricha</i>
Internodes length (mm)	2~8	10~20
Leaf blade	Densely glandular-pubescent on both sides	Adaxially sparsely puberulent and sparsely pilose, eglandular, abaxially sparsely pubescent
Lateral veins	3~4 on each side of midrib, impressed adaxially and prominent abaxially	4~7 on each side of midrib, inconspicuous
Inflorescence	Spreading glandular-pubescent	Puberulent or spreading pilose
Calyx-lobe	Lanceolate, 10~12 mm × 2.5~3.5 mm	Linear-lanceolate to narrowly triangular, 7~17 mm × 0.5~1.2 mm
Lipped lobes	Oblong	Subround
Filaments	Twisted at the middle, densely purple glandular-puberulent	Geniculate near middle, sparsely puberulent

**Acknowledgements** We are grateful to Prof. Fa-nan WEI (IBK) for latin diagnosis, and Mr. Yun-xi ZHU (IBK) for preparation the illustration.

## References

[1] Xu W B, Gao H S, Liu Y. *Lagarosolen jingxiensis* Yan Liu, H. S. Gao et W. B. Xu, a new species of Gesneriaceae from Guangxi,

China [J]. *J Trop Subtrop Bot*, 2008, 16(3): 274-276.

[2] Liu Y, Wei Y G. *Chirita lutea* Yan Liu et Y. G. Wei, a new species of Gesneriaceae from Guangxi, China [J]. *J Wuhan Bot Res*, 2004, 22 (5): 391-393. (in Chinese)

[3] Liu Y, Wei Y G, Tang S C. *Chiritopsis lingchuanensis* Yan Liu et Y. G. Wei, a new species of Gesneriaceae from Guangxi, China [J].

- Acta Phytotax Sin, 2006, 44(3): 340-344.(in Chinese)
- [4] Wei Y G. *Petrocodon ferrugineus* (Gesneriaceae), a new species from Guangxi, China [J]. Novon, 2007, 17: 135-137.
- [5] Wei Y G. A new species of *Lagarosolen* W. T. Wang (Gesneriaceae) from Guangxi Province, China [J]. Kew Bull, 2006, 61: 273-275.
- [6] Wang W T. *Chirita* Buch.-Ham. ex D. Don [M]// Flora Reipublicae Popularis Sinicae Tomus 69. Beijing: Science Press, 1990: 333-409. (in Chinese)
- [7] Wang W T, Pan K Y, Li Z Y, et al. *Chirita* Buch.-Ham. ex D. Don [M]// Wu Z Y, Raven P H. Flora of China Vol. 18. Beijing: Science Press; St. Louis: Missouri Botanical Garden Press, 1998: 311-345.
- [8] Li Z Y, Wang Y Z. Plants of Gesneriaceae in China [M]. Zhengzhou: Henan Science and Technology Publishing House, 2004: 171-261. (in Chinese)
- [9] Wei Y G, Pan B, Tang W X. *Chirita guihaiensis* sp. nov. (Gesneriaceae) from Guangxi, China [J]. Nord J Bot, 2007, 25: 296-298.
- [10] IUCN. IUCN Red List Categories and Criteria Version 3.1 [M]. Gland, Switzerland and Cambridge: IUCN Publication Service Unit, 2001: 18-20.