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Briggsia damingshanensis (Gesneriaceae), a new species from Guangxi, China

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Briggsia damingshanensis L. Wu & B. Pan is described and illustrated as a new species of Gesneriaceae from Guangxi, China. It is similar to *B. dongxingensis*, but differs in its densely glandular-pubescent ovary, inconspicuous or absent bracts, pendulous and very slender peduncle, and sparsely pubescent stem and petiole.

The genus *Briggsia* (Gesneriaceae, Cyrtandroideae) consists of approximately 22 species distributed in southeastern Asia. In China, the genus is represented by about 21 species, many of which are endemic (Li & Wang 2004). During our expedition to Damingshan in Guangxi, China in 2010, a peculiar specimen of *Briggsia* was collected by the authors. After consulting the relevant literature (Pan 1988, Wang *et al.* 1990, 1998, Li & Wang 2004) as well as herbarium specimens, we concluded that it represents an undescribed species in *Briggsia*.

***Briggsia damingshanensis* L. Wu & B. Pan, sp. nova** (Figs. 1 and 2)

Species nova haece *B. dongxingensis* Chun ex K.Y. Pan arcte affinis est, a qua differt caule petiolisque sparse pubescentibus, pedunculo pendulo, gracillimo, sparse pubescenti, bracteis inconspicuis nullisque, tubo corollae intus inferne

purpureo-striato, filamentis apice glabris, ovario dense glanduloso-pubescenti.

TYPE: China, Guangxi, Nanning, Damingshan Natural Reserve, under evergreen broad-leaved forest, 23°28'N, 108°25'E, alt. 1250 m, 5 Aug. 2010 Lei Wu & Rihong Jiang D0320 (holotype IBK; isotypes PE and IBK). — PARATYPE: China, Guangxi, Nanning, Damingshan Natural Reserve, rare, alt. 950 m, 19 Aug. 2010 Lei Wu & Wei-bin Xu 10970 (IBK).

ETYMOLOGY. The specific epithet is derived from the type locality, Damingshan Natural Reserve, Guangxi.

Herbs perennial. Stems 18–34 cm high, purple, sparsely pubescent, sometimes with decumbent rhizomes. Leaves opposite, unequal or subequal, rarely equal in a pair; petiole 0.6–2.6 cm long, sparsely pubescent; leaf blade elliptic-ovate, 4.5–14 × 2.5–5.5 cm, sparsely pubescent on both surfaces, pilose along veins, base frequently oblique, cuneate, sometimes rounded on one side, margin denticulate to serrate, apex acuminate to acute; lateral veins 5–10 on each side of midrib, purple, adaxially retuse,

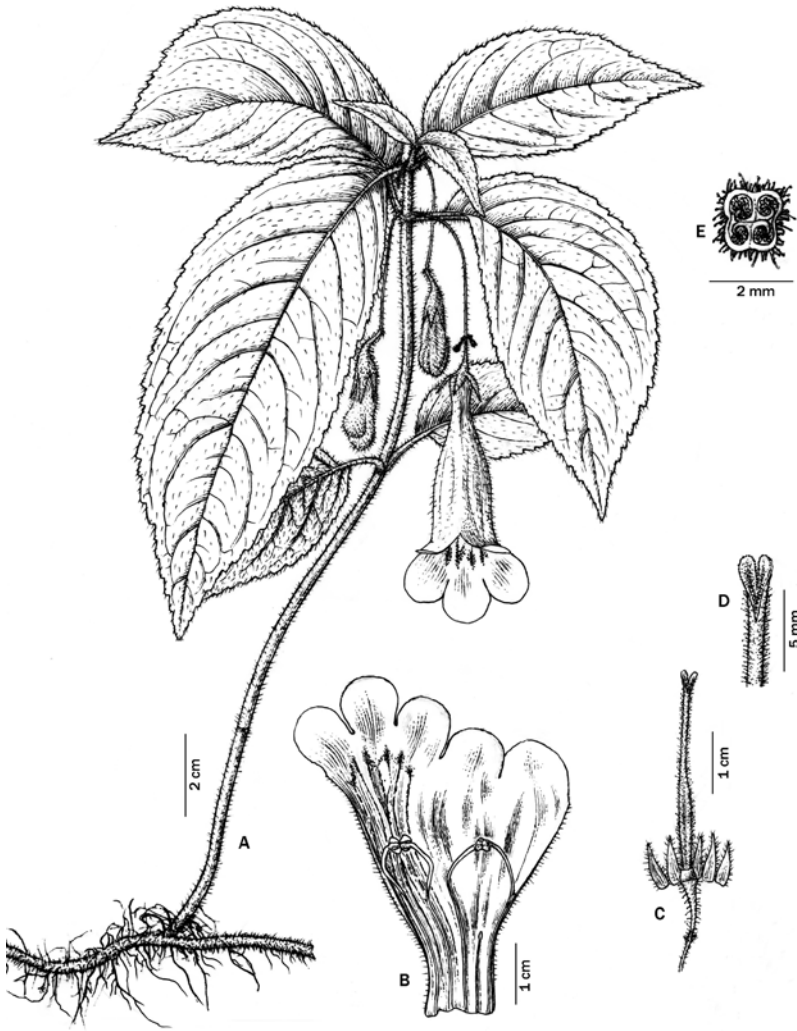


Fig. 1. *Briggsia damingshanensis* (from the holotype, drawn by Y. X. Zhu). — **A:** Habit. — **B:** Corolla opened, showing stamens and staminodes. — **C:** Calyx and pistil. — **D:** Stigma lobes. — **E:** Cross section of ovary.

abaxially raised. Cymes 1–3-flowered; peduncle 4–8 cm long, purple, very slender, with sparse glandular-pubescent; bracts inconspicuous or absent. Calyx lobes 5, free nearly to base, lobes lanceolate to narrowly lanceolate, 5–10 × 1.5–2 mm, outside densely glandular-pubescent, inside glabrous, margin entire, veins indistinct. Corolla tube narrowly campanulate, yellow, gibbous abaxially, with purple stripes inside, 4.8–6 cm long, outside sparsely glandular-pubescent, inside sparsely pubescent only on lobes of abaxial lip; tube 3.7–4.5 × 1.3–1.5 cm; limb distinctly 2-lipped, adaxial lip ca. 0.65 cm long, 2-lobed, lobes semiorbicular, 6–7 × 7–8 mm, apex rounded; abaxial lip ca. 1.4 cm long, 3-lobed, lobes semiorbicular, 5–8 × ca. 7 mm,

apex rounded. Stamens 4, adaxial stamens adnate to 1.5–2 cm above corolla tube base, ca. 1.2 cm long, abaxial ones adnate to 1.3–1.7 cm above corolla tube base, ca. 1.4 cm long; filaments glabrous; anthers globose, thecae not confluent; staminodes adnate to ca. 1.3 cm above corolla tube base, ca. 1 mm long. Disc ringlike, subentire. Pistil 2.7–3.3 cm long; ovary densely glandular-pubescent, ca. 1.8 × 0.1–0.2 cm, 1-loculed; placentas 2, parietal, projecting inward, 2-cleft. Style 9–13 mm, glandular-pubescent; stigmas 2, equal, 2-lipped, undivided. Fruit unknown. Flowering from August to September.

Briggsia damingshanensis resembles *B. dongxingensis*, but there are several differences (see Appendix).

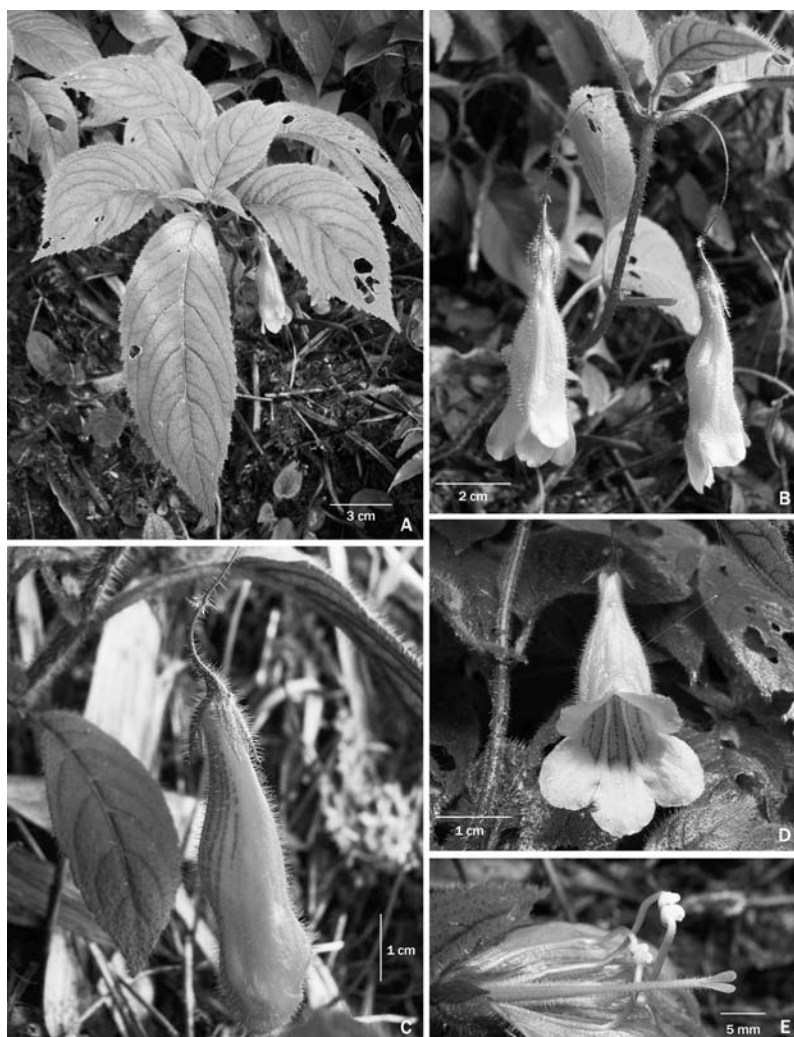


Fig. 2. *Briggsia damingshanensis*. — **A:** Habit. — **B:** Flowers. — **C:** Flower side view. — **D:** Flower front view. — **E:** Corolla opened, showing pistil and stamens.

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References

- Li, Z. Y. & Wang, Y. Z. 2004: [*Plants of Gesneriaceae in China*]. — Henan Sci. & Technol. Publ. House, Zhengzhou. [In Chinese].
- Pan, K. Y. 1988: [New taxa of *Briggsia* Craib (Gesneriaceae) from China]. — *Acta Phytotaxonomica Sinica* 26: 450–457. [In Chinese].
- Wang, W. T., Pan, K. Y. & Li, Z. Y. 1990: Gesneriaceae. — In: Wang, W. T. (ed.), *Flora Reipublicae Popularis Sinicae* 69: 203–226. Sci. Press, Beijing. [In Chinese].
- Wang, W. T., Pan, K. Y., Li, Z. Y., Weitzman, A. L. & Skog, L. E. 1998: Gesneriaceae. — In: Wu, Z. H. & Raven, P. H. (eds.), *Flora of China*, vol. 18: 244–401. Sci. Press, Beijing & Missouri Bot. Garden Press, St. Louis.

Apendix. Morphological comparison of *Briggsia damingshanensis* and *B. dongxingensis*.

	<i>B. damingshanensis</i>	<i>B. dongxingensis</i>
Stems	sparsely pubescent	densely pubescent
Petiole	sparsely pubescent	densely pilose
Leaf blade	elliptic-ovate, sparsely pubescent on both surfaces, pilose along veins, lateral veins purple	elliptic to ovate or obovate adaxially appressed puberulent to pubescent, abaxially pubescent, villous along veins
Peduncle	purple, very slender, sparsely pubescent with glandular-pubescent	pubescent
Bracts	inconspicuous or absent	2, lanceolate to narrowly oblong, 2–4 × 0.5–1.2 mm
Calyx	outside densely glandular-pubescent	outside pubescent to villous
Corolla	4.8–6 cm long, inside sparsely pubescent only on lobes of abaxial lip, adaxial lip ca. 0.65 cm long, 6–7 × 7–8 mm, abaxial lip ca. 1.4 cm long, 5–8 × ca. 7 mm, inside with purple stripes	4–5 cm long, inside sparsely pubescent only on lobes of adaxial lip, adaxial lip ca. 1.1 cm long, 5–6 × 5–7 mm, abaxial lip 7–9 mm long, 4–7 × ca. 5 mm, inside spotted or not
Filaments	glabrous	sparsely glandular-pubescent near apex or glabrous
Stamens	abaxial ones ca. 1.4 cm long	abaxial ones ca. 1.8 cm long
Staminodes	adnate to ca. 1.3 cm above corolla tube base, ca. 1 mm long	adnate to ca. 1.8 cm above corolla tube base, ca. 1.5 mm long
Ovary	densely glandular-pubescent	glabrous