

Petrocodon ferrugineus (Gesneriaceae), a New Species from Guangxi, China

Yi-Gang Wei

The Botanical Institute of Guangxi, Academia Sinica, Guilin 541006, People's Republic of China. weiyigang@yahoo.com.cn

ABSTRACT. A new species, *Petrocodon ferrugineus* Y. G. Wei (Gesneriaceae) from Guangxi Province in southern China, is described and illustrated. Its relationship with *Petrocodon dealbatus* Hance is discussed. The new species is distinguished by the dense villous pubescence of the leaves, bracts, and plant axes; filaments that are linear, glabrous, curved, and somewhat expanded in the middle; and fruits with 4-loculicidal, but not septicidally dehiscent, capsules.

Key words: China, Gesneriaceae, Guangxi, *Petrocodon*.

The genus *Petrocodon* Hance (Gesneriaceae) is comprised of one species, *P. dealbatus* Hance, with two varieties established in 1883. These plants are perennial, acaulescent herbs with caespitose habit and 5 to 15 leaves that are elliptic-obovate, elliptic to oblong, and petiolate. The inflorescences are always subumbelliform. The flowers are distinguished by two stamens and two staminodes, with a superior ovary, and the fruit is generally 2-valvular. The new species, *P. ferrugineus*, differs by having fruits with 4-loculicidal, but not septicidally dehiscent, capsules. The morphological characteristics of *P. dealbatus* and *P. ferrugineus* are compared in Table 1. *Petrocodon* is distributed in the southern provinces of Guangxi, Guangdong, Guizhou, Hunan, and Hubei. After a morphological study, study of the pertinent literature, and examination of other specimens, the authors are convinced that the morphological features of the specimens from Guangxi represent a new species.

Petrocodon ferrugineus Y. G. Wei, sp. nov. TYPE: China. Guangxi Prov.: Xincheng Co., 15 July 2004, Yi-gang Wei & Chao Cui 0402 (holotype, IBK; isotype, PE). Figure 1.

Haecc species *P. dealbato* affinis, sed foliis supra dense villosis apice obtusis raro acutis; petiolis, pedunculis, pedicellis, calycibus dense ferrugineo-pilosis; corollis campanulatis extus sparse purpureo-puberulis, filamentis curvis versus medium dilatatis, capsulis 4-loculicidis differt.

Perennial herb, acaulescent; rhizomes terete, 1.5–4 cm, 2–10 mm diam. Leaves 8 to 15, elliptic to oblong, 3–6 × 1.8–2.5 cm, obtuse to acute at apex, cuneate at base, margin with crenation generally up to the middle, densely villous on the abaxial and adaxial surfaces, often purple abaxially, petioles 0.5–3.5 cm, with dense ferruginous villous pubescence. Inflorescence of 1 to 5 cymes, 4- to 11-flowered; peduncles 2–10 cm, with dense ferruginous pubescence; bracts 2, lanceolate to narrowly linear, 4–5 × ca. 1 mm, with dense ferruginous pubescence, slender, 4–8 mm. Calyx 5-parted to the base, calyx lobes linear, 1–2 × 0.2–0.3 mm, with dense ferruginous pubescence; corolla white, campanulate, 4–5 mm, with sparse purple-red pubescence outside, corolla tubes longer than the limbs, 3–4 mm, corolla mouth orifice 3–4 mm diam., superior corolla upper lip ca. 2 mm long, 2 corolla lobes slit to the base, these lobes deltoid; inferior lip, ca. 2 mm long, 3 lobes split close to the base, these lobes deltate to ovate; stamens 2, glabrous, filaments linear, glabrous, curved, somewhat expanded in the middle, ca. 2 mm long, inserted at about 1 mm from the base of

Table 1. Morphological characteristics of *Petrocodon ferrugineus* and *P. dealbatus*.

	<i>P. ferrugineus</i>	<i>P. dealbatus</i>
Leaf	apex obtuse to acute, densely villous adaxially and abaxially, often purple abaxially, petioles with dense ferruginous villous pubescence	apex acute to acuminate, sparsely pubescent adaxially and abaxially, not purple abaxially, petioles sparsely pubescent
Flower	peduncles, calyces, bracts with dense ferruginous pubescence; corolla campanulate with sparse purple-red pubescence outside, filaments curved, somewhat expanded in the middle	peduncles, calyces, bracts with pubescence; corolla urceolate with pubescence outside, filaments not curved, not expanded in the middle
Fruit	4-loculicidal, but not septicidally dehiscent capsules	capsule, 2-valvular

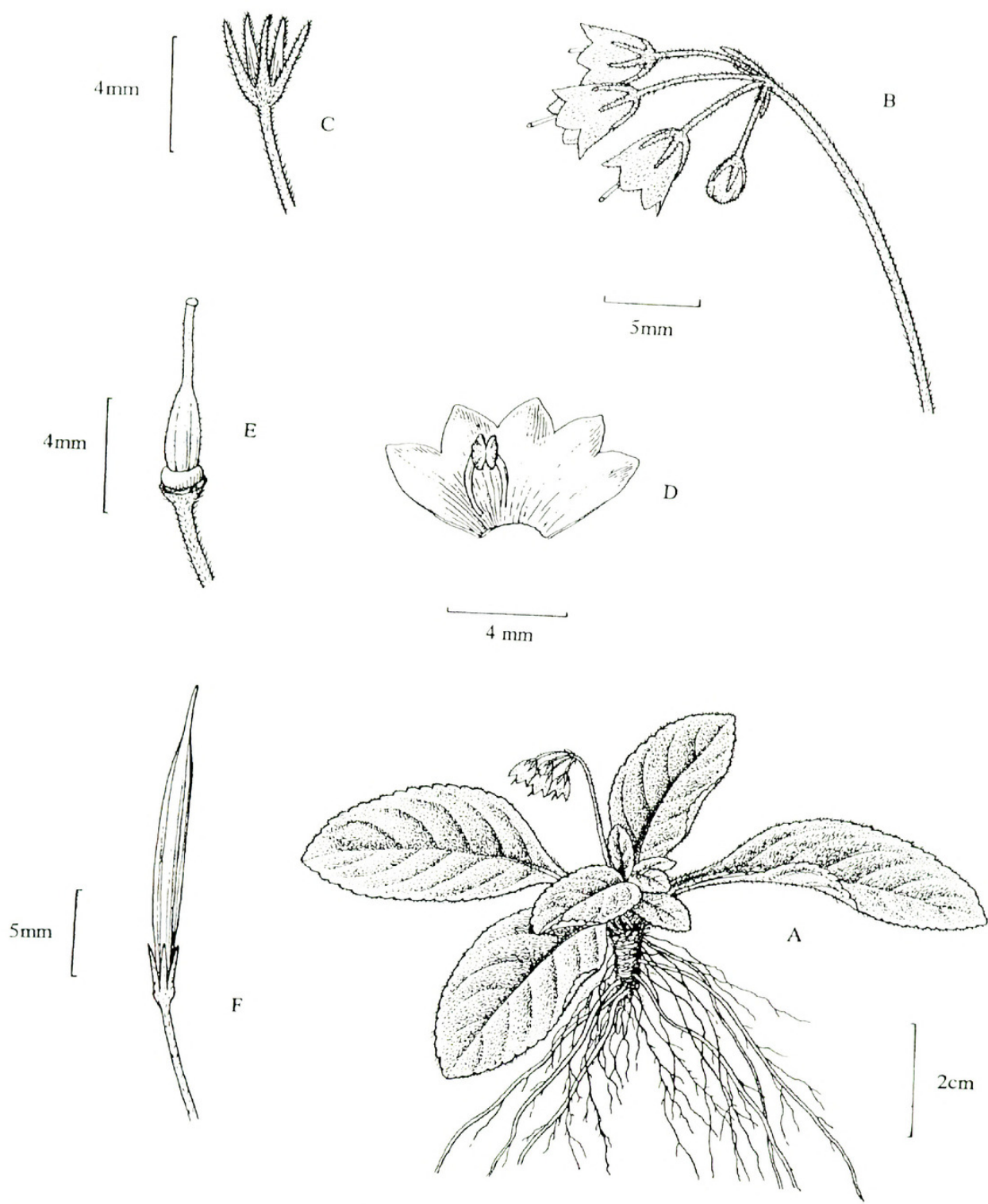


Figure 1. *Petrocodon ferruginum* Y. G. Wei. —A. Habit. —B. Inflorescence. —C. Calyx. —D. Dissected corolla. —E. Ovary and style. —F. Fruit. Drawn from the holotype *Yi-gang Wei & Chao Cui 0402* (IBK) by Shun-qing He.

the corolla; anthers coherent, confluent at their apex, anthers elliptic, ca. 1 mm; staminodes 2, linear, straight, 0.3–0.5 mm, glabrous, inserted 0.5–0.8 mm from the base of the corolla; disk ca. 0.5 mm high, annular; pistil linear, with sparse pubescence, 6–7 mm, often exserted; ovary ca. 2 mm, style ca. 4 mm. Stigma small, spheroidal. Fruit 5–20 × 1–2 mm, linear, glabrous, loculicidal, opening by 4

valves; seeds fusiform, 0.6–0.8 mm, seed coat ± glabrate.

Phenology. Flowering July–August.

Distribution. Known from limestone hills and stony slopes, under forest cover at 250 m elevation in Xincheng County, Guangxi Province, in southern China. The new species could be seen only on the

northeastern slope of the limestone hill, with a population size of approximately 100. The author considers *Petrocodon ferrugineus* to be endemic to Xincheng County.

Paratypes. CHINA. **Guangxi Prov.:** Xincheng Co., 14 July 2006, *Yi-gang Wei* 06200 (IBK, MO), 23 Sep. 2003, *Yi-gang Wei & Chao Cui* 0301 (IBK), 17 June 1985, *Xiu-xiang Chen & Zhi-ren Liu* 61327 (GXMI).

Acknowledgments. I thank Ding Fang, Guangxi Institute of Traditional Medical and Pharmaceutical Science, for amending the paper and Shun-qing He, The Botanical Institute of Guangxi, Academia Sinica, for drawing the illustration. This study was supported by Knowledge Innovation Program of the Chinese Academy of Sciences and The Guangxi Natural Science Foundation (GKJ0448089).



Wei, Yi-Gang. 2007. "Petrocodon ferrugineus (Gesneriaceae), a New Species from Guangxi, China." *Novon a journal of botanical nomenclature from the Missouri Botanical Garden* 17, 135–137.

View This Item Online: <https://www.biodiversitylibrary.org/item/41805>

Permalink: <https://www.biodiversitylibrary.org/partpdf/121744>

Holding Institution

Missouri Botanical Garden, Peter H. Raven Library

Sponsored by

Missouri Botanical Garden

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.