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# *Aristolochia wuana*, a New Name in Chinese *Aristolochia* (Aristolochiaceae)

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**ABSTRACT.** A new name, *Aristolochia wuana* Zhen W. Liu & Y. F. Deng, is proposed to replace the later homonym *Aristolochia macrocarpa* C. Y. Wu & S. K. Wu ex D. D. Tao, not *A. macrocarpa* Duchartre. The species may be closely related to *A. griffithii* Hooker f. & Thomson ex Duchartre but differs in its retuse or rounded leaf apex (vs. acute or shortly acuminate), oblong capsule (vs. narrowly cylindrical), and the smooth upper surface of the seeds (vs. rugose).

**Key words:** *Aristolochia*, Aristolochiaceae, China.

In 1983, a new species of *Aristolochia* L. (Aristolochiaceae) was described from Xizang, China, as *A. macrocarpa* C. Y. Wu & S. K. Wu ex D. D. Tao (Tao, 1983). The species did not appear in the recently published Volume 5 of *Flora of China* (Huang et al., 2003). Furthermore, this name is a later homonym of *A. macrocarpa* Duchartre from West Africa (Duchartre, 1864; Ma, 1992). After studying the specimens of both *A. macrocarpa* Duchartre and *A. macrocarpa* C. Y. Wu & S. K. Wu ex D. D. Tao, it was apparent that the specimens represent two distinct species. According to the classification of Schmidt (1935) and Gonzalez (1999), *A. macrocarpa* Duchartre belongs to subgenus *Par aristolochia* (Hutchinson & Dalziel) O. C. Schmidt and *A. macrocarpa* C. Y. Wu & S. K. Wu ex D. D. Tao belongs to subgenus *Siphisia* (Rafinesque) Duchartre. Subgenus *Siphisia* differs from subgenus *Par aristolochia* in having six anthers (vs. eight to 10), a 3-lobed gymnostemium (vs. 8- to 10-lobed), and fruit flesh that is dehiscent (vs. woody indehiscent). Subgenera *Siphisia* and *Par aristolochia* were treated at generic rank as *Isotrema* Rafinesque and *Par aristolochia* Hutchinson & Dalziel, respec-

tively, by some authors (Klotzsh, 1859; Huber, 1960, 1985, 1993; Poncy, 1978; Mabberley, 1987). However, the broad circumscription of *Aristolochia* was widely accepted by others (Hou, 1984; Phuphatthanaphong, 1985; Hwang, 1988; Ma, 1989, 1992; Gonzalez, 1999; Murata et al., 2001; Huang et al., 2003) and supported by recent molecular studies (Wanke et al., 2006). According to Article 53.1 of the *International Code of Botanical Nomenclature* (McNeil et al., 2006), *A. macrocarpa* C. Y. Wu & S. K. Wu ex D. D. Tao must be replaced, and the following new name is proposed here.

***Aristolochia wuana*** Zhen W. Liu & Y. F. Deng, nom. nov. Replaced name: *Aristolochia macrocarpa* C. Y. Wu & S. K. Wu ex D. D. Tao, Fl. Xizang, 1: 585. 1983, non *Aristolochia macrocarpa* Duchartre, 1864. TYPE: China. Xizang Autonomous Region: Zayü Xian, in woods, 2100 m, 1 Aug. 1973, *Qinghai-Xizang (Tibet) Complex Expedition* 73-948 (holotype, KUN).

The species has not yet been described in English. The emended full description is provided as follows.

Shrub climbing; stems terete, striate, sparsely gray villous; buds densely grayish brown villous. Petioles 8–18 cm, sparsely gray villous; leaf blade cordate, 18–24 × 16–20 cm, thick papery, adaxially sparsely pubescent along the veins, abaxially reddish brown or white villous, basally palmate, with primary veins 3 to 5, lateral veins in 3 to 4 pairs, tertiary veins prominent abaxially, base cordate to auriculate, margin entire, apex retuse or rounded. Flowers not seen; pedicels 6–7 cm in fruit. Capsule solitary, oblong, ca. 11 × 6 cm,

6-ribbed, dehiscing at tip; seeds ovoid, upper surface plano-convex, smooth, lower surface deeply concave.

**Distribution and habitat.** *Aristolochia wuana* is known from northern Gaoligong Shan, occurring in southeastern Xizang and northeastern Yunnan in China. The plants were noted from mixed conifer and broad-leaved forest at altitudes from 2000 to 2300 m.

**Phenology.** The species has been collected in fruit from August to September. No flowering specimens have been seen.

**Etymology.** The species epithet honors Wu Zhenyi (Wu Chengyih) (13 June 1916–) of the Kunming Institute of Botany, Chinese Academy of Sciences, who first found *Aristolochia wuana* during the expedition to Qinghai-Xizang Plateau led by him in 1970–80s. Prof. Wu is a great expert on the flora of China and has devoted 70 years to the study of the flora and vegetation of China. He has organized several large-scale surveys of plant resources in southwestern China. He is currently the co-chair of the editorial committee of the *Flora of China*, a joint project between the Chinese Academy of Sciences and Missouri Botanical Garden that aims to revise the Chinese vascular plants. In 2007, he won the State Preeminent Science and Technology Award of China for his outstanding achievements in the fields of systematic botany and plant geography, as well as plant diversity, conservation, and sustainable use of plant resources.

**Relationships.** In the protologue, *Aristolochia wuana* was regarded as similar to *A. moupinensis* Franchet, differing in its leaves 18–24 × 16–20 cm (vs. 6–16 × 5–12 cm), retuse apex (vs. acute or acuminate), and larger fruits ca. 11 × 6 cm (vs. 6–8 × 2–3.5 cm) (Tao, 1983; Huang et al., 2003). Ma (1989) placed *A. macrocarpa* C. Y. Wu & S. K. Wu ex D. D. Tao in synonymy with *A. griffithii* Hooker f. & Thomson ex Duchartre. In fact, it differs from the latter in its retuse or rounded leaf apex (vs. acute or shortly acuminate), oblong capsule (vs. narrowly cylindrical), and the smooth upper surface of the seeds (vs. rugose).

**Additional specimens examined.** CHINA. Xizang: Mêdog Xian, near Beibeng, 9 Aug. 1974, *Qinghai-Xizang (Tibet) Complex Expedition* 74-4304 (KUN); Zayü Xian, Xia Zayü, 3 Sep. 1976, C. Y. Wu et al. 5450 (KUN). Yunnan: Gongshan Xian, the trail from the Dulong Township to Zayü, 6 Sep. 1982, *Qinghai-Xizang (Tibet) Complex Expedition* 9974 (KUN).

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