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# *Magnolia amabilis*, a New Species of Magnoliaceae from Yunnan, China

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**ABSTRACT.** A new species of Magnoliaceae, *Magnolia amabilis* Y. K. Sima & Y. H. Wang, from Yunnan, China, is described and illustrated. The new species resembles *Magnolia dianica* Y. K. Sima & Figlar in the stipules adnate to the petiole and the petioles short, not exceeding 10 mm, and in the tepals 6 to more, 3- to 4-merous, subsimilar; it differs in its leaves oblanceolate to narrowly elliptic, glaucous beneath, with nerves in 13 to 17 pairs, in its tepals contracted-acute at the apex, and in its mature carpels, glabrous, dark green, tawny-black when dry.

**Key words:** China, *Magnolia*, *Magnolia amabilis*, Magnoliaceae, Yunnan.

During an inventory of the state priority protection program for wild plants in Yunnan Province, Sima Yong-Kang observed a shrub species of *Magnolia* L., known as “Dujuan” (azalea) and introduced from Gejiu County in southeastern Yunnan by Liu Ke-Sheng to the Kunming Jindian Botanic Gardens in November 2000. In spring 2001, Mr. Sima visited the gardens again and acquired the type collection of the shrub in flower, Y. K. Sima & B. Fang 98257. Another collection was later made for the fruit, Y. K. Sima & J. H. Li 98304. It was affirmed that the shrub was a new species of *Magnolia* in Magnoliaceae.

In accordance with studies of the genus *Magnolia* L. (Figlar, 2000; Sima, 2001; Figlar & Nootboom, 2004), we assign the new species to the genus *Magnolia* L. subg. *Yulania* Spach sect. *Michelia* (L.) Baillon subsect. *Michelia* (L.) Figlar & Nootboom. Its discovery supports the viewpoint that southeastern Asia, especially southeastern Yunnan, is a center of biodiversity for Magnoliaceae (Law, 1984; Liu et al.,

1995; Chen & Zhang, 1996; Liu, 2000; Sima, 2001; Sima et al., 2001; Zhang, 2001).

The flowers of the species are as showy as those of local species (e.g., *Rhododendron simsii* Planchon). Called “Dujuan” locally, the new species will be a worthy addition to world horticulture as an ornamental for further plant breeding.

***Magnolia amabilis*** Y. K. Sima & Y. H. Wang, sp. nov. TYPE: China. Yunnan: Kunming, Jindian Botanic Gardens, in cult. (introduced from Gejiu County, SE Yunnan), 8 Mar. 2001 (fl), Y. K. Sima & B. Fang 98257 (holotype, YCP). Figure 1.

Species *Magnoliae dianicae* Y. K. Sima & Figlar similis, sed foliis oblanceolatis vel anguste ellipticis, subtus glaucis; nervis lateralibus 13 ad 17; tepalis apice breviter acutis; folliculis glabris, atro-viridibus, in sicco furvis differt.

Shrub, 1–4 m high; buds, young twigs, stipules outside, petiole and peduncles densely pubescent with short tawny, brown, or rufous indument; twigs green when young, gray and glabrous when old. Young leaves in buds erect, conduplicate; leaves coriaceous, oblanceolate to narrowly elliptic, 5–9 × 1–2 cm, acuminate at apex, cuneate at base, glabrous, dark green above, pale green, glaucous, sparsely tawny pubescent to glabrescent beneath; midrib slightly impressed above, nerves much visible on both surfaces when dry, in 13 to 17 pairs; reticulation sparsely netted, prominent on both surfaces when dry; petioles 4–6 mm long, stipular scars 2–3 mm long. Peduncle 5–8 mm long, ca. 2 mm diam., with 2 or 3 internodes, pedicel absent or less than 1 mm long. Flower heavily scented; tepals 6 to 8, white or



Figure 1. *Magnolia amabilis* Y. K. Sima & Y. H. Wang, sp. nov. —A. Flowering branch. —B. Adaxial view of petiole, showing stipular scar. —C. Inner tepal. —D. Outer tepal. —E. Gynoecium. —F. Stamen. Drawn by Liu Ling from the holotype (Y. K. Sima & B. Fang 98257, YCP).

yellowish white, narrowly to broadly obovate, 1.5–3.0 × 0.5–2.0 cm, contracted-acute at the apex; stamens 55 to 64, persistent, 0.9–1.2 cm long, connective appendage triangular, anthers 0.6–0.8 cm long; gynoecium cylindrical, 1.0–1.2 cm long; gynophore 5–7 mm long, densely appressed pubescent with short tawny trichomes; carpels 10 to 19, ovoid, 1–2 mm long; styles ca. 2 mm long; ovules 2 to 6. Fruit 2.7–6.9 cm long; mature carpels 1 to 10, globose or ovoid to ellipsoid, 8–16 mm long, 7–11 mm diam., glabrous, dark green, tawny-black when dry, sparsely but conspicuously lenticellate, dehiscent along two valves ventrally.

*Habitat and distribution.* In subtropical forest or thickets, 1700–2100 m; known only from southeastern Yunnan, China.

*Phenology.* Flowering from February to April; fruiting from July to August.

Although *Magnolia amabilis* is similar to *Magnolia dianica* Y. K. Sima & Figlar in the stipules adnate to the petiole and the petioles short, not exceeding 10 mm, and in the tepals 6 to more, 3- to 4-merous, subsimilar, the latter differs mainly in its obovate, narrowly obovate, or narrowly obovate-elliptic leaves, not glaucous beneath, with nerves in 7 to 11 pairs, in its emarginate tepals, and in its mature carpels, yellowish green or dark red, rufous when dry, with short indument.

*Paratypes.* CHINA. **Yunnan:** Kunming, Jindian Botanic Gardens, in cult. (introduced from Gejiu County, SE Yunnan), Y. K. Sima 98250 (MO, PE, YCP), Y. K. Sima & J. H. Li 98304 (PE, YCP), Y. K. Sima & Z. J. Yang 98505 (PE, YCP), Y. K. Sima 98591 (KUN, MO, PE, YCP).

*Acknowledgments.* This research is funded by the Natural Science Foundation of Yunnan Province (2001C0022Q); the Foundation of Yunnan Provincial

Key Laboratory for Cultivation and Exploitation of Forest Plants; Yunnan Laboratory for Conservation of Rare, Endangered and Endemic Forest Plants, State Forestry Administration, China; and the Foundation of The Magnolia Society International. We express our sincere thanks to Kunming Jindian Botanic Gardens for kindly providing various research facilities during our visit to this famous Magnolia Garden, to Li Jun-Hong, Yang Zhi-Jie, Gao Zekun, Liu Ke-Sheng, Chen Kang, and Fang Bo for their zealous help, and to Liu Ling for kindly drawing the figure.

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