

5. VATICA Linnaeus, Mant. Pl. 2: 152, 242. 1771.

青梅属 qing mei shu

Pachynocarpus J. D. Hooker; *Retinodendron* Korthals (1840), not Zenker (1833) [Fossil]; *Sunaptea* Griffith.

Trees of main canopy and understory, unbuttressed, white resinous. Bark gray, smooth, often with annular striations. Stipules caducous, small; leaf blade ± leathery, pinnately veined, tertiary reticulate veins conspicuous, margin entire. Flowers in axillary or terminal cymose panicles, usually stellate pubescent. Calyx tube short; sepals narrowly imbricate, equal or subequal. Petals white, often with a mauve suffusion, lorate, large, falling separately. Stamens 15; filaments unequal, stout; anthers ellipsoid; connective appendages short, obtuse. Ovary ovoid, pubescent; style cylindric, short; stigma capitate or conic, prominent, entire or dentate. Nut globose or ellipsoid, 1- or 2-seeded; calyx segments equal or unequal, with 2 developed into long wings.

About 65 species: Cambodia, China, E and S India, Indonesia, Laos, Malaysia, Myanmar, Philippines, Sri Lanka, Thailand, Vietnam; three species (one endemic) in China.

Vatica cordata Hu is a synonym of *Tridynamia sinensis* (Hemsley) Staples var. *sinensis* in the Convolvulaceae (see Fl. China 16: 282. 1995).

- 1a. Fruit sepals short, subequal; leaf abaxially glaucous 2. *V. lanceifolia*
1b. Fruit sepals unequal, 2 winglike; leaf not as above.
2a. Leaf lateral veins 12 or more pairs 1. *V. guangxiensis*
2b. Leaf lateral veins 7–10 pairs 3. *V. mangachapoi*

1. Vatica guangxiensis X. L. Mo, Acta Phytotax. Sin. 18: 232. 1980.

广西青梅 guang xi qing mei

Vatica guangxiensis subsp. *xishuangbannaensis* (G. D. Tao & J. H. Zhang) Y. K. Yang & J. K. Wu; *V. xishuangbannaensis* G. D. Tao & J. H. Zhang.

Trees to 40 m tall, ca. 90 cm in diam. Branchlets of current year densely yellowish brown to dark brown stellate-tomentose, old branchlets glabrous. Petiole 1.5–2 cm, densely yellowish brown pubescent; leaf blade narrowly elliptic to elliptic-lanceolate, 6–19 × 1.5–4 cm, thinly leathery, both surfaces with grayish yellow stellate hairs, glabrescent or abaxially sparsely stellate-pubescent and adaxially glabrous, lateral veins 12–18(–20) pairs raised on both surfaces, base cuneate, margin entire, apex acuminate or shortly acuminate. Panicles terminal or axillary, robust, to 12 cm, densely yellowish brown pubescent. Sepals densely pubescent on both surfaces. Petals white or reddish, ca. 15 × 5 mm, pubescent on parts exposed in bud. Stamens 15; filaments triangular, short; anthers oblong; connective appendages short, obtuse. Ovary subglobose, densely grayish yellow pubescent; style glabrous; stigma capitate, 3-lobed. Nut subglobose, pubescent; calyx without basal cup adnate to ovary; fruit sepals: 2 longer oblong-elliptic, to 8 × 2 cm, obtuse, longitudinally 5-veined; 3 shorter linear-lanceolate, to 2 × 0.5 cm, all sparsely stellate-pubescent. Fl. Apr–May, fr. Jul–Aug.

Mountain slopes, hills; 800–1000 m. W Guangxi (Napo), S Yunnan (Mengla) [N Vietnam].

This is an endangered species threatened by habitat loss. The durable wood is used for making boats and furniture and building houses.

Zhu and Wang (Acta Bot. Yunnan. 14: 21–24. 1992) thought that it was unreliable to separate *Vatica xishuangbannaensis* from *V. guangxiensis* based on the different number of lateral leaf veins; however, Li and Xu (Acta Bot. Yunnan. 23: 201–208. 2001) supported such a com-

bination based on population genetic data.

Vatica fleuryana Tardieu, based on a type in flower from Vietnam but unknown in fruit, was associated by Smitinand et al. (Fl. Cambodge Laos Vietnam 25: 57. 1990) with *V. diospyroides* Symington, but may be the correct name for this species. *Vatica diospyroides* is a swamp species. The fruit will resolve the issue.

2. Vatica lanceifolia (Roxburgh) Blume, Mus. Bot. 2: 31. 1856.

西藏青梅 xi zang qing mei

Vateria lanceifolia Roxburgh, Fl. Ind. 2: 601. 1824.

Trees evergreen, to 12 m tall. Bark pale grayish green, mottled, smooth. Twig slender, grayish brown puberulous. Stipules fugacious; petiole ca. 2 cm, puberulous; leaf blade abaxially glaucous, elliptic to lanceolate, 10–23 × 3–8 cm, usually narrow, thinly leathery, midvein raised abaxially, conspicuous adaxially; lateral veins 10–15 pairs, slender, raised abaxially, conspicuous adaxially, base cuneate, acumen slender. Inflorescence irregularly racemose, to 12 cm, lax, or flowers fascicled, scented. Sepals deltoid, ca. 3 mm, outside densely puberulous. Petals lorate, to 2 mm, pubescent on parts exposed in bud. Stamens 15; anthers ovoid-oblong; connectival appendage exceeding anther apices, stout. Ovary ovoid, puberulous; style stout, ca. as long as ovary; stigma prominent. Nut pink-brown, ca. 3 × 2.5 cm, globose, with 3 loculicidal sutures, becoming rugulose; fruit sepals ascending, subequal, to 10 × 8 mm, lanceolate, papery, bases cordate.

Relict in evergreen valley forests; below 900 m. SE Xizang [Bhutan, NE India, NW Myanmar].

3. Vatica mangachapoi Blanco, Fl. Filip. 1: 401. 1837.

青梅 qing mei

Anisoptera mangachapoi (Blanco) Candolle; *Dipterocarpus mangachapoi* (Blanco) Blanco; *Mocanera mangachapoi*

(Blanco) Blanco; *Pteranthera sinensis* Blume; *Shorea mangachapoi* (Blanco) Blume; *Vatica apterantha* Blanco; *V. hainanensis* H. T. Chang & L. C. Wang; *V. hainanensis* var. *glandipetala* L. C. Wang; *V. hainanensis* var. *parvifolia* H. T. Chang; *V. mangachapoi* subsp. *hainanensis* (H. T. Chang & L. C. Wang) Y. K. Yang & J. K. Wu; *V. mangachapoi* var. *glandipetala* (L. C. Wang) Y. K. Yang & J. K. Wu; *V. mangachapoi* var. *parvifolia* (H. T. Chang) Y. K. Yang & J. K. Wu.

Trees to 20 m tall, white resinous. Branchlets stellate-puberulous. Petiole 1.5–2 cm, densely grayish yellow puberulous; leaf blade oblong to oblong-lanceolate, 5–13 × 2–5 cm, leathery, both surfaces glabrous or sparsely pubescent, lateral veins 7–10 pairs raised on both surfaces, tertiary veins conspicuous, base rounded or truncate, margin entire, apex acuminate or acute. Panicle terminal or axillary, 4–8 cm, slender, silver-gray stellate-pubescent. Calyx grayish yellow pubescent; sepals ovate-lanceolate or oblong, unequal, ca. 3.2 cm. Petals white, sometimes yellowish or reddish, oblong or linear-spatulate, ca. 10 × 4 mm, outside pubescent, inside glabrous. Stamens 15; filaments short, unequal; anthers oblong; connective appendages short, obtuse. Ovary globose, densely puberulous; style short; stigma capitate. Fruit globose; 2 calyx segments lorate, longer, 3–4 × 1–1.5 cm, longitudinally 5-veined, apex rounded; 3 shorter segments lanceolate, to 10 × 4 mm, apex acute. Fl. May–Jun, fr. Aug–Sep.

Forests on hills, mountain slopes; below 700 m. Hainan [Indonesia, Malaysia (N Borneo), Philippines, Thailand, Vietnam].

This species is vulnerable to extirpation in China due to habitat loss. The durable wood is used for making boats and building bridges and houses.

Records of *Vatica astrotricha* Hance from Hainan are referable to *V. mangachapoi*.

