

1. MASTIXIA Blume, Bijdr. Fl. Ned. Ind. 13: 654. 1826.

单室茱萸属 dan shi zhu yu shu

Xiang Qiuyun (向秋云 Jenny Xiang); David E. Boufford

Trees evergreen. Branchlets terete or ridged. Leaves oblong-elliptic, ovate, or narrowly obovate, leathery to thickly papery. Flowers pedicellate; bracteoles 2, at base of pedicel. Calyx campanulate, thick; lobes 4 or 5(–7), persistent. Petals 4 or 5(or 6), ovate, leathery, valvate, apex inflexed. Stamens 4, 5, 6, or 8; filaments subulate, short, flattened. Style often persistent, conical, short; disk circular, slightly 4- or 5-lobed. Drupes ovoid, oblong-globose, or narrowly ovoid; stone of fruit woody, with longitudinal grooves; seed coat white, membranous. $2n = 22, 26$.

About 25 species: Bhutan, Cambodia, China, India, Indonesia, Laos, Malaysia, Myanmar, Papua New Guinea, Philippines, Sri Lanka, Thailand, Vietnam; Pacific Islands (Solomon Islands); three species (two endemic) in China.

- 1a. Flowers 5-merous; inflorescences slightly pubescent or nearly glabrous 1. *M. pentandra*
- 1b. Flowers 4-merous; inflorescences densely pubescent or glabrous.
 - 2a. Branches and leaves alternate, densely pubescent with gray-brown trichomes; inflorescences densely pubescent with dark brown or yellow brown trichomes; leaf blade broadly elliptic or oblong, $14-20 \times 5-7$ cm, apex acute 2. *M. trichophylla*
 - 2b. Branches and leaves opposite, glabrous; inflorescence glabrous; leaf blade elliptic or oblong, smaller, $8-13 \times 2.5-6$ cm, apex caudate 3. *M. caudatilimba*

1. *Mastixia pentandra* Blume, Bijdr. Fl. Ned. Ind. 654. 1826.

五蕊单室茱萸 wu rui dan shi zhu yu

Trees, evergreen, to 30 m tall. Branches cylindrical or ridged, slender or stout, subglabrous or puberulous. Leaves alternate; petiole 1.5–2.5 cm; leaf blade elliptic or oblong-obovate, $6-15(-20) \times 2.5-8$ cm, leathery or subleathery, abaxially subglabrous, veins 3–8(or 9) per side, shortly ascending along margin, base cuneate to broadly cuneate, apex acute or acuminate. Inflorescences terminal, 4–9 cm, puberulous; branches subtended by small, triangular or lanceolate bracteoles. Flowers 5-merous; sepals 5; petals 5, oblong, thick, apex inflexed. Stamens 5, alternate petals; anther locules 2; disk slightly 5-lobed. Style 1.5–2 mm; stigma small. Drupes ovoid to oblong, $1.5-2.5 \times 1-1.7$ cm, apex with persistent style and sepals. Fl. May–Jun, fr. Sep–Oct.

Dense forests, mixed woods; 300–1400 m. Hainan, S Yunnan [Cambodia, NE India, Malaysia, Myanmar, Thailand, Vietnam].

- 1a. Leaves elliptic or obovate oblong, $6-11 \times 3-4$ cm; fruit $1.5-1.7$ cm ... 1a. subsp. *cambodiana*
- 1b. Leaves oblong or long-obovate, $15-20 \times 4-8$ cm; fruit ca. 2.5 cm 1b. subsp. *chinensis*

1a. *Mastixia pentandra* subsp. *cambodiana* (Pierre) K. M. Matthew, Blumea 23(1): 85. 1976.

单室茱萸 dan shi zhu yu

Mastixia cambodiana Pierre, Fl. For. Cochinch. Fasc. 17. 1892; *M. alternifolia* Merrill & Chun.

Trees 7–15 m tall; branches terete. Leaves with petiole 1.5–2 cm; leaf blade elliptic or obovate-oblong, $6-11 \times 2.5-5$ cm, leathery, veins 3–5, arched inward, base cuneate, apex shortly acuminate. Inflorescences 4–5 cm, puberulous; bracteoles lanceolate to triangular, 1–1.5 mm. Drupes 1.5–1.7 cm. Fl. May–Jun, fr. Oct.

Dense forests; 300–900 m. Hainan [Cambodia, Vietnam].

1b. *Mastixia pentandra* subsp. *chinensis* (Merrill) K. M. Matthew, Blumea 23(1): 83. 1976.

云南单室茱萸 yun nan dan shi zhu yu

Mastixia chinensis Merrill, Sunyatsenia 3: 256. 1937.

Trees 7(–30) m tall; branches ridged. Leaves with petiole 2–2.5 cm; leaf blade oblong, obovate-oblong, or narrowly obovate, $15-20 \times 4-8$ cm, leathery or subleathery, veins 6–8, base broadly cuneate, apex shortly acuminate. Inflorescences 7–9 cm, slightly pubescent; bracteoles lanceolate to triangular, less than 3 mm. Drupes 2–2.5 cm. Fl. May, fr. Sep.

Dense forests, mixed woods; 1300–1400 m. S Yunnan [NE India, Malaysia, Myanmar, Thailand, Vietnam].

2. *Mastixia trichophylla* W. P. Fang, J. Sichuan Univ., Nat. Sci. Ed. 1982(1): 65. 1982.

毛叶单室茱萸 mao ye dan shi zhu yu

Trees, evergreen, ca. 7 m tall. Branches alternate, dark

brown, terete, sometimes slightly ridged, densely pubescent, with dark gray or brown short trichomes; young branches slender, ridged; old branches also densely puberulous. Leaves alternate, petiolate; leaf blade elliptic or oblong, 14–20 × 5–7 cm, thickly papery, abaxially light green, densely pubescent, with gray-brown trichomes, veins 6 or 7, ascending along margin toward apex, base broadly cuneate, margin slightly revolute when dry, apex acute. Inflorescences loose, terminal and axillary, pubescent, with brown to yellow-brown short trichomes; terminal panicles 9–10 cm, with 30 or more flowers, axillary panicles 4–7 cm, with 5–15 flowers; bracteoles lanceolate, 3–5 mm. Flowers 4-merous; calyx slightly lobed, lobes 4 or 5, abaxially puberulous. Petals 4, whitish, ovate, ca. 4 × 2–2.5 mm, apex inflexed. Stamens 4; filaments ca. 3 mm, slender; anthers ovoid, locules 2. Disk 4-lobed. Style ca. 2 mm; stigma small. Fruit not observed. Fl. Jun–Jul, fr. unknown.

- Evergreen forests; ca. 700 m. S Guangxi.

3. *Mastixia caudatilimba* C. Y. Wu ex T. P. Soong, J. Sichuan Univ., Nat. Sci. Ed. 1982(1): 66. 1982.

长尾单室茱萸 chang wei dan shi zhu yu

Trees, evergreen, to 23 m tall. Branches opposite, dark brown, terete, glabrous or subglabrous; young branches slender, ridged. Leaves opposite; leaf blade elliptic, broadly elliptic, or oblong, 8–13 × 2.5–6 cm, leathery, abaxially glabrous, veins 6 or 7, ascending shortly, ending at margin, base somewhat rounded or broadly cuneate, slightly decurrent and oblique, margin entire or slightly undulate, slightly revolute, apex caudate. Inflorescences panicles, terminal, 5–6 cm, loosely flowered, densely pubescent; bracteoles narrowly triangular. Flowers not observed (floral characters taken from fruit), 4-merous. Calyx lobes 4. Disk circular, slightly 4-lobed, with scars of 4 stamens. Style ca. 2 mm. Fruit dark brown after drying, oblong, ca. 2 cm, ca. 9 mm in diam., calyx and style persistent. Fl. buds Mar, fr. Oct–Dec.

- Subtropical forests, sparse wet forests in valleys; 1400–1600 m. S Yunnan (Xishuangbanna: Nannuo Shan).

MASTIXIACEAE