

14. LOROPETALUM R. Brown in G. F. Abel, Narr. Journey China, App. B, 375. 1818.

樺木属 jì mù shù

Tetrathyrium Benth.

Shrubs or small trees, evergreen or semievergreen; buds naked. Leaves shortly petiolate; stipules membranous; leaf blade membranous or thinly leathery, margin entire, venation pinnate. Inflorescence capitate, shortly spicate, or racemose, axillary or terminal, 3–25-flowered. Flowers bisexual, usually 4 or 5(or 6)-merous. Floral cup obconical, stellately pubescent. Sepals usually 4 or 5(or 6), ovate, pubescent, deciduous. Petals white or red, straplike, circinate in bud. Stamens 4 or 5(or 6), perigynous, anther thecae 2-sporangiate, each dehiscent by 2 valves, connective protrusion long and slender; disk scales present. Ovary inferior or semi-inferior; ovules 1 per locule. Fruiting pedicel short or absent. Capsules dehiscent by two 2-lobed valves, lower part enveloped by floral cup. Seeds 1 per carpel; endosperm fleshy.

Three species: China, E and N India, Japan; three species (two endemic) in China.

- 1a. Bracts pectinate, glandular fimbriate; inflorescence axillary, 14–25-flowered; flowers 5-merous; styles ca. 2 mm; capsules sessile, clustered in a head, adnate to floral cup for 1/4–1/2 of their length 1. *L. subcordatum*
1b. Bracts entire, glandular; inflorescence terminal, mostly on short branches, 3–16-flowered; flowers 4(or 5)-merous; styles very short; capsules pedicellate, separated, adnate to floral cup for 2/3–3/4 of their length.
2a. Leaves glabrescent; peduncle 3–5 mm; capsule 10–14 × 9–10 mm 2. *L. lanceum*
2b. Leaves with scattered stellate hairs, seldom glabrescent; peduncle 8–10 mm; capsule 7–8 × 6–7 mm 3. *L. chinense*

1. *Loropetalum subcordatum* (Benth.) Oliver, Hooker's Icon. Pl. 15: t. 1417. 1883.

四药门花 sì yào mén huā

Tetrathyrium subcordatum Benth., Fl. Hongk. 133. 1861.

Shrubs or trees to 12 m tall; branchlets glabrous. Stipules lanceolate, 5–6 mm, stellately pubescent; petiole 1–1.5 cm; leaf blade ovate or elliptic, 7–12 × 3.5–5 cm, discolorous, base rounded or subcordate, margin entire or sparsely serrulate, apex acute; lateral veins 6–8 on each side, abaxially prominent, glabrous, adaxially impressed. Inflorescence axillary, 14–25-flowered; peduncle 4–5 cm; bracts linear, ca. 3 mm. Sepals ca. 1.5 mm, stellately pubescent. Petals ca. 1.5 cm; anthers ovoid; staminodes divergent, teeth oblong-ovate, ca. 2.5 mm. Ovary stellately pubescent. Persistent floral cup ca. 2/3 as long as capsule; capsules subglobose, 10–12 mm in diam., adnate to floral cup for 1/4–1/2 of their length. Seeds 6–7 mm. Fl. Apr–Jun, fr. Jul–Aug.

• Roadsides; 100–200 m. Guangdong, SW Guangxi (Longzhou Xian), Guizhou.

This species is listed as endangered by the IUCN (as *Tetrathyrium subcordatum*).

2. *Loropetalum lanceum* Handel-Mazzetti, Sinensia 2(10): 123. 1932.

大果樺木 dà guo jì mù

Trees, 9–13 m tall; young branches pubescent; buds naked, stellately pubescent. Leaf blade lanceolate or ovate-lanceolate, 5–8.5 × 2.5–3.5 cm, abaxially glabrescent, adaxially olive, glabrous, base cuneate or obtuse, somewhat asymmetrical, apex caudate-acuminate and ca. 1 cm; lateral veins 5 on each side, abaxially somewhat prominent. Inflorescence a short spike, terminal, mostly on short lateral branches, 4- or 5-flowered; peduncle 0.3–0.5 cm. Flowers nearly sessile. Sepals ovate, 2–2.5 mm. Petals white, 1–1.3 cm. Stamens short,

filament as long as anthers, connective produced into a long mucro. Ovary tomentose, styles very short. Fruiting pedicel ca. 1.5 mm; capsules compressed-globose, 12–14 × 10–12 mm, stellately tomentose, hairs yellow-brown, adnate to floral cup for 2/3–3/4 of their length. Seeds ellipsoid, 7–8 mm. Fl. Mar–May, fr. Jun–Aug.

• Evergreen forests on mountain slopes; ca. 1000 m. S Guangxi (Shiwan Dashan), Guizhou.

3. *Loropetalum chinense* (R. Brown) Oliver, Trans. Linn. Soc. London 23: 459. 1862.

樺木 jì mù

Hamamelis chinensis R. Brown in G. F. Abel, Narr. Journey China, App. B, 375. 1818.

Shrubs or small trees, 1–3 m tall, much branched; branchlets stellately pubescent. Stipules triangular-lanceolate or obovate, 3–5 × 1.5–2 mm, stellately pubescent; petiole 0.2–0.5 cm, stellately pubescent; leaf blade ovate, elliptic or, rarely, obovate, 2–6.5 × 1–3 cm, discolorous, abaxially densely stellately pubescent, adaxially sparsely pubescent or stellately pubescent when young, glabrescent, base asymmetrical, rounded or cuneate, margin ± entire, apex acute or shortly acuminate; lateral veins 4–8 on each side, abaxially prominent. Inflorescence a short raceme or nearly capitate, terminal, mostly on short lateral branches, 3–16-flowered; peduncle 0.8–1 cm, stellately pubescent; bracts linear or lanceolate, 2–4.5 mm. Flowers shortly pedicellate, open before leaves appear. Floral cup cupular, stellately pubescent, 1.2–1.5 mm. Sepals ovate, 2–3 mm. Petals 4(–6), white, pale yellow or red, 1–2 cm, apex obtuse or rounded. Stamens 4 or 5, filaments very short, connective elongated into a horn, 0.4–0.5 mm, anthers ovoid, 0.5–0.6 mm; staminodes 4–6, scalelike, alternate with stamens. Ovary inferior, stellately pubescent, styles ca. 1 mm. Persistent floral cup 2/3–4/5 as long as capsule; capsules ovoid or obovoid-globose, 7–8 × 6–7 mm, stellately tomentose, hairs brown, apex rounded, adnate to floral cup for 2/3–3/4 of their length. Seeds ovoid-

globose or ellipsoid, 4–7 × 3.5–4 mm. Fl. Mar–Apr, fr. May–Jul.

Forests, thickets, sunny hills; 1000–1200 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangsu, Jiangxi, Sichuan, Yunnan, Zhejiang [NE India, Japan].

This species is widely cultivated in China.

Two varieties occur in China; the present authors have seen no specimens of the recently published var. *coloratum* C. Q. Huang (Bull. Bot. Res., Harbin 21: 508. 2001).

- 1a. Flowers usually white or pale yellow 3a. var. *chinense*
1b. Flowers usually purple-red or red 3b. var. *rubrum*

3a. *Loropetalum chinense* var. *chinense*

檵木(原变种) ji mu (yuan bian zhong)

Loropetalum indicum K. Y. Tong; *L. subcapitatum* Chun ex H. T. Chang; *Tetrathyrium simaoense* Y. Y. Qian.

Petals usually white or pale yellow.

Forests, sunny hills; 1000–1200 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangsu, Jiangxi, Sichuan, Yunnan, Zhejiang [NE India, Japan].

Loropetalum indicum was said to have thick leaves with a 2-layered palisade tissue and well-developed cuticle, whereas *L. chinense* mostly has a 1-layered palisade tissue and a weaker cuticle, but these differences alone are not sufficient to distinguish species. *Loropetalum subcapitatum* was said to differ from *L. chinense* by its larger, glabrescent leaves, but the paratype of *L. subcapitatum*, Liang 65827 (PE), also has small leaves and the difference does not justify recognition of a

separate species. Qian (Acta Bot. Yunnan. 16: 235. 1994) described *Tetrathyrium simaoense* with 5-merous flowers, but both 4-merous and 5-merous flowers coexist in the same inflorescences of both the holotype and an isotype as well as Qian 3288 and Chen & Feng 97040, all from Simao, Yunnan. Other characters, such as habit, leaves, and fruit, are similar in *T. simaoense* and *L. chinense*.

3b. *Loropetalum chinense* var. *rubrum* Yieh, Zhong Guo Yuan Yi Zhuan Kan (China Bull. Hort. Special Issue) 1942(2): 33. 1942.

红花檵木 hong hua ji mu

Loropetalum chinense f. *rubrum* H. T. Chang.

Petals usually purple-red or red.

- Thickets. Guangxi, Hunan.

This variety was described from material of garden origin and is widely cultivated in southern China.

