

16. BISCHOFIA Blume, Bijdr. 1168. 1826–1827.

秋枫属 qiu feng shu

Li Bingtao (李秉滔 Li Ping-tao); Michael G. Gilbert

Microelus Wight & Arnott; *Stylodiscus* Bennett.

Large trees, dioecious, rarely monoecious, with red or reddish latex; indumentum of simple hairs, often absent. Leaves alternate, usually crowded at stem apex, palmately 3(–5)-foliolate; stipules small, falcate, caducous; petiole long; leaflet margins crenulate-serrate. Inflorescences axillary or lateral, produced with young leaves, paniculate or racemose, pendent, flowers 1 per bract. Male flowers: pedicel articulated at base; sepals 5, free, valvate, initially curved around stamens, later reflexed; petals and disk absent; stamens 5, free, inserted at bases of sepals; filaments short; anthers larger, thecae 2, parallel, introrse, dehiscence longitudinal; pistillode short and broad, peltate. Female flowers: pedicel articulated at middle; sepals imbricate, flat, free; petals and disk absent; staminodes sometimes present, soon lost; ovary 3(or 4)-locular; ovules 2 per locule; styles 3 or 4, long, stout, entire, erect or recurved. Fruits small, baccate, globose, indehiscent, exocarp fleshy, endocarp papery to thinly woody, 3- or 4-locular. Seeds 3–6, oblong-obovoid, rather crescent-moon-shaped, smooth, not carunculate; testa crustaceous; endosperm fleshy; embryo erect; cotyledon broad and flattened. $x = 7$.

Two species: Bhutan, Cambodia, China, India, Indonesia, Japan, Laos, Malaysia, Myanmar, Nepal, Philippines, Sri Lanka, Thailand, Vietnam; Australia, Pacific islands (Polynesia); two species (one endemic) in China.

1a. Evergreen; leaflet base broadly cuneate or obtuse, margins with 2 or 3 denticles per cm; inflorescence branched 1. *B. javanica*

1b. Deciduous; leaflet base rounded or shallowly cordate, margins with 4 or 5 denticles per cm; inflorescence

unbranched 2. *B. polycarpa*

1. *Bischofia javanica* Blume, Bijdr. 1168. 1826–1827.

秋枫 qiu feng

Andrachne trifoliata Roxburgh; *Bischofia cumingiana* Decaisne; *B. leptopoda* Müller Argoviensis; *B. oblongifolia* Decaisne; *B. roeperiana* Decaisne; *B. toui* Decaisne; *B. trifoliata* (Roxburgh) Hooker; *Microelus roeperianus* (Decaisne) Wight & Arnott; *Stylodiscus trifoliatus* (Roxburgh) Bennett.

Trees to 40 m tall, to 2.3 m d.b.h., evergreen; stem straight, branching lower; bark gray-brown to brown, ca. 1 cm thick, with red latex; branchlets glabrous. Leaves palmately 3(–5)-foliolate; stipules membranous, lanceolate, ca. 8 mm, caducous; petiole 8–20 cm; terminal petiolule 2–5 cm, lateral petiolules 5–20 mm; leaflet blades ovate, elliptic, obovate, or elliptic-ovate, 7–15 × 4–8 cm, papery, sparsely pubescent only on nerves, glabrescent, base broadly cuneate to obtuse, margins with 2 or 3 teeth per cm, apex acute or caudate-acuminate. Plants dioecious. Inflorescence axillary, paniculate; male peduncle 8–13 cm, puberulent to glabrous, female peduncle 15–27 cm, pendent. Male flowers to 2.5 mm in diam.; sepals membranous, semiorbicular, adaxially concave, ladle-shaped, abaxially puberulent outside; filaments short; pistillode small, peltate, pubescent. Female flowers: sepals similar to male but oblong-ovate, margins membranous; ovary smooth, glabrous, 3- or 4-locular; styles 3 or 4, linear, entire. Fruits globose or subglobose, 6–13 mm in diam., brownish. Seeds oblong, ca. 5 mm. Fl. Apr–May, fr. Aug–Oct.

Evergreen forests, open valley woodlands, widely planted on stream banks, cultivated in gardens and along avenues; below 800 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hainan, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Shaanxi, Sichuan, Taiwan, Yunnan, Zhejiang

[Bhutan, Cambodia, India, Indonesia, Japan, Laos, Malaysia, Myanmar, Nepal, Philippines, Sri Lanka, Thailand, Vietnam; Australia, Pacific Islands (Polynesia)].

The dark reddish brown wood of *Bischofia javanica* is heavy and very hard, with a fine structure, and is used for bridges, vehicles, and structural timbers. The bark is a source of a red dye, used to stain rattan baskets. The fruits are mostly used for making wines. The seeds yield 30%–54% oil. The roots are used as a medicine for rheumatism and malaria.

2. *Bischofia polycarpa* (H. Léveillé) Airy Shaw, Kew Bull. 27: 271. 1972.

重阳木 chong yang mu

Celtis polycarpa H. Léveillé, Repert. Spec. Nov. Regni Veg. 2: 296. 1912; *Bischofia racemosa* Cheng & D. Chu.

Trees to 15 m tall, 50(–100) cm d.b.h., deciduous, glabrous

Fl. China 11: 217–218. 2008.

throughout; bark brown, ca. 6 mm thick, longitudinally fissured; older branches brown, lenticels rusty; branchlets green, lenticels gray-white. Leaves palmately 3-foliolate; stipules small, caducous; petiole 9–13.5 cm; terminal petiolule 1.5–4(–6) cm, lateral petiolules 3–14 mm; terminal leaflets usually larger than bilateral ones; leaflet blades ovate or elliptic-ovate, sometimes oblong-ovate, 5–9(–14) × 3–6(–9) cm, papery, base rounded or shallowly cordate, apex acute or shortly acuminate, margins with 4 or 5 teeth per cm. Plants dioecious. Inflorescences pendent racemes, on lower parts of previous year branches, generally appearing in spring, male inflorescences 8–13 cm, female 3–12 cm. Male flowers: sepals semiorbicular, membranous, spreading; filaments short; pistillode prominent. Female flowers: sepals as in male, with white membranous margin; ovary 3- or 4-locular; styles 2 or 3, entire. Fruits globose, 5–7 mm in diam., brown-red when mature. Fl. Apr–May, fr. Oct–Nov.

• Evergreen forests, often widely planted; 200–1000 m. Anhui, Fujian, N Guangdong, Guangxi, Guizhou, Hunan, Jiangsu, Jiangxi, Shaanxi, Yunnan, Zhejiang.

The wood of *Bischofia polycarpa* is used for furniture, vehicles, bridges, and structural timbers. The fruits are mostly used for the production of distilled liquors. The seeds yield 30% oil, which is used for lubrication.

Fl. China 11: 217–218. 2008.