

7. **IDESIA** Maximowicz, Bull. Acad. Imp. Sci. Saint-Petersbourg 10: 485. 1866, nom. cons., not Scopoli (1777).

山桐子属 shan tong zi shu

*Cathaya* Ohwi; *Polycarpa* Linden ex Carrière (1868), not Linnaeus (1759), nor *Polycarpaea* Lamarck (1792).

Trees, deciduous, dioecious. Leaves alternate; stipules small, caducous; petiole elongate, with two sessile discoid or shortly cylindrical glands at apex, sometimes with additional glands along petiole length; leaf blade palmately 3–5-veined from base, glandular-toothed. Flowers hypogynous, unisexual, many, in terminal and axillary pendulous panicles, these sometimes racemelike; bracts caducous; pedicels articulate. Sepals (3–)5(or 6), imbricate, free or joined only at base, caducous. Petals absent. Disk glands present. Staminate flowers: stamens many, inserted on disk, ca. as long as sepals; filaments free, slender, softly hairy; anthers elliptic, longitudinally dehiscent, basifixed; disk lobes many, small, set among stamen bases; reduced ovary present. Pistillate flowers: staminodes many, surrounding ovary base, resembling stamens but smaller and sterile; disk lobes many, small, set among staminode bases; ovary superior, 1-loculed, with (3–)5(or 6) placentas; ovules many; styles (3–)5(or 6), ± erect, cylindrical, connate at base, apex dilated to form a nearly peltate, flattened, subcircular (actually U-shaped) stigma. Fruit a berry; pericarp thin. Seeds many.

One species: China, Japan, Korea.

"*Idesia fargesii*" and "*I. polycarpa* var. *fargesii*" are not treated here because no protologues could be traced and neither name is included in the International Plant Names Index (www.ipni.org). The taxon is represented at K by four sheets: *Farges* 76 (two sheets), Sichuan, annotated "*Idesia polycarpa* var. *fargesii* Franch."; *Farges* s.n., same locality, annotated "*Idesia fargesii* Oliver"; and *Cavalerie* 2981, Guizhou, annotated "*Idesia fargesii* Franch." All are duplicates from P. No significant differences were found between this material and *I. polycarpa*. Among the *Farges* specimens, all leaves are glued abaxial surface down; abaxial leaf surfaces of the *Cavalerie* sheet are more or less glabrous.

1. **Idesia polycarpa** Maximowicz, Bull. Acad. Imp. Sci. Saint-Petersbourg 10: 485. 1866.

山桐子 shan tong zi

Trees, 8–21 m tall; bark grayish, not flaking; branchlets sparsely pubescent or glabrous. Petiole reddish, usually long, (4–)5–15 cm or more, glabrous, base slightly dilated; leaf blade deep green adaxially, broadly ovate, (6–)8–16(–20) × (4–)7–15(–20) cm, thinly leathery, abaxially pruinose, with a small dense patch of hairs at extreme base, elsewhere glabrous, sparsely hairy along veins or pubescent throughout, hairs (except in basal patch) mostly spreading, short, drying whitish or yellowish; adaxially usually glabrous, rarely sparsely hairy along mid-vein and main veins or throughout, lateral veins ca. 6 pairs, blade usually 5(–7)-veined from base, base cordate, often deeply so, less often rounded, margin serrate, usually coarsely so, apex gradually or more abruptly acuminate. Panicles (13–)20–30 cm; rachis sparsely to more densely pubescent. Flowers unisexual, yellowish green; pedicels 1–1.5 cm, densely pubescent, hairs appressed, yellowish brown, short; bracts lanceolate, 3–10 mm, reducing in size toward apex of rachis, papery, toothed or lobed. Staminate flowers: slightly larger than pistillate ones, 1.2–1.6 cm in diam.; sepals 5–6 × 2–3 mm, ovate to elliptic or slightly obovate, both surfaces densely pubescent, hairs yellowish brown, appressed, short; stamens 5–6 mm; filaments pubescent in lower half, hairs crisped, white when dry; disk glands globose to truncate, small, glabrous. Pistillate flowers: ca. 9 mm in diam.; sepals as in staminate flowers but slightly smaller, 4–5 × ca. 2.5 mm; disk glands globose to truncate, small; ovary superior, globose, glabrous; styles 5 or 6, 0.5–2 mm, joined at base; stigmas 0.5–1 mm in diam. Berry purple-red or orange-red when mature, drying blackish, globose, 8–10 mm in diam., apical scar left by styles pale, circular, flat, small, 0.5–1 mm in diam.; pericarp thin, brittle when dry; stalk 0.6–2 cm. Seeds drying reddish brown or purplish brown, broadly ovoid, 2–3 mm, completely enclosed in a thin, translucent membrane. Fl. Apr–May, fr. Oct–Nov.

Deciduous broad-leaved forests, needle-leaved and broad-leaved mixed forests; 400–3000 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangsu, Jiangxi, Shaanxi, Shandong, Sichuan, Yunnan, Taiwan, Zhejiang [Japan, Korea].

*Idesia polycarpa* is grown as an ornamental.

- 1a. Leaf blade abaxially glabrous (except at extreme base), or sparsely hairy only along main veins ..... 1a. var. *polycarpa*
- 1b. Leaf blade abaxially pubescent throughout.
  - 2a. Petiole 2–3 cm, leaf blade 6–7 × 4–5 cm ..... 1c. var. *fujianensis*
  - 2b. Petiole ca. 4 cm or longer, leaf blade ca. 8 cm or longer ..... 1b. var. *vestita*

1a. **Idesia polycarpa** var. **polycarpa**

山桐子(原变种) shan tong zi (yuan bian zhong)

*Cathaya polycarpa* (Maximowicz) Ohwi; *Idesia polycarpa* var. *intermedia* Pampanini; *I. polycarpa* var. *latifolia* Diels; *Polycarpa maximowiczii* Linden ex Carrière.

Leaf blade abaxially glabrous (except at extreme base), or sparsely hairy only along main veins.

Deciduous broad-leaved forests, needle-leaved and broad-leaved mixed forests; 400–2500 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangsu, Jiangxi, Sichuan, Yunnan, Taiwan, Zhejiang [Japan, Korea].

1b. **Idesia polycarpa** var. **vestita** Diels, Bot. Jahrb. Syst. 39: 478. 1900.

毛叶山桐子 mao ye shan tong zi

Petiole ca. 4 cm or longer; leaf blade ca. 8 cm or longer, abaxially softly pubescent throughout.

Deciduous broad-leaved forests; 900–3000 m. Fujian, Guangxi, Guizhou, Hubei, Hunan, Jiangsu, Jiangxi, Shaanxi, Shandong, Sichuan, Yunnan, Zhejiang [Japan].

"*Idesia polycarpa* var. *longicarpa*" (S. S. Lai, Bull. Bot. Res., Harbin 14: 227. 1994) belongs here but was not validly published under Art. 37.2 of the *Vienna Code* because three gatherings were indicated as types (S. S. Lai et al. 20, S. C. Zhang 8, and P. X. Tan [P. C. Tam] 59730).

**1c. *Idesia polycarpa* var. *fujianensis*** (G. S. Fan) S. S. Lai, Fl. Reipubl. Popularis Sin. 52(1): 58. 1999.

福建山桐子 fu jian shan tong zi

*Idesia fujianensis* G. S. Fan, J. S. W. Forest. Coll. 5(3): 30. 1995.

Petiole 2–3 cm; leaf blade 6–7 × 4–5 cm. Infructescence 8–10 cm. Branchlets, petioles, leaf blades abaxially, peduncles, and fruiting pedicels densely yellowish pubescent.

- Forests; ca. 900 m. Fujian.

*Idesia polycarpa* var. *fujianensis* is possibly a small form of *I. polycarpa* var. *vestita*. Material was not seen by the present authors.

Flora of China 13: 124–125. 2007.