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70. SHIRAKIOPSIS Esser, Blumea 44: 184. 1999.

齿叶乌桕属 chi ye wu jiu shu

Li Bingtao (李秉滔 Li Ping-tao); Hans-Joachim Esser

Trees, monoecious; flowering and fruiting twigs with leaves; indumentum of pale to yellowish [or reddish], multicellular, uniseriate hairs. Leaves regularly alternate; stipules ovate to triangular, undivided, without glands; petiole much shorter than blade, without glands; leaf blade oblong to elliptic to ovate, abaxial surface paler than adaxial one but not whitish and not papillate, with 0–10 strictly marginal glands on each side, basal glands slightly larger but very similar, adaxial surface eglandular, base obtuse to slightly attenuate, margin serrate with teeth 3–5 mm apart, apex acute to acuminate. Inflorescences terminal, yellowish, racemelike thyrses, unbranched, without sterile basal region, bisexual, pilose. Male flowers (3–)5–7 in cymules, pedicellate; bracts triangular, pilose to ciliate, at base with a pair of elongate-spheroidal to elliptic glands touching axis of thyrse and sometimes decurrent; calyx with 3 sepals, fused at base; petals and disk absent; stamens 3; filament and anther of similar length. Female flowers 1–3 at base of inflorescence, sometimes absent; pedicel distinct; sepals [2 or]3, irregularly triangular, fused at base, glandless; petals and disk absent; ovary [2 or]3-locular, smooth, usually glabrous; style present; stigmas [2 or]3, undivided, glandless. Fruits distinctly (at least 8 mm) pedicellate; mericarps 3-seeded [2-seeded in African species], smooth, dry and woody [partly fleshy in *S. virgata*], regularly dehiscent along septa (sometimes tardily so) [mericarps with very thick pericarp in Malesian taxa (fruit length/pericarp thickness more than 10:1) but much thinner pericarp in African taxa]; septa with a separate basal triangle and 1 vascular strand; central columella alate. Seeds elliptic, dry; caruncle very inconspicuous to absent.

Six species: three in tropical Africa and three in tropical Asia, from India to Cambodia and to the Caroline and the Solomon Islands; one species (introduced) in China.

1. Shirakiopsis indica (Willdenow) Esser, Blumea 44: 185, Map 5. 1999.

齿叶乌桕 chi ye wu jiu

Sapium indicum Willdenow, Sp. Pl. 4: 572. 1805; *Excoecaria indica* (Willdenow) Müller Argoviensis; *S. bingyricum* Roxburgh ex Baillon; *Shirakia indica* (Willdenow) Hurusawa; *Stillingia diversifolia* Miquel.

Trees up to 30 m tall, to 40 cm d.b.h., bole twisting, with spines at base. Stipules 1–2 mm; petiole 1–1.5 cm, sparsely pilose to glabrous, eglandular at apex; leaf blade oblong to elliptic or slightly ovate, 7–14 × 3–4 cm, leathery, abaxially with 2–4 glands per side, base obtuse, margins conspicuously serrate, apex subacuminate to acuminate; lateral veins 18–24 pairs, at 60°–66° to midrib. Inflorescence solitary, racemelike, to 10 cm, axis pilose. Male flowers: bracts broad, ciliate, bases with 2 glands; pedicels 1–2 mm; calyx 0.6–0.8 mm, ciliate; stamen filaments 0.5–0.6 mm at anthesis, nearly absent in bud; anthers 0.4–0.5 mm. Female flowers: pedicel ca. 5 mm; calyx 1.25–1.75 mm, pilose; ovary ovate, ca. 2.5 mm; styles ca. 1.5 mm; stigmas 4–6 mm. Fruiting pedicel 8–22 mm; capsules subglobose, 18–30 × 20–32 mm, rounded at both ends or slightly attenuate at base, obscurely 3-lobed, walls of cocci very thick and hard. Seeds often less than 3 per fruit, ellipsoid, 11–13 × 7–8.5 mm, keeled on back, medium to pale brown, not spotted, without caruncle. Fl. Jun–Jul.

Along rivers and seashores, gallery, tidal, and mangrove forests, primary and old secondary forests of swampy and seasonally inundated areas; below 100 m. Guangdong [native to Bangladesh, Brunei, India, Indonesia, Malaysia, Myanmar, Papua New Guinea, Singapore, Sri Lanka, Thailand, Vietnam; Pacific islands (Bismarck Archipelago, Caroline Islands, Solomon Islands)].

Shirakiopsis indica is cultivated for timber and used medicinally. A drying oil is obtained from the seeds, which are edible, though the outer layers of the fruit and other parts of the plant are poisonous and have been used as fish poisons. It is of particular interest because of its ability to grow in waterlogged soils.

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