5. MESUA Linnaeus, Sp. Pl. 1: 515. 1753.

铁力木属 tie li mu shu

Li Xiwen (李锡文 Li Hsi-wen), Li Jie (李捷); Peter F. Stevens

Trees. Apical bud abortive; axillary buds with scales. Leaves opposite, petiolate, leathery, usually with inconspicuous, translucent glands; secondary veins many, slender; tertiary veins scalariform, not prominent. Flowers bisexual, homostylous, solitary, axillary [or in axillary thyrses]. Sepals 4[or 5], imbricate. Petals 4[or 5], imbricate. Stamens many, not obviously fascicled, in continuous ring; filaments free, slender; anthers erect, basifixed; fasciclodes absent. Ovary 2-loculed, with 2 erect ovules per locule; styles united, elongate; stigma peltate. Capsule subwoody, septifragal; septae persistent. Seeds 1–4, without appendage; embryo with broad fleshy cotyledons.

About five species: India and Sri Lanka to peninsular Malaysia, possibly Java, and China; one species (introduced) in China.

1. Mesua ferrea Linnaeus, Sp. Pl. 1: 515. 1753.

铁力木 tie li mu

Calophyllum nagassarium N. L. Burman; Mesua nagassarium (N. L. Burman) Kostermans.

Trees evergreen, 20–30 m tall. Trunk upright, buttressed at base; crown conic. Bark dark gray-brown, thin, fissured, lamellate, exuding aromatic white resin when wounded. Leaves always pendulous; petiole 5–8 mm; leaf blade reddish yellow when young, becoming dark green, abaxially usually glaucous, adaxially dark green and somewhat lucid, lanceolate or narrowly ovate-lanceolate to linear-lanceolate, $(4-)6-10(-12) \times (1-)2-4$ cm, leathery; secondary veins numerous, obliquely parallel, slender and indistinct; tertiary veins and veinlets reticulate, \pm visible under hand lens, base cuneate, apex acuminate or long acuminate to caudate. Pedicel 3–5 mm. Flowers

bisexual, solitary, axillary, 5–8.5 cm in diam. Sepals (outer 2 slightly larger than inner 2) orbicular, convex, margin membranous and sometimes white ciliate. Petals white, obovate-cuneate, 3–3.5 cm. Stamens with filaments filiform, 1.5–2 cm; anthers golden-yellow, oblong. Ovary conic, ca. 1.5 cm; style 1–1.5 cm; stigma oblique. Fruit broadly ovoid or laterally depressed globose, ca. 3×2.5 cm, dry, longitudinally rugose, with stoutly pointed style at apex, usually dehiscent by 2 valves, with accrescent woody sepals and many persistent filaments at base; stalk robust, 0.8–1.2 cm. Seeds 1–4, \pm irregular in shape; coat brown, fragile. Fl. Mar–May, fr. Aug–Oct. 2n = 32.

Usually cultivated, escaped and locally naturalized in SW Yunnan (Gengma: Mengding); 500–600 m. Guangdong (Xinyi), Guangxi (Rongxian, Tengxian), S, SW, and W Yunnan [Bangladesh, India, ?Indonesia (Java), Malaysia, Sri Lanka, Thailand].

The seeds yield up to 79% oil, which is inedible but is used industrially. The wood is very hard. The tree is a handsome ornamental.

Flora of China 13: 38. 2007.