

6. HYMENAEA Linnaeus, Sp. Pl. 2: 1192. 1753.

李叶豆属 luan ye dou shu

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Trachylobium Hayne.

Trees. Leaves with 1 pair of leaflets; stipules caducous; leaflets paired, thickly leathery, entire, often translucent glandular punctate, with short petiolules or subsessile. Flowers white, in terminal panicles or corymbose panicles; bracts and bracteoles caducous, ovate or orbicular, concave. Calyx tubular, solid in lower part, expanded and campanulate or turbinate in upper part; lobes 4, thickly leathery, imbricate. Petals 3 or 5, clawed or sessile, subequal in size or lower 2 small and squamose. Stamens 10, all perfect, free; filaments glabrous or hairy at base; anthers oblong, dorsifixed, cells opening lengthwise. Ovary shortly stalked, stalk adnate to calyx tube, glabrous or hairy, few ovuled; style filiform; stigma terminal, small. Legume drupelike, obliquely obovoid or oblong, thickly leathery or woody, rough and tuberculate, not dehiscent. Seeds few, of various shapes; testa hard, bony, without endosperm and aril; cotyledons thickened, fleshy; radicle short, straight.

About 26 species: tropical America and Africa; two species (both introduced) in China.

- 1a. Petals narrowly ovate, sessile or subsessile, subequal in size; legume rough, without tubercles on surface; petiolules obscure 1. *H. courbaril*
1b. Petals suborbicular, clawed, unequal (2 petals smaller, squamose) or subequal in size; legume tuberculate on surface; petiolules conspicuous, ca. 3 mm 2. *H. verrucosa*

1. *Hymenaea courbaril* Linnaeus, Sp. Pl. 2: 1192. 1753.

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Trees, evergreen, 5–10 m tall. Branchlets grayish green, with numerous brown, small lenticels and adpressed puberulent. Leaves alternate; petiolules obscure; leaflets ovate or ovate-oblong, slightly incurved, 5–10 × 2.5–4 cm, abaxially adpressed shortly pubescent on veins, adaxially glabrous or sparsely puberulent, base obliquely rounded, asymmetric, apex acute. Inflorescences corymbose panicles. Flowers large, 2.5–3 cm; pedicels articulate, adpressed densely puberulent. Calyx tube 1.3–1.5 cm, expanded and campanulate in upper part; lobes broadly ovate or suborbicular, ca. as long as calyx tube, outside densely adpressed puberulent, inside densely silky at middle part. Petals 5, ovate or narrowly ovate, subequal in size, ca. as long as calyx lobes, clawed or subsessile. Stamens exerted; filaments 2.5–3 cm. Ovary compressed, glabrous; style elongated, curved in upper part; stigma capitate. Legume reddish brown, oblong or obovoid-oblong, 5–10.5 × 2.5–5 cm, woody, rough and not tuberculate; stipe short, ca. 5 mm. Fl. Aug–Oct, fr. next May–Jun.

Cultivated. Guangdong, Taiwan [native to Central America and Mexico].

The wood is hard and is used for shipbuilding and making furniture. It also yields a gum-resin (copal). The pulp is edible.

2. *Hymenaea verrucosa* Gaertner, Fruct. Sem. Pl. 2: 306. 1791.

疣果李叶豆 you guo luan ye dou

Trachylobium verrucosum (Gaertner) Oliver.

Trees, 6–24 m tall. Branchlets grayish white. Petiolules ca. 3 mm; leaflets ovate-oblong, asymmetric, 5–8(–12) × 2.5–5 cm, both surfaces glabrous, base obliquely rounded, apex acute. Inflorescences panicles; bracts and bracteoles deciduous, ovate

or orbicular. Flowers small. Calyx tube expanded and turbinate in upper part; lobes 7–11 mm, outside densely adpressed puberulent, inside densely white silky. Petals unequal in size, uppermost inner 3 larger, suborbicular, clawed, other 2 small, scaly, or sometimes 5 subequal and all clawed. Ovary shortly stalked, densely strigose at base. Legume blackish brown, slightly compressed, obovoid, 3–4.2 cm, tuberculate. Fl. Sep–Nov, fr. next May–Jun.

Cultivated. Taiwan [native to Madagascar; cultivated in Indonesia (Java), Pacific islands (Hawaii), Singapore, and Sri Lanka].

