

3. GONOCARYUM Miquel, Fl. Ned. Ind., Eerste Bijv. 343. 1861.

琼榄属 qiong lan shu

Shrubs or small trees. Leaves alternate, leathery, glabrous, margin entire. Plants polygamo-dioecious or flowers bisexual, in 1 to several axillary dense or interrupted spikes or racemes. Calyx free at least at apical 3/4; sepals 5 or 6, imbricate. Corolla tubular; lobes 5, valvate. Stamens 5, rudimentary in pistillate plants; filaments glabrous, 3–5 × as long as anthers, rarely very short, adnate on corolla tube, alternate petals; anthers ovoid or narrowly ellipsoid. Ovary conical, reduced and sterile in staminate flowers; style subulate or terete; stigma thickly peltate. Drupe ellipsoid, apex subtruncate; exocarp thick, corky-spongy; endocarp thin, woody.

Nine or ten species: S and SE Asia; two species in China.

- 1a. Plants polygamo-dioecious; sepals 5; filaments 3–4 mm; leaves flat, midvein flat 1. *G. lobbianum*
1b. Flowers bisexual; sepals 6; anthers sessile; leaves folded, midvein curved 2. *G. calleryanum*

1. *Gonocaryum lobbianum* (Miers) Kurz, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 39: 72. 1870.

琼榄 qiong lan

Platea lobbiana Miers, Ann. Mag. Nat. Hist., ser. 2, 10: 110. 1852; *Gonocaryum maclurei* Merrill.

Shrubs or small trees, 1.5–8(–10) m tall. Bark gray; branchlets light olive green to light gray-brown, glabrous. Petiole 1–2 cm, stout; leaf blade shiny, olive green when dry, abaxially slightly light green and adaxially dark green when fresh, narrowly to broadly elliptic, 9–20(–25) × 4–10(–14) cm, leathery, glabrous, midvein abaxially conspicuously prominent, flat, adaxially conspicuous, slightly concave, lateral veins 5 or 6(–9) pairs, abaxially prominent, adaxially slightly prominent, reticulate veins inconspicuous, slender, base broadly cuneate or subrounded to oblique on one side. Plants polygamo-dioecious. Staminate flowers in dense interrupted short spikes, 7–8 mm, with short pedicel; sepals 5, broadly elliptic, ca. 2 mm, valvate, connate only at base, margin ciliate; corolla white, tubular, ca. 6 mm, slightly fleshy, glabrous, with 5 triangular lobes; lobes incurved; stamens 5, on corolla tube, filaments 3–4 mm; anthers ovoid, ca. 1.5 mm; ovary ca. 2.5 mm, pubescent. Pistillate or bisexual flowers few, in racemes on short peduncles; calyx lobes 5, ovate, ca. 2.5 mm, valvate; corolla tubular, ca. 6 mm, 5-lobed, lobes triangular; filaments ca. 4 mm; anthers ca. 0.5 mm; ovary broadly ovoid, glabrous; style hairy; stigma small, 3-lobed. Drupe changing from green to purple-black, ellipsoid to narrowly ellipsoid, 3–4.5(–6) × 1.8–2.5 cm, with longitudinal ribs when dry, apex with a short mucro; exocarp 3–4 mm thick. Fl. Jan–Apr, fr. Mar–Oct.

Dense valley forests; 500–1800 m. Hainan, Yunnan [Cambodia, Indonesia, Laos, Malaysia, Myanmar, Thailand, Vietnam].

This is a rare species. The seed oil is used for making soap and lubricating oil.

2. *Gonocaryum calleryanum* (Baillon) Beccari, Malesia 1: 123. 1877.

台湾琼榄 tai wan qiong lan

Fl. China 11: 507–508. 2008.

Phlebocalymna calleryana Baillon, *Adansonia* 9: 147. 1869; *Gonocaryum diospyrosifolium* Hayata.

Shrubs. Branchlets and young branches curved, terete; branchlets gray; young branches light brown or black when dry. Petiole 1–2 cm; leaf blade light yellow-green when dry, abaxially not shiny, adaxially shiny, orbicular or broadly ovate, 8–14 × 5–7 cm, leathery, midvein and lateral veins abaxially prominent, reticulate veins inconspicuous abaxially, conspicuously prominent adaxially, base rounded to cuneate, usually unequal, margin entire. Racemes short, 1–2 cm, few flowered. Flowers bisexual, without or with short pedicel, pubescent; bractlets broadly triangular, ca. 1.5 mm. Sepals 6, unequal, orbicular, ca. 2 × 2 mm, ciliate. Corolla cylindric, ca. 5 mm; tube ca. 3 mm, apically 5-lobed; lobes triangular, ca. 2 mm, base ca. 2 mm wide, valvate, apex acute, thickened, incurved. Stamens 5, inserted at corolla throat; anthers sessile, ovoid-triangular, ca. 0.8 × 0.8 mm. Ovary conical, ca. 1.5 × 1.5 mm, minutely hispid, with a very short stalk; stigma ca. 0.2 mm. Drupe black, ovoid to ellipsoid, 2.5–3.5 × 2–2.2 cm, glabrous; exocarp thin, fragile. Fl. and fr. unknown.

Forests on coral reef islands; sea level. Taiwan (Hengchun peninsula, Lan Yu) [Indonesia, Philippines].

This is a rare species.

Fl. China 11: 507–508. 2008.