

1. LUMNITZERA Willdenow, Ges. Naturf. Freunde Berlin Neue Schriften 4: 186. 1803.

榄李属 lan li shu

Funcia Dennstedt (1818), not Willdenow (1808); *Pokornya* Montrouzier; *Problastes* Reinwardt; *Pyrrhanthus* Jack.

Trees small or shrubs, evergreen. Leaves spiraled, densely crowded at apices of branchlets; leaf blade spatulate to narrowly oblanceolate, gradually narrowed into a short petiole, somewhat fleshy, glossy and glabrous when mature; lateral veins inconspicuous or obscure. Inflorescences axillary or terminal, short, several-flowered spikes or racemes. Calyx tube cylindrical or cylindrical-ellipsoid, not differentiated into proximal and distal parts, bearing 2 deltoid bracteoles minutely glandular pilose at margin; lobes 5, persistent, deltoid or broadly triangular, margin minutely glandular pilose. Petals 5, red or white, rarely pink [or yellow]. Stamens 5–10. Style persistent. Fruit fusiform or ellipsoid, obtusely angled, dry, ± woody, nearly smooth or longitudinally wrinkled, apex bearing persistent calyx lobes and style.

Two species: Bangladesh, Cambodia, China, India, Indonesia, Japan (Ryukyu Islands), S Korea, Malaysia, New Guinea, Philippines, Singapore, Sri Lanka, Thailand, Vietnam; E Africa (including Madagascar), N Australia, Pacific islands; two species in China.

The species of this genus are trees of mangrove forests, banks of tidal creeks, and borders of coastal fishponds.

- 1a. Petals bright red; inflorescences terminal; stamens ca. $2 \times$ as long as petals; fruit fusiform, stipe ca. 5 mm 1. *L. littorea*
1b. Petals white; inflorescences axillary; stamens shorter than or equaling petals; fruit ellipsoid or ovoid, stipe
ca. 1 mm 2. *L. racemosa*

1. *Lumnitzera littorea* (Jack) Voigt, Hort. Suburb. Calcutt. 39. 1845.

红榄李 hong lan li

Pyrrhanthus littoreus Jack, Malayan Misc. 2(7): 57. 1822; *Bruguiera littorea* (Jack) Steudel; *Laguncularia coccinea* Gaudichaud-Beaupré; *L. purpurea* Gaudichaud-Beaupré; *Lumnitzera coccinea* (Gaudichaud-Beaupré) Wight & Arnott, nom. superfl.; *L. purpurea* (Gaudichaud-Beaupré) C. Presl; *Petaloma coccinea* (Gaudichaud-Beaupré) Blanco.

Trees to 7(–25) m tall; trunk to 0.5 m d.b.h. Bark dark blackish brown, deeply longitudinally fissured. Branchlets reddish or green when young, glabrous. Leaf blade dark green adaxially, oblanceolate or narrowly oblong-oblanceolate, (2–)4–8 × 1–3 cm, apex retuse or rounded; lateral veins in 4 or 5 pairs. Inflorescences terminal, 3–4.5 cm. Calyx tube 12–18 mm; bracteoles 1.5–2 mm; lobes broadly triangular, 1–1.5 mm, apex obtuse. Petals bright red, oblong-elliptic, 5–6 mm, apex obtuse or acuminate. Stamens 5–10 (usually 7), ca. 10 mm, ca. $2 \times$ as long as petals. Style ca. 10 mm. Fruit blackish brown when ripe, fusiform, 1.6–2 cm × 4–5 mm excluding stipe, longitudinally striate; stipe ca. 5 mm. Fl. Nov–Dec, May, fr. Jun–Aug.

Open remnant mangrove forests along sea shores. S Hainan (Lingshui, Yaxian) [Cambodia, India, Indonesia, Malaysia, New Guinea, Philippines, Singapore, Sri Lanka, Thailand, Vietnam; N Australia, Pacific islands].

This species was listed as endangered in China by Ko (in Fu & Jin, China Pl. Red Data Book 1: 224–225. 1992).

2. *Lumnitzera racemosa* Willdenow, Ges. Naturf. Freunde Berlin Neue Schriften 4: 187. 1803.

榄李 lan li

Bruguiera madagascariensis Candolle; *Funcia karakandel* Dennstedt; *Laguncularia rosea* Gaudichaud-Beaupré; *Lumnitzera racemosa* var. *pubescens* Koorders & Valetton; *L. rosea* (Gaudichaud-Beaupré) C. Presl; *Petaloma alba* Blanco; *P. albiflora* Zippelius ex Spanoghe; *P. alternifolia* Roxburgh; *Pokornya ettingshausenii* Montrouzier; *Problastes cuneifolia* Reinwardt.

Shrubs or small trees, to 8 m tall; trunk to 0.3 m d.b.h. Bark brown or grayish black, coarse. Branchlets red or grayish black. Leaf blade pale green adaxially, spatulate to oblanceolate or obovate, 3.5–7 × 1–2.5 cm, apex retuse or rounded; lateral veins usually in 3 or 4 pairs. Inflorescences axillary, 2–6 cm. Flowers fragrant. Calyx tube ca. 9 mm; bracteoles ca. 1 mm; lobes deltoid, 1–2 mm, apex obtuse or shortly mucronate. Petals white, elliptic, 4.5–5 mm, apex obtuse. Stamens 5 or 10, 4–5 mm, shorter than or equaling petals. Style ca. 4 mm. Fruit blackish brown when ripe, ellipsoid or ovoid, slightly compressed on one side, 1–2 cm × 5–8 mm excluding stipe, 2- or 3-ridged, smooth proximally, longitudinally striate distally; stipe ca. 1 mm. Fl. Nov–Aug, fr. Aug–Apr.

Open remnant mangrove forests along sea shores, estuaries, lagoon sides, saltwater swamps, swamps, swampy meadows on sandy soils. Guangdong, Guangxi (Fangcheng, Hepu), Hainan, Taiwan [Bangladesh, Cambodia, India, Indonesia, Japan (Ryukyu Islands), S Korea, Malaysia, New Guinea, Philippines, Singapore, Sri Lanka, Thailand, Vietnam; E Africa (including Madagascar), N Australia, Pacific islands].

Chinese plants belong to *Lumnitzera racemosa* var. *racemosa*, which occurs throughout the range of the species; *L. racemosa* var. *lutea* (Gaudichaud-Beaupré) Exell (*Laguncularia lutea* Gaudichaud-Beaupré; *Lumnitzera lutea* (Gaudichaud-Beaupré) C. Presl), which has yellow petals, is confined to Timor.

COMBRETACEAE