18. LUVUNGA Buchanan-Hamilton ex Wight & Arnott, Prodr. Fl. Ind. Orient. 90. 1834.

三叶藤橘属 san ye teng ju shu

Zhang Dianxiang (张奠湘); Thomas G. Hartley

Woody climbers, with straight or recurved axillary spines, without rust-colored villosulous indumentum on terminal and axillary buds or young inflorescences. Leaves alternate, digitately 3-foliolate; leaflets petiolulate (occasional leaves 1-foliolate, including sometimes all of those on new shoots). Inflorescences terminal, axillary, or basal to leaves, paniculate or racemose. Flowers bisexual. Calyx cup-shaped, 3–5-lobed (often irregularly) or truncate. Petals 3–5, imbricate in bud. Stamens 6–10, equal in length, distinct or monadelphous. Disk annular, pulvinate, or columnar. Gynoecium 2–4-loculed, syncarpous; ovules 1 or 2 per locule; style to 4 × as long as ovary, deciduous in fruit. Fruit a berry, with mucilaginous pulp and without pulp vesicles; endocarp membranous or fleshy. Seeds with membranous seed coat; endosperm lacking; embryo straight; cotyledons elliptic, plano-convex; hypocotyl partly included between cotyledons.

About ten species: S and SE Asia; one species in China.

1. Luvunga scandens (Roxburgh) Buchanan-Hamilton ex Wight & Arnott, Prodr. Fl. Ind. Orient. 90. 1834.

三叶藤 san ye teng

Limonia scandens Roxburgh, Fl. Ind., ed. 1832, 2: 380. 1832; Luvunga nitida Pierre.

Heavy woody climbers. Leaves digitately 3-foliolate; petiole 2–9 cm; petiolules 3–10 mm; leaflet blades elliptic to

obovate, $6-20 \times 3-9$ cm. Flowers ellipsoid in bud. Calyx 2.5–4 mm, shallowly 4-lobed. Petals 4.6–10 mm. Stamens 8 or fewer. Fruit yellow, globose or obpyriform, 3–5 cm in diam., surface smooth, 1–4-seeded; outer part of pericarp (exocarp and mesocarp) thick. Seeds broadly ovoid, 2–3 cm. Fl. Mar–Apr, fr. Oct–Dec.

Riverbanks, valleys of evergreen broad-leaved forests; below 600 m. Guangdong, Hainan, S Yunnan [Cambodia, India, Laos, Malaysia, Myanmar, Thailand, Vietnam].