

15. **NEPHELIUM** Linnaeus, Syst. Nat., ed. 12, 2: 623; Mant. Pl. 1: 18, 125. 1767.

韶子属 shao zi shu

Trees, rarely shrubs, monoecious or dioecious. Leaves paripinnate, alternate, petiolate; leaflets entire. Thyrses terminal or axillary. Flowers unisexual, actinomorphic, small; bracts and bracteoles small. Calyx cupular, 5- or 6-lobed; sepals small, valvate or imbricate, often opening early. Petals absent or 5 or 6. Disk annular, entire or lobed. Stamens (male flowers) 6–8, exerted; filaments villous. Ovary (female flowers) obcordiform, 2(or 3)-lobed, 2(or 3)-loculed, densely tuberculous; ovules 1 per locule; style inserted between ovary lobes; stigma 2- or 3-lobed. Fruit deeply parted into 2 or 3 schizocarps, usually 1 developed, ellipsoid; pericarp leathery, with soft spines. Seeds same as schizocarps in shape; arilode fleshy, adnate to testa, thoroughly covering seeds; embryo arched or slightly straight, cotyledons thick. $2n = 22$.

About 22 species: SE Asia; three species (one endemic, one introduced) in China.

See the revision by Leenhouts (Blumea 31: 373–436. 1986).

- 1a. Leaflet blades elliptic or obovate, glabrous, lateral veins 7–9 pairs 1. *N. lappaceum*
1b. Leaflet blades oblong, abaxially pilose, lateral veins 9–14 pairs or more.
2a. Fruit 4–5 × 3–4 cm including spines, spines ca. 1 cm or longer 2. *N. chryseum*
2b. Fruit smaller than 3 × 2 cm including spines, spines 3.5–5 mm 3. *N. topengii*

1. ***Nephegium lappaceum*** Linnaeus, Syst. Nat., ed. 12, 2: 623; Mant. Pl. 1: 125 [*“lappacea”*]. 1767.

红毛丹 hong mao dan

Trees, evergreen, ca. 10 m tall. Branches grayish brown, terete, rugose, ferruginous pilosulose when young. Leaves with petiole 15–45 cm, axis slightly strong, rugose when dry; leaflets (1 or)2 or 3(or 4) pairs; petiolules ca. 5 mm; blades elliptic or obovate, 6–18 × 4–7.5 cm, thinly leathery, glabrous, lateral veins 7–9 pairs, brownish red when dry, only prominent abaxially, net veins slightly honeycombed, visible on both surfaces when dry, base cuneate, margin entire, apex obtuse or slightly rounded, sometimes nearly acute. Inflorescences many branched, nearly as long as or longer than leaves, ferruginous tomentose. Pedicels short. Calyx ca. 2 mm, leathery; sepals ovate, tomentose. Petals absent. Stamens ca. 3 mm. Fruit reddish yellow, broadly ellipsoid, including spines ca. 5 × 4.5 cm, spines ca. 1 cm. Fl. early summer, fr. early autumn.

Cultivated in Guangdong and Hainan [native to Indonesia, Malaysia, Philippines, and Thailand; cultivated in SE Asia].

The fruit is edible.

2. ***Nephegium chryseum*** Blume, Rumphia 3: 105. 1847.

韶子 shao zi

Trees, evergreen, 10–20 m tall or more. Branches striate, grayish brown when dry, ferruginous pubescent when young. Leaves with petiole 20–40 cm; leaflets (2–)4 pairs; petiolules 5–8 mm; blades 6–18 × 2.5–7.5 cm, thinly leathery, glaucous, pilose abaxially, lateral veins 9–14 pairs or more, prominent and nitid abaxially, smooth or slightly concave adaxially, base

and apex nearly acute. Inflorescences many branched, male ones nearly as long as leaves, female ones shorter. Calyx ca. 1.5 mm, densely pilose. Disk pilose. Stamens 7 or 8; filaments ca. 3 mm, villous. Ovary 2-lobed, 2-loculed, pilose. Fruit red, ellipsoid, 4–5 × 3–4 cm including spines; spines ca. 1 cm or longer, bilaterally compressed, base broad, apex acute, hooklike. Fl. spring, fr. summer.

Dense forests; 500–1500 m. W Guangdong, S Guangxi, S Yunnan [Borneo, Philippines, Vietnam].

The fruit is edible.

3. ***Nephegium topengii*** (Merrill) H. S. Lo, Fl. Hainan. 3: 574. 1974.

海南韶子 hai nan shao zi

Xerospermum topengii Merrill, Philipp. J. Sci. 23: 250. 1923; *Nephegium chryseum* Blume var. *topengii* (Merrill) C. Y. Wu; *N. lappaceum* Linnaeus var. *topengii* (Merrill) F. C. How & C. N. Ho.

Trees, evergreen, 5–20 m tall. Branches reddish brown when dry, often pilosulose. Leaflets 2–4 pairs; petiolules 5–8 mm; blades oblong or oblong-lanceolate, 6–18 × 2.5–7.5 cm, thinly leathery, glaucous, pilose abaxially, lateral veins 10–15 pairs, straight, nearly parallel, base slightly obtuse to broadly cuneate, margin entire, apex acute. Inflorescences and flowers similar to *N. chryseum*. Fruit reddish yellow, ellipsoid, including spines ca. 3 × 2 cm, spines 3.5–5 mm.

• Forests. Hainan.

This species is used for its timber.

