# 2. DILLENIA Linnaeus, Sp. Pl. 1: 535. 1753.

# 五桠果属 wu ya guo shu

Trees, rarely shrubs, evergreen or rarely deciduous. Bark red, gray, or brown. Leaves simple, alternate, to 50 cm, with or without persistent or deciduous amplexicaul wings. Flowers solitary or in few- to many-flowered racemes, large. Sepals (4 or)5(-18), fleshy, often accrescent. Petals (4 or)5(-7) or absent. Stamens very numerous, inner often with longer anthers than outer; anthers dehiscing by 2 (sub)apical pores or less often by 2 longitudinal slits, connective narrow, linear. Carpels partially joined, 4–20, adnate to conical receptacle; ovules 1 to numerous per carpel. Fruit enclosed by enlarged sepals, carpels dehiscing along ventral suture or indehiscent. Seeds usually only 1 or few per carpel, arillate or not.

About 65 species: Madagascar to Fiji, most species in tropical Asia; three species in China.

- 1a. Flowers solitary; flower buds and fruits more than 5 cm in diam.; anthers dehiscing with pores; carpels 16-20 ...... 1. D. indica
- 1b. Flowers 2-7 in fascicles or racemes; flower buds and fruits less than 5 cm in diam.; anthers dehiscing with
  - pores or longitudinal slits; carpels 5-9.
  - 2a. Leaf blade obovate to long obovate; flower buds 4–5 cm in diam.; anthers dehiscing with pores; carpels 8

#### 1. Dillenia indica Linnaeus, Sp. Pl. 1: 535. 1753.

### 五桠果 wu ya guo

## Dillenia speciosa Thunberg.

Evergreen trees to 30 m tall, ca. 1.2 m d.b.h. Bark reddish brown, exfoliating; young branchlets brown pubescent, glabrescent; leaf scars obvious. Petiole narrowly winged; leaf blade oblong or obovate-oblong,  $15-40 \times 7-14$  cm, secondary veins (20-)30-40(-70) on either side, parallel, margin obviously serrate. Flowers solitary, 12-20 cm in diam., more than 5 cm in diam. in bud. Sepals 5, approximately rounded, 4-6 cm in diam., thickly fleshy. Petals white, obovate, 7-9 cm. Stamens in 2 distinct groups, outer very numerous, slightly curved in bud, inner ca. 25, apically reflexed outward in bud; anthers dehiscing with 2 pores. Carpels 16-20; stylodia spreading; ovules many per carpel. Aggregate fruit globose, 10-15 cm in diam., indehiscent; persistent sepals fleshy, slightly swollen. Seeds 5 or more per carpel, exarillate.

Valleys, streamsides. S Guangxi, S Yunnan [Bhutan, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Philippines, Sri Lanka, Thailand, Vietnam].

The fruit of this species is edible.

**2. Dillenia turbinata** Finet & Gagnepain, Bull. Soc. Bot. France 52(Mém. 4): 11. 1906.

#### 大花五桠果 da hua wu ya guo

Evergreen trees to 30 m tall. Branchlets stout, brown tomentose, glabrescent. Petiole 2–6 cm, narrowly winged; leaf blade obovate to long obovate,  $12-30 \times 7-14$  cm, secondary veins (9–)15–22(–40) on either side, margin serrate. Racemes terminal, 3–5-flowered; peduncle 3–5 cm, stout, both bracts and bractlets absent. Flowers 2–7, fragrant, 10–12 cm in diam., 4–5 cm in diam. in bud. Sepals oval, 2.5–4.5 × 2–3 cm, thickly fleshy, unequal, outer ones larger than inner ones. Petals yellow, yellowish white, or reddish, obovate, 5–7 cm, thin, base narrow, apex rounded. Stamens in 2 distinct groups, outer very numerous, slightly curved in bud, 1.5–2 cm, inner ca. 25, reflexed in bud; anthers dehiscing with pores. Carpels 8 or 9, ca. 1 cm; ovules many per carpel. Pseudocarps indehiscent, reddish to dull red. Seeds 1 or more per mature carpel, exarillate. Fl. Apr–May.

Mixed evergreen forests, wet places in valleys; 700–1000 m. S Guangxi, Hainan, S Yunnan [Vietnam].

3. Dillenia pentagyna Roxburgh, Pl. Coromandel 1: 21. 1795.

#### 小花五桠果 xiao hua wu ya guo

Dillenia hainanensis Merrill.

Deciduous trees to 15 m tall, to 1 m d.b.h. Bark smooth, gray, exfoliating; branchlets glabrous, stout. Petiole 2–5 cm, glabrous, with narrow wings; leaf blade oblong to obovate-oblong,  $20-60 \times 10-25$  cm, leathery, secondary veins 25–50 on either side, margin with shallowly undulate teeth. Flowers 2–7, small, fascicled at top of lateral spurs, 2–3 cm in diam., less than 2 cm in diam. in bud; pedicels 2–4 cm, bractlets deciduous. Sepals 5. Petals 5, yellow, obovate. Stamens in 2 distinct groups, outer 60–90, 3–4 mm, slightly curved in bud, inner ca. 10, reflexed, 6–9 mm; anthers dehiscing with longitudinal slits.

# Flora of China 12: 332-333. 2007.

Carpels 5 or 6, 3.5–4 mm in diam.; stylodia spreading; ovules 5–20 per carpel. Pseudocarp indehiscent, yellow, orange, or red; carpels each 1(or 2)-seeded. Seeds exarillate. Fl. Apr–May.

Rain forests, thickets, hills; below 400 m. Hainan, Yunnan [Bhutan, India, Indonesia, Malaysia, Myanmar, Nepal, Thailand, Vietnam]. Flora of China 12: 332–333. 2007.