# 3. SCLEROPYRUM Arnott, Mag. Zool. Bot. 2: 549. 1838, nom. cons.

## 硬核属 ying he shu

Heydia Dennstedt ex Kosteletzky, nom. rej.; Scleromelum K. Schumann & Lauterbach.

Small trees or shrubs evergreen; bark grayish white. Branches terete, nodes sometimes with spines. Winter buds not formed. Leaves alternate, petiolate, orbicular or elliptic, leathery, pinnately veined, lateral veins conspicuous, mostly not reaching to near apex, margin entire. Inflorescences axillary, catkinlike, short spikes, pendulous; male inflorescences sometimes in clusters. Flowers bisexual or unisexual (plants trioecious). Male flowers: perianth tube rigid, short, lobes 5, usually distinct beyond disk, valvate or slightly imbricate in buds. Stamens 5, on base of lobes; filaments short, cells divaricate, dehiscence transverse. Discs obtusely square, becoming circular, margin slightly prominent, wavy lobed. Female flowers: perianth tube ovoid, adnate to ovary, lobes similar to those of males. Ovary inferior; ovules 3. Style rather strong, short; stigma scutiform, large, 3–5-lobed. Bisexual flowers similar to female but with fertile stamens. Fruit a berrylike drupe, obovoid to pear-shaped, large, base gradually narrowed to form a long stalk, apex slightly raised, relatively narrow, with persistent perianth lobes and relatively narrow rudimentary disk (to 2.5 mm wide), exocarp thickly fleshy, endocarp rigid. Seeds subglobose; embryo terete.

Six species: SE Asia; one species in China.

1. Scleropyrum wallichianum (Wight & Arnott) Arnott, Mag. Zool. Bot. 2: 550. 1838.

#### 硬核 ying he

Trees 4-10 m tall. Branches grayish green, strong and thick, smooth, spines sometimes present. Petiole thick, 6-10 mm; leaf blade  $9-17 \times 5-7$  cm, glabrous or sparsely pubescent, abaxially pale green, adaxially deep green, ± glossy, midvein adaxially depressed, abaxially prominent, lateral veins 3 or 4 on each side, lower 2 pairs almost reaching leaf apex, tertiary veins patent and netlike, base subrotund or cuneate, apex obtuse or acute. Inflorescences solitary, paired, or a few in fascicles, 2-2.5 cm, yellow tomentose; bracts narrowly lanceolate, ca. 2  $\times$ 0.7 mm, villous abaxially, caducous. Perianth pale yellow to reddish yellow, ca.  $3.8 \times 5.5$  mm, lobes 5, ovate, ca.  $2 \times 1.5$ mm, apex subacute, abaxially villous, hair short near base or tomentose, adaxially with a tuft of hair behind each stamen. Stamen filaments ca. 1.5 mm. Disk depressed in middle, ca. 1.8 mm in diam. Style 0.8-1 mm; stigma shallowly 3- or 4-lobed, sunken in middle. Drupe orange or orange-red when mature, 3- $3.5 \times 2.3$ –2.5 cm, glabrous, glossy, apex nipple-like, persistent perianth not conspicuously enlarged, 2-2.5 mm in diam. Fl. Apr-May, fr. Aug-Sep.

Forests, slopes, valleys; 600–1700 m. Guangxi, Hainan, Yunnan [Cambodia, India, Laos, Malaysia, Myanmar, Sri Lanka, Thailand, Vietnam].

The seeds contain more than 67% oil, which is suitable as raw material for lubricants and soap. The young shoots and mature fruits are edible.

- 1a. Branches with spines to 8 cm; leaf
- blade glabrous, base  $\pm$  rounded ...... 1a. var. *wallichianum* 1b. Branches without spines; leaf blade
  - sparsely pubescent, base cuneate ...... 1b. var. mekongense

#### 1a. Scleropyrum wallichianum var. wallichianum

### 硬核(原变种) ying he (yuan bian zhong)

Sphaerocarya wallichiana Wight & Arnott, Edinburgh New Philos. J. 15: 180. 1833; Pyrularia zeylanica A. Candolle.

Branches with spines to 8 cm. Leaf blade glabrous, base  $\pm$ 

rounded. Male perianth lobes abaxially villous, hairs short near base.

Forests, slopes, valleys; 800–1200 m. Guangxi, Hainan, Yunnan [Cambodia, India, Laos, Malaysia, Myanmar, Sri Lanka, Vietnam].

**1b. Scleropyrum wallichianum** var. **mekongense** (Gagnepain) Lecomte, Bull. Mus. Natl. Hist. Nat. 20: 404. 1914.

无刺硬核 wu ci ying he

Scleropyrum mekongense Gagnepain, Notul. Syst. (Paris) 1: 196. 1911.

Branches without spines. Leaf blade sparsely pubescent, base cuneate. Male perianth lobes abaxially tomentose.

Forests; 600-1700 m. S Yunnan [Cambodia, Laos, Vietnam].

Flora of China 5: 210. 2003.