

### 9. REHDERODENDRON Hu, Sinensia 2: 109. 1932.

木瓜红属 mu gua hong shu

Trees deciduous. Winter buds enclosed by scales. Leaves alternate; stipules absent; leaf blade margin serrate or serrulate. Inflorescences axillary or at nodes of previous year branchlets, racemose or paniculate. Pedicel jointed. Flowers opening before or at same time as leaves. Calyx tube obconical, completely adnate to ovary, 5–10-ribbed, 5-toothed. Corolla campanulate; lobes 5, imbricate, basally short connate. Stamens 10, 5 long and 5 short; filaments flattened, basally connate and adnate to corolla; anthers ovate to oblong. Ovary inferior, 3- or 4-locular; ovules 4 per locule, basally pendulous, apically erect; placentation axile. Style elongated, slender; stigma obscurely 4- or 5-lobed. Fruit woody, indehiscent, 5–10-ribbed, mostly adnate to calyx, apex with persistent calyx and style base forming a short rostrum; exocarp thin, hard; mesocarp thick, fibrous-spongy; endocarp intruded by mesocarp, with many radiate lacunas. Seeds 1–3, narrowly cylindrical; seed coat almost leathery; embryo fleshy.

Five species: SW China, Myanmar, Vietnam; five species in China.

- 1a. Leaves stellate hairy.
  - 2a. Leaves abaxially densely stellate tomentose; fruit stellate tomentose, coarsely rugose between ribs ..... 1. *R. kweichowense*
  - 2b. Leaves abaxially sparsely stellate pubescent; fruit glabrous, smooth between ribs ..... 2. *R. gongshanense*
- 1b. Leaves glabrous except for veins or when young.
  - 3a. Fruit reddish brown with prominent pale brown spots; leaves always glabrous; branchlets reddish brown ..... 5. *R. indochinense*
  - 3b. Fruit brown, not spotted; leaves often with some hairs at least on veins; branchlets dark purplish.
    - 4a. Flowers opening at same time as leaves; corolla lobes 1.5–1.8 × 0.5–0.8 cm; stamens slightly longer than corolla ..... 3. *R. macrocarpum*
    - 4b. Flowers opening before leaves expand; corolla lobes 2–2.5 × 1–1.4 cm; stamens shorter than or equal to corolla ..... 4. *R. kwangtungense*

#### 1. *Rehderodendron kweichowense* Hu, Sinensia 2: 109. 1932.

贵州木瓜红 gui zhou mu gua hong

*Rehderodendron praeteritum* Sleumer; *R. tsiangii* Hu & Cheng; *R. yunnanensis* Hu.

Trees to 15 m tall. Trunk to 30 cm d.b.h. Branchlets stellate pubescent or glabrous. Winter buds ovate-oblong, 5–6 mm. Petiole ca. 1 cm; leaf blade elliptic to ovate-elliptic, 12–20 × 5–9.5 cm, abaxially densely brownish stellate tomentose, adaxially densely brownish stellate pubescent on veins, base rounded to broadly cuneate, margin remotely serrate, apex short acuminate to acute; secondary veins 8–12 per side, tertiary veins reticulate, raised. Inflorescences racemes or panicles, 5–16-flowered, 6–10 cm. Pedicel 3–6 mm. Flowers 1.2–1.5 cm. Calyx ca. 3 × 2 mm, densely yellow stellate tomentose; teeth deltoid. Corolla lobes oblong to obovate-elliptic, ca. 1.3 cm × 5 mm. Filaments white stellate villose. Fruit cylindrical to cylindrical-ellipsoid, slightly curved, 5–7.5 × 3–4.5 cm, 10–12-ribbed, coarsely rugose between ribs, densely gray-brown to brownish stellate tomentose, exocarp ca. 1 mm thick, mesocarp ca. 1 cm thick, endocarp 3–4 mm thick. Seeds 2–4, cylindrical, ca. 6 mm. Fl. Apr–May, fr. Aug–Sep.

Dense forests; 500–1500 m. Guangdong, Guangxi, Guizhou, SE Yunnan [Vietnam].

#### 2. *Rehderodendron gongshanense* Y. C. Tang, Acta Bot. Yunnan. 10: 350. 1988.

贡山木瓜红 gong shan mu gua hong

Trees to 10 m tall. Trunk to 20 cm d.b.h. Branchlets stellate tomentose or glabrous. Petiole 6–10 mm; leaf blade

elliptic to oblong, 9–20 × 4–10 cm, sparsely stellate pubescent, base subrounded, margin serrulate, apex acute to short acuminate; secondary veins 7–12 per side, tertiary veins reticulate, conspicuous. Flowers unknown. Fruit cylindrical, usually slightly curved, 5–7 × 2–2.5 cm, 9- or 10-ribbed, inconspicuously raised, slightly conic-umbonate, glabrous, exocarp ca. 1 mm thick, mesocarp ca. 8 mm thick, endocarp 3–4 mm thick and lacunate. Seeds 1, cylindrical-fusiform, ca. 4 cm × 4 mm. Fr. Aug.

\* Broad-leaved evergreen forests; ca. 1500 m. Yunnan (Gongshan Xian).

#### 3. *Rehderodendron macrocarpum* Hu, Bull. Fan. Mem. Inst. Biol. 3: 78. 1932.

木瓜红 mu gua hong

*Rehderodendron mapienense* Hu.

Trees 7–10 m tall. Trunk to 20 cm d.b.h.; bark dark gray. Branchlets purple stellate pubescent or glabrous. Winter buds ovate to oblong-ovate. Petiole 1–1.5 cm; leaf blade oblong-ovate, elliptic, or oblong-elliptic, 9–13 × 4–5.5 cm, abaxially glabrous but veins slightly pubescent, adaxially glabrescent, base cuneate, margin remotely serrate, apex acute to short acuminate; secondary veins 7–13 per side, tertiary veins reticulate, conspicuously raised. Racemes 6–8-flowered, 4–5 cm, densely grayish stellate pubescent. Pedicel 3–10 mm. Flowers opening at same time as leaves. Calyx ca. 4 × 3 mm, densely stellate pubescent; teeth deltoid, ca. 2 mm, apex acuminate. Corolla lobes elliptic to obovate, 1.5–1.8 cm × 5–8 mm, apex obtuse. Fruit red-brown, cylindrical to cylindrical-ovoid, slightly curved, 3.5–9 × 2.5–3.5 cm, 8–10-ribbed,

smooth between ribs, glabrous, exocarp ca. 1.5 mm thick, mesocarp ca. 1 cm thick, endocarp 3–4 mm thick. Seeds brown, 2–2.5 cm. Fl. Mar–Apr, fr. Jul–Sep.

Dense forests; 1000–1500 m. Guangxi, Sichuan, Yunnan [Vietnam].

**4. *Rehderodendron kwangtungense*** Chun, Sunyatsenia 1: 290. 1943.

广东木瓜红 guang dong mu gua hong

*Rehderodendron hui* Chun.

Trees to 15 m tall. Trunk to 20 cm d.b.h.; bark gray. Branchlets smooth. Winter buds red-brown, oblong to ovate. Petiole 1–1.5 cm; leaf blade oblong-elliptic to elliptic, 7–16 × 3–8 cm, glabrous or slightly stellate and villose on veins, base cuneate, margin remotely serrate, apex acute to acuminate; secondary veins 7–11 per side, tertiary veins reticulate, raised, usually purplish. Racemes 6–8-flowered, ca. 7 cm. Calyx densely gray-yellow stellate pubescent. Corolla lobes ovate, slightly unequal in length, 2–2.5 × 1–1.4 cm. Fruit brown to gray-brown, cylindric, obovoid, or ellipsoid, 4.5–8 × 2.5–4 cm, glabrous or slightly pubescent, 3–10-ribbed, smooth between ribs, exocarp ca. 1 mm thick, mesocarp 0.8–1.2 cm thick, endocarp hard woody. Seeds 2–2.5 cm. Fl. Mar–Apr, fr. Jul–Sep.

\* Dense forests; 100–1300 m. Guangdong, Guangxi, Hunan, Yunnan.

**5. *Rehderodendron indochinense*** H. L. Li, J. Arnold Arbor. 24: 369. 1934.

越南木瓜红 yue nan mu gua hong

*Rehderodendron fengii* Hu.

Trees 7–13 m tall. Branchlets red-brown, glabrous. Petiole 6–10 mm; leaf blade elliptic-lanceolate, oblong, or oblong-elliptic, 7–10 × 2.5–3.5 cm, membranous to papery, glabrous, base cuneate, margin serrulate, apex acuminate; secondary veins 6–9 per side, tertiary veins reticulate. Inflorescences axillary, racemes or panicles. Calyx campanulate, ca. 4 mm; teeth 5, deltoid. Corolla lobes elliptic to elliptic-oblong, ca. 1.4 cm × 5 mm, apex obtuse. Fruit red-brown, cylindric, terete, 7.5–11 × 2.8–6 cm, often with brown rounded small spots when dried, 6–8-ribbed, smooth between ribs, exocarp ca. 1 mm thick, mesocarp 8–10 mm thick, endocarp hard woody. Seeds 2 or 3, ca. 2 cm. Fr. Aug–Oct.

Mixed forests; 100–1300 m. Yunnan (Pingbian Xian) [Vietnam].

