

6. RHODOLEIA Champion ex Hooker, Bot. Mag. 76: t. 4509. 1850.

红花荷属 hong hua he shu

Trees or shrubs, evergreen. Leaves alternate, petiolate; stipules apparently absent; leaf blade ovate or lanceolate, leathery, margin entire, venation pinnate, sometimes with 3 basal veins, abaxially usually glaucous. Inflorescence capitate, axillary, pedunculate, usually nodding, 5–8-flowered; involucre bracts 5–many, imbricate, ovate-rounded, outer bracts usually much smaller than inner bracts. Flowers bisexual, zygomorphic. Floral cup very short, enclosing base of ovary. Sepals absent or rudimentary, number not distinguishable. Petals 2–5, well developed only on abaxial side of flower, red, spatulate or oblanceolate, clawed, straight in bud, head as whole rayed and flowerlike. Stamens 4–11, equal to or somewhat shorter than petals; filaments linear; anther thecae 2-sporangiate, each dehiscing by 2 valves; nectariferous disk scales present. Ovary semi-inferior; ovules 12–18 per locule, inserted on septum; styles long, very slender, nearly equal to stamens, apex acute, caducous or persistent in fruit. Capsules dehiscing loculicidally above middle by 4 valves; pericarp thin. Seeds flattened, mostly sterile and wingless, fertile seeds laterally narrowly winged; endosperm rather copious; cotyledons ovate, flat, fleshy; radicle cylindric, ca. 1/3 as long as cotyledons. $2n = 24$.

About ten species: China, Indonesia, Malaysia, Myanmar, Vietnam; six species (three endemic) in China.

Vink (Flora Malesiana, ser. 1, 5: 371–374. 1957) regarded *Rhodoleia* as monospecific.

- 1a. Petals linear-oblanceolate, 1.5–3 mm wide; leaf blade base rounded 6. *R. stenopetala*
- 1b. Petals spatulate or oblanceolate, 5–8 mm wide; leaf blade base cuneate.
 - 2a. Leaf blade abaxially brown tomentose, reticulate venation adaxially very distinctly impressed 5. *R. forrestii*
 - 2b. Leaf blade abaxially glabrous or with stellate scales, reticulate venation adaxially indistinct.
 - 3a. Leaf blade abaxially stellately scaly; capsules long ovoid, 1.2–2 × 0.6–1 cm 4. *R. macrocarpa*
 - 3b. Leaf blade abaxially glabrous or very sparsely stellately scaly; capsules subglobose, ca. 1 × 1 cm.
 - 4a. Peduncles 2–3 cm long, with several scalelike bracts; petals 6–8 mm wide 1. *R. championii*
 - 4b. Peduncles 1–1.5 cm long, with few or no bracts; petals 5–6 mm wide.
 - 5a. Leaf blade oblong, lateral nerves indistinct, at ca. 45° to midrib; involucre bracts abaxially mostly whitish stellately pubescent, brown-pilose only at or near margin 2. *R. parvipetala*
 - 5b. Leaf blade ovate-elliptic, lateral nerves abaxially prominent, pale, at ca. 30° to midrib; involucre bracts abaxially ferruginous-tomentose 3. *R. henryi*

1. *Rhodoleia championii* Hooker, Bot. Mag. 76: t. 4509. 1850.

红花荷 hong hua he

Rhodoleia latiovatifolia G. A. Fu.

Trees, to 12 m tall; young branches stout, drying dark brown, glabrous. Petiole 3–5.5 cm; leaf blade ovate to broadly ovate, 7–16 × 4.5–10.5 cm, firmly leathery, drying discolorous, abaxially whitish gray, usually glabrous or sometimes with remains of brown stellate scales or stellate indumentum that appears tuberculate on drying, base broadly cuneate, apex obtuse or subacute; obscurely 3-veined at base, lateral veins 7–9 on each side at ca. 60° to midrib, conspicuous on both surfaces, reticulate veins obscure. Inflorescences 3–4 cm, 2.5–3.5 cm wide in fruit; peduncle 2–3.8 cm, with several scalelike bracts; involucre bracts many, ovate-rounded, brown pubescent; bracteoles 5 or 6, scalelike. Petals spatulate, 25–35(–40) × 4–8 mm. Stamens as long as petals, filaments glabrous, 1.5–2 cm, anthers 4–6 mm. Ovary glabrous; styles somewhat shorter than stamens. Capsules 5, ovoid-globose, ca. 1.2–1.5 cm, styles not persistent, pericarp thin-woody. Seeds yellow-brown, flattened. Fl. Feb–Apr, fr. May–Aug.

Forests; ca. 1000 m. C and W Guangdong, Guizhou, Hainan [Indonesia (Sumatra), W Malaysia, Myanmar, Vietnam].

Records of *Rhodoleia championii* from outside China must be treated with caution; collectors have commented on the similarity of the foliage to that of *Rhododendron*.

2. *Rhodoleia parvipetala* Tong, Bull. Dept. Biol. Sun Yatsen

Univ. 2: 35. 1930.

小花红花荷 xiao hua hong hua he

Trees, to 20 m tall; young branches drying dark brown, stellately scaly but quickly glabrescent. Petiole 2–4.5 cm; leaf blade oblong, 5–10 × 2–4 cm, drying discolorous, abaxially whitish gray, glabrous, adaxially drying dark green, base cuneate, apex acute; obscurely 3-veined at base, lateral veins 6–9 on each side, abaxially somewhat raised, adaxially obscure. Inflorescences 2–2.5 cm, 2.5–3.5 wide in fruit; peduncle 1–1.5 cm, to 2 cm in fruit; involucre bracts 5–7, ovate-rounded, 7–10 mm, pubescent with dark brown hairs; bracteoles absent. Petals spatulate, 15–18 × 5–6 mm. Stamens 6–8, about as long as petals. Ovary glabrous; styles as long as stamens. Capsules 0.8–1 cm. Seeds many, flattened. Fl. May–Apr, fr. Apr–Sep.

Slopes in evergreen forests; ca. 1000 m. W Guangxi, SE Guizhou, SE Yunnan [N Vietnam].

3. *Rhodoleia henryi* Tong, Bull. Dept. Biol. Sun Yatsen Univ. 2: 35. 1930.

小脉红花荷 xiao mai hong hua he

Trees, to 15 m tall. Petiole ca. 5 cm; leaf blade ovate-elliptic, ca. 11 × 3–6 cm, abaxially drying yellow-green, glabrous, adaxially drying dark green, base broadly cuneate, apex acuminate; lateral veins ca. 6 on each side at ca. 30° to midrib, abaxially raised, adaxially sunken. Inflorescences 3–3.5 cm, 5-flowered; peduncle 1–1.5 cm; involucre bracts many, rusty tomentose; bracteoles absent. Petals dark red, spatulate, ca. 30 ×

6 mm. Stamens 7–9, as long as petals. Ovary glabrous; styles 1.8–2 cm. Capsules not seen. Fl. Mar–May.

- Slopes in evergreen forests; 2000–2450 m. SE Yunnan.

4. *Rhodoleia macrocarpa* H. T. Chang, Acta Sci. Nat. Univ. Sunyatsen. 1963(4): 50. 1963.

大果红花荷 da guo hong hua he

Trees, to 10 m tall; young branches drying dark brown, stellately lepidote. Petiole 2.5–4 cm; leaf blade elliptic or narrowly elliptic, 7–11 × 3–6 cm, abaxially gray-white, lepidote, adaxially drying dark green, not shiny, base broadly cuneate, apex mucronate; obscurely 3-veined, lateral veins 8 or 9 on each side at ca. 75° to midrib, obscure on both surfaces. Flowers not seen. Infructescences 2.5–3.5 cm wide; fruiting peduncle 1–1.5 cm, stout, pubescent. Capsules 5, narrowly ovoid, 1.5–2 × 1.1–1.4 cm, glabrous, apex acute; styles persistent, short. Seeds dark brown, flattened, ca. 6 × 4 mm, narrowly winged. Fl. Mar–Jun, fr. Aug–Sep.

- Slopes in evergreen forests; 2000–2400 m. SE Yunnan.

5. *Rhodoleia forrestii* Chun ex Exell, Sunyatsenia 1: 97. 1933.

绒毛红花荷 rong mao hong hua he

Trees, to 15 m tall; young branchlets long tomentose. Petiole ca. 3.5 cm, rusty tomentose; leaf blade oblong lanceolate, 7–15 × 2–7 cm, abaxially whitish gray, brown-tomentose to pilose, adaxially drying dark green, shiny, ± bullate, base cuneate, apex acute or acuminate; lateral veins 7–9 on each side at ca. 45° to midrib, abaxially convex, adaxially sunken, as is the reticulate venation. Inflorescences ca. 3 cm, 2.5–3 cm wide in fruit; peduncle ca. 1 cm; involucre bracts many, ovate-rounded or broadly ovate, 5–10 mm, brown-tomentose. Petals oblanceolate, ca. 28 × 6 mm. Ovary glabrous; styles shorter than stamens. Capsules ovoid-globose, angular, 1.3–1.6 cm, styles persistent, long. Seeds dark brown, flattened, narrowly winged. Fl. Mar–May, fr. Jun–Sep.

- Evergreen forests; 1500–2300 m. W Yunnan [NE Myanmar].

6. *Rhodoleia stenopetala* H. T. Chang, Acta Sci. Nat. Univ. Sunyatsen. 1959(2): 31. 1959.

窄瓣红花荷 zhai ban hong hua he

Trees, to 20 m tall. Petiole 3–5 cm, stout, glabrous; leaf blade ovate or broadly so, 6–10 × 4–6.5 cm, drying discolorous,

abaxially whitish gray, adaxially dark green, somewhat shiny, base rounded or obtuse, apex obtuse or nearly acute; 3-veined at base, lateral veins 4–6 on each side, abaxially slightly raised, obscure adaxially. Inflorescences ca. 2 cm long, ca. 2.5 cm wide in fruit; peduncle 1–1.5 cm, stellately pubescent; involucre bracts ca. 10, ovate-rounded, 5–9 mm, abaxially stellately tomentose. Petals 4, narrowly oblanceolate, 15–20 × 1.5–3 mm. Stamens 8, ca. 17 mm; filaments stout, glabrous. Ovary tomentose; styles ca. 1.5 cm. Capsules 5, ovoid-globose, ca. 1.2 cm long, styles not persistent. Seeds flattened. Fl. Mar–Jun, fr. Jul–Sep.

- Evergreen forests; 600–1000 m. W Guangdong, Hainan.

This species has the narrowest petals in *Rhodoleia*.

