

**11. CAULOPHYLLUM** Michaux, Fl. Bor.-Amer. 1: 204, t. 21. 1803.

红毛七属 hong mao qi shu

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*Phtheirotheca* Maximowicz ex Regel.

Herbs, perennial, deciduous, glabrous. Rhizome creeping, stout, nodose, with numerous fibrous roots. Aerial stem erect. Leaves alternate, 2 or 3 × ternately compound, broadly ovate in overall outline; petiole short or leaves sessile; pinnules petiolulate or sessile, ovate, obovate, or broadly lanceolate, undivided or lobed, venation pinnate or palmate, margin entire. Inflorescences terminal, compound cymes. Flowers 3-merous; bracteoles 3 or 4, sepaloid, caducous. Sepals 6, petaloid, yellow, red, purple, or green. Petals 6, fan-shaped or obovate, nectary-like. Stamens distinct; anthers dehiscing by 2 apically hinged flaps; pollen prolate, 3-colporate, exine reticulate. Ovary bladderlike; placentation basal; styles eccentric. Fruit not developing, ovary wall soon rupturing and seed coat becoming fleshy and fruitlike. Seeds 2, raised on elongating stalk, naked at maturity, globose; seed coat tunic-blue, fleshy, glaucous.  $x = 8$ .

Three species: North America and E Asia; one species in China.

**1. Caulophyllum robustum** Maximowicz, Mém. Acad. Imp. Sci. St.-Pétersbourg Divers Savans 9 [Prim. Fl. Amur.]: 33. 1859.

红毛七 hong mao qi

*Leontice robusta* (Maximowicz) Diels.

Herbs, to 80 cm tall. Rhizomes short, stout, nodose. Stem leaves 2; terminal leaflet usually petiolulate, lateral leaflets subsessile; leaflets abaxially pale green or grayish white, adaxially green, ovate, oblong, or broadly lanceolate, 4–8 × 1.5–5 cm, both surfaces glabrous, base broadly cuneate, margin entire, sometimes 2- or 3-lobed, apex acuminate. Flowers pale yellow, 7–8 mm in diam.; bracteoles usually 3. Sepals obovate, 5–6 × 2.5–3 mm, apex rounded. Petals much smaller than sepals, base clawed. Stamens opposite petals, ca. 2 mm; filaments longer than anthers. Pistils shorter than stamens; ovules 2, stipitate; funiculus thickened, 7–8 mm. Seeds naked at maturity, 6–8 mm in diam.; seed coat blue, fleshy, glaucous; aril absent. Fl. May–Jun, fr. Jul–Sep.  $2n = 16$ .

Forests, bamboo thickets, *Cathaya* forests, moist places in valleys; 900–3500 m. Anhui, Gansu, Guizhou, Hebei, Heilongjiang, Henan, Hubei, Jilin, Liaoning, Shaanxi, Shanxi, Sichuan, Xizang, Yunnan, Zhejiang [Japan, Korea, Russia].

Fl. China 19: 800. 2011.