

CARDIOPTERIDACEAE

心翼果科 xin yi guo ke

Peng Hua (彭华)¹; Richard A. Howard²

Herbs climbing, with abundant milky juice. Leaves spirally arranged, estipulate. Cymes axillary, branched, ± scorpioid, ebracteate. Flowers very small. Sepals (4 or)5, coherent at base. Petals (4 or)5, coherent at base. Stamens (4 or)5, epipetalous. Disk absent. Ovary superior, 1-loculed, apically with 2 pendulous ovules; styles 2, dissimilar, 1 longer and thicker, cylindrical or subclavate, persistent on fruit, other style shorter and thinner, with capitate stigma. Fruit a 2-winged samara, indehiscent, flat, 2-seeded; embryo minute, in fleshy endosperm.

One genus and two species: tropical SE Asia to NE Australia; one species in China.

Chuang Hsuan. 1981. *Peripterygium*. In: Fang Wen-pei, ed., *Fl. Reipubl. Popularis Sin.* 46: 63–65.

1. *CARDIOPTERIS* Wallich ex Royle, *Ill. Bot. Himal. Mts.* 136. 1834.

心翼果属 xin yi guo shu

Peripterygium Hasskarl.

Lianas herbaceous, glabrous. Leaves long petiolate; leaf blade cordate or cordate-hastate, thin, membranous, lobed or not, palmately 3–7-veined. Panicles sparse, scorpioid at apex; bracts early deciduous, ovate, small, apex acuminate. Flowers bisexual or polygamous, sessile. Calyx deeply (4 or)5-lobed; lobes persistent, imbricate. Petals deciduous, imbricate, coherent at base. Stamens alternate with petals, inserted at throat of corolla; filaments very short; anthers introrse, 2-celled, longitudinally dehiscent. Ovary ovoid-oblong, slightly 4-ribbed, rudimentary in staminate flowers; styles short, stout; stigmas 2-lobed, 1 capitate and early deciduous, 1 elongate in fruit, apex 2-lobed, deciduous. Fruit broad, orbicular or obcordate, wings membranous, horizontally veined. Seeds longitudinally grooved; endosperm densely granular, fleshy.

Geographical distribution is the same as that of the family.

1. *Cardiopteris quinqueloba* (Hasskarl) Hasskarl, *Tijdschr. Natuurl. Gesch. Physiol.* 10: 64. 1855.

心翼果 xin yi guo

Peripterygium quinquelobum Hasskarl, *Tijdschr. Natuurl. Gesch. Physiol.* 10: 142. 1843; *Cardiopteris platycarpa* Gagnepain; *P. platycarpum* (Gagnepain) Sleumer.

Leaves widely spaced; petiole 3–12 cm; leaf blade abaxially light green, adaxially inflexed upward near apex of petiole and marginally, polymorphic, broadly ovate, (4–)7–12(–17) × (3–)5–8(–16) cm, glabrous, base usually cordate, sometimes truncate, margin usually ± deeply or irregularly 3–5(–9)-lobed, apex commonly acute; basal lobes auriculate-orbicular or hastate, sometimes sinuous; apical lobe larger; basal veins 5, widely divergent, midvein with 1 or 2 pairs of lateral veins, veins

slightly prominent, reticulate veins inconspicuous. Panicle solitary on peduncle, (3–)5–16(–27) cm, 1–3-forked, cincinni rather few flowered. Flowers small, bisexual; plants polygamous, dioecious, or monoecious; flower buds yellow-green, subglobose. Calyx lobes ovate, 1.5–2 mm, glabrous or outside sparsely puberulent, coherent at base, margin sometimes ciliate. Petals white, ovate to narrowly ovate, ca. 2 mm, united at base, apex obtuse or rounded. Filaments filiform, slightly widened at base; anthers oblong-ovoid, longer than filaments. Ovary ellipsoid or narrowly conical, 1.5–3 mm, slightly 4-ribbed, glabrous; style exerted, terete. Samara golden, shiny, suborbicular or obcordate, 2–3.5 × 1.5–3 cm, with persistent calyx, with 1–8 mm elongate fruiting axis above calyx. Fl. May–Nov, fr. Oct–Mar.

Sparse woods, scrub, forests in karst mountains, dense valley forests; 100–1300 m. Guangxi, Hainan, Yunnan [?Bhutan, NE India, Indonesia, Malaysia, Myanmar, Thailand, Vietnam].

¹ Kunming Institute of Botany, Chinese Academy of Sciences, Heilongtan, Kunming, Yunnan 650204, People's Republic of China.

² Harvard University Herbaria, 22 Divinity Avenue, Cambridge, Massachusetts 02138-2094, U.S.A. (Richard A. Howard died on 18 September 2003.)