

21. CARDIOSPERMUM Linnaeus, Sp. Pl. 1: 366. 1753.

倒地铃属 *dao di ling shu*

Herbaceous or woody climbers, rarely shrubs. Leaves usually biternate or bitrilobate; stipules small, deciduous; leaflets pinnately lobed or dentate, usually with pellucid glands. Panicles axillary; peduncles rather long, first pair of branches forming tendrils or spines; bracts and bracteoles subulate. Flowers unisexual, zygomorphic, with slender noded pedicels. Sepals 4 or 5, imbricate, outer 2 smaller. Petals 4, with a large scale inside and slightly above base; scales of abaxial petals with broadly winged appendage, scales of adaxial petals simple. Disk lobed into 2 large glandular lobes at base of petals. Stamens (male flowers) 8, slightly longer than petals. Ovary (female flowers) ellipsoid, trigonous, 3-loculed; ovules 1 per locule, inserted at middle of middle axis; style short; stigma 3-lobed. Capsules inflated, saclike, 3-loculed; pericarp membranous or papery, veined. Seeds 1 per locule, subglobose; hilum cordate or suborbicular; embryo with large cotyledons, outer one arched, inner one reflexed. $2n = 20, 22$.

About 12 species: mostly in tropical and subtropical America; one species in China.

1. *Cardiospermum halicacabum* Linnaeus, Sp. Pl. 1: 366. 1753.

倒地铃 *dao di ling*

Cardiospermum halicacabum var. *microcarpum* (Kunth) Blume; *C. microcarpum* Kunth.

Climbers, herbaceous, 1–1.5 m. Stems and branches green, 5- or 6-sulcate, slender, glabrous or sparsely hairy. Leaves biternate, triangular in outline; petioles 3–4 cm; leaflets sessile; blades thinly papery, margin sparsely serrate or pinnately parted, abaxially sparsely villous on midvein and lateral veins, adaxially subglabrous or sparsely pilosulose; terminal blade obliquely lanceolate or subrhombic, 3–8 × 1.5–2.5 cm, apex acuminate; lateral ones slightly smaller, ovate or narrowly elliptic. Panicles few flowered, ca. as long as or slightly longer than

leaves; peduncles straight, 4–8 cm, tendrils spiralled. Sepals 4, ciliate, outer 2 ovate, 8–10 mm, inner 2 narrowly elliptic, ca. 2 × as long as outer ones. Petals milky-white, obovate. Stamens (male flowers) ca. as long as or slightly longer than petals; filaments sparsely long villous. Ovary (female flowers) obovoid or sometimes subglobose, pubescent. Capsules brown, pearlike, turbinate-obtriangular or sometimes nearly ellipsoid, 1.5–3 × 2–4 cm, pubescent. Seeds black, shiny, ca. 5 mm in diam.; hilum green when fresh, white when dry, cordate. Fl. summer–autumn, fr. autumn–early winter.

Forest margins, shrublands, grasslands, cultivated areas, wastelands. Common in E, S, and SW China, rare in N China [common weed widely distributed in tropical and subtropical regions].

This species is used medicinally.

