

2. LEPTOCODON (J. D. Hooker & Thomson) Lemaire, Ill. Hort. 3. Misc. 49. 1856.

细钟花属 xi zhong hua shu

Hong Deyuan (洪德元); Thomas G. Lammers, Laura L. Klein

Codonopsis subg. *Leptocodon* J. D. Hooker & Thomson, Ill. Himal. Pl. t. 16, A. 1855.

Vines, perennial. Stems slender. Leaves alternate, but on branches often opposite or subopposite. Flowers solitary, outside axils, less frequently in axils, or opposite to leaves. Calyx 5-lobed, tube broadly obconical. Corolla tubular, 5-lobed. Stamens 5; filaments long, base slightly dilated, alternate with 5 free, lamellar glands. Ovary semi-inferior, with superior part narrowly conical, 3-locular; style long; stigma 3-fid, segments clavate. Capsule 3-loculicidal at superior part. Seeds numerous.

Two species: Bhutan, SW China, N India, N Myanmar, E Nepal; two species (one endemic) in China.

- 1a. Plants glabrous throughout except young leaves sparsely villous; calyx lobes linear-oblong, often reflexed, distant from each other, glabrous, base clawlike 1. *L. gracilis*
1b. Plants ± hairy, rarely sparsely villous only on leaf margin; calyx lobes ovate to narrowly ovate, not reflexed, overlapping each other, at least villous on margin, base obtuse, truncate, or cordate, but not clawlike 2. *L. hirsutus*

1. *Leptocodon gracilis* (J. D. Hooker & Thomson) Lemaire, Ill. Hort. 3: Misc. 49. 1856.

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Codonopsis gracilis J. D. Hooker & Thomson, Ill. Himal. Pl. t. 16, A. 1855; *Campanumoea gracilis* (J. D. Hooker & Thomson) G. Nicholson.

Plants glabrous throughout except young leaves sparsely villous, odorous. Roots unknown. Stems long, slender, branched. Leaves alternate, rarely those on branchlets opposite, long petiolate; blade abaxially gray, adaxially green, ovate-orbicular, 0.9–2.5 × 0.9–2.5 cm, membranous, base truncate or obtuse, margin sinuate-crenate, apex obtuse. Flowers pendent; pedicels slender, 1–5 cm, straight or curved. Calyx glabrous; tube 2–3 mm; lobes narrowly oblong, 5–8 × 1–2 mm, margin with 1 or 2 pairs of callose serratures. Corolla blue or purple, 2.8–3.5 cm; tube ca. 4 mm in diam.; limb 1–1.5 cm in diam.; lobes triangular, 4–5 mm. Filaments ca. 2 cm. Style ca. 2 cm. Inferior part of capsule semiglobose or obconic, 4–5 mm; superior part conical or ovoid, 8–10 mm. Seeds red-brown, linear-oblong, 1.5–1.8 mm, smooth. Fl. Aug–Oct.

Forests, thickets; 2000–2500 m. SW Sichuan (Huili, Muli, Yanbian), NW Yunnan [Bhutan, N India, N Myanmar, E Nepal].

2. *Leptocodon hirsutus* D. Y. Hong, Acta Phytotax. Sin. 18: 246. 1980.

毛细钟花 mao xi zhong hua

Codonopsis hirsuta (D. Y. Hong) K. E. Morris & Lammers (1999), not (Handel-Mazzetti) D. Y. Hong & L. M. Ma (1992); *C. hongii* Lammers.

Plants malodorous. Roots slender, not thickened. Stems hirsute on young parts. Leaves on main stems alternate, those on branchlets almost opposite, all leaves long petiolate; blade abaxially villous, rarely extremely sparsely villous. Flowers subopposite to leaves. Calyx lobes ovate, overlapping each other at anthesis, separated at fruiting, upright, 5–7 × 3–4 mm, hirsute on abaxial side and margin, base cordate or subtruncate, not clawlike, margin sinuate-crenate. Inferior part of capsule

semiglobose, 8–10 mm in diam.; superior part conical, ca. 10 mm. Seeds ellipsoid, ca. 1 mm. Fl. Jul–Aug, fr. Oct–Nov.

• Mixed forests, thickets, grasslands; 2000–2700 m. SE Xizang (Bomi, Cona, Zayü), NW Yunnan (Gongshan, Weixi).

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