

## 5. *COLDENIA* Linnaeus, Sp. Pl. 1: 125. 1753.

双柱紫草属 *shuan zhu zi cao shu*

*Lobophyllum* F. Mueller.

Herbs annual. Leaves alternate, margin lobed; secondary veins ending in sinuses. Inflorescences generally extra-axillary on leafy twigs or in forks of branches, sometimes glomerate. Flowers sessile or on short pedicels, 4-merous. Calyx 4-lobed. Corolla throat glabrous, naked or with 4 scaly appendages; lobes spreading, overlapping in bud. Ovary ovoid, somewhat 4-lobed, 2-loculed and with 2 ovules per locule, or falsely 4-loculed and with 1 ovule per locule; ovules anatropous. Styles 2, terminal, divided or united to middle; stigmas 2, usually divided. Fruit fleshy or dry, fastigiate or semiglobose, endocarp bony, divided into 4 1-seeded achenelike mericarps; mericarps  $\pm$  united ventrally or joined to a central extension of receptacle. Seeds with little or no endosperm or not; embryo straight or curved.

One species: Cambodia, China, India, Indonesia, Malaysia, Pakistan, Sri Lanka, Thailand, Vietnam; Africa, Australia, North America, South America.

For a discussion on the generic limits of *Coldenia*, see Richardson (*Rhodora* 79: 476. 1977).

### 1. *Coldenia procumbens* Linnaeus, Sp. Pl. 1: 125. 1753.

双柱紫草 *shuang zhu zi cao*

Herbs annual. Stems branched from base; branches prostrate or ascending, 15–40 cm, densely spreading strigose. Lower stem leaves short petiolate, oblong to obovate, 1–2  $\times$  0.5–1.5 cm, asymmetrical, scabrous, strigose, margin coarsely crenate-lobulate; lateral veins 4–6 pairs, prominent abaxially, concave adaxially; upper leaves sessile. Flowers solitary, subsessile. Calyx 1.5–2 mm; lobes lanceolate to ovate-lanceolate, slightly enlarged in fruit, persistent, strigose. Corolla white, tubular, 2–2.5 mm, glabrous; lobes orbicular, ca. 0.3 mm. Stamens included; filaments ca. 0.3 mm, glabrous, inserted at middle of corolla tube; anthers rounded to broadly ovate, ca. 0.2 mm. Ovary fastigiate, 4-sulcate; stigma obscurely 2-cleft. Fruit broadly triangular, 3–4 mm, glandular pubescent; mericarps wrinkled, spinescent-tuberculate. Fl. Apr, fr. Jun.

Sandy places, beaches, dry cultivated ground. Hainan, Taiwan [Cambodia, India, Indonesia, Malaysia, Pakistan, Sri Lanka, Thailand, Vietnam; Africa, Australia, North America, South America].

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