

## 2. **HERNIARIA** Linnaeus, Sp. Pl. 1: 218. 1753.

治疝草属 zhi shan cao shu

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Herbs annual or perennial. Stems diffuse or procumbent, much branched. Leaves alternate or opposite, sessile or shortly petiolate; leaf blade oblong, elliptic, or subcordate; stipules small, membranous, caducous. Inflorescence a small cyme or glomerule, sometimes reduced to a solitary flower, leaf-opposed or terminal; bracts small, membranous. Flowers 4- or 5-merous. Pedicel green, short or nearly absent, small. Sepals not aristate at apex, persistent. Petals very small or absent. Stamens as many as and shorter than sepals. Ovary obovoid, 1-locular with 1 to several ovules; style very short, apex 2-fid. Fruit a utricle, a membranous-walled achene enclosed within persistent sepals, irregularly dehiscent or indehiscent, usually 1-seeded. Seeds brown, ovoid or flat-orbicular; testa shiny.

About 45 species: Africa, Europe, and Mediterranean region to C Asia; three species in China.

1a. Flowers 4-merous; sepals abaxially hairy, apex apiculate ..... 1. *H. polygama*

1b. Flowers 5-merous; sepals glabrous or marginally ciliate, apex obtuse.

2a. Sepals glabrous; plants glabrous or thinly pilose; flowers 1.2–1.5(–1.7) mm ..... 2. *H. glabra*

2b. Sepals ciliate; plants tomentose; flowers (1.6–)1.8–2.3 mm ..... 3. *H. caucasica*

**1. *Herniaria polygama*** J. Gáy, Rev. Bot. Recueil Mens. 2: 371. 1847.

杂性治疝草 za xing zhi shan cao

Plants annual, pubescent. Stems spreading, 3–15 cm. Petiole short; leaf blade oblong-elliptic, 3–10 × 1–3 mm, base attenuate, apex obtuse. Glomerules leaf-opposed, (6–)10–12- or more flowered. Flowers 4-merous, 1.4–1.5(–1.7) mm. Sepals lanceolate, ca. 1.5 × 0.5 mm, abaxially hairy, apex apiculate. Stamens 4, shorter than sepals. Style (0.3–)0.5 mm, often longer than sepals at maturity, divided for ca. 1/3 length. Achene ovoid, subequalling calyx. Fl. Jul–Aug, fr. Aug–Sep.

Steppes, riverside grasslands; ca. 500 m. Xinjiang [Russia; E Europe].

**2. *Herniaria glabra*** Linnaeus, Sp. Pl. 1: 218. 1753.

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Plants annual or perennial, yellowish green. Stems spreading, 5–18(–35) cm, glabrous or thinly pilose. Leaf blade elliptic-obovate, 3–7 × 1–3 mm, glabrous, base cuneate, apex obtuse. Glomerules leaf-opposed, 6–10-flowered. Flowers 5-merous, 1.2–1.5(–1.7) mm. Sepals ovate-oblong, ca. 1.5 × 0.5 mm, glabrous, apex obtuse. Stamens 5, short. Style 0.2–0.3 mm; stigma lobes nearly sessile. Achene ovoid, longer than sepals. Seed flat-orbicular, ca. 0.5 mm in diam. Fl. Jul, fr. Aug–Sep.

Meadows, mires, hillsides, ravines; 900–2400 m. W Sichuan, N Xinjiang [Afghanistan, Mongolia, Russia, Uzbekistan; Europe].

Chaudhri (Meded. Bot. Mus. Herb. Rijks Univ. Utrecht 285: 315–320. 1968) divided this rather variable species into four varieties based on minor differences in flower size and indumentum.

**3. *Herniaria caucasica*** F. Ruprecht, Mém. Acad. Imp. Sci.

Saint Pétersbourg, Sér. 7, 15(2): 241. 1869.

高加索治疝草 gao jia suo zhi shan cao

Plants perennial, yellowish green, tomentose. Stems prostrate, 5–15 cm. Leaf blade obovate or oblong, 4–5 × 2–3 mm, base attenuate, apex obtuse. Glomerules leaf-opposed, (1–)4–12-flowered. Flowers 5-merous,

yellowish green, (1.6–)1.8–2.3 mm. Sepals oblong, 1–1.5 × ca. 0.5 mm, ciliate, apex obtuse. Stamens 5, shorter than sepals. Style exerted at maturity, 0.3–0.4 mm, stigmas 2, often spreading. Achene subequalling calyx. Seed dark brown, subglobose, ca. 0.8 × 0.8 mm. Fl. Jul–Aug, fr. Aug–Sep.

Hillsides, meadows; 1400–2000 m. Xinjiang [Kazakhstan, Mongolia, Russia; SW Asia].

