

2. ELATINE Linnaeus, Sp. Pl. 1: 367. 1753.

沟繁缕属 *gou fan lü shu*

Herbs annual, aquatic. Stem prostrate, slender, rooting at nodes. Leaves opposite or verticillate, shortly petiolate; leaf blade small, margin usually entire. Flowers usually only 1 per node, very small. Sepals 2–4, united at base, membranous, apex subacute. Petals 2–4, longer than sepals, apex obtuse. Stamens 1 or 2 × as many as petals. Ovary globose, compressed, 2–4-loculed, apex truncate; ovules numerous; styles 2–4; stigmas capitate. Capsule membranous, 2–4-septical. Seeds straight, curved, or horseshoe-shaped, surface reticulate-striate with hexagonal or elliptic pits.

About 25 species: tropical, subtropical, and temperate regions; three species in China.

- 1a. Sepals and petals 4; stamens 8; capsule 4-septical; seeds horseshoe-shaped 1. *E. hydropiper*
1b. Sepals and petals 3; stamens 3; capsule 3-septical; seeds nearly straight or slightly curved.
2a. Flowers sessile or shortly pedicellate, pedicel 0.3–0.4 mm, conspicuously shorter than petals 2. *E. triandra*
2b. Flowers conspicuously pedicellate, pedicel 1.5–2.5 mm, 1–2 × as long as petals 3. *E. ambigua*

1. *Elatine hydropiper* Linnaeus, Sp. Pl. 1: 367. 1753.

马蹄沟繁缕 *ma ti gou fan lü*

Plants 2–4 cm tall. Branches ascending. Leaves opposite; stipules small, slightly conspicuous; petioles on upper part of stem shorter, those on lower part longer; leaf blade oblong, oblong-elliptic, or spatulate, 2–5 × ca. 0.5 mm, base attenuate into petiole, margin entire, apex obtuse. Flowers solitary in leaf axils, subsessile or very shortly pedicellate. Sepals 4, oblong, 0.6–7(–0.9) × ca. 0.3 mm, apex rounded. Petals 4, obovate or broadly elliptic, 0.8–1 × ca. 0.4 mm, slightly longer and wider than sepals, apex rounded. Stamens 8, shorter than petals. Ovary 4-loculed; styles 4. Capsule compressed globose, ca. 2 mm in diam., 4-septical. Seeds horseshoe-shaped, 0.5–0.7 mm, finely and densely hexagonal reticulate-striate.

Pools, water on river banks, marshy places. Heilongjiang, Jilin, Liaoning [Russia (Siberia); Europe].

2. *Elatine triandra* Schkuhr, Bot. Handb. 1: 345. 1791.

三蕊沟繁缕 *san rui gou fan lü*

Plants 2–10 cm tall. Stem richly branched, terete, weak; internodes short. Leaves opposite; stipules caducous, triangular or ovate-lanceolate, 0.7–1 mm, membranous, apex acute; petiole 0.5–3 mm or absent; leaf blade ovate-oblong or lanceolate to linear-lanceolate, 3–10 × 1.5–3 mm, submembranous, adaxially glabrous, base attenuate, margin entire, apex obtuse; lateral veins 2- or 3-paired, minute. Flowers axillary, solitary, sessile, subsessile, or shortly pedicellate and then pedicel 0.3–0.4 mm at fruiting stage. Sepals 2 or 3, ovate, 0.5(–0.7) mm, connate at

base, apex obtuse. Petals 3, white or reddish, broadly ovate or elliptic, slightly longer than sepals. Stamens 3, shorter than petals. Ovary compressed globose, 3-loculed; styles 3, erect, free, short. Capsule compressed globose, 1–1.5 mm in diam., 3-septical. Seeds oblong, nearly straight or slightly curved, ca. 0.5 mm, finely and densely hexagonal reticulate-striate.

Pools, streams, paddy fields, marshy places. Guangdong, Heilongjiang, Jilin, Taiwan [India, Indonesia, Japan, Malaysia, Nepal, Philippines; Australia, Europe, North America, Pacific islands (New Zealand)].

3. *Elatine ambigua* Wight in Hooker, Bot. Misc. 2: 103. 1830.

长梗沟繁缕 *chang geng gou fan lü*

Plants 1.5–3 cm tall. Stem richly branched. Leaves subsessile or shortly petiolate; stipules lanceolate, ca. 1 mm, membranous, margin dentate, apex acute; petiole (if present) ca. 1 mm; leaf blade spatulate, lanceolate to ovate-lanceolate, or elliptic, 2–5 × ca. 0.7 mm, margin entire, apex subacute. Flowers axillary, solitary; pedicel conspicuous, curved downward at fruiting stage, 1.5–2.5 mm. Calyx 3-fid; lobes oblong-ovate or broadly lanceolate, ca. 0.5 × 0.3 mm, apex obtuse. Petals 3, reddish, long elliptic, elliptic, or ovate, 1–1.5 × ca. 0.5 mm, 2–3 × as long as sepals. Stamens 3, shorter than petals. Ovary obovoid, 3-loculed; styles 3. Capsule cylindrical-ovoid, 3-septical. Seeds nearly straight or slightly curved, ca. 0.5 mm, reticulate-striate.

Lakes, pools, marshy places. Yunnan [Bhutan, India, Indonesia, Malaysia, Vietnam; naturalized in Australia, Europe, and North America (California)].

