

41. HALIMOCNEMIS C. A. Meyer in Ledebour, Fl. Altaic. 1. 381. 1829.

盐蓬属 yan peng shu

Herbs annual, hairy or glabrous. Branches terete or 3-angled, stout. Leaves alternate, terete or semiterete, fleshy, apex obtuse or easily deciduous spinose mucronate. Flowers solitary in bract axils, bisexual, with 2 bractlets. Perianth segments 4 or 5, lanceolate, membranous, proximally hardened and usually connate into an urceolate tube, without an appendage, hairy or rarely glabrous. Disk entire. Stamens 4 or 5, inserted on disk; filaments filiform, compressed; anthers oblong, base free, apex with a vesicular appendage. Ovary ovoid, laterally compressed; ovule pendulous on long funicle; style slender; stigmas 2. Utricle broadly ovoid to globose; pericarp membranous, free from seed. Seed vertical, globose, laterally compressed; testa slightly fleshy, embryo planospiral; perisperm absent.

About 12 species: from the Black Sea region through the Caspian region to C Asia; three species in China.

- 1a. Perianth segments and stamens 4; perianth tube basal surface with 4 radial ribs; plants densely pubescent mixed with jointed, villous hairs 1. *H. villosa*
- 1b. Perianth segments and stamens 5; perianth tube basal surface with 5 radial ribs, or segments not proximally connate; plants subglabrous or only pubescent.
 - 2a. Bracts and bractlets shorter than or equaling perianth; anther appendage narrowly elliptic, distinctly narrower than anther; plants glabrous below, slightly pubescent above 2. *H. karelinii*
 - 2b. Bracts and bractlets distinctly longer than perianth; anther appendage broadly ovate, subequaling or broader than anther; plants densely pubescent 3. *H. longifolia*

1. Halimocnemis villosa Karelin & Kirilov, Bull. Soc. Imp. Naturalistes Moscou 14: 434. 1841.

柔毛盐蓬 rou mao yan peng

Plants 15–40 cm tall, densely pubescent mixed with jointed, villous hairs. Stem much branched; branches obliquely spreading, usually ribbed. Leaves spreading, linear, slightly arcuate, semiterete, 2–3 cm × 1–2 mm, abaxially convex and slightly keeled, adaxially plane or slightly sulcate, base expanded, decurrent, apical spine subulate, 1.5–2.5 mm. Bracts similar to bractlets but longer; bractlets with base expanded and margin membranous at base. Perianth tube ovoid, 4–5 × 3–4 mm, densely appressed pubescent, basal surface with 4 radial ribs; segments 4, 4–6 mm, abaxially hairy, apex acute. Stamens 4; anthers ca. 2.5 mm excluding appendage; appendage sessile, white or light yellow, ovate-oblong, slightly shorter and broader than anther. Style 1.5–2 mm; stigmas linear, apex inflated. Utricle broadly ovoid, laterally compressed, ca. 3 × 2.5 mm. Fl. and fr. Jul–Oct.

Gobi desert. N Xinjiang [Kazakhstan].

2. Halimocnemis karelinii Moquin-Tandon in Candolle, Prodr. 13(2): 196. 1849.

短苞盐蓬 duan bao yan peng

Plants appearing blue-green, 10–20 cm tall. Stem strongly branched, glabrous below, slightly pubescent above. Lower leaves linear, terete or semiterete, 0.5–2 cm, usually early withering, apex obtuse or acute. Bracts triangular-ovate, 3–4 mm, slightly shorter than bractlets, fleshy, adaxially concave, base decurrent, margin membranous, apex shortly yellow-brown spinose mucronate. Bractlets similar to bracts, broadly ovate, abaxially papillate. Perianth segments 5, linear-lanceolate, 4–5 mm, slightly enlarged in fruit, membranous, glabrous; proximal part hardened and appearing cochleate; distal part connivent with other segments and protruding from bractlets, apex obtuse

or acuminate. Stamens 5; anthers free in proximal ca. 1/3, narrowly oblong, 1.5–2 mm; appendage shortly stalked or subsessile, light yellow, narrowly elliptic, ca. 1/2 as long as and distinctly narrower than anther. Ovary laterally compressed; style obscure; stigmas linear, apex not inflated. Fl. Jul, fr. Aug–Sep.

Gobi desert, deserts. N Xinjiang [Kazakhstan].

3. Halimocnemis longifolia Bunge, Trudy Imp. S.-Peterburgsk. Bot. Sada 5: 643. 1877.

长叶盐蓬 chang ye yan peng

Plants gray-green, 10–25 cm tall, densely pubescent. Stem much branched; branches ribbed. Leaves subhorizontally spreading, linear, straight or slightly curved, semiterete, 2–5 cm × 1.5–2 mm, abaxially convex, adaxially plane or sulcate near base, base expanded, decurrent, apex yellow-brown, subulate, shortly spinose mucronate. Bractlets shorter than bracts, but both distinctly longer than perianth, abaxially longitudinally keeled. Perianth tube hooded campanulate, basal surface plane or slightly concave, with 5 radial ribs; segments 5, lanceolate, membranous, abaxially villous, apex acuminate. Stamens 5;

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anthers basally free, narrowly oblong, 1.5–2 mm; appendage subsessile, broadly ovate, subequaling or broader than anther. Style terete; stigmas distinctly shorter than style, apex inflated. Utricle light yellow, broadly ovoid, 2.5–3 mm in diam. Fl. and fr. Jun–Aug.

Dunes, sandy areas on lake shores. N Xinjiang [Kazakhstan].

