

# 1. REAUMURIA Linnaeus, Syst. Nat., ed. 10, 2: 1069, 1081, 1374. 1759.

红砂属 hong sha shu

*Hololachna* Ehrenberg.

Subshrubs or shrubs, to 80 cm tall, with numerous zigzag branchlets. Leaves subsessile, scale-like, shortly terete or linear, small, margin entire, often fleshy or leathery, with salt-secreting glands. Flowers solitary on lateral branches or on shortened branchlets, or clustered in lax racemes, hermaphroditic, 5-merous; bracts imbricate, slightly longer or shorter than corolla. Calyx subcampanulate. Petals deciduous or persistent, inside with 2 scale-like appendages in lower half, margin lacinate, serrate, or entire. Stamens 5 to numerous, free or filaments united into 5 fascicles at base, opposite to petals. Ovary orbicular or broadly ellipsoid; styles 2–5. Capsule cartilaginous, 3–5-septical; seeds long brown hairy.

Twelve species: N Africa, Asia, S Europe; four species (one endemic) in China.

- 1a. Leaves compressed-flat, shortly petiolate ..... 4. *R. alternifolia*  
1b. Leaves subterete, thick, sessile.  
2a. Leaves 1–5 mm, shortly terete, scale-like; petals 3–4.5 mm; stamens 7–10; styles 6–8(–12); capsule narrowly ellipsoid ..... 1. *R. soongarica*  
2b. Leaves 4–15 mm, sublinear, terete; petals 5–8 mm; stamens 15 or more, often united into 5 fascicles at base; capsule globose, broadly ellipsoid, or oblong.  
3a. Bracts enlarged at base, broadly ovate, mucronate; flowers yellow; styles 3; capsule oblong, 3-septical .... 2. *R. trigyna*  
3b. Bracts the same shape as leaves, narrowly linear; flowers pink; styles 5; capsule globose or oblong-ovoid, 5-septical ..... 3. *R. kaschgarica*

**1. *Reaumuria soongarica*** (Pallas) Maximowicz, Fl. Tangut. 1: 97. 1889.

红砂 hong sha

*Tamarix soongarica* Pallas, Nova Acta Acad. Sci. Imp. Petrop. Hist. Acad. 10: 374. 1797; *Hololachna soongarica* (Pallas) Ehrenberg.

Shrubs, small, 10–30(–70) cm tall, much branched. Old branches gray-brown; branchlets reddish, usually zigzag, longitudinally cracked. Leaves often 4–6 clustered on shortened branches, grayish blue, sometimes turning purple-red at anthesis, shortly terete, scale-like, slightly thicker in upper part, 1–5 × 0.5–1 mm, often slightly curved, fleshy, with dotlike salt-secreting glands, apex obtuse. Flowers solitary, axillary (actually at apices of extremely shortened branchlets), or clustered into few flowered racemes in upper part of young branches, sessile, ca. 4 mm in diam.; bracts 3, lanceolate, 0.5–0.7 mm, apex acute. Calyx campanulate, united in lower part, 1.5–2.5 mm; lobes triangular, margin scarious, with dotlike glands. Petals white, tinged reddish, oblong, ca. 4.5 × 2.5 mm, base cuneate, attenuate, apex obtuse, open, reflexed in upper part; inside with 2 appendages in lower half oblanceolate, laminar, apex lacinate, inserted on two lateral sides of midribs of petals. Stamens 6–8(–12), free; filaments dilated at base, subequaling petals. Ovary ellipsoid; styles 3; stigmas narrowly acute. Capsule narrowly ellipsoid or fusiform, or triquetar-conic, 4–6 × ca. 2 mm, 2–3 × exceeding calyx, 3-angled, 3(or 4)-septical, usually 3- or 4-seeded. Seeds oblong, 3–4 mm, black-brown hairy throughout, base attenuate, apex acuminate. Fl. Jul–Aug, fr. Aug–Sep.

Deserts, margins of lowlands. Gansu, Nei Mongol, Ningxia, Qinghai, Xinjiang [Mongolia].

*Reaumuria minfengensis* D. F. Cui & M. J. Zhong (Acta Bot. Boréal.-Occid. Sin. 19: 552. 1999), described from Xinjiang, is very similar to *R. soongarica* judging from the protologue. However, because we have not seen the type, it must remain a dubious species in the present treatment.

**2. *Reaumuria trigyna*** Maximowicz, Bull. Acad. Imp. Sci. Saint-Petersbourg 27: 425. 1881.

黄花红砂 huang hua hong sha

Subshrubs, small, 10–30 cm tall, much branched. Old branches gray-yellow or brown-gray; branchlets slightly spreading, produced from old branches, greenish, slender, smooth. Leaves often 2–5 clustered, semiterete-linear, 5–10(–15) mm, unequal in length, slightly thickening toward upper part, fleshy, base attenuate, apex obtuse, ± arching when dry. Flowers solitary, axillary (mostly at apices of branchlets), 5–7 mm in diam. Pedicels 8–10 mm, slender; bracts ca. 10, broadly ovate, shorter than or ca. same size as calyx, mucronate, imbricate, closely contacting calyx. Sepals united at base, ca. same size as bracts. Petals revolute in bud, yellow, oblong-obovate, slightly oblique, ca. 5 mm, inside with 2 appendages in lower half. Stamens 15, free; filaments subulate. Ovary ovoid-orbicular or obovoid-orbicular; styles 3, rarely 4 or 5, 3–5 mm, longer than ovary, persistent. Capsule oblong, to 1 cm, 3-septical. Fl. unknown.

● Deserts. N Gansu, Nei Mongol, N Ningxia.

**3. *Reaumuria kaschgarica*** Ruprecht, Mém. Acad. Imp. Sci. Saint Pétersbourg, Sér. 7, 14(4): 42. 1869.

五柱红砂 wu zhu hong sha

*Reaumuria kaschgarica* var. *nanschanica* Maximowicz; *R. kaschgarica* var. *przewalskii* Maximowicz.

Dwarf subshrubs, to 20 cm tall, cushionlike, with numerous zigzag slender branches. Old branches gray-brown; branches of current year green, later reddish to reddish brown, produced from old branches, 4–9(–15) cm; flowering branches produced from old branches at first, later from leaf axils of new branches of current year. Leaves slightly compressed, basal ones scale-like, those in upper part becoming longer, linear or subterete, often slightly curved, 4–10 × 0.6–1 mm, fleshy, attenuate toward base, apex obtuse or acutish. Flowers solitary at apices of branchlets, subsessile; bracts few, with same shape as leaves, 3–4 mm, ca. as long as or slightly longer than calyx, surrounding calyx. Sepals slightly united at base, exerted, 3–4 mm, ovate-lanceolate, base dilated, margin membranous, subentire, apex subacuminate. Petals pink, elliptic, 1/3–1/2 longer than calyx, inside with 2 long orbicular appendages. Stamens 15(–18), slightly shorter than or as long as petals; filaments dilated in lower part, margin lacinate or denticulate, base united. Ovary ovoid-orbicular, ca. 3 mm; styles 5; stigmas narrowly acute. Capsule oblong-ovoid, ca. 7 × 3–4 mm, 5-septical. Seeds oblong-ellipsoid, minute, brown hairy throughout. Fl. Jul–Aug.

Salty deserts, steppes, rocky mountain slopes. Gansu, Qinghai, Xinjiang, N Xizang [C Asia].

**4. *Reaumuria alternifolia*** (Labillardière) Britten, J. Bot. 54: 110. 1916.

互叶红砂 hu ye hong sha

*Hypericum alternifolium* Labillardière, Icon. Pl. Syr. 2: 17. 1791.

Dwarf subshrubs, 10–30 cm tall, much branched; branches erect or obliquely ascending. Leaves dense, compressed-flat, not fleshy, those of winter elliptic or lanceolate to sublinear, 0.7–2 cm × 1–3 mm, base attenuate, subsessile, apex acute; those of summer smaller. Flowers terminal, to 1.3 cm in diam.; bracts erect, linear, nearly as long as or slightly longer than calyx, apex apiculate. Calyx 6–7 mm; sepals united in lower 1/4, upper free part ovate-lanceolate, apex acuminate, apiculate. Petals pink, 0.9–1.1 cm, apex truncate, inside with 2 long, scale-like appendages. Filaments dilated in lower part, margin inconspicuously crenate. Capsule shorter than calyx. Seeds long hairy. Fl. May–Jun.

Deserts in mountains. Xinjiang [Afghanistan; SW Asia (Iran, Syria)].

TAMARICACEAE