

23. LYCHNIS Linnaeus, Sp. Pl. 1: 436. 1753.

剪秋罗属 jian qiu luo shu

Lu Dequan (鲁德全); Magnus Lidén, Bengt Oxelman

Coronaria Guettard; *Hedona* Loureiro.

Herbs biennial or perennial. Stems erect. Leaves lanceolate to ovate-lanceolate, apex acute. Inflorescence a dichasium or flower solitary. Calyx tubular to narrowly funnel-shaped or narrowly campanulate, usually not inflated, 10-veined, with 5 teeth. Petals 5, long clawed, limb white, pink, or red, entire, bifid, 4-fid, or laciniate; coronal scales present. Androgynophore ± conspicuous, glabrous. Stamens 10. Ovary 1-loculed; ovules numerous; styles 5, opposite calyx teeth, their bases persistent in fruit. Capsule septically dehiscent with 5 teeth. Seeds numerous, reniform, minute, ± tuberculate.

About 25 species: temperate Africa, Asia, and Europe; six species in China.

Lychnis coronaria (Linnaeus) Desrousseaux is cultivated in China for its attractive flowers.

Recently, Greuter (in Taxon 44: 543–581. 1995) placed *Lychnis* into the synonymy of *Silene*. However, Oxelman et al. (in Nordic J. Bot. 20: 513–518. 2001) showed that it is possible to retain *Lychnis* and several other genera (e.g., *Atocion*) as separate from *Silene* in a taxonomy that is consistent with both the ability to diagnose taxa and solid, molecular-phylogenetic hypotheses. Some species, traditionally included in *Lychnis*, belong in *Silene*.

- 1a. Inflorescence a dense, corymblike dichasium 1. *L. chalconica*
- 1b. Inflorescence not corymblike.
 - 2a. Petal limb unlobed, apex dentate 5. *L. coronata*
 - 2b. Petal limb lobed, apex dentate or entire.
 - 3a. Petal limb 2-lobed with lateral, subulate teeth, apex obtuse.
 - 4a. Petal limb crimson-red, not overlapping, bracts and calyx densely villous 4. *L. fulgens*
 - 4b. Petal limb orange-red or reddish, obovate, overlapping, bracts and calyx laxly villous 3. *L. cognata*
 - 3b. Petal limb with several acute, ± irregular lobes.
 - 5a. Androgynophore ca. 10 mm or more 6. *L. senno*
 - 5b. Androgynophore ca. 5 mm or less 2. *L. wilfordii*

1. *Lychnis chalconica* Linnaeus, Sp. Pl. 1: 436. 1753.

皱叶剪秋罗 zhou ye jian qiu luo

Silene chalconica (Linnaeus) E. H. L. Krause.

Herbs perennial, 50–100 cm tall, hispid with multicellular glandular hairs. Stems simple or rarely branched; sterile, dwarf, axillary shoots from short rhizomes present. Leaves ovate or ovate-lanceolate, 5–12 × 2–5 cm, both surfaces sparsely pilose. Inflorescence a terminal, dense, corymblike, 10–50-flowered dichasium. Pedicel much shorter than calyx, slender; bracts lanceolate, small, herbaceous. Flowers 1.5–2 cm in diam. Calyx tubular or tubular-clavate, 1.2–1.5(–1.7) × ca. 3 mm, pilose at veins; teeth triangular-lanceolate, ca. 3 mm. Petal limb orange-red, broadly obovate, 7–9 mm, bifid to 1/3; lobes obovate, each with a subulate lateral tooth; claw oblanceolate, base ciliate; coronal scales linear, apex acute. Stamens slightly exerted. Androgynophore 4–6 mm. Capsule ovoid, 8–10 mm. Seeds dark red-brown, triangular-reniform, ca. 1 mm, sharply pointed tuberculate. Fl. summer–autumn, fr. autumn. 2n = 24, 48.

Gansu, Xinjiang [Mongolia, Russia].

This species is also cultivated in Chinese gardens.

2. *Lychnis wilfordii* (Regel) Maximowicz, Bull. Acad. Imp. Sci. Saint-Petersbourg, sér. 3, 17: 178. 1872.

丝瓣剪秋罗 si ban jian qiu luo

Lychnis fulgens Fischer var. *wilfordii* Regel, Bull. Soc. Imp. Naturalistes Moscou 34(4): 576. 1861; *Silene wilfordii* (Regel) H. Ohashi & H. Nakai.

Herbs perennial, 45–100 cm tall, glabrous or pilose with intermixed sparse multicellular glandular hairs. Roots unknown. Stems simple or branched above. Leaves sessile, ovate-lanceolate or narrowly lanceolate, 3–12 × 1–2.5 cm, glabrous, margin thickly ciliate. Dichasium rather dense, many flowered. Pedicel 3–20 mm; bracts linear-lanceolate. Flowers 2.5–3 cm in diam. Calyx narrowly funnel-shaped, 1.5–2 cm × 4–5 mm, veins prominent, teeth ca. 3 mm. Petal limb bright red, 4-lobed; lobes subulate to broadly filiform, apex acute; claw narrowly cuneate; coronal scales dark red, oblong. Stamens and styles exerted. Androgynophore ca. 5 mm. Capsule cylindrical-ovoid, ca. 1 cm, equaling or slightly included in calyx. Seeds black-brown, reniform, ca. 1 mm, sharply pointed tuberculate. Fl. Jun–Jul, fr. Aug–Sep. 2n = 24.

Wet meadows, low river banks, woodland edges, forest margins; 200–1200 m. Jilin [Japan, N Korea, Russia (Far East)]. Mabblerley (in Telopea 8: 249–256) considered species nos. 2–6 to be conspecific, hypothesizing that the type specimens pertaining to them are of garden origin and that they could all be of hybrid origin. The morphological diversity should thus be a reflection of segregation of offspring in F² or later generations.

3. *Lychnis cognata* Maximowicz, Prim. Fl. Amur. 55. 1859.

浅裂剪秋罗 qian lie jian qiu luo

Lychnis fulgens Fischer var. *cognata* (Maximowicz) Regel; *Silene cognata* (Maximowicz) H. Ohashi & H. Nakai.

Herbs perennial, 30–90 cm tall, pilose with intermixed sparse multicellular eglandular hairs. Roots caespitose, fusiform, slightly fleshy. Stems simple or branched above. Leaves ovate-lanceolate, 5–11 × 1–4 cm, more densely pilose at veins, base broadly cuneate, apex acute. Dichasium several flowered, or sometimes flowers solitary in leaf axils. Pedicel 3–12 mm; bracts laxly villous. Flowers 3.5–5 cm in diam. Calyx narrowly campanulate, 2–2.5 cm × 3.5–5 mm, laxly villous at veins, slightly inflated in fruit; teeth triangular, ca. 3 mm. Petal limb orange-red or reddish, bifid, apically obtuse, each with a subulate lateral tooth, main lobes obovate, margin entire or obscurely denticulate; claw slightly protruding from calyx, glabrous, base narrowly cuneate; coronal scales dark red, apex dentate. Stamens and styles slightly exerted. Androgynophore 8–10 mm. Capsule narrowly ellipsoid-ovoid, ca. 1.5 cm. Fl. Jun–Jul, fr. Jul–Aug. $2n = 24$.

Mountain slopes, gullies, forests, scrub, grasslands; 500–2000 m. Hebei, Heilongjiang, Henan, Jilin, Liaoning, Nei Mongol, Shaanxi, Shandong, Shanxi, Zhejiang [Korea, Russia (Far East)].

4. *Lychnis fulgens* Fischer ex Sprengel, Nov. Prevent. 26. 1818.

剪秋罗 jian qiu luo

Silene fulgens (Sprengel) E. H. L. Krause.

Herbs perennial, 50–85 cm tall, pilose with sparse multicellular eglandular hairs. Roots caespitose, fusiform, slightly fleshy. Stems simple or branched above. Leaves ovate or ovate-lanceolate, 3.5–10 × 2–4 cm, both surfaces and margin pilose, base rounded, rarely broadly cuneate, slightly clasping, apex acute. Dichasium several flowered, dense, rarely corymblike. Pedicel 3–12 mm; bracts lanceolate, herbaceous, densely villous, ciliate at margin. Flowers 3.5–5 cm in diam. Calyx narrowly campanulate, 1.5–2.8 cm × 4–8 mm, villous, densely so at veins, slightly inflated in fruit; teeth triangular. Petal limb crimson-red, 2-lobed to 1/2; lobes linear, apex obtuse, sometimes obscurely denticulate, each lobe with a subulate, lateral tooth; claw narrowly lanceolate, not exceeding calyx; coronal scales dark red, narrowly elliptic. Stamens and styles slightly exerted. Androgynophore ca. 5 mm. Capsule narrowly ellipsoid-ovoid, 1.2–1.4 cm. Fl. Jun–Jul, fr. Aug–Sep. $2n = 24$.

Woodlands on low hills, wet shady scrub meadows. Guizhou, Hebei, Heilongjiang, Henan, Hubei, Jilin, Liaoning, Nei Mongol, Shanxi, Sichuan, Yunnan [Japan, Korea, Russia (Siberia, Far East)].

5. *Lychnis coronata* Thunberg in Murray, Syst. Veg., ed. 14, 435. 1784.

剪春罗 jian chun luo

Agrostemma banksia Meerburgh; *Hedona sinensis* Loureiro; *Lychnis grandiflora* Jacquin; *Silene banksia*

(Meerburgh) Mabblerley; *S. grandiflora* (Jacquin) H. Ohashi & H. Nakai.

Herbs perennial, 50–90 cm tall, subglabrous. Roots caespitose, pale yellow, narrowly fusiform, slightly fleshy. Stem solitary, rarely sparsely caespitose. Leaves ovate-lanceolate, (5–)8–15 × (1–)2.5 cm, both surfaces subglabrous, ciliate at margin, base cuneate, apex acuminate. Dichasium several flowered. Pedicel very short, sparsely pubescent; bracts lanceolate, herbaceous, ciliate at margin. Flowers 4–5 cm in diam. Calyx tubular, (2.5–)3–3.5 cm × 3.5–5 mm, veins prominent, glabrous, teeth 8–10 mm. Petal limb salmon-pink, obovate, (1.5–)2–2.5 cm, unlobed, apex irregularly incised-dentate; claw not exceeding calyx. Stamens included. Androgynophore 1–1.5 cm. Capsule narrowly ellipsoid, ca. 2 cm. Fl. Jun–Jul, fr. Aug–Sep.

Sparse forests, scrub grasslands, also cultivated. Anhui, Fujian, Hunan, Jiangsu, Jiangxi, Sichuan (Emei Shan), Zhejiang [Japan].

This species is used medicinally.

6. *Lychnis senno* Siebold & Zuccarini, Fl. Jap. 1: 98. 1839.

剪红纱花 jian hong sha hua

Agrostemma bungeana D. Don; *Lychnis bungeana* (D. Don) Fischer ex Lindley; *Silene bungeana* (D. Don) H. Ohashi & H. Nakai.

Herbs perennial, 50–100 cm tall, pilose with sparse multicellular eglandular hairs. Roots caespitose, pale yellow, narrowly cylindrical, slightly fleshy. Stem solitary, simple or branched above. Leaves elliptic-lanceolate, (4–)8–12 × 2–3 cm, both surfaces pubescent, ciliate at margin, base cuneate, apex acuminate. Dichasium many flowered. Pedicel 2–5(–15) mm; bracts lanceolate, pubescent. Flowers 3.5–5 cm in diam. Calyx tubular to narrowly funnel-shaped, (2–)2.5–3 cm × 2.5–3.5 mm, slightly inflated in fruit, pilose at veins; teeth triangular, 2–4 mm. Petal limb deep red, triangular-obovate, irregularly parted into numerous incised-dentate lobes; claw often exceeding calyx, narrowly cuneate, glabrous. Stamens and styles included; anthers dark purple. Androgynophore 1–1.5 cm. Capsule ellipsoid-ovoid, 1–1.5 cm, protruding from calyx tube. Seeds red-brown, reniform, ca. 1 mm, tuberculate. Fl. Jul–Aug, fr. Aug–Sep. $2n = 24^*$.

Sparse forests, scrub grasslands, also extensively cultivated; 100–2000 m. Anhui, Gansu, Guizhou, Hebei, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Sichuan, Yunnan, Zhejiang [Japan].

