

### 3. ALCEA Linnaeus, Sp. Pl. 2: 687. 1753.

蜀葵属 shu kui shu

Herbs annual, biennial, or perennial, usually erect, unbranched, most parts stellate pubescent, sometimes mixed with long simple hairs. Leaves long petiolate; leaf blade ovate to suborbicular, angled, weakly lobed, or deeply palmatifid, margin crenate or dentate, apex acute to obtuse. Flowers axillary, solitary or fascicled, often arranged into terminal racemes. Epicalyx lobes 6 or 7, basally connate. Calyx 5-lobed, ± pubescent. Petals pink, white, purple, or yellow, usually more than 3 cm wide, apex notched. Staminal column glabrous with anthers clustered at apex; anthers yellow and compact. Ovary 15- or more loculed; ovules 1 per locule, erect; styles as many as locules; stigmas decurrent, filiform. Fruit a schizocarp, disk-shaped, fruit axis as long as or shorter than carpels; mericarps more than 15, laterally compressed and circular with a prominent ventral notch, glabrous or pubescent, 2-celled, proximal cell 1-seeded, distal cell sterile. Seed glabrous or pustulose.

About 60 species: C and SW Asia, E and S Europe; two species (one endemic) in China.

The large colorful flowers contribute to the popularity of the plants as cultivated ornamentals. The stems are used as firewood, and the roots are used medicinally.

- 1a. Leaves on proximal part of stem shallowly lobed, central lobe wider than long; pedicel ca. 5 mm at anthesis; corolla often colored, infrequently white; bracts foliaceous ..... 1. *A. rosea*  
1b. Leaves on proximal part of stem deeply lobed, central lobe longer than wide; pedicel 10–20 mm at anthesis; corolla white; bracts absent ..... 2. *A. nudiflora*

#### 1. *Alcea rosea* Linnaeus, Sp. Pl. 2: 687. 1753.

蜀葵 shu kui

*Althaea rosea* (Linnaeus) Cavanilles; *A. rosea* var. *sinensis* (Cavanilles) S. Y. Hu; *A. sinensis* Cavanilles.

Herbs biennial, erect, to 2(–3) m tall; stem densely hirsute. Stipules ovate, ca. 8 mm, apically 3-lobed; petiole 5–15 cm, stellate hirsute; leaf blade nearly orbicular, palmately 5–7-lobed or crenate-angled, 6–16 cm in diam., papery, abaxially long stellate hirsute or stellate tomentose, adaxially sparsely stellate pilose, lobes triangular or rounded, central lobe ca. 3 × 4–6 cm. Flowers solitary or fascicled, aggregated into a terminal, spikelike inflorescence. Bracts foliaceous. Pedicel ca. 5 mm, 8–10 mm in fruit, stellate hirsute. Epicalyx cup-shaped, usually 6- or 7-lobed, 8–10 mm, densely stellate hirsute, lobes ovate-lanceolate. Calyx campanulate, 2–3 cm in diam., lobes ovate-triangular, 1.2–1.5 cm, densely stellate hirsute. Corolla red, purple, white, pink, yellow, or black-purple, 6–10 cm in diam., sometimes double; petals obovate-triangular, ca. 4 cm, base attenuate, claw tipped with long thin hairs, apex emarginate. Staminal column glabrous, ca. 2 cm; filaments ca. 2 mm. Style branches many, puberulent. Schizocarp disk-shaped, ca. 2 cm in diam., puberulent; mericarps many, nearly orbicular, longitudinally grooved. Fl. Feb–Aug.

• Cultivated. Throughout China [widely introduced throughout temperate regions].

*Alcea rosea* originated in the SW provinces of China and has been grown in Europe since at least the 15th century. It is cultivated as an

ornamental and is used medicinally. It is not known from any truly wild situations.

#### 2. *Alcea nudiflora* (Lindley) Boissier, Fl. Orient. 1: 833. 1867.

裸花蜀葵 luo hua shu kui

*Althaea nudiflora* Lindley, Trans. Hort. Soc. London 7: 251. 1830; *A. leucantha* Fischer.

Herbs biennial, to 80 cm tall, stellate pilose. Petiole 4–10 cm, stellate hirsute; leaf blade ovate, both surfaces densely stellate hirsute, base cordate, margin crenate; blades on proximal part of stem 5–6-lobed, those on distal part of stem 3–5-lobed; lobes ovate-oblong, central lobe 8–9 × 4–6 cm. Flowers clustered into a terminal, racemelike inflorescence. Pedicel 10–20 mm, densely stellate hirsute. Foliaceous bracts absent. Epicalyx cup-shaped, 6- or 7-parted, ca. 8 mm in diam., lobes triangular to lanceolate, ca. 5 mm, densely stellate woolly. Calyx cup-shaped, ca. 2 × as long as epicalyx, densely stellate hirsute, lobes triangular-lanceolate. Corolla white, greenish yellow in center, 5–8 cm in diam.; petals obovate, ca. 4 cm, base attenuate into hairy claw, apex emarginate. Staminal column 1–1.5 cm. Style branches many. Schizocarp disk-shaped, ca. 1.5 cm in diam., puberulent. Fl. Jul.

Sunny slopes; 1000 m. NW Xinjiang (Toli) [Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Uzbekistan].

This species is very similar to *Alcea rosea* but differs by the longer central lobe of the leaf blade, the absence of leafy bracts, longer pedicels, and the white or greenish yellow corolla.

Flora of China 12: 267–268. 2007.