## 5. MALVASTRUM A. Gray, Mem. Amer. Acad. Arts, n.s., 4: 21. 1849, nom. cons.

## 赛葵属 sai kui shu

Malveopsis C. Presl.

Herbs perennial (sometimes annual) or subshrubs, erect. Leaves simple; stipules lanceolate or falcate; leaf blade ovate or lanceolate, entire or sometimes obscurely 3-lobed, margin crenate or dentate; foliar nectaries lacking. Flowers axillary, solitary or in cymose clusters, sometimes aggregated into terminal spikes. Epicalyx lobes 3, free, subulate or filiform to lanceolate. Calyx cupshaped, 5-lobed. Corolla yellow or  $\pm$  orange, broadly campanulate; petals 5, scarcely longer than calyx. Filament tube included within corolla, glabrous or puberulent; anthers clustered at apex. Ovary 5–18-loculed; ovules 1 per locule; styles as many as carpels, slender; stigmas capitate. Fruit a schizocarp, oblate; mericarps 5–18, indehiscent, reddish brown, horseshoe-shaped with a prominent ventral notch, sometimes 2- or 3-cuspidate. Seeds solitary, reniform, glabrous.

Fourteen species: principally in North, Central, and South America, a few ± pantropical weeds; two species (both introduced) in China.

- 1b. Flowers subterminal, congested into terminal spike; mericarps without cusps; stipules filiform, 4-5 mm ........ 2. M. americanum
- **1. Malvastrum coromandelianum** (Linnaeus) Garcke, Bonplandia (Hanover) 5: 297. 1857.

## 赛葵 sai kui

Malva coromandeliana Linnaeus, Sp. Pl. 2: 687. 1753; M. tricuspidata R. Brown; Malvastrum ruderale Hance ex Walpers; M. tricuspidatum (R. Brown) A. Gray.

Subshrubs, sometimes annual, to 1(-1.5) m tall, most parts pilose and appressed stellate pubescent. Stipules lanceolate, 5-7 mm; petiole 0.7-3 cm, densely pilose; leaf blade ovate-lanceolate or ovate,  $3-7 \times 0.8-4$  cm, abaxially pilose and stellate pilose, adaxially sparsely hairy, base broadly cuneate to rounded, margin coarsely dentate, apex acute or obtuse. Flowers axillary, solitary. Pedicel 3-5(-10) mm, pilose. Epicalyx lobes filiform, ca. 5 × 1 mm, pilose. Calyx shallowly cup-shaped, 5-7 mm in flower, accrescent to 8-11 mm in fruit, lobes ovate, ca. 8 mm, abaxially sparsely pubescent with stellate hairs, adaxially nearly glabrous, apex acuminate. Corolla apricot-yellow, ca. 1.5 cm in diam.; petals obovate, 6–9 × ca. 4 mm. Filament tube ca. 6 mm, glabrous. Schizocarp ca. 6 mm in diam.; mericarps 8-12(-14), reniform, sparsely pubescent with simple hairs mixed with stellate hairs, ca. 2.5 mm in diam., 3-cusped (2 abaxial, 1 apical), endoglossum lacking. Seeds ca. 1 mm in diam.

Weed of fallow fields, dry and open wastelands, or roadsides; near sea level to 500 m. Fujian, Guangdong, Guangxi, Taiwan, Yunnan [India, Japan (Ryuku Islands), Myanmar, Pakistan, Sri Lanka, Vietnam; probably originating in America, now pantropical].

Chinese material can be referred to *Malvastrum coromandelianum*; subsp. *coromandelianum*; two further subspecies are recorded from South America.

The whole plant is used medicinally.

**2. Malvastrum americanum** (Linnaeus) Torrey, Rep. U. S. Mex. Bound. 2(1): 38. 1859.

## 穗花赛葵 sui hua sai kui

Malva americana Linnaeus, Sp. Pl. 2: 687. 1753; M. spicata Linnaeus; Malvastrum spicatum (Linnaeus) A. Gray; Melochia spicata (Linnaeus) Fryxell; Sphaeralcea americana

(Linnaeus) Metz.

Herbs, perennial, or subshrubs, 0.5-1(-3) m, most parts principally stellate pubescent, also with some simple hairs. Stipules filiform, 4-5 mm; petiole 0.5-3.5 cm; leaf blade ovate to oblong, rarely slightly 3-lobed,  $2-6(-7) \times 1.2-4(-6)$  cm, both surfaces stellate pubescent, base acute, obtuse, or truncate to slightly cordate, margin serrate, apex acute to acuminate. Flowers congested into a dense short terminal spike,  $1.5-3(-10) \times$ ca. 1 cm, usually only 1 flower open at a time. Epicalyx lobes filiform to lanceolate, acuminate, 8–10 × 1.5–2.5 mm, abaxially hispid with simple or bifurcate hairs and minute stellate hairs, adaxially glabrous. Calyx shallowly cup-shaped, 5-6 mm in diam., accrescent to 6–10 mm in fruit, lobes triangular, ca. 4 × 3 mm, abaxially densely hirsute, adaxially minutely stellate pubescent, apex acuminate. Corolla yellow, 1.3–1.7 cm in diam.; petals obliquely obovate, claw stellate ciliate, apex asymmetrically emarginate. Filament tube 2-3 mm, stellate pubescent. Mericarps (5–)8–15(–18), nearly orbicular,  $(1-)2-2.5 \times 1.5-$ 3(-5) mm in diam., cusps absent, endoglossum usually present, minute. Seeds gray, reniform, 1.2–1.7 mm in diam., glabrous.

Weed of semi-arid areas. Fujian, Taiwan [India, Indonesia, Philippines; Australia, North and South America; naturalized pantropical weed].

Chinese material can be referred to Malvastrum americanum var. americanum. Malvastrum americanum var. stellatum S. R. Hill is restricted to Australia.

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