

18. LUFFA Miller, Gard. Dict. Abr., ed. 4, [806]. 1754.

丝瓜属 si gua shu

Lu Anmin (路安民 Lu An-ming); Charles Jeffrey

Herbs, scandent, annual, glabrous or puberulent. Tendrils bi- or multifid. Petiole eglandular; leaf blade usually 5–7-lobed. Plants monoecious. Male flowers in a raceme; calyx tube obconical; segments 5, triangular or lanceolate; corolla segments 5, free, spreading, entire or erose; stamens 3 or 5, free; anthers: one 1-celled, other 2-celled or all 1-celled when stamens 5; anther cells linear, sigmoid-flexuous; connective usually dilated; pistillode glandular or absent. Female flowers solitary; calyx and corolla as in male flowers; staminodes 3, or rarely 4 or 5; ovary cylindrical; ovules numerous, horizontal; stigmas 3. Fruit oblong or cylindrical, terete or acutely costate, smooth or echinate, inside fibrous, apex operculately dehiscent. Seeds numerous, oblong, compressed.

Six species: tropical and subtropical regions throughout the world; two species (both introduced) in China.

- 1a. Stamens often 5, anther cells all 1-celled; fruit smooth, ecostate 1. *L. aegyptiaca*
1b. Stamens 3, anthers: one 1-celled, others 2-celled; fruit with 8–10 acute ribs 2. *L. acutangula*

1. *Luffa aegyptiaca* Miller, Gard. Dict., ed. 8, *Luffa* no. 1. 1768.

丝瓜 si gua

Momordica luffa Linnaeus, Sp. Pl. 2: 1009. 1753; *Luffa cylindrica* (Linnaeus) M. Roemer; *M. cylindrica* Linnaeus.

Stem and branches scabrous, sulcate-angular, puberulent. Tendrils rather robust, usually 2–4-fid. Petiole 10–12 cm, scabrous, subglabrous; leaf blade triangular or suborbicular, 10–20 × 10–20 cm, often palmately 5–7-lobed; lobes triangular, median lobe 8–12 cm, base deeply cordate, margin dentate, apex acute or acuminate; sinus 2–3 cm deep, 2–2.5 cm wide. Male flowers usually 15–20 in a raceme; peduncle somewhat robust, 12–14 cm, pubescent; pedicels 1–2 cm; calyx broadly campanulate, 5–9 mm, puberulent; segments reflexed above, ovate-lanceolate or subtriangular, 8–13 × 4–7 mm, densely puberulent, 3-veined, apex acuminate; corolla yellow, rotate, 5–9 cm in diam.; segments oblong, 2–4 × 2–2.8 cm, inside densely yellow-white villous, base attenuate, apex rounded-obtuse. Stamens usually 5, rarely 3; filaments 6–8 mm, base white pubescent, connate at first, later free. Female flowers solitary; pedicel 2–10 cm; ovary narrowly cylindrical, puberulent; stigmas expanded. Fruit cylindrical, straight or slightly curved, 15–45 × 3–6 cm, smooth, ecostate, inside strongly fibrous when mature. Seeds usually black, ovate, smooth or very sparingly tuberculate, margin slightly winged. Fl. and fr. summer and autumn.

Commonly cultivated in China [widely cultivated throughout tropical and temperate regions].

The fruit is eaten as a vegetable.

2. *Luffa acutangula* (Linnaeus) Roxburgh, Hort. Bengal. 70. 1814.

广东丝瓜 guang dong si gua

Cucumis acutangulus Linnaeus, Sp. Pl. 2: 1011. 1753; *Luffa acutangula* var. *subangulata* (Miquel) Cogniaux; *L. subangulata* Miquel.

Stem rather robust, sulcate-angular, pubescent. Tendrils robust, often 3-fid, puberulent. Petiole 8–12 cm; leaf blade suborbicular, 15–20 × 15–20 cm, membranous, often 5–7-lobed; median lobe broadly triangular, lateral lobes smaller, both surfaces puberulent, margin dentate, apex acute or acuminate; sinus subrounded. Male flowers 17–20 in raceme at apex of peduncle; peduncle 10–15 cm; pedicels 1–4 cm, white puberulent; calyx tube campanulate, 5–8 × ca. 10 mm; segments lanceolate, 4–6 × 2–3 mm, densely white pubescent, 1-veined, apex acuminate, slightly reflexed; corolla yellow, rotate; segments obcordate, 15–25 × 10–20 mm, both surfaces subglabrous; stamens 3, free; filaments 4–5 mm; anthers puberulent. Female flowers solitary; ovary terete, longitudinally 8–10-angled; style short; stigmas expanded, 2-lobed. Fruit cylindrical or clavate-oblong, 8–10-angled, 15–40 × 6–10 cm, glabrous. Seeds black, ovoid, 11–12 × 7–8 mm, ca. 1.5 mm thick, margin without wing. Fl. and fr. summer and autumn.

Cultivated in S China [S and SW Asia; also cultivated in tropical regions].

The fruit is eaten as a vegetable.

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