3. TARENAYA Rafinesque, Sylva Tellur. 111. 1838.

Cleome sect. Tarenaya (Rafinesque) Iltis.

Herbs [or shrubs], annual [or perennial], sparsely branched, glabrous or glandular pubescent. Stipular thorns present [or absent]. Leaves alternate, spirally arranged, palmately compound, ± prickly; petiole spiny, with pulvini at basal or distal end; leaflets [1 or]3–7[–11]; petiolule bases connate forming a pulvinar disk; leaflet blades lanceolate to oblanceolate, margin entire or serrulate. Inflorescences terminal or axillary from apical leaves, racemose or sometimes flat-topped or elongated, 10–80-flowered, elongating in fruit; bract present [or absent] at base of pedicels. Flowers slightly zygomorphic. Sepals 4, equal, each often subtending a basal nectary. Petals 4, equal, distinct. Stamens 6; filaments inserted on a discoid or conical receptacle (androgyrophore). Gynophore slender, elongating and recurving in fruit; carpel 1; style short, thick; stigma 1, capitmate. Fruit an oblong capsule, dehiscent. Seeds 10–40 per capsule, reniform, not arillate; cleft fused between 2 ends of seed.

About 33 species: tropical W Africa and South America; one species (introduced) in China.

Traditionally included in a broad Linnaean circumscription of Cleome, Tarenaya is distinguished by its stipular thorns, petiolar spines, lack of arils, and seeds with a large cleft cavity. All species are native to tropical America, with the exception of one species in tropical W Africa. Tarenaya hassleriana is a popular garden subject and probably the most widely distributed member of the family, having been introduced worldwide in tropical and warm-temperate regions.


Herbs, annual, (0.5–)1–1.5 m tall. Stems branched, glandular pubescent. Stipular spines 1–3 mm. Petiole 2.5–7.5 cm, glandular pubescent, with scattered 1–3 mm spines; leaflets 5 or 7; leaflet blades elliptic to oblanceolate, 2–6(–12) × 1–3 cm, abaxially glandular pubescent, adaxially glandular, margin serrulate-denticulate, apex acute. Inflorescences 5–30 cm but 10–80 cm in fruit, pedunculate; bracts ovate, 1–2.5 cm. Pedicel 2–4.5 cm, glandular pubescent. Sepals green, equal, distinct, linear-lanceolate, 5–7 × 0.8–1.3 mm, reflexed after anthesis, persistent, glandular pubescent, margin entire, apex acuminate. Petals pink to purple but infrequently white or fading to white by second day, oblong to ovate, 2–3(–4.5) × 0.8–1.2 cm, clawed. Stamens purple, 3–5 cm; anthers green, 9–10 mm. Pistil 6–10 mm; style ca. 0.1 mm. Fruit gynophore 4.5–8 cm; capsule (2.5–)4–8 cm × 2.5–4 mm, in straight alignment with gynophore and pedicel, glabrous. Seeds 10–20 per capsule, dark brown to black, triangular to subspherical, 1.9–2.1 × 1.9–2.1 mm, tuberculate. Fl. (Apr–)May–Dec, fr. Jun–Dec. 2n = 20.

Roadsides, vacant lots, dry hillsides; near sea level to 800(–2000) m. Introduced and sparingly escaped in Guangdong, Hainan, Jiangsu, Sichuan, Yunnan, and Zhejiang [native to South America (Argentina, Brazil, and Paraguay); widely cultivated and occasionally naturalized in tropical and warm-temperate regions].

In cultivation and in various floras (including FRPS 32: 534: 1999), this species has been treated under the name Cleome spinosa Jacquin; however, Jacquin’s name and type apply to a different species, Tarenaya spinosa (Jacquin) Rafinesque.