

7. **ACTINOSTEMMA** Griffith, Account Bot. Coll. Cantor, 24. 1845.

盒子草属 he zi cao shu

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

*Mitrosicyos* Maximowicz.

Herbs, scandent. Leaves petiolate; blade cordate-hastate, cordate-ovate, broadly ovate, or lanceolate-triangular, unlobed or 3–5-lobed, margins dentate. Tendrils 2-fid or rarely simple. Plants monoecious or rarely bisexual. Flowers unisexual. Male inflorescence racemose or paniculate, rarely flowers solitary or paired; calyx rotate, segments linear-lanceolate; corolla rotate, segments lanceolate, acuminate; stamens 5(or 6), free; filaments short, filiform; anthers subovoid, extrorse, basifixed, 1-celled; anther cell oblong; connective papillose on back. Female flowers solitary or fasciculate; calyx and corolla as in male flowers; ovary ovoid, verrucose, 1-locular; style short; stigmas 3, reniform; ovules 2(–4), attached to wall near apex of locule, pendulous. Fruit ovoid, conical at apex, semi-superior, echinate, circumscissile-dehiscent near middle. Seeds 2–4, compressed, testa rugose, margin denticulate.

One species: E Asia and India.

**1. *Actinostemma tenerum*** Griffith, Account Bot. Coll. Cantor, 25. 1845.

盒子草 he zi cao

Branches slender, slightly pilose when young, ultimately glabrous. Petiole filiform, slightly puberulent, 2–6 cm; blade very variable, ovate or sagittate-ovate, 3–12 × 2–8 cm, abaxially slightly pilose, ultimately glabrous, adaxially indistinctly punctate-scabrid, 3-lobed, base deeply emarginate, margin minutely denticulate or coarsely serrate, apex long, acute-acuminate. Tendrils filiform, 2-fid. Male inflorescence racemose, sometimes paniculate, shortly villous, many flowered, main rachis 1–13 cm, shortly villous; bract linear, ca. 3 mm, villous; calyx segments linear-lanceolate, 2–3 × 0.5–1 mm, margin dentate; corolla segments lanceolate, 2–3 × 1–1.5 mm at base, scarcely villous, 1- or 3-veined, apex narrowly subulate; staminal filaments slightly dilated at apex, ca. 0.5 mm, pilose; anthers ca. 0.3 mm. Female flowers solitary or fasciculate; calyx and corolla as in male flowers; ovary ovoid, verrucose. Fruit ovoid or oblong-ellipsoid, 1.6–2.5 × 1–2 cm, verrucose, operculate, 2–4-seeded. Seed plano-convex, broadly ovoid, 11–13 × 8–9 mm, 3–4 mm thick, both surfaces reticulate, base slightly attenuate. Fl. Jul–Sep, fr. Sep–Nov.

Growing on watersides. Anhui, Fujian, Guangxi, Hebei, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Liaoning, Shandong, Sichuan, S Xizang, W Yunnan, Zhejiang [India, Japan, Korea, Laos, Thailand, Vietnam].

The whole plant and its seeds are used medicinally.

- 1a. Flowers unisexual; stamens 5 ..... 1a. var. *tenerum*  
1b. Flowers bisexual; stamens 6 ..... 1b. var. *yunnanense*

**1a. *Actinostemma tenerum* var. *tenerum***

盒子草(原变种) he zi cao (yuan bian zhong)

*Actinostemma japonicum* (Miquel) Miquel; *A. lobatum* (Maximowicz) Franchet & Savatier; *A. lobatum* var. *japonicum* Maximowicz; *A. lobatum* f. *longilobum* Komarov; *A. lobatum* var. *palmatum* Makino; *A. lobatum* f. *subintegrum* Komarov; *A. palmatum* (Makino) Makino; *A. parvifolium* Cogniaux; *A. racemosum* (Maximowicz) Cogniaux; *Mitrosicyos lobatus* Maximowicz; *M. racemosus* Maximowicz; *Pomasterion japonicum* Miquel.

Flowers unisexual. Stamens 5.

Grasslands at watersides. Anhui, Fujian, Guangxi, Hebei, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Liaoning, Shandong, S Xizang, W Yunnan, Zhejiang [India, Japan, Korea, Laos, Thailand, Vietnam].

**1b. *Actinostemma tenerum* var. *yunnanense*** A. M. Lu & Zhi Y. Zhang, Bull. Bot. Res., Harbin 4(2): 127. 1984 [“*yunnanensis*”].

云南盒子草 yun nan he zi cao

Flowers bisexual. Stamens 6.

● W Yunnan.

