

## 29. MIMOSA Linnaeus, Sp. Pl. 1: 516. 1753.

含羞草属 han xiu cao shu

Shrubs or herbs, rarely trees or climbers, usually armed. Stipules not spinescent, usually 2 per pinna, small, caducous. Leaves bipinnate, often sensitive. Heads globose or spikes cylindric, solitary or fasciculate, axillary, pedunculate. Flowers small, bisexual or polygamous, sessile, usually 4-merous. Calyx connate, valvate, campanulate, toothed. Petals connate at base. Stamens 4 or 8, free, exserted; anthers without glands. Ovary many ovuled; style filiform. Legume oblong or linear, usually plano-compressed, membranous or leathery, composed of 1-seeded segments, separating from persistent margins. Seeds elliptic or orbicular, flat.

About 500 species: mostly in tropical America; three species (all introduced) in China.

- 1a. Pinnae 1 or 2 pairs ..... 1. *M. pudica*
- 1b. Pinnae 3–10 pairs.
  - 2a. Tall shrubs or trees; stems terete ..... 2. *M. bimucronata*
  - 2b. Straggling woody shrubs or semiwoody herbs; stems angulate ..... 3. *M. diplotricha*

### 1. *Mimosa pudica* Linnaeus, Sp. Pl. 1: 518. 1753.

含羞草 han xiu cao

Herbs, diffuse, shrubby, to 1 m tall. Stems cylindric, branched, with reflexed bristles and scattered, curved prickles. Stipules lanceolate, 5–10 mm, bristly; pinnae and leaflets sensitive; pinnae usually 2 pairs, digitate, 3–8 cm; leaflets 10–20 pairs, linear-lanceolate, 6–15 × 1.5–3 mm, abaxially slightly hispid, adaxially glabrous, margin ciliate, apex acute. Heads solitary or 2, axillary, globose, ca. 1 cm in diam.; peduncle long; bracts linear. Flowers numerous, pink, small. Calyx minute. Corolla campanulate; lobes outside pubescent. Stamens 4, exserted. Ovary shortly stipitate, glabrous; ovules 3 or 4; style filiform; stigma small. Legumes arranged in a star, slightly recurved, flat, oblong, 1–2 cm × ca. 5 mm, consisting of 3–5 1-seeded segments which fall away from persistent, bristly sutures. Seeds light brown, ovoid, ca. 3.5 mm. Fl. Mar–Oct, fr. May–Nov.  $2n = 52^*$ .

Wilderness tracts, wastelands, or cultivated; sea level to 1500 m. Fujian, Guangdong, Guangxi, Hainan, Jiangsu, Taiwan, Yunnan, Zhejiang [native to tropical America; naturalized in tropical regions of the world].

This plant is grown as an ornamental and used medicinally as a sedative and sleep aid.

### 2. *Mimosa bimucronata* (Candolle) O. Kuntze, Revis. Gen. Pl. 1: 198. 1891.

光荚含羞草 guang jia han xiu cao

*Acacia bimucronata* Candolle, Prodr. 2: 469. 1825; *Mimosa sepiaria* Benth.

Shrubs, deciduous, 3–6 m tall. Branchlets unarmed in distal parts, in lower parts armed by recurved prickles to 1 cm, densely yellow tomentose. Pinnae 4–9 pairs, 1.5–8 cm; rachis unarmed, pubescent; leaflets 12–16 pairs, linear, 5–7 × 1–1.5 mm, leathery, glabrous to puberulent with ciliate margin, main vein near upper side, apex mucronate. Heads globose, forming a spreading panicle with compound, spreading lower branches. Flowers white, scented. Calyx cup-shaped, minute. Petals oblong, 2.5–4 mm, connate at base. Stamens 8; filaments 4–5 mm. Ovary initially glabrous. Legume brown, straight, strap-shaped, 3.5–4.5 × ca. 0.6 cm, unarmed, finely reticulate veined, usually

with 4–8 segments. Seeds olivaceous, ovoid, compressed, ca. 4.5 mm.  $2n = 26^*$ .

Introduced in Guangdong, escaped in thin forests [native to South America (NE Argentina and E Brazil)].

### 3. *Mimosa diplotricha* C. Wright ex Sauvalle, Anales Acad. Ci. Med. Habana 5: 405. 1868.

巴西含羞草 ba xi han xiu cao

Subshrubs or perennial herbs. Stems scandent or prostrate, to 5 m, 4-angulate, hirsute, with or without prickles along angles. Leaves 10–15 cm; petiole and rachis with 4 rows of recurved prickles; pinnae (3–)7 or 10 pairs, 2–4.5 cm; leaflets (11–)20–30 pairs per pinna, linear-oblong, 3–5 × 1–2 mm, both surfaces white villous. Heads 1 or 2, axillary, ca. 1 cm in diam. (including filaments); peduncles 5–10 mm. Flowers bisexual. Calyx inconspicuous, ca. 0.4 mm. Corolla narrowly funnel-shaped, ca. 2.5 mm, 4-lobed, outside slightly pubescent. Stamens 8; filaments pale purple-pink. Ovary ca. 1 mm. Legumes in clusters, slightly curved, oblong, 1.5–3.5 × 0.4–0.5 cm, with or without prickly bristles. Seeds yellow-brown, ca. 3.5 mm.  $2n = 26^*$ .

Cultivated or naturalized in Fujian, Guangdong, Hainan, Taiwan, and Yunnan [native to tropical America; introduced throughout the tropics].

This species is planted as a cover crop.

- 1a. Plants with prickles ..... 3a. var. *diplotricha*
- 1b. Plants without prickles ..... 3b. var. *inermis*

**3a. *Mimosa diplotricha* var. *diplotricha***

巴西含羞草(原变种) ba xi han xiu cao (yuan bian zhong)

*Mimosa invisa* Martius (1837), not Martius ex Colla (1834).

Plants with prickles.

Cultivated or naturalized in Guangdong, Hainan, and Yunnan [native to tropical America; introduced throughout the tropics].

**3b. *Mimosa diplotricha* var. *inermis*** (Adelbert) Veldkamp, Fl. Males. Bull. 9: 416. 1987.

无刺巴西含羞草 wu ci ba xi han xiu cao

*Mimosa invisa* Martius var. *inermis* Adelbert, Reinwardtia 2: 359. 1953.

Plants without prickles.

Cultivated in Fujian, Guangdong, Hainan, and Yunnan [widely cultivated in tropical regions].

