

12. CHAMAECRISTA Moench, Methodus, 272. 1794.

山扁豆腐 shan bian dou shu

Herbs or suffrutescent herbs, rarely small trees. Leaves abruptly pinnate; leaflets opposite; foliar glands usually present, disk- or cup-shaped, rarely flat. Flowers yellow or red. Sepals 5. Petals 5, unequal. Stamens 10 to 5 fertile, filaments straight, anther thecae ciliate along suture, dehiscent terminally by slit or pore. Legume elastically dehiscent, valves coiling. Seeds with either smooth or pitted testa, usually exareolate.

About 270 species: mostly (ca. 240) indigenous to America, with only a few (ca. 30) in tropical Asia; three species (one introduced) in China.

- 1a. Petiolar gland distinctly stipitate 1. *C. pumila*
 1b. Petiolar gland sessile, discoid, raised or slightly flat.
 2a. Rachis of leaves not canaliculate; leaflets 20–50 pairs, 3–4 mm; ovary with short, stiff, appressed hairs;
 legume with scattered, appressed hairs 2. *C. mimosoides*
 2b. Rachis of leaves canaliculate; leaflets 10–25 pairs, 8–13 mm; ovary woolly with long and short, thin
 hairs; legume with long and short, non-appressed hairs 3. *C. leschenaultiana*

1. *Chamaecrista pumila* (Lamarck) V. Singh, J. Econ. Taxon. Bot. 16: 600. 1992.

柄腺山扁豆 bing xian shan bian dou

Cassia pumila Lamarck, Encycl. 1: 651. 1785.

Subshrubs or diffuse herbs, perennial, woody at base, 25–75 cm tall, with many branches. Branches, petioles, and rachises of leaves pilose. Leaves 3–6 cm, with a stipitate gland on top of petiole and on rachis between lowest pair of leaflets; stipules linear-subulate, 6–8 mm, acuminate; leaflets 12–20 pairs, sessile, unequally sided, linear-falcate, 8–12 × ca. 2 mm, midrib near upper margin of blade, apex mucronate. Flowers axillary, solitary or most often 2 or 3 together in a very short raceme; bracts and bracteoles similar to stipules but shorter. Sepals ovate-oblong, 4–6 mm, apex acute. Petals bright yellow, unequal, oblong-ovate, shorter than or ca. as long as sepals, shortly clawed. Stamens 5, subequal; anthers oblong, opening by apical pores enlarging to short slits. Ovary sessile, appressed tomentose; stigma peltate, small. Legume flat, straight, strap-shaped, 3–5 × ca. 0.5 cm, pilose. Seeds 10–20, subrhomboid, ca. 3 mm, flat, smooth. $2n = 32$.

Mountain slopes, open fields, among shrubs, grasslands. Guangdong, Hainan, Yunnan [India, Laos, Malaysia, Myanmar, Vietnam; Australia].

2. *Chamaecrista mimosoides* (Linnaeus) Greene, Pittonia 4: 27. 1897.

山扁豆 shan bian dou

Cassia mimosoides Linnaeus, Sp. Pl. 1: 379. 1753.

Herbs, suffrutescent, annual or perennial, with woody base, 30–60 cm tall, or low shrubs to 1 m tall, with many slender, puberulent branches. Leaves 4–8 cm, with an orbicular, discoid, sessile gland in upper part of petiole, below lowest pair of leaflets; stipules persistent, linear-subulate, 4–7 mm, with conspicuous longitudinal veins; rachis not canaliculate, sparsely pubescent; leaflets sessile, 20–50(–80) pairs, reddish brown when dry, linear-falcate, 3–4 × ca. 1 mm, midvein near upper margin of blade, very unequally sided, base obliquely truncate, apex acute, mucronate. Flowers supra-axillary, mostly solitary, sometimes 2 or 3 together in a very short raceme; bracts and

bracteoles similar to stipules but latter smaller. Sepals lanceolate, 4–8 mm, apex acute. Petals bright yellow, unequal, obovate to orbicular, equal to or slightly longer than sepals, shortly clawed. Stamens 10, alternately 5 shorter and 5 longer; anthers opening by apical pores. Ovary with stiff, appressed hairs; stigma flat. Legume flat, falcate, 2.5–5 × ca. 0.5 cm. Seeds 10–20, flat, smooth. $2n = 16$.

Slopes, wastelands, among bushes, grasslands. S China [native to tropical America; widely introduced in the tropics and subtropics].

This is a drought-enduring and barren-resistant plant, grown for improving the soil. The roots are used medicinally for treating dysentery.

3. *Chamaecrista leschenaultiana* (Candolle) O. Degener, Fl. Hawaiiensis Fam. 169b. 1934.

大叶山扁豆 da ye shan bian dou

Cassia leschenaultiana Candolle, Mém. Soc. Phys. Genève 2: 132. 1824 [“*lechenaultiana*”].

Herbs, suffrutescent, annual or perennial, 30–100(–150) cm tall. Stems erect or decumbent; young branches densely yellowish pubescent. Leaves 3–8 cm, with a slightly raised, orbicular-discoid gland just below lowest pair of leaflets in upper part of petiole; stipules persistent, linear-subulate, 7–9 mm; rachis canaliculate, pubescent; leaflets sessile, 10–25 pairs, linear-falcate, 8–13(–15) × 2–3 mm, very unequally sided, with midvein close to upper border of blade. Flowers axillary or in few-flowered, short, axillary or supra-axillary racemes; bracts and bracteoles like stipules but smaller. Sepals ligulate-lanceolate, ca. 1 cm, outside sparsely yellowish pubescent. Petals orange-yellow, slightly longer than or equal to sepals. Stamens 10, sometimes 1–3 reduced. Ovary densely whitish pubescent; stigma flat, ciliate. Legume flat, strap-shaped, 2.5–5 × ca. 0.5 cm, with long and short, non-appressed hairs to nearly glabrous. Seeds 8–16, flat, smooth.

Mountains, among shrubs, near roads, grassy slopes. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Sichuan, Taiwan, Yunnan [Cambodia, India, Indonesia, Laos, Malaysia, Myanmar, New Guinea, Thailand, Vietnam].

