

### 3. CORCHORUS Linnaeus, Sp. Pl. 1: 529. 1753.

黄麻属 huang ma shu

Herbs or subshrubs. Leaves petiolate; stipules filiform; leaf blade papery, basal veins usually 3, usually with linear appendages at or near base, margin serrate, serrulate, or crenate. Flowers solitary or several arranged in cymes, axillary or extra-axillary, bisexual, yellow. Sepals 4 or 5. Petals 4 or 5; glands absent. Stamens 15 to many, on androgynophore, free; staminodes absent. Ovary 2–5-loculed; ovules many per locule; style short; stigma peltate or disk-shaped, entire or lobed. Fruit a capsule, cylindrical or globose, sometimes angled, 2–5-valved, loculicidally dehiscent. Seeds many.

Between 40 and 100 species: primarily in tropical regions; four species in China.

*Corchorus oenotheroides* H. Léveillé is the basionym of *Indigofera oenotheroides* (H. Léveillé) Lauener in the Fabaceae (see Fl. China 10). *Corchorus polygonatum* H. Léveillé is a synonym of *Tricyrtis pilosa* Wallich in the Liliaceae (see Fl. China 24: 152. 2000).

Several species have been grown as a fiber crop. *Corchorus capsularis* and *C. olitorius* are the source of the important fiber jute.

- 1a. Capsule globose, apex truncate or slightly emarginate; leaf blade glabrous ..... 1. *C. capsularis*  
1b. Capsule cylindrical, apex angled or beaked; leaf blade hairy at least abaxially on veins.  
2a. Capsule apex 3–5-angled; leaf blade abaxially sparsely pilose, glabrescent ..... 2. *C. aestuans*  
2b. Capsule apex beaked; leaf blade abaxially sparsely hairy only on veins.  
3a. Ovary 5-loculed; leaf blade margin serrulate, petiole 0.8–3.5 cm ..... 3. *C. olitorius*  
3b. Ovary 3-loculed; leaf blade margin crenate, petiole 0.5–1 cm ..... 4. *C. trilocularis*

#### 1. *Corchorus capsularis* Linnaeus, Sp. Pl. 1: 529. 1753.

黄麻 huang ma

Herbs woody, erect, 1–2 m tall. Petiole ca. 2 cm, puberulent; leaf blade ovate-lanceolate or narrowly lanceolate, 5–12 × 2–5 cm, glabrous, basal veins ascending to mid leaf, lateral veins 8–10 pairs, base rounded, margin coarsely serrate, apex acuminate. Flowers solitary or several arranged in cymes, axillary; peduncle and pedicel short. Sepals 4 or 5, 3–4 mm. Petals obovate, ± as long as sepals, glabrous. Stamens 18–22; androgynophore short, glabrous. Ovary 5-loculed, glabrous; stigma lobed. Capsule globose, obtusely angled, 5-valved, ca. 1 cm in diam., verrucose, apex truncate or slightly emarginate. Fl. summer, fr. late autumn.

Widely cultivated. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hubei, Hunan, Jiangsu, Jiangxi, Shaanxi, Sichuan, Taiwan, Yunnan, Zhejiang [Bangladesh, India, Indonesia, Japan, Malaysia, Myanmar, Pakistan, Philippines, Sri Lanka].

#### 2. *Corchorus aestuans* Linnaeus, Syst. Nat., ed. 10, 2: 1079. 1759.

甜麻 tian ma

Herbs annual, to 1 m tall. Stem red-brown, slightly yellowish puberulent; branches slender. Petiole 0.9–1.6 cm, with yellowish, long, rigid hairs; leaf blade ovate or broadly ovate, 4.5–6.5 × 3–4 cm, sparsely pilose on both surfaces, glabrescent, basal veins 5–7, lateral veins 3–6 pairs, base rounded, margin serrate, basal pair of teeth usually elongating into filiform or caudate appendages, apex shortly acuminate or acute. Flowers solitary or several together in cymes, axillary or leaf-opposed; peduncle and pedicel very short or absent. Sepals 5, purple-red abaxially, narrowly oblong, ca. 5 mm, semi-foveolately boat-shaped distally, apex awned. Petals 5, yellow, nearly as long as sepals, obovate. Stamens many, yellow, ca. 3 mm. Ovary 3–5-loculed, long cylindrical, puberulent; style rodlike; stigma beak-like, 5-toothed. Capsule cylindrical, angled, 3–5-valved, 1.2–

2.5 × ca. 0.5 cm, apex 3–5-angled, awns bifurcate. Seeds separated by transverse septum. Fl. summer–autumn.

Widely cultivated. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangsu, Jiangxi, Sichuan, Taiwan, Yunnan, Zhejiang [Bangladesh, Bhutan, India, Indonesia, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, Vietnam; tropical Africa, Australia, Central America, West Indies].

- 1a. Ovary puberulent, stigma 5-toothed; capsule 3–4-loculed ..... 2a. var. *aestuans*  
1b. Ovary woolly, stigma entire; capsule usually 5-loculed ..... 2b. var. *brevicaulis*

#### 2a. *Corchorus aestuans* var. *aestuans*

甜麻(原变种) tian ma (yuan bian zhong)

Stems usually erect, internodes as long as or longer than leaf blade. Stamens many. Ovary puberulent; stigma 5-toothed. Capsule 3–4-loculed, 6–8-angled, ca. 2.5 cm. Fl. summer–autumn.

Widely cultivated. Anhui, Guangdong, Guangxi, Hainan, Hubei, Hunan, Jiangsu, Jiangxi, Sichuan, Taiwan, Yunnan, Zhejiang [Bangladesh, Bhutan, India, Laos, Malaysia, Myanmar, Nepal, Pakistan, Sri Lanka, Vietnam; tropical Africa, Australia, Central America, West Indies].

#### 2b. *Corchorus aestuans* var. *brevicaulis* (Hosokawa) T. S. Liu & H. C. Lo, Fl. Taiwan 3: 695. 1977.

短茎甜麻 duan jing tian ma

*Corchorus brevicaulis* Hosokawa, Trans. Nat. Hist. Soc. Taiwan 22: 226. 1932.

Stems almost procumbent, internode shorter than leaf blade. Leaf blade membranous, basal appendages subulate filiform. Stamens 16 to many. Ovary woolly; stigma entire. Capsule usually 5-loculed, 10-angled, ca. 1.2 cm (excluding awns). Fl. Aug.

- Taiwan.

**3. *Corchorus olitorius*** Linnaeus, Sp. Pl. 1: 529. 1753.

长蒴黄麻 chang shuo huang ma

Herbs woody, 1–3 m tall. Stipule ovate-lanceolate, ca. 1 cm; petiole 0.8–3.5 cm, puberulent; leaf blade oblong-lanceolate, 7–10 × 2–4.5 cm, glabrous, basal veins 5, lateral veins 7–10 pairs, base rounded, margin serrulate, apex acuminate. Flowers solitary or 1–3 arranged in cymes, axillary, opposite to leaves; peduncle and pedicel short. Sepals oblong, hairy at base,

apex long awned. Petals oblong, as long as or slightly shorter than sepals, stalked at base; stalk ciliate. Stamens on very short androgynophore, glabrous. Ovary 5-loculed, hairy; style glabrous; stigma disk-shaped, lobed. Capsule cylindrical, slightly curved, 10-angled, robust, 5–6-valved, 3–8 cm, apex beaked, with single awn. Seeds obconic, slightly angled, separated by septum. Fl. summer–autumn.

Cultivated, weed of disturbed areas. Anhui, Fujian, Guangdong, Guangxi, Hainan, Hunan, Jiangxi, Yunnan [widely distributed throughout tropics].

**4. *Corchorus trilocularis*** Linnaeus, Syst. Nat., ed. 12, 2: 369; Mant. Pl. 1: 77. 1767.

三室黄麻 san shi huang ma

Herbs annual or perennial, many branched, pilose. Stipule subulate; petiole 0.5–1 cm, pilose; leaf blade elliptic or ovate-oblong, 1.5–3 × 1–2 cm, hairy only on veins abaxially, glabrous adaxially, lateral basal veins 1/3 as long as leaf blade, base broadly rounded, margin crenate, apex obtuse. Cymes opposite to leaves, 1–3-flowered; peduncle very short. Sepals ca. 5 mm. Petals nearly spatulate, 5–6 mm. Stamens 15–20; filaments 5–6 mm. Ovary 3-loculed. Capsule 1–3-fascicled, long cylindrical, 5–7 × ca. 0.3 cm, apex beaked. Seeds separated by septum. Fl. Aug, fr. Sep.

Moist shady places, weed of cultivated fields. NW Yunnan [Afghanistan, Bhutan, India, Indonesia (Java), Pakistan, Sri Lanka; tropical and N Africa, S Asia, Australia].

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