

### 10. SECAMONE R. Brown, Prodr. 464. 1810.

#### 鲫鱼藤属 *ji yu teng shu*

Lianas or scandent shrubs. Leaves opposite, often with translucent dots. Cymes terminal or axillary, forked, sessile or short pedunculate. Flowers small. Sepals ciliate at margin; basal glands usually absent. Corolla subrotate; tube short; lobes erect patent, overlapping to right. Corona usually double, outer lobes 5, reduced to longitudinal ridges below corolla lobe sinus; inner lobes 5, inserted on gynostegium, usually laterally compressed, straight or incurved. Filaments free or connate at base; anthers with short, incurved apical appendages; pollinia minute, 4 per pollinarium, erect, globose to ellipsoid, retinaculum minute, translator arm absent. Ovaries glabrous. Stigma head capitate or short conical. Follicles terete, smooth. Seeds ovate.

About 80 species: mostly in Africa, especially Madagascar (62 species), 2–7 species in tropical and subtropical Asia and Australia; six species in China.

Klackenberg (Kew Bull. 47: 595–612. 1992) included all six Chinese species in two subspecies of *Secamone elliptica* R. Brown: *S. elliptica* subsp. *minutiflora* (Woodson) Klackenberg for *S. minutiflora* and *S. elliptica* subsp. *elliptica* for the other five species.

- 1a. Leaf epidermis seemingly powdery abaxially (epidermis finely and densely tuberculate-papillate under  $\times 25$  magnification), glabrous or with a hairy petiole and few hairs along midrib; stigma head clearly exerted beyond anthers ..... 6. *S. minutiflora*
- 1b. Leaf epidermis smooth abaxially, hairy to glabrous; stigma head not or only slightly exerted beyond anthers.
  - 2a. Leaves abaxially pubescent.
    - 3a. Leaves abaxially gland dotted ..... 1. *S. sinica*
    - 3b. Leaves abaxially not gland dotted ..... 2. *S. ferruginea*
  - 2b. Leaves glabrous.
    - 4a. Leaves ca. 3 mm wide, usually linear to oblong-lanceolate, not gland dotted ..... 3. *S. likiangensis*
    - 4b. Leaves 10–25 mm wide, elliptic or ovate-elliptic, gland dotted.
      - 5a. Leaf apex caudate-acuminate; peduncle flexuous ..... 4. *S. elliptica*
      - 5b. Leaf apex acute or obtuse; peduncle not flexuous ..... 5. *S. bonii*

**1. *Secamone sinica*** Handel-Mazzetti, Symb. Sin. 7: 997. 1936.

吊山桃 *diao shan tao*

Plants to 8 m. Young branchlets rusty puberulent, branches of previous years pale gray, densely lenticellate. Petiole pubescent, 2–5 mm; leaf blade ovate-lanceolate, 2–7  $\times$  2–2.5 cm. Seeds oblong, 1–3 cm  $\times$  ca. 5 mm; coma ca. 3.5 cm. Fl. May–Jun, fr. Sep–Oct.

• Open montane woods, dense forests; 400–800 m. Guangdong, Guangxi, Guizhou, Yunnan.

**2. *Secamone ferruginea*** Pierre ex Costantin in Lecomte, Fl. Indo-Chine 4: 44. 1912.

锈毛鲫鱼藤 *xiu mao ji yu teng*

Plants to 6 m. Branchlets glabrescent. Petiole 3–5 mm; leaf blade ovate-lanceolate, 4.5–6  $\times$  1.2–2.5 cm, thin papery, adaxially deep green and short gray hairy, abaxially rusty villous, base obtuse, margin recurved, apex acuminate; lateral veins numerous, arching toward margin. Cymes extra-axillary, 1.8–2.5  $\times$  2.5–3 cm, with reddish hairs; peduncle 3–10 mm. Pedicel 1–3 mm. Sepals pubescent. Corolla greenish yellow, 1.5–2 mm, glabrous; lobes rounded, apex obtuse. Corona lobes falcate. Stigma head slightly exerted from anthers, apex umbonate. Follicles oblong-lanceolate in outline, ca. 6 cm  $\times$  6 mm, glabrous. Seeds oblong ca. 6  $\times$  3

cm, papery, glabrous adaxially, pubescent and glandular dotted abaxially, base subrounded or broadly cuneate, apex acuminate; lateral veins 6–10 pairs. Cymes extra-axillary or subterminal; peduncle short, densely rusty pubescent. Pedicel ca. 5 mm. Sepals broadly ovate, ca. 1 mm, ciliate. Corolla yellow; tube short; lobes oblong, ca. 2 mm, papillose inside. Corona lobes shorter than gynostegium. Stigma head short conical. Follicles lanceolate in outline, 4–6 cm  $\times$  ca. 7 mm; coma to 3 cm. Fl. Jun–Aug, fr. Aug–Dec.

Thickets, montane forests; 200–800 m. Guangdong, Guangxi, Hainan [Thailand, Vietnam].

**3. *Secamone likiangensis*** Tsiang, Sunyatsenia 4: 57. 1939.

丽江鲫鱼藤 *li jiang ji yu teng*

Plants to 4 m, glabrous except for inflorescences. Branchlets pale gray. Petiole 1–2 mm; leaf blade linear or oblong-lanceolate, 1.5–3 cm  $\times$  ca. 3 mm, thin papery; lateral veins flat, inconspicuous. Cymes extra-axillary, shorter than leaves, tawny puberulent except for corolla. Corolla yellow; tube short; lobes oblong, 1–2 mm, glabrous. Corona lobes falcate. Anthers oblong, appendages retuse; pollinia erect, retinaculum nearly 4-angled, 2-cleft at base. Styles apically dilated; stigma head terete, slightly exerted beyond anther appendages. Follicles linear-lanceolate in outline, ca. 4 cm  $\times$  5 mm, glabrous. Seeds with white silky coma. Fl. May–Jul, fr. Jul–Dec.

- Montane bushland. C & S Yunnan.

**4. *Secamone elliptica*** R. Brown, Prodr. 464. 1810.

鲫鱼藤 ji yu teng

*Secamone lanceolata* Blume; *S. micrantha* (Decaisne) Decaisne; *Tylophora micrantha* Decaisne.

Plants to 5 m, glabrous except for inflorescences. Branches pale gray. Petiole 2–5 mm; leaf blade elliptic, elliptic-oblong, or rarely ovate, 4–7 × 1.5–2.5 cm, papery, with translucent gland dots, base cuneate, apex caudate-acuminate; lateral veins inconspicuous. Cymes extra-axillary, to 6 cm, many flowered; peduncle flexuous, dichotomous, pubescent. Pedicel 2–4 mm, pubescent. Sepals ovate, pubescent. Corolla yellow or greenish yellow; lobes oblong, ca. 3 mm. Corona lobes falcate, shorter than stamens. Stigma head exserted from anthers. Follicles lanceolate in outline, 5–7 × ca. 1 cm, terete, glabrous. Seeds ovate-oblong, ca. 5 × 3 mm; coma ca. 3 cm. Fl. Jul-Aug, fr. Sep-Dec.

Bushland, open woods; 100–600 m. Guangdong, Guangxi, Hainan, Taiwan, Yunnan [Cambodia, Indonesia, Malaysia, Vietnam].

The roots are used as medicine for rheumatism and traumatic injury.

**5. *Secamone bonii*** Costantin in Lecomte, Fl. Indo-Chine 4: 43. 1912.

斑皮鲫鱼藤 ban pi ji yu teng

Plants to 3 m, glabrous except for young branchlets and inflorescences. Branches tawny brown, with pale lenticels. Petiole 2–3 mm; leaf blade elliptic or ovate-lanceolate, 3–4.5 × 1.5–2.8 cm, base broadly cuneate, apex acute or rarely acuminate; lateral veins inconspicuous. Cymes extra-axillary, 1.5–2 cm; peduncles, pedicels, and bracteoles puberulent. Sepals ovate, pubescent. Corolla yellowish; tube short; lobes ovate, obtuse. Stigma head conical. Follicles oblong-lanceolate in outline, 5–6.5 × ca. 1 cm, glabrous. Seeds oblong, ca. 8 × 3 mm; coma white, ca. 3.5 cm. Fl. May-Jul, fr. Aug-Oct.

Mixed forests; 100 m. Hainan [Vietnam].

**6. *Secamone minutiflora*** (Woodson) Tsiang, Sunyatsenia 4: 56. 1939.

催吐鲫鱼藤 cui tu ji yu teng

*Tylophora minutiflora* Woodson, Ann. Missouri Bot. Gard. 21: 609. 1934; *Secamone elliptica* subsp. *minutiflora* (Woodson) Klackenberg; *S. szechuanensis* Tsiang & P. T. Li.

Plants to 5 m, glabrous except for petioles and inflorescences. Petiole 2–3 mm, puberulent; leaf blade elliptic-ovate, 3–6.5 × 1.2–2.5 cm, thin papery, base cuneate, apex acute, abaxially gland dotted; lateral veins inconspicuous. Cymes extra-axillary, ± umbel-like, shorter than leaves. Sepals ovate,

ca. 1 mm, densely pubescent. Corolla ± rotate, ca. 4 mm in diam.; lobes oblong, ca. 1.5 mm. Corona lobes falcate. Stigma head clearly exserted from anthers. Follicles linear-lanceolate in outline, 5–6 cm × 6–9 mm, divaricate at 180–200°, glabrous. Seeds brownish, oblong, ca. 10 × 4 mm; coma white sericeous, to 2.5 cm. Fl. May-Jul, fr. Aug-Oct.

- Open woods, below 800 m. Guangxi, Guizhou, Sichuan, Yunnan.

Previous authors have assumed that Woodson's original name was a later homonym of *Tylophora minutiflora* A. Chevalier (1920). However, Chevalier's name is invalid and thus Woodson's is legitimate.

