

38. URCEOLA Roxburgh, *Asiat. Res.* 5: 169. 1799, nom. cons.

水壶藤属 *shui hu teng shu*

Chunechites Tsiang; *Ecdysanthera* Hooker & Arnott; *Parabarium* Pierre in Spire; *Xylinabariopsis* Lý.

Lianas woody, latex white. Leaves opposite. Cymes paniculate, terminal or axillary, 3-branched. Flowers small. Calyx deeply divided, with basal glands inside. Corolla suburceolate, throat without scales; lobes short, overlapping to right. Stamens included, inserted at base of corolla tube; filaments short; anthers narrowly oblong, sagittate, connivent, adherent to pistil head, cells spurred at base; disc ringlike, entire or 5-lobed. Ovaries 2, longer than disc, villous at apex; ovules numerous in each locule. Style short; pistil head ovoid, conical or oblong, apex 2-cleft. Follicles cylindric or narrowly ellipsoid, spreading, thick, acuminate. Seeds numerous, oblong or linear, compressed, pubescent, coma long; endosperm scanty; cotyledons oblong or ovate, leaflike, radicle short.

Fifteen species: SE Asia, eight species in China.

- 1a. Leaf blade pubescent abaxially, denser along veins.
 - 2a. Leaf blade very narrowly elliptic, lateral veins 5–7 pairs; corolla glabrous outside, lobe margin 1-toothed; fruit linear or nearly so, ca. 0.5 cm in diam. 1. *U. xylinabariopsoides*
 - 2b. Leaf blade ovate or narrowly elliptic, lateral veins ca. 10 pairs; corolla pubescent outside, lobe margin entire; fruit narrowly ovoid, 1.5–2 cm in diam. 2. *U. huaitingii*
- 1b. Leaf blade glabrous, sometime with hairy domatia in axils of lateral veins.
 - 3a. Petiole puberulent; corolla lobes 1-toothed near base; fruit ovoid 3. *U. micrantha*
 - 3b. Petiole glabrous; corolla lobes entire; fruit sublinear or oblong, if ovoid then long beaked.
 - 4a. Leaf blade papillate abaxially, petiole 3–5 mm 4. *U. quintaretti*
 - 4b. Leaf blade not papillate abaxially, petiole 6–25 mm.
 - 5a. Leaf blade narrowly oblong, 11–18 cm; fruit ca. 2 cm in diam. 5. *U. tournieri*
 - 5b. Leaf blade broadly elliptic, elliptic, or narrowly ovate, 3–10 cm; fruit 0.4–1 cm in diam.
 - 6a. Inflorescences glabrous 8. *U. linearicarpa*
 - 6b. Inflorescences pubescent or puberulent.
 - 7a. Sepals ca. 4 mm; corolla lobes ± symmetrical, slightly longer than tube; follicles to 15 cm, terete, not stipitate 6. *U. rosea*
 - 7b. Sepals ca. 0.8 mm; corolla lobes strongly asymmetrical, ca. 2 × longer than tube; follicles 5–7 cm, strongly stipitate 7. *U. napeensis*

1. *Urceola xylinabariopsoides* (Tsiang) D. J. Middleton, *Novon* 4: 151. 1994.

乐东藤 *le dong teng*

Chunechites xylinabariopsoides Tsiang, *Sunyatsenia* 3: 306. 1937; *Ecdysanthera xylinabariopsoides* (Tsiang) P. T. Li; *Xylinabariopsis ventii* Lý; *X. xylinabariopsoides* (Tsiang) Lý.

Liana to 1.5 m, densely pubescent. Bark dark brown. Petiole 2–3 mm; leaf blade narrowly elliptic, 3–6 × ca. 1.7 cm, somewhat leathery, base broadly cuneate, apex short acuminate, glabrous adaxially except along veins, pubescent abaxially, denser along veins; lateral veins 5–7 pairs. Cymes paniculate, axillary and terminal, 3-branched, 5–8 cm. Sepals narrowly elliptic, ca. 1 mm, acute. Corolla reddish yellow, tube ca. 1 mm; lobes sublinear, unequally falcate, 1.5–2 mm, 1-toothed at middle of margin, apex rounded or obtuse. Disc ringlike, obscurely 5-lobed. Ovary apex pilose. Follicles sublinear, 5–7 cm × ca. 5 mm, puberulent to glabrous. Seeds narrowly oblong, ca. 1 cm, pubescent, coma ca. 3 cm. Fl. Jun-Sep, fr. Sep-Dec.

Open montane forests. Hainan [Vietnam].

2. *Urceola huaitingii* (Chun & Tsiang) D. J. Middleton, *Novon* 4: 151. 1994.

毛杜仲藤 *mao du zhong teng*

Parabarium huaitingii Chun & Tsiang, *J. Arnold Arbor.* 28: 245. 1947.

Lianas to 15 m, minutely tomentose or densely pubescent. Petiole ca. 5 mm; leaf blade ovate or elliptic, 2.5–7.5 × 1.5–3.5 cm, papery; lateral veins ca. 10 pairs. Cymes corymbose, axillary or terminal, 4–6 cm; bracts leaflike, 1–3 × 0.5–1 mm. Sepals narrowly oblong, ca. 2 mm. Corolla yellow, tube ca. 2 mm; lobes obliquely oblong, falcate, longer than or as long as tube, entire. Disc 5-partite. Ovary pilose; ovules ca. 10 in each carpel. Follicles narrowly ovoid, 6–7 × 1.5–2 cm, dilated at base. Seeds very narrowly oblong, 1–1.5 cm × 2–3 mm, coma ca. 3 cm. Fl. Apr-Jun, fr. Jun-Dec.

• Open forests, moist valleys; 200–1000 m. Guangdong, Guangxi, Guizhou, Hainan.

The bark and roots are used to treat rheumatism and injury. The leaves are used externally to stop bleeding.

3. *Urceola micrantha* (Wallich ex G. Don) D. J. Middleton, *Novon* 4: 151. 1994.

杜仲藤 *du zhong teng*

Echites micrantha Wallich ex G. Don, Gen. Hist. 4: 75. 1837; *Ecdysanthera brachiata* A. de Candolle; *E. micrantha* (Wallich ex G. Don) A. de Candolle; *E. multiflora* King & Gamble; *E. utilis* Hayata & Kawakami; *Parabarium micranthum* (Wallich ex G. Don) Pierre; *P. multiflorum* (King & Gamble) Lý; *P. spireanum* Pierre; *P. utile* (Hayata & Kawakami) Lý; *P. utile* var. *kerrii* Lý.

Lianas to 50 m. Stems 10–30 cm in diam.; branches often lenticellate. Petiole puberulent, 1.5–3 cm; leaf blade elliptic or narrowly ovate, 5–15 × 1.5–6 cm, base obtuse, apex narrowly acuminate, glabrous; lateral veins 3–7 pairs. Cymes paniculate, compact, to 9 cm; peduncle pubescent. Sepals ovate, ca. 0.8–1 mm, apex subacute. Corolla pink, lobes oblong, as long as to longer than tube, to 2 mm, 1-toothed near base. Filaments ca. 0.5 mm; disc ringlike. Ovary pilose. Pistil head conical. Follicles narrowly ovoid, 9–23 × (0.4–)1–1.2 cm, base dilated. Seeds oblong, 2–4 cm, coma ca. 4 cm. Fl. Mar–Jun, fr. Jun–Dec.

Mixed forests, brushwoods; 300–1000 m. Fujian, Guangdong, Guangxi, Hainan, Sichuan, Taiwan, Xizang, Yunnan [India, Indonesia, Japan (Ryukyu Islands), Laos, Malaysia, Nepal, Thailand, Vietnam].

The bark and roots are used for the treatment of infantile paralysis, rheumatism, injury, and fractures.

4. *Urceola quintaretii* (Pierre) D. J. Middleton, Novon 4: 151. 1994.

华南杜仲藤 hua nan du zhong teng

Ecdysanthera quintaretii Pierre, Rev. Cultures Col. 11: 228. 1902; *E. micrantha* Quintaret, not (Wallich ex G. Don) A. de Candolle; *E. parameroides* Tsiang; *Parabarium chunianum* Tsiang; *P. hainanense* Tsiang; *P. handelianum* Tsiang; *P. quintaretii* (Pierre) Pierre.

Lianas to 10 m, glabrous except for inflorescences. Branches dark brown when young, dark gray when older. Petiole ca. 5 mm; leaf blade glaucous at first, deep lustrous green adaxially, pale green and with scattered black papillae abaxially, elliptic, narrowly elliptic, ovate, or obovate, 4.5–11 × 1.6–3 cm, apex short acuminate; lateral veins 5–7 pairs. Cymes paniculate, compact, terminal and axillary, 2- or 3-branched, as long as or longer than leaves. Sepals narrowly ovate, ca. 2 mm, pilose, apex obtuse. Corolla pilose, tube ca. 1 mm, lobes ca. 1 mm. Disc short, fleshy, ringlike or obscurely 5-lobed. Ovary pilose. Follicles very narrowly oblong, 4.5–6 cm × 7–10 mm. Seeds oblong, 1.3–1.6 cm, tomentose, coma 1.5–2.5 cm. Fl. Jan–Jun, fr. Aug–Dec.

Dense montane forests; 300–500 m. Guangdong, Guangxi, Hainan [Laos, Vietnam].

5. *Urceola tournieri* (Pierre) D. J. Middleton, Novon 4: 151. 1994.

云南水壶藤 yun nan shui hu teng

Ecdysanthera tournieri Pierre, Rev. Cultures Colon. 11: 228. 1902; *Parabarium burmanicum* Lý; *P. tournieri* (Pierre) Pierre.

Lianas stout, to 20 m, glabrous except for branches and inflorescences. Bark brown, prominently lenticellate; branches puberulent. Petiole 6–8 mm; leaf blade oblong, narrowly so, 11–18 × 2.5–6 cm, apex cuspidate; lateral veins 7–9 pairs. Cymes corymbose, axillary, 8–16 cm, puberulent. Pedicel 2–2.5 mm, puberulent. Sepals ovate, 0.5–0.7 mm. Corolla white, 1.6–2.2 mm, tube 1–1.5 mm; lobes 0.5–0.7 mm, asymmetric. Ovary villous. Follicles narrowly ovoid, to 10 × 2 cm, stout, nearly woody, with many lenticels. Seeds oblong, ca. 1.5 cm × 3 mm, coma yellowish, ca. 3 cm. Fl. summer–autumn.

Forests; 800–1800 m. S Yunnan [Laos, Myanmar].

6. *Urceola rosea* (Hooker & Arnott) D. J. Middleton, Novon 4: 151. 1994.

酸叶胶藤 suan ye jiao teng

Ecdysanthera rosea Hooker & Arnott, Bot. Beechey Voy. 198. 1837; *Antirrhoea esquirolii* H. Léveillé.

Lianas to 20 m. Stem dark brown, lenticels absent; branches tawny gray, young ones brownish. Petiole 0.8–1.2 cm; leaf blade broadly elliptic, rarely subovate, 3–7 × 1–4 cm, apex acute, glabrous, ± lustrous adaxially, glaucous abaxially, lateral veins 4–6 pairs. Sepals ovate, ca. 3 mm, obtuse. Corolla pink, tube ca. 4 mm; lobes ± symmetrical, slightly longer than tube, acute. Disc ringlike, entire. Ovary pubescent. Follicles to 15 cm, terete, densely spotted. Seeds oblong, ca. 1 cm, coma ca. 3 cm. Fl. Apr–Dec, fr. Jun–Dec. *2n* = 20*.

Ravines at low and middle altitudes, scattered in montane forests. Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hunan, Sichuan, Taiwan, Yunnan [Indonesia, Thailand, Vietnam].

All parts are used to treat endosteum, injury, and rheumatism.

7. *Urceola napeensis* (Quintaret) D. J. Middleton, Blumea 39: 89. 1994.

华南水壶藤 hua nan shui hu teng

Micrechites napeensis Quintaret, Compt. Rend. Hebd. Séances Acad. Sci. 134: 438. 1902; *Ecdysanthera napeensis* (Quintaret) Pierre; *Parabarium napeense* (Quintaret) Pierre; *Xylinabaria reynaudii* Jumelle; *Xylinabariopsis napeensis* (Quintaret) F. P. Metcalf; *X. reynaudii* (Jumelle) Pitard.

Lianas 5–20 m. Petiole 1–1.5 cm; leaf blade ovate, elliptic, or lanceolate, 5–9 cm, base rounded or obtuse, apex acuminate or obtuse; lateral veins 6–8 pairs. Inflorescences axillary, corymbose cymes 5–7 cm, pubescent; bracteoles linear. Pedicel 2–4 mm. Sepals ovate, ca. 0.8 mm, ciliate, obtuse. Corolla rose or white; lobes strongly asymmetrical, ca. 2 × longer than tube. Disc ringlike, with 5 rounded lobes. Follicles ovoid, long beaked, 5–7 cm × 6–7 mm, strongly stipitate. Seeds ca. 1.5 cm. Fl. Oct–May, fr. Dec–Aug.

Forests. Guangdong, Guangxi, Hainan [Laos, Thailand, Vietnam].

8. *Urceola linearicarpa* (Pierre) D. J. Middleton, Novon 4: 151. 1994.

线果水壶藤 xian guo shui hu teng

Ecdysanthera linearicarpa Pierre, Rev. Cultures Colon. 11: 228. 1902; *Parabarium linearicarpum* (Pierre) Pichon.

Lianas to 8 m, glabrous. Branches lenticellate. Petiole 6–10 mm; leaf blade green adaxially, greenish abaxially, elliptic or narrowly ovate, 6–8 × 3–3.5 cm, base broadly cuneate or nearly rounded, apex acute to caudate; lateral veins 5 or 6 pairs. Cymes axillary. Flowers small. Sepals ovate, ca. 0.5 × 0.5 mm, apex subacute. Corolla campanulate, yellowish, tube ca. 1.5 × 1.5 mm; lobes erect or incurved, ca. 1 × 0.7 mm. Disc ringlike, shorter than ovary. Ovary pilose. Pistil head ovoid. Follicles linear, 13–14 cm × 5–10 mm. Seeds brownish, oblong, ca. 1.5 cm, coma ca. 3 cm. Fl. Aug–Nov, fr. Oct–Dec.

Tropical rain forests, humid sparse woods; 500–1500 m. SE Xizang, S Yunnan [Laos].

