

## 22. TRACHELOSPERMUM Lemaire, Jard. Fleur. 1: 61. 1851.

络石属 *luo shi shu*

Lianas woody, latex white. Leaves opposite. Cymes lax, terminal, pseudoaxillary, or axillary. Flowers white or purplish, 5-merous. Calyx small, deeply divided, basal glands 5–10, apex usually denticulate. Corolla salverform; tube cylindric, 5-angled, dilated at staminal insertion, throat constricted; lobes sharply overlapping to right. Stamens inserted at lower third of corolla tube; anthers sagittate, connivent, adherent to pistil head, anther tips included or exerted, cells spurred at base; disc scales 5, free. Ovaries 2, free, usually longer than disc; ovules numerous in each ovary. Style short; pistil head conical. Follicles 2, linear or fusiform, divergent or parallel. Seeds linear-oblong, not beaked, coma silky white; endosperm copious; cotyledons linear, flat, radicle short.

About 15 species: one in North America, the others in Asia; six species in China.

- 1a. Anther apex exerted or slightly so ..... 1. *T. asiaticum*
- 1b. Anther apex included or reaching corolla mouth.
  - 2a. Corolla tube dilated at throat or middle.
    - 3a. Stamens inserted at corolla throat ..... 2. *T. bodinieri*
    - 3b. Stamens inserted at middle of corolla tube ..... 3. *T. jasminoides*
  - 2b. Corolla tube dilated at base.
    - 4a. Follicles divergent, linear, 3–5 mm in diam. .... 4. *T. brevistylum*
    - 4b. Follicles parallel, cylindric to fusiform, 10–15 mm in diam.
      - 5a. Leaves usually obovate or narrowly so; flowers purplish; ovaries and fruit glabrous ..... 5. *T. axillare*
      - 5b. Leaves oblong, narrowly ovate, or elliptic; flowers white; ovaries and fruit pubescent ..... 6. *T. dunnii*

**1. *Trachelospermum asiaticum*** (Siebold & Zuccarini) Nakai in T. Mori, Enum. Pl. Corea 293. 1922.

亚洲络石 *ya zhou luo shi*

*Malouetia asiatica* Siebold & Zuccarini, Abh. Math. Phys. Cl. Königl. Bayer. Akad. Wiss. 4: 163. 1846; *Melodinus cavaleriei* H. Léveillé; *Trachelospermum asiaticum* var. *brevisepalum* (C. K. Schneider) Tsiang; *T. divaricatum* var. *brevisepalum* C. K. Schneider; *T. foetidum* (Matsumura & Nakai) Nakai; *T. gracilipes* J. D. Hooker; *T. gracilipes* var. *cavaleriei* (H. Léveillé) Tsiang; *T. gracilipes* var. *hupehense* Tsiang & P. T. Li; *T. jasminoides* (Lindley) Lemaire subsp. *foetidum* Matsu-mura & Nakai; *T. lanyuense* C. E. Chang; *T. siamense* Craib.

Lianas woody, to 10 m, glabrous or pubescent when young. Petiole 2–10 mm; leaf blade elliptic, narrowly ovate, or subobovate, 2–10 × 1–5 cm, membranous to papery, base acute or broadly cuneate, apex obtuse to acute, rarely caudate; lateral veins 6–10 pairs. Cymes terminal and axillary. Sepals appressed to corolla tube, 1.5–3 mm, puberulent to glabrous outside, apex obtuse to subacute; basal glands 10. Corolla white, tube 6–10 mm, dilated at throat, glabrous or puberulent inside facing stamens; lobes obovate, as long as tube. Stamens inserted at or near corolla throat; anther apex exerted or slightly so; disc scales shorter than to as long as ovary. Ovary glabrous. Follicles linear, 10–30 cm × 3–5 mm. Seeds oblong, 2–2.5 cm, coma to 3.5 cm. Fl. Apr-Jul, fr. Aug-Nov.  $2n = 20$ .

Dense or open montane forests, brushwoods, often clinging to trees; 100–1000 m. Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hainan, Hubei, Hunan, Jiangxi, Sichuan, Taiwan, Xizang, Yunnan [India, Japan, Korea, Thailand].

**2. *Trachelospermum bodinieri*** (H. Léveillé) Woodson in Rehder, J. Arnold Arbor. 15: 312. 1934.

贵州络石 *gui zhou luo shi*

*Melodinus bodinieri* H. Léveillé, Repert. Spec. Nov. Regni Veg. 2: 113. 1906; *Trachelospermum cathayanum* C. K. Schneider; *T. cathayanum* var. *longipedicellatum* Lingelsheim; *T. cathayanum* var. *tetanocarpum* (C. K. Schneider) Tsiang & P. T. Li; *T. formosanum* Y. C. Liu & C. H. Ou; *T. longipedicellatum* (Lingelsheim) Woodson; *T. tetanocarpum* C. K. Schneider; *T. wenchowense* Tsiang; *T. yunnanense* Tsiang & P. T. Li.

Lianas woody, to 15 m, minutely tomentose to glabrous or glabrescent. Petiole 3–10 mm long; leaf blade elliptic, narrowly elliptic, or narrowly obovate, 3–10 × 1–4 cm, thick papery; lateral veins 8–13 pairs. Cymes paniculate, terminal or axillary, to 10 cm. Sepals narrowly elliptic, 2–3 mm, glabrous, ciliate, apex appressed to corolla or slightly spreading, acute or obtuse. Corolla white, tube 5–14 mm; throat dilated, pilose, glabrous outside; lobes obliquely obovate or narrowly obovate, as long as tube. Anthers apex reaching corolla throat; disc 5-lobed, shorter than ovary. Ovary glabrous. Follicles linear, 12–41 cm × 2–5 mm. Seeds oblong, ca. 1.5 cm, coma 2–3.5 cm. Fl. May-Aug, fr. Aug-Dec.

• Mixed woods, brushwoods; 500–2600 m. Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Sichuan, Taiwan, Xizang, Yunnan, Zhejiang.

**3. *Trachelospermum jasminoides*** (Lindley) Lemaire, Jard. Fleur. 1: t. 61. 1851.

络石 *luo shi*

*Rhynchospermum jasminoides* Lindley, J. Hort. Soc. London 1: 74. 1846; *Trachelospermum adnascens* Hance; *T. jasminoides* var. *heterophyllum* Tsiang; *T. jasminoides* var. *variegatum* W. T. Miller.

Lianas woody, to 10 m. Stem brownish, lenticellate; young branchlets pubescent, glabrous when older. Petiole 3–12 mm long; leaf blade ovate to obovate or narrowly elliptic, 2–10 × 1–4.5 cm, papery, glabrous or sometimes sparsely pubescent abaxially. Cymes paniculate, terminal and axillary; peduncle 2–6 cm, puberulent to glabrous. Sepals narrowly oblong, 2–5 mm, spreading or reflexed, pubescent outside, ciliate, apex obtuse or acute. Corolla white, tube dilated at middle, 5–10 mm, throat glabrous or pilose facing stamens; lobes obovate, as long as tube. Stamens included, inserted at middle of corolla tube; ovary glabrous. Follicles linear, 10–25 cm × 3–10 mm. Seeds oblong, 1.5–2 cm, coma 1.5–4 cm. Fl. Mar–Aug, fr. Jun–Dec.  $2n = 20$ .

Sunny edges of forests, brushwoods; 200–1300 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hainan, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Shandong, Shanxi, Sichuan, Taiwan, Xizang, Yunnan, Zhejiang [Japan, Korea, Vietnam].

A strong bast fiber obtained from the inner bark is used in making rope, sacks, and paper. The stem is used for the treatment of rheumatism and injury. The flowers yield perfumed oil. The whole plant is poisonous.

**4. *Trachelospermum brevistylum*** Handel-Mazzetti, Akad. Wiss. Wien. Sitzungsber., Math.-Naturwiss., Kl., Abt. 1, 58: 228. 1921.

短株络石 duan zhu luo shi

*Trachelospermum cuneatum* Tsiang; *T. suaveolens* Chun.

Lianas woody, to 5 m, glabrous. Branches lenticellate. Petiole 5–8 mm; leaf blade narrowly elliptic, 5–10 × 1.2–3 cm, base obtuse, apex acuminate or caudate-acuminate; lateral veins 10–14 pairs. Cymes terminal and axillary; peduncle 1–2 cm. Pedicel 5–7 mm. Sepals narrowly elliptic, 1–2 mm, glabrous, apex acute, slightly spreading. Corolla white, tube ca. 4.5 mm, strigose-pilose inside; lobes obliquely obovate, 6–7 mm. Stamens included, inserted near base of corolla tube; disc rectangular, 5-lobed, free. Ovary glabrous. Follicles linear, divergent, 11–24 cm × 3–5 mm. Seeds oblong, 1–3 cm, coma ca. 3 cm. Fl. Apr–Jul, fr. Aug–Dec.

• Open forests, often climbing on trees; 600–1100 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hunan, Sichuan, Xizang.

**5. *Trachelospermum axillare*** J. D. Hooker, Fl. Brit. India 3: 668. 1882.

紫花络石 zi hua luo shi

*Maesa scandens* H. Léveillé; *Melodinus chaffanjonii* H. Léveillé; *Periploca astacus* H. Léveillé.

Lianas woody, to 10 m, glabrous except for young shoots and inflorescences. Stems densely lenticellate. Petiole 3–5 mm; leaf blade obovate, narrowly obovate, or narrowly elliptic, 8–15 × 3–4.5 cm, leathery, base cuneate or rounded, apex acute, abruptly caudate, or acuminate; lateral veins to 15 pairs. Cymes axillary or sometimes subterminal, to 3 cm. Pedicel 3–8 mm. Sepals appressed to corolla tube, ovate, obtuse, basal glands ca. 10. Corolla purplish, tube ca. 5 mm; lobes narrowly obovate, 5–7 mm. Stamens inserted at base of corolla tube, included. Follicles connate, cylindrical to fusiform, 10–15 × 1–1.5 cm, glabrous. Seeds broadly

ovate, ca. 1.5 cm, coma ca. 5 cm. Fl. May–Jul, fr. Aug–Oct.

• Brushwoods, sunny open forests; 500–1500 m. Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangxi, Sichuan, Xizang, Yunnan, Zhejiang.

A fine, strong fiber is obtained from the inner bark and used in making paper. The whole plant is used in Guangxi as medicine for the treatment of injury, pulmonary tuberculosis, bronchitis, and rheumatism.

**6. *Trachelospermum dunnii*** (H. Léveillé) H. Léveillé, Fl. Kouy-Tchéou 31. 1914.

绣毛络石 xiu mao luo shi

*Melodinus dunnii* H. Léveillé, Repert. Spec. Nov. Regni Veg. 9: 453. 1911. *Trachelospermum eglandulatum* D. Fang; *T. rubrinerve* H. Léveillé; *T. tenax* Tsiang.

Lianas woody, to 20 m, rust colored tomentose. Petiole 3–5 mm; leaf blade oblong, elliptic, or narrowly so, 6–10 × 2–3 cm, base obtuse or subcordate to subauriculate-cordate, apex short acuminate or acute, lateral veins 10–14 pairs. Cymes terminal or axillary; peduncle 1.2–1.5 cm. Pedicel 1–2.5 cm. Sepals slightly spreading, narrowly elliptic, 3–4 mm, tomentose, apex acute, recurved. Corolla white, tube 5–6 mm, pilose; lobes obliquely obovate or elliptic, falcate, 8–9 mm. Stamens inserted near base of corolla tube; disc 5-lobed, as long as ovary. Follicles connate, cylindrical to fusiform, 8–9 × 1.2 cm, pubescent. Seeds ca. 1 cm, coma 3–4 cm. Fl. Mar–Aug, fr. Jun–Dec.

Open forests, brushwoods; 300–1600 m. Guangxi, Guizhou, Hunan, Yunnan, Zhejiang [Vietnam].

The young leaves are used in Guangxi as medicine for injury.

Flora of China 16: 166–168. 1995.