

### 10. SINOSIDEROXYLON (Engler) Aubréville, Adansonia, n. s., 3: 32. 1963.

铁榄属 tie lan shu

*Sideroxylon* Linnaeus sect. *Sinosideroxylon* Engler, Bot. Jahrb. Syst. 12: 518. 1890.

Trees or rarely shrubs. Leaves alternate; stiples absent; leaf blade leathery. Flowers small, in axillary clusters, sometimes racemose. Sepals 5(or 6), imbricate, rounded to ovate-rounded, apex obtuse to rarely acuminate. Corolla broadly to narrowly campanulate, tube short; lobes 5(or 6), apex obtuse to acuminate. Stamens 5(or 6), inserted in throat, opposite corolla lobes; anthers ovoid to lanceolate; staminodes 5(or 6), linear, scalelike to petal-like, entire or serrate, inserted in throat and alternate with corolla lobes. Ovary glabrous or villous, 5-locular. Fruit a berry, ovoid to globose, 1(–5)-seeded; pericarp usually thick, sometimes fleshy. Seed scar basal, sometimes lateral.

Four species: Vietnam; three species in China.

*Sinosideroxylon* may not be sufficiently distinct from *Sideroxylon*.

- 1a. Flowers 1 or 2–5 in axillary clusters; fruit ellipsoid, 1–1.5 cm ..... 1. *S. wightianum*
- 1b. Flowers in a raceme or pedunculate umbel; fruit ovoid, ca. 2.5 cm.
- 2a. Inflorescences umbels on peduncles 0.2–0.6 cm; leaf blade oblanceolate ..... 2. *S. yunnanense*
- 2a. Inflorescences a raceme of panicles, 1–3 cm overall; leaf blade elliptic-lanceolate to ovate ..... 3. *S. pedunculatum*

**1. *Sinosideroxylon wightianum*** (Hooker & Arnott) Aubréville, Fl. Cambodge, Laos & Vietnam 3: 68. 1963.

革叶铁榄 ge ye tie lan

*Sideroxylon wightianum* Hooker & Arnott, Bot. Beechey Voy. 196. 1837; *Mastichodendron wightianum* (Hooker & Arnott) P. Royen; *S. wightianum* var. *balansae* Lecomte;

Trees or rarely shrubs, (2–)4–8(–15) m tall. Branchlets and leaves rust colored tomentose when young, glabrescent. Petiole 0.7–1.5(–2) cm; leaf blade elliptic, lanceolate, or oblanceolate, (5–)7–10(–17) × (1.5–)2.5–3.7(–9.5) cm, leathery, base narrowly cuneate, apex acute to obtuse; lateral veins 12–17 pairs. Flowers 1 or 2–5 in axillary clusters, greenish white, aromatic. Pedicel 4–10 mm, pale yellow tomentose. Sepals 5, ovate to lanceolate, 2–2.5(–4) × 1.5–2.5 mm, outside pale yellow tomentose, inside glabrous. Corolla 4–5 mm, lobes lanceolate to ovate. Staminodes lanceolate to subtriangular, petal-like, 2.5–3 mm. Ovary ovoid, ca. 2 mm, 5-locular, base rust colored hirsute. Style 2–4 mm, glabrous. Fruit green, becoming dark purple, ellipsoid, 1–1.5(–1.8) cm × 5–8 mm, glabrous. Seeds 1, ellipsoid, compressed; scar basal to lateral-basal. Fl. May–Jun, fr. Aug–Oct.

Thickets and forests on limestone hill; 500–1500 m. Guangdong, Guangxi, S Guizhou, SE Yunnan [N Vietnam].

**2. *Sinosideroxylon yunnanense*** (C. Y. Wu) H. Chuang, Guihaia 3: 312. 1983.

滇铁榄 dian tie lan

*Planchonella yunnanensis* C. Y. Wu in C. Y. Wu & H. W. Li, *Yunnan Redai Yaredai Zhiwu Quxi Yanjiu Baogao* (Rep. Stud. Pl. Trop. Subtrop. Yunnan) 1: 26. 1965.

Trees 5–15 m tall. Young parts soon glabrescent. Branchlets striate, with small and dense lenticels. Leaves alternate; petiole 1–1.5 cm; leaf blade oblanceolate, 9–20 × 2–5 cm, leathery, glabrous, apex acuminate, veins conspicuous. Flowers in axillary panicles, usually umbellate, 12–20, closely clustered; peduncle 2–6 mm, rust colored pubescent. Calyx connate at base; lobes 5, ovate-triangular, ca. 2 × 1.5 mm,

outside rust colored pubescent, inside glabrous. Corolla ca. 5 mm; lobes 5, ovate. Staminodes 5, petal-like, ca. 3 mm, elongated after flowering. Fruit a berry, green becoming black, ovoid, ca. 2.4 cm, glabrous. Seeds 1, oblong-ovoid, ca. 2 cm; scar rounded, subbasal. Fl. May, fr. Nov.

\* Dense forests; 1000–1600 m. SE Yunnan.

The generic placement of *Sinosideroxylon yunnanense* follows Aubréville (Fl. Cambodge, Laos & Vietnam 3: 6. 1963), who emphasized seed characters in the generic delimitations within the Sapotaceae.

**3. *Sinosideroxylon pedunculatum*** (Hemsley) H. Chuang, Guihaia 3: 312. 1983.

铁榄 tie lan

Trees (5–)9–12 m tall. Branchlets rust colored pubescent, lenticellate. Leaves alternate, often closely clustered at end of branchlets; petiole 0.7–1.5 cm, rust colored tomentose or subglabrous; leaf blade ovate to ovate-lanceolate, (5–)7–9(–15) × 3–4 cm, base cuneate, apex acuminate; lateral veins 8–12 pairs. Flowers pale yellow, in 1–3-flowered clusters on axillary panicle; peduncle 1–3 cm; bractlets ovate-triangular. Pedicel 2–4 mm. Calyx campanulate; lobes 5, triangular or subovate, 2–3 × 1.5–2 mm. Corolla 4–5 mm; lobes (4 or)5, ovate-oblong, 1.5–2.5 × ca. 1 mm. Stamens (4 or)5; staminodes (4 or)5, petal-like, lanceolate, 1–2 mm, lacinate. Ovary subglobose, 4- or 5-locular, ca. 1 mm, glabrous. Style 2–3 mm, elongated in fruit. Fruit ca. 2.5 × 1.5 cm. Seeds 1, ellipsoid, compressed, ca. 1.6 × 0.9 cm; scar subrounded. Fl. May–Aug.

1000–1100 m. Guangdong, Guangxi, Hunan, Yunnan [Vietnam].

The generic placement of *Sinosideroxylon pedunculatum* is unsettled. Hemsley originally placed it, with uncertainty, in *Sarcosperma*, but the two genera are quite different in vegetative and floral characters. Lam and Kerpel's (Blumea 3: 285. 1939) transfer to *Planchonella* was followed by Wu and Li [*Yunnan Redai Yaredai Zhiwu Quxi Yanjiu Baogao* (Rep. Stud. Pl. Trop. Subtrop. Yunnan) 1: 26. 1965], who drew attention to the seeds with copious endosperm and leafy cotyledons. However, the racemose or sometimes paniculate inflorescences and rounded basal seed scar suggest exclusion from *Planchonella*. Based on the alternate leaves, 1-

seeded berry, and seed characteristics, it is here included within *Sinosideroxylon*.

- 1a. Leaf blade glabrous on both surfaces ..... 3a. var. *pedunculatum*
- 1b. Leaf blade adaxially sericeous, abaxially glabrescent ..... 3b. var. *pubifolium*

**3a. *Sinosideroxylon pedunculatum* var. *pedunculatum***

铁榄(原变种) tie lan (yuan bian zhong)

*Sarcosperma pedunculata* Hemsley in F. B. Forbes & Hemsley, J. Linn. Soc., Bot. 26: 68. 1889; *Planchonella pedunculata* (Hemsley) H. J. Lam & Kerpel.

Leaf blade glabrous on both surfaces. Fl. Jul–Aug.

Forests, limestone hills; 1000–1100 m. Guangdong, Guangxi, Hunan, Yunnan [Vietnam].

**3b. *Sinosideroxylon pedunculatum* var. *pubifolium* H. Chuang, Guihaia 3: 312. 1983.**

毛叶铁榄 mao ye tie lan

Shoots and young leaves rust colored sericeous. Leaf blades abaxially sericeous, adaxially glabrescent. Fl. May

\* Top of limestone hills. Guangxi (Longzhou Xian).

