

29. WRIGHTIA R. Brown, Mem. Wern. Nat. Hist. Soc. 1: 73. 1811.

倒吊笔属 *dao diao bi shu*

Trees or shrubs with latex. Leaves opposite, petiolate; glands axillary. Cymes terminal or subterminal, dichasial, few to many flowered. Sepals quincuncial, with 5–10, basal, scalelike glands inside. Corolla salverform, funnellform, subrotate, or rotate, tube cylindric to campanulate; lobes overlapping to left; corona ligulate, fringed, or cup-shaped, entire or subentire at apex, shallowly or deeply divided, sometimes absent. Stamens inserted at middle, apex, or rarely base of corolla tube; anthers sagittate, connivent and adherent to pistil head, exerted, spurred at base; disc absent. Ovaries 2, distinct or connate; ovules numerous in each locule. Style filiform; pistil head ovoid, usually dilated at base. Follicles 2, connate or divaricate. Seeds narrowly fusiform, with an apical coma directed toward fruit base, beakless.

About 23 species: tropical Africa, Asia, Australia; six species in China.

- 1a. Shrubs; corona obsolete; seeds (excluding coma) ca. 0.8 cm 6. *W. religiosa*
- 1b. Trees; corona scales present; seeds (excluding coma) 1–2 cm.
 - 2a. Leaves densely pubescent or tomentose abaxially.
 - 3a. Corona lobes much shorter than stamens, glabrous inside; fruit lenticellate, usually glabrous 1. *W. arborea*
 - 3b. Corona lobes about as long as stamens, puberulent inside; fruit not lenticellate, usually minutely puberulent 2. *W. pubescens*
 - 2b. Leaves glabrous or minutely pubescent abaxially along veins.
 - 4a. Ovaries and fruit connate.
 - 5a. Apex of leaf blade short acuminate; corona with 10 scales, longer than anthers 2. *W. pubescens*
 - 5b. Apex of leaf blade caudate-acuminate; corona cup-shaped, shorter than anthers 3. *W. coccinea*
 - 4b. Ovaries and fruit distinct.
 - 6a. Corolla funnellform, white; corona with 25–35 scales 4. *W. laevis*
 - 6b. Corolla rotate or subrotate, yellowish; corona with 10 scales 5. *W. sikkimensis*

1. *Wrightia arborea* (Dennstedt) Mabberley, Taxon 26: 533. 1977.

胭脂木 *yan mu*

Periploca arborea Dennstedt, Schlüssel Hortus Malab. 13, 23, 25. 1818; *Nerium tomentosum* Roxburgh; *Wrightia tomentosa* (Roxburgh) Roemer & Schultes.

Trees to 20 m tall. Branches gray or brown, pubescent, lenticellate. Petiole 2–10 mm; leaf blade elliptic to broadly so or obovate, 6–18 × 3–8.5 cm, pubescent to glabrescent adaxially, tomentose abaxially; lateral veins 10–15 pairs. Cymes pubescent; peduncle to 2 cm. Pedicel 1–1.5 cm. Sepals ovate or broadly so, ca. 3 mm. Corolla yellowish, pinkish, or salmon, rotate or subrotate; tube 3–7 mm, glabrous; lobes narrowly elliptic to ovate, 0.8–1.6 cm, papillate; corona scales 10, shorter than anthers, glabrous inside, apex dentate. Ovaries connate. Follicles connate, cylindric, 14–21 × 3–4 cm, lenticellate. Seeds linear-fusiform, ca. 2 cm, coma ca. 3.5 cm. Fl. May–Oct, fr. Aug–Dec. *2n* = 22.

Deciduous or mixed forests; stream banks; 200–1500 m. Guangxi, Guizhou, Yunnan [India, Laos, Malaysia, Myanmar, Sri Lanka, Thailand, Vietnam].

2. *Wrightia pubescens* R. Brown, Mem. Wern. Nat. Hist. Soc. 1: 73. 1811.

倒吊笔 *dao diao bi*

Anasser laniti Blanco; *Wrightia annamensis* Eberhardt & Dubard; *W. kwangtungensis* Tsiang; *W. laniti* (Blanco) Merrill; *W. pubescens* subsp. *laniti* (Blanco) Ngan.

Trees to 35 m tall. Trunk to 60 cm in diam.; bark yellowish brown; young branchlets yellowish pubescent,

glabrate with age, densely lenticellate. Petiole ca. 1 cm; leaf blade narrowly oblong, ovate, or narrowly ovate, 5–10 × 3–6 cm, papery, puberulent to glabrous adaxially, densely pubescent to puberulent or glabrescent except along veins abaxially, veins 8–15 pairs. Cymes ca. 5 cm, pubescent. Sepals ovate to broadly so, 2–5 mm. Corolla white or pinkish white, funnellform, tube 5–6.5 mm; lobes oblong, 1–2 cm; corona fringed, scales 10, as long as or longer than anthers, puberulent inside. Stamens pubescent, inserted at mouth of corolla; anthers exerted. Ovaries connate, glabrous. Follicles connate, sublinear, 15–30 × 1–2 cm, not lenticellate. Seeds narrowly fusiform, coma to 3.5 cm. Fl. Apr–Aug, fr. Aug–Dec.

Secondary rain forests, dry woods; 400 m. Guangdong, Guangxi, Guizhou, Hainan, Yunnan [Cambodia, India, Indonesia, Malaysia, Philippines, Thailand, Vietnam; Australia].

The wood is used for making furniture, poles, seals, and musical instruments. Bark fibers are used for making paper and artificial cotton. Extracts from the roots and bark are used to treat scrofula and rheumatic arthralgia.

3. *Wrightia coccinea* (Loddiges) Sims, Bot. Mag. 53: t. 2696. 1826.

云南倒吊笔 *yun nan dao diao bi*

Nerium coccineum Loddiges, Bot. Cab. 9: t. 894. 1824.

Trees to 20 m tall. Bark pale gray to brownish; branchlets lenticellate, glabrous. Petiole ca. 5 mm; leaf blade elliptic to ovate, 5–17 × 3–8 cm, glabrous or puberulent along veins abaxially, base obtuse to acute, apex caudate-acuminate; lateral veins 8–14 pairs. Flowers solitary or in cymes, 2–3.5 cm. Sepals broadly ovate, 5–9 mm. Corolla reddish,

funneliform; tube campanulate, shorter than calyx; lobes broadly obovate, papillate; corona crimson, cup-shaped, apex incised. Anthers exerted. Ovaries connate. Follicles linear, connate, 14–20 cm, conspicuously lenticellate. Seeds linear, ca. 2 cm, coma to 4 cm. Fl. Jan-May, fr. Jun-Dec. $2n = 22$.

Dense montane forests; 300–1800 m. SE Guangxi, S Yunnan [India, Myanmar, Pakistan, Thailand].

4. *Wrightia laevis* J. D. Hooker, Fl. Brit. India 3: 654. 1882.

蓝树 lan shu

Wrightia hainanensis Merrill; *W. hainanensis* var. *variabilis* Tsiang; *W. tinctoria* R. Brown var. *laevis* (J. D. Hooker) Pichon.

Trees to 40 m tall, glabrous except for flowers. Bark dark gray, branchlets brownish, lenticellate. Petiole 5–7 mm; leaf blade oblong or narrowly elliptic, rarely ovate, 7–18 × 2.5–8 cm, apex acuminate to caudate-acuminate; lateral veins 5–11 pairs. Cymes ca. 6 cm; peduncle ca. 1 cm, puberulent to glabrous. Pedicel 1–1.5 cm. Sepals broadly ovate, ca. 1 mm, pubescent outside, apex rounded or obtuse. Corolla white or yellowish, funneliform, tube 1.5–3 mm; lobes narrowly elliptic, 5.5–13.5 mm, papillate; corona fringed, scales 25–35, linear, puberulent. Anthers as long as corona, puberulent. Ovaries 2, distinct. Follicles cylindrical, distinct, 20–35 cm × ca. 7 mm, lenticellate. Seeds sublinear, 1.5–2 cm, coma to 4 cm. Fl. Apr-Aug, fr. Jul-Dec. $2n = 22$.

Montane forests, valley thickets; 200–1000 m. Guangdong, Guangxi, Guizhou, Hainan, Yunnan [India, Indonesia, Laos, Malaysia, Myanmar, Philippines, Thailand, Vietnam; N Australia].

The roots and leaves are used to treat injury and cuts, and the fruits are used to cure pulmonary tuberculosis. A blue dye is extracted from the leaves.

5. *Wrightia sikkimensis* Gamble, Bull. Misc. Inform. Kew 1908: 447. 1908.

个溲 ge pu

Wrightia hainanensis Merrill var. *chingii* Tsiang; *W. schlechteri* H. Léveillé.

Trees to 12 m tall. Branchlets dark brown, puberulent to glabrous. Petiole ca. 5 mm; leaf blade ovate to obovate, 6–17 × 3–6 cm, glaucescent, glabrous except along veins on abaxial surface, apex caudate-acuminate; lateral veins 9–15 pairs. Cymes puberulent; peduncle to 3 cm. Pedicel ca. 1 cm. Sepals ovate, ca. 2.5 mm. Corolla yellowish, rotate or subrotate, tube 2–2.5 mm; lobes oblong or narrowly obovate, 1.2–1.4 cm, papillate; corona scales 10, the 5 inserted at base of corolla lobes ca. 6 mm, entire at apex, the 5 at corolla throat ca. 2.5 mm, 2-cleft at apex. Anthers puberulent, exerted. Ovaries distinct. Follicles cylindrical, distinct, to 35 cm × 4–7 mm, lenticellate. Seeds narrowly fusiform, 1.5–2 cm, coma to 4 cm. Fl. Apr-Jun, fr. Jun-Dec.

Montane forests, valleys, limestone brushwoods; 500–1500 m. Guangxi, Guizhou, Hainan, Yunnan [NE India, Sikkim, Vietnam].

6. *Wrightia religiosa* (Teijsmann & Binnendijk) Benth in Bentham & J. D. Hooker, Gen. Pl. 2: 713. 1876.

无冠倒吊笔 wu guan dao diao bi

Echites religiosa Teijsmann & Binnendijk, Natuurk. Tijdschr. Ned. Indië 27: 34. 1864.

Shrubs to 3 m tall. Branchlets thin, terete, often with many lateral short branchlets, minutely puberulent. Petiole 2–4 mm; leaf blade elliptic, ovate, or narrowly oblong, 2.5–7.5 × 1.5–3 cm, pubescent along midvein; lateral veins 5–7 pairs. Cymes often on short, few-leaved branches, short pedunculate, 1–13-flowered. Pedicel 1.5–2 cm, thin, finely hairy. Sepals ovate, ca. 1.5 mm. Corolla white, subrotate; tube 3–4 mm, glabrous; lobes ovate, ca. 7 mm, densely pubescent on both surfaces; corona obsolete. Stamens inserted at mouth of corolla tube. Ovaries free. Follicles linear, free, 12–17 cm. Seeds narrowly fusiform, ca. 8 mm, coma to 3.5 cm. Fl. all year. $2n = 22$.

S Guangdong [Cambodia, Laos, Malaysia, Thailand, Vietnam].

Cultivated for medicine.

