

49. **VERNICIA** Loureiro, Fl. Cochinch. 2: 586. 1790.

油桐属 you tong shu

Li Bingtao (李秉滔 Li Ping-tao); Michael G. Gilbert

Dryandra Thunberg.

Trees, monoecious or dioecious; indumentum of simple or T-shaped hairs, often sparse. Leaves alternate, simple; stipules caducous; petiole long, with 2 adaxial glands at apex; leaf blade entire, palmately veined. Inflorescence terminal, much branched, thyrsoid, cymules of bisexual inflorescences each with several male flowers and a terminal female flower; bracts inconspicuous. Male flowers: buds ovoid or subglobose; calyx ± spatulate, ± regularly 2- or 3-lobed; petals 5, white or reddish white to purple, base clawed; disk segments 5, subulate; stamens 8–12, in 2 series; outer filaments free, inner ones longer and connate at base. Female flowers: sepals and petals as in male; disk obscure or absent; ovary densely pubescent, 3(–8)-locular; ovules 1 per locule; styles 3–5, bifid. Fruit a drupe, large, subglobose, beaked at apex, indehiscent or slightly dehiscent at base, 3-seeded; exocarp crustaceous. Seed without caruncle; seed coat woody.

Three species: Myanmar to Indonesia, China, Japan; two species in China.

- 1a. Trees deciduous; inflorescences produced before new leaves, usually bisexual; glands at junction of petiole and leaf blade sessile and cushion-shaped; fruits smooth 1. *V. fordii*
1b. Trees evergreen; inflorescences produced with new leaves, usually unisexual; glands at junction of petiole and leaf blade stalked and cupular; fruits wrinkled, longitudinally grooved, and ridged 2. *V. montana*

1. ***Vernicia fordii*** (Hemsley) Airy Shaw, Kew Bull. 20: 394. 1966.

油桐 you tong

Aleurites fordii Hemsley, Hooker's Icon. Pl. 29: t. 2801, 2802. 1906.

Trees deciduous, up to 10 m tall, monoecious; bark gray, nearly smooth; branches verticillate, stout, glabrous, prominently lenticellate. Petiole as long as leaf blade, glabrescent, with 2 compressed and sessile glands; leaf blade ovate, 5–18 × 3–15 cm, puberulent when young, dark green and glabrous adaxially, gray-green and pubescent abaxially at maturity, base truncate to shallowly cordate, margin entire, rarely shallowly 1–3-fid, apex acute; palmate veins 5(–7). Inflorescences flat-topped panicles of cymes, appearing generally before new leaves, usually bisexual; calyx ca. 10 mm, 2(or 3)-fid, densely brown puberulent outside; petals obovate, 2–3 × 1–1.5 cm, yellow at base, pink to purplish, pink-veined, base clawed, apex rounded; stamens 8–12; outer filaments free, inner filaments connate to below middle; ovary 3–5(–8)-locular, pubescent; styles 3–5(–8), bifid. Drupe subglobose, 4–6(–8) cm in diam.; exocarp smooth, not grooved, 3- or 4(–8)-seeded. Seed coat woody. Fl. Mar–Apr, fr. Aug–Nov.

Open forests; 200–1500(–2000) m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hainan, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Shaanxi, Sichuan, Yunnan, Zhejiang [Vietnam; cultivated in the Old and New Worlds].

This species is usually cultivated on slopes below 800 m.

2. ***Vernicia montana*** Loureiro, Fl. Cochinch. 2: 586. 1790.

木油桐 mu you tong

Aleurites cordata Gagnepain; *A. montana* (Loureiro) Wilson; *A. vernicia* (Corrêa) Hasskarl; *Dryandra vernicia* Corrêa; *Elaeococca vernicia* (Corrêa) A. Jussieu.

Trees evergreen, up to 20 m tall, usually dioecious; bark brown; branches glabrous, with sparsely elevated lenticels. Petiole 7–17 cm, glabrous, apex with 2 stalked and cupular glands; leaf blade broadly ovate, 8–20 × 6–18 cm, pubescent on both surfaces when young, only abaxially pubescent along base of

Fl. China 11: 266–267. 2008.

nerves at maturity, base cordate to truncate, margin entire or 2–5-fid, apex acute to acuminate, sinus usually with cupular glands. Inflorescences produced with new leaves, usually unisexual. Male flowers: calyx ca. 10 mm, 2- or 3-fid, glabrous; petals obovate, 2–3 cm, base clawed, white or purple-red at base and with purple-red nerve-stripes; stamens 8–10; filaments hairy, outer filaments free, inner filaments connate at and below middle. Female flowers: calyx and petals as in male; ovary densely brown pubescent, 3-locular; styles 3, bipartite. Drupes ovoid, 3–5 cm in diam., longitudinally 3-angular, between angles with sparsely reticulate wrinkles, 3-seeded. Seeds compressed globose; seed coat thicker, verrucose. Fl. Apr–Jun, fr. Jul–Oct.

Open forests; below 1600 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hubei, Hunan, Jiangxi, Taiwan, Yunnan, Zhejiang [Myanmar, Thailand, Vietnam; cultivated in Japan].

The seeds are a source of drying oils, used in paints and varnishes.

Fl. China 11: 266–267. 2008.