

## 1. *HANDELIODENDRON* Rehder, J. Arnold Arbor. 16: 65. 1935.

掌叶木属 *zhang ye mu shu*

Xia Nianhe (夏念和); Nicholas J. Turland, Paul A. Gadek

Trees or shrubs, deciduous. Leaf blade 5-foliolate; leaflet blades on both surfaces with sparsely scattered, conspicuous, brown or dark red glands, margin entire. Thyse shortly cylindric-conic; branches compound; bracts subulate, small. Flowers rather small. Sepals connate only at base. Petals  $\pm$  equal, narrowly oblong or oblanceolate, not clawed, reflexed from middle, with 2 small scales at base adaxially. Ovary fusiform with a long gynophore; style short; stigma 3-lobed. Capsule pyriform, abruptly tapering at base into a long (1–1.5 cm) gynophore, 1–5-seeded; pericarp smooth. Seeds subovoid or  $\pm$  ellipsoid, relatively small (0.8–1.1 cm); testa glossy black; hilum a 2-layered arillode occupying ca. 1/2 of seed.

- One species: China.

*Handeliodendron* was reluctantly placed in the Sapindaceae by Rehder (loc. cit.), and has been retained there by subsequent authors, even though it is an anomaly in that family. It shares many morphological characters with *Aesculus* and *Billia* and is better placed in the Hippocastanaceae. Such a placement is supported by *rbcL* and *matK* molecular data published by Harrington et al. (Syst. Bot. 30: 365–381. 2005), who gave it as the sister taxon of *Aesculus* and *Billia*, with that clade the sister taxon of the Aceraceae.

**1. *Handeliodendron bodinieri*** (H. Léveillé) Rehder, J. Arnold Arbor. 16: 66. 1935.

掌叶木 *zhang ye mu*

*Sideroxylon bodinieri* H. Léveillé, Fl. Kouy-Tchéou, 384. 1914–1915.

Trees or shrubs to 15 m tall, glabrous throughout except flowers. Petiole 4–11 cm; petiolules 0.1–1.5 cm; leaflet blades elliptic to oblanceolate, 3–12  $\times$  1.5–6.5 cm, base broadly cuneate, apex acuminate to caudate; lateral veins in 9–12 pairs. Peduncle 3–4 cm; compound thyse 5–7.5(–12) cm; branches 1–3 cm; pedicels 2–5 mm, densely covered with whitish, globose papillae. Sepals 2–3  $\times$  ca. 1 mm, oblong-elliptic or subovate, abaxially covered with whitish, globose papillae, margin densely ciliate, apex subobtusate. Petals 4 or 5, yellow to white, 5–9  $\times$  1.5–2 mm, abaxially crispate villous, adaxially glabrous, margin densely ciliate. Stamens 7 or 8, 5–10 mm; filament proximally crispate villous; anther ca. 0.7 mm. Ovary ca. 2.5 mm (including gynophore), glabrous. Capsule orange-brown, mottled, 2.2–3.5  $\times$  0.5–1.8 cm (including gynophore 1–1.5 cm), apex mucronate. Fl. Mar–May, fr. Jul–Aug(–Oct).

- Forests, forest margins, glades, rocky gullies, caves, and rock crevices in karstic limestone mountain areas; 500–1200 m. NW Guangxi, S Guizhou.

The specimen *J. Cavalerie 7945* (K), from “Tou-chan” in the “Yunnan-sen district” (i.e., Kunming in Yunnan), may represent either a range extension into Yunnan or a labeling error. Some populations in Guangxi and Guizhou are almost on the Yunnan border, so such a range extension is not unlikely.

This species was given as rare by Lan (in Fu & Jin, China Pl. Red Data Book 1: 590–591. 1992), owing to excessive collecting of seeds for extraction of oil and poor natural regeneration. The seeds are rich in oil and therefore a favorite food of wild animals.

