

4. DODECADENIA Nees in Wallich, Pl. Asiat. Rar. 2: 61, 63. 1831.

单花木姜子属 dan hua mu jiang zi shu

Huang Puhua (黄普华 Huang Pu-hwa), Li Jie (李捷), Li Xiwen (李锡文 Li Hsi-wen); Henk van der Werff

Evergreen trees, dioecious. Leaves alternate, pinninerved. Umbels solitary or clustered in axils of leaf, 1-flowered; peduncles absent or nearly absent; involucre bracts 4 or 5, imbricate. Flowers unisexual; perianth tube short; perianth segments 6 in 2 whorls, spreading, nearly equal. Male flowers: fertile stamens 12 in 4 whorls or 3 each; filaments of 1st and 2nd whorls eglandular, of 3rd and 4th whorls each with 2 glands at base; anthers all introrse, 4-celled; cells opening by lids; rudimentary ovary small. Female flowers: staminodes 12 in 4 whorls of 3 each, 1st and 2nd whorls eglandular, of 3rd and 4th whorls each with 2 glands at base; ovary superior; style elongated; stigma enlarged. Fruit seated on perianth tube.

One species: Bhutan, China, India, Myanmar, Nepal.

1. Dodecadenia grandiflora Nees in Wallich, Pl. Asiat. Rar. 2: 63. 1831.

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Evergreen trees, 10–15 m tall, ca. 30 cm d.b.h. Branchlets covered with dense brown pubescence or glabrous. Leaves alternate; petiole 8–10 mm, covered with pubescence; leaf blade oblong-lanceolate or oblong-oblongeolate, 5–10 × 2–3 cm, glabrous abaxially, along midrib pubescent adaxially, lateral veins 8–12 pairs, conspicuously reticulate-veined on both surfaces, base cuneate, apex acute or acuminate. Umbels 1–3-clustered in leaf axils, 1-flowered. Male flowers: perianth segments 6 in 2 whorls, outer ones broader, inner ones slightly narrow and pubescent outside; fertile stamens 12; filaments pubescent, of 3rd whorls each with 2 large glands at base, of 4th whorls with smaller glands; rudimentary pistil pubescent or glabrous. Female flowers: ovary pubescent or glabrous. Fruit ellipsoid, 10–12 × 7–9 mm, seated on discoid perianth tube; fruiting pedicel ca. 5 mm, stout.

Weed-tree forests in valleys, mixed forests of coniferous and deciduous broad-leaved trees, *Tsuga* forests; 2000–2600 m. W Sichuan, SE Xizang, Yunnan [Bhutan, India, Myanmar, Nepal].

Reviewer Colin Pendry (E) notes that among Nepalese specimens the distinction between var. *grandiflora* and var. *griffithii* is unclear. Both glabrous and tomentose twigs can be seen on the same branch in *Nicolson 2661* (BM), and glabrous ovaries can be seen with tomentose twigs in *Stainton 6181* (BM) and *Proud s.n.* (BM).

- 1a. Branchlets and ovary pubescent 1a. var. *grandiflora*
- 1b. Branchlets and ovary glabrous 1b. var. *griffithii*

1a. Dodecadenia grandiflora var. **grandiflora**

单花木姜子(原变种) dan hua mu jiang zi (yuan bian zhong)

Actinodaphne monantha (Yen C. Yang & P. H. Huang) H. P. Tsui; *Litsea monantha* Yen C. Yang & P. H. Huang.

One-year-old branchlets covered with dense brown pubescence; two-year-old branchlets hairy. Ovary pubescent. Fr. Jul–Sep.

Weed-tree forests in valleys, mixed forests of coniferous and deciduous broad-leaved trees, *Tsuga* forests; 2000–2600 m. W Sichuan, SE Xizang, NW Yunnan [Bhutan, India, Myanmar, Nepal].

The wood is soft, light, and used for making plywood, packaging

material, mechanical models, agricultural tools, etc. The branchlets and leaves may be processed for their aromatic oil and are used as material for light industry. The seeds contain fat, which is used for making soap and lubricant.

1b. Dodecadenia grandiflora var. **griffithii** (J. D. Hooker) D. G. Long, Notes Roy. Bot. Gard. Edinburgh 41: 507. 1984.

无毛单花木姜子 wu mao dan hua mu jiang zi

Dodecadenia griffithii J. D. Hooker, Fl. Brit. India 5: 181. 1886.

Branchlets and ovary glabrous.

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Weed-tree forests in valleys, mixed forests of coniferous and deciduous broad-leaved trees, *Tsuga* forests; 2000–2600 m. Yunnan [Bhutan, India].

