15. DEHAASIA Blume in Nees, Syst. Laur. 372. 1836 ["Haasia"].

莲桂属 lian gui shu

Li Xiwen (李锡文 Li Hsi-wen), Li Jie (李捷); Henk van der Werff

Cyanodaphne Blume.

Shrubs to small- or medium-sized trees. Bark usually white, smooth, papery, exfoliating easily; xylem yellow. Branchlets white, slender and rigid, with conspicuous leaf scars. Terminal buds small, with 1 or 2 small and acute caducous scales. Leaves clustered at apex of branchlet; leaf blade pinninerved, reticulate veins like those of *Beilschmiedia* but usually very fine and nearly foveolate. Panicle axillary, usually slender, many or few flowered, usually upright and branched at a right angle; bracts and bracteoles deciduous. Flowers small or minute, bisexual. Perianth tube developed; perianth lobes generally unequal, outer ones always smaller. Fertile stamens (3 or)9; filaments of 1st and 2nd whorls all glandless, those of 3rd whorl each with 2 small glands at base; anthers 2-celled, cells of 1st and 2nd whorls introrse, those of 3rd whorl extrorse to lateral-extrorse. Staminodes minute, not stalked, triangular, sometimes all absent. Ovary ovoid; style short; stigma subpeltate. Fruit black, shiny, usually ovoid, rarely globose, with fleshy exocarp; fruit stalk generally scarlet or yellow or green, fleshy-dilated, obconical, warty, apex nearly depressed and rarely with persistent perianth lobes.

About 35 species: Cambodia, China, Indonesia, Laos, Malaysia, Myanmar, Philippines, Thailand, Vietnam, with the center of diversity in W Malaysia; three species (two endemic) in China.

- 1a. Stamens of 1st and 2nd whorls always infertile and reduced to staminodes, only those of 3rd whorl fertile 3. D. incrassata
- 1b. Stamens of 1st and 2nd whorls all fertile.
- **1. Dehaasia hainanensis** Kostermans, Bot. Jahrb. Syst. 93: 439. 1973.

莲桂 lian gui

Shrubs or small trees, up to 5 m tall, to 15 cm d.b.h. Branchlets vellow-white initially but soon graved, slender, glabrous, warty, lenticellate, with distinctive leaf scars; young ones ± angled; innovation covered with long and finely appressed hairs. Leaves alternate; petiole brown, (0.5-)1-2.3 cm, concave-convex, glabrous; leaf blade glaucous abaxially when young but nearly concolorous on both surfaces when mature. shiny adaxially, suboblanceolate to oblanceolate-elliptic, 3.5-9 × 1.5–4 cm, thinly leathery, glabrous on both surfaces, midrib elevated abaxially, impressed on its lower part at least adaxially, lateral veins (7 or)8-10 pairs, oblique-patent, arcuately interconnected near leaf margin, veins and veinlets conspicuous and foveolate on both surfaces, base attenuate and acute, apex shortly acuminate or obtuse. Panicle axillary, up to 2.5 cm before anthesis, very slender, glabrous, few flowered, few branched or nearly unbranched; peduncle slender; bracts and bracteoles subulate, deciduous. Pedicels slender, up to 5 mm. Flowers small, glabrous, up to 1.5 mm. Perianth tube broadly obconical, 0.5-0.8 mm; perianth lobes 6, subequal, broadly ovate, thin, $1.2-1.5 \times 1.2-1.3$ mm. Fertile stamens 9, densely golden villous, ca. 0.8 mm (of 1st and 2nd whorls) or ca. 0.7 mm (of 3rd whorl); filaments of 3rd whorl each with 2 suborbicular-cordate glands at base, those of 1st and 2nd whorls glandless; anthers of 1st and 2nd whorls broadly ovoid, with 2 introrse cells, those of 3rd whorl ovoid-square, truncate at apex, with extrorse cells. Staminodes deltoid-conical, stalked, including stalk ca. 0.6 mm; stalk densely golden yellow villous. Ovary ovoid, including style ca. 1.2 mm; style slightly slender; stigma small and subpeltate. Fruit ovoid, ca. 1.2 mm; fruit stalk slightly thickened, ca. as long as fruit. Fl. Apr–Jun, fr. Jul–Oct.

• Dense forests, thickets. Hainan.

Records of *Dehaasia cairocan* (S. Vidal) C. K. Allen (*Beil-schmiedia cairocan* S. Vidal) from China (e.g., in Fl. Hainan. 1: 275. 1964) are referable to *D. hainanensis*.

2. Dehaasia kwangtungensis Kostermans, Bot. Jahrb. Syst. 93: 461. 1973.

广东莲桂 guang dong lian gui

Trees, up to 6 m tall, to 15–20 cm d.b.h., glabrous on all parts. Branchlets gray-brown, slender, upright, smooth. Leaves alternate, clustered at apex of branchlet; petiole slender, 1–1.5 cm; leaf blade glaucous and opaque abaxially, green and shiny adaxially, elliptic, 5–10 \times 2.5–4.5 cm, thinly leathery, midrib and lateral veins elevated on both surfaces, lateral veins 5 or 6 pairs, oblique-patent, base acute, apex acuminate. Panicle axillary, slender, 2.5–6 cm, unbranched or shortly branched. Pedicels slender, 3–5 mm, dilated into a perianth tube ca. 0.75 mm on top. Ovary glabrous. Fruit unknown. Fl. May–Jun, fr. Jul–Oct.

- Valleys. Guangdong.
- **3. Dehaasia incrassata** (Jack) Kostermans, J. Sci. Res. (Jakarta) 1: 91. 1952.

腰果楠 yao guo nan

Laurus incrassata Jack, Malayan Misc. 2(7): 33. 1822; Dehaasia lanyuensis (C. E. Chang) Kostermans; D. triandra Merrill; Endiandra lanyuensis C. E. Chang.

Trees, 7–15 m tall. Branchlets grayish, terete, striate, glabrous. Leaves alternate; petiole ca. 2.5 cm, concave-convex; leaf blade elliptic or ovate-oblong, 10–13 × 5–7 cm, thinly leathery, glabrous on both surfaces, midrib conspicuously elevated abaxially, slightly impressed adaxially, lateral veins 8–10 pairs, elevated on both surfaces, arcuate-ascendant, reticulate veins and veinlets conspicuous, base cuneate or broadly cuneate, apex acute. Panicle axillary, inserted on nearby apex of branchlet, glabrous, blackish when dry; peduncle ca. 7 cm. Pedicels

slightly slender, ca. 3 mm; bracts small. Perianth tube campanulate; perianth lobes broadly ovate, ca. 1.2×1.4 mm, leathery, deciduous when in fruit, ciliolate on margin, acute at apex. Stamens adnate to perianth tube, those of 1st and 2nd whorls reduced to staminodes, spatulate, up to 1.1 mm, sparsely puberulent outside but densely tomentose on upper part inside, stamens of 3rd whorl fertile, ca. 1.3 mm, densely villous, each with 2 stalkless glands at base, anthers 2-celled, cells extrorse. Staminodes of innermost whorl subulate, densely tomentose. Ovary ovoid, partly immersed in perianth tube, ca. 1 mm, glabrous; style ca. 1.5 mm. Fruit oblong, ca. 4.5×2.5 cm, glabrous, blue-black when mature; fruit stalk dilated, red when mature. Seed large, with an orthotropous embryo. Fl. Feb–Mar, fr. May–Jun.

Thickets. S Taiwan (Lan Yu) [Indonesia, Malaysia, Philippines, Thailand].

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