A NEW CANARIUM (BURSERACEAE) FROM BATJAN I., MOLUCCAS, INDONESIA

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Canarium batjanense Leenh., nov. sp.

Descriptio typi: Arbor 35 m alta, 35 cm diam. Ramuli 2 cm diam., glabri; medulla fasciculis vasorum multis pro parte peripheralibus suffulta; gemma terminalis ± 1 cm longa. Folia 7-jugata. Stipulae in basi petioli insertae, subulatae, 4-5 mm longae, costatae, \pm persistentes. Petiolus 20 cm longus, ca. 5 mm diam., medulla ca. 20-25 fasciculis vasorum suffulta; petioluli laterales 1-1,5 cm longi, petiolulus terminalis 3 cm longus. Foliola ca. 20 cm longa, 6-8 cm lata, elliptica vel ovata, pergamentacea, glabra; basis subobliqua, rotundata vel subcordata; margo integer; apex abrupte acuminatus, acumine 0,5-1,5 cm longo, angusto, rotundato; costa supra prominula; nervi laterales inter se ca. 1,5 cm distantes, subpatentes, praeter marginem abrupte curvati, supra prominuli subtus prominentes; venae venulaeque minute reticulatae, utrinque prominulae. Infructescentiae axillares laxe thrysoideae, ad 16 cm longae, subglabrae; bracteae deltoideae; calyx applanatus 1 cm diam., extus subglaber, intus sericeus. Fructus late fusiformes, sectione transversa subtrigonales, 3 cm longi 1.5 cm diam., glabri; valvae pyrenae ca. 4 mm crassae; loculi 2 steriles, loculus fertilis 2 mm altus, 8 mm latus.

T y p u s: E. F. de Vogel 3646, Indonesia, Moluccas, P. Batjan, B. Sibela near Waiaua, 0°45' S, 127°32' E, alt. 910 m, 25-10-1974, fr. (L).

Tree up to 35 m high, the bole up to 25 m \times 38 cm d.b.h.; buttresses absent or up to 50 cm high, 70 – 80 cm spreading, and 5 – 7 cm thick. Twigs 2 cm diam., glabrous; pith with many vascular strands, partly forming a closed cylinder appressed to the wood, partly scattered; terminal bud 0.75 – 1 cm long. Leaves 5 – 8-jugate, up to 1 m long. Stipules basally attached, subulate with a dorsal rib and 4 – 5 mm long, leaving an inconspicuous disc-shaped scar, to strap-shaped (like in C. acutifolium), up to 25 mm long and at base up to 1.5 mm wide, leaving an elliptic scar, caducous to persistent. Petiole 20 – 30 cm long, halfway 4 – 6 mm thick, terete in cross-section; pith with up to c. 20 – 25 scattered vascular strands; rachis terete; lateral petiolules 1 - 1.5 cm long, terminal one 3 - 3.5 cm long. Leaflets $11 - 28 \times 6 - 10$ cm, c. 2 - 3.5times as long as wide, widest near the base to sometimes just below the middle, in terminal leaflets in the middle, stiff-pergamentaceous, glabrous; base equalsided to slightly oblique, rounded, truncate, or slightly cordate; margin entire; apex tapering to abruptly acuminate, acumen up to 1.5 cm long, slender, rounded to acute; the midrib slightly raised above, strongly so beneath; nerves in central part of leaflet c. 1.5 cm distant mutually, nearly transverse, strongly bent near the margin, above slightly raised, more so beneath; veins and veinlets rather finely reticulate, slightly raised at both sides. *Inflorescences* axillary, laxly thyrsoid, up to c. 50 cm long, nearly glabrous or the terminal parts sparsely rusty hairy; bracts deltoid. Flowers (2) 7 mm long. Calyx in 3 4 mm high, in 94.5 mm, outside with few scattered hairs only, inside densely appressed hairy. Petals 5.5 × 2 mm, fleshy, outside in the upper two thirds fairly densely hairy, inside glabrous. Stamens and staminodes 6, free, glabrous. Disk in \circ flower tubular, slightly 6-lobed, thin-fleshy, glabrous, c. 2.25

mm high. Pistil glabrous. Pistillode adnate to the disc, broad conical, c. 1 mm high, glabrous, the discal part slightly lobed. Calyx in fruit \pm flat with reflexed lobes. Fruits broadly spindle-shaped, slightly trigonous in section, 3×1.5 cm, finely wrinkled when dry, glabrous; lids c. 4 mm thick, 2 cells hardly developed, bent outwards like the fertile one; fertile cell 2 mm high, 8 mm wide.

MOLUCCAS. P. B a t j a n: B. Sibela near Waiaua, E. F. de Vogel 3646, 3673, 3696, 3729 (all in L).

Field characters. Bole straight, core solid. Outer bark not fissured, \pm peeling off, grey to whitish, 0.2-0.5 mm thick; inner bark 3-8 mm thick, reddish or inside whitish, with a little to much whitish or opaque resin, with a fragrant smell. Sapwood pale yellowish, not sharply set off against the slightly darker heartwood.

E c o l o g y. A canopy or subcanopy tree of rather dense to dense primary forest, often on steep, rather dry slopes, once near a river bank, on a deep or shallow clay, often with stones; bedrock grey schists. Flowers and fruits are collected in october. Altitude 250 – 1050 m.

Relationships. The present species seems to be allied with C. acutifolium Merr., C. balsamiferum Willd., and C. oleosum Engl. This is well in accordance with its geographical position (compare Leenhouts, Blumea 9: 317, fig. 9. 1959). It seems nearest to C. balsamiferum, which differs by the absence of stipules, the far stronger reduced pistil in the flower, and the fruit cells that are all three well developed. The only moderately reduced pistillode is well in accordance with C. oleosum, different in both other points mentioned under balsamiferum, however, and moreover in the much smaller, nearly ovoid fruits. Vegetatively, C. acutifolium and C. batjanense are hardly separable but for the longer and more persistent stipules of the former; C. acutifolium differs, however, in the strongly reduced pistillode and in the smaller and more globular fruits.

The present new species can be included in the key in the Flora Malesiana I, 5 (1956) 251 as follows:

- 6b. Stipules up to 1.5, rarely to 2.5 cm long, not distinctly exceeding the terminal bud. Branchlets solid. Stamens 6.
 - 7a. Branchlets 1.5-3 cm in diam., pith thick and soft.
 - 7A. Petiole terete with the stipules inserted at the base. Fruit glabrous

C. batjanense