

THE GENUS CONANDRIUM MEZ (MYRSINACEAE)

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SUMMARY

A taxonomic revision of the genus *Conandrium* Mez, which is reduced to 2 species, one in the Moluccas and in the extreme West of New Guinea, the other widely distributed all over New Guinea and the Bismarck Archipelago, and apparently also represented in the Aru Islands. A key to the species, complete descriptions and an enumeration of the collections studied are given.

INTRODUCTION

The genus *Conandrium* was described by Mez in his Monograph of the Myrsinaceae (1902), based on two species which had been considered before to belong to *Ardisia* Sw., i.e. *C. rhynchocarpum* from Amboina, and *C. polyanthum* from the Madang District in New Guinea. In fact only one character, the coherence of the anthers, distinguishes *Conandrium* from *Ardisia* with its free anthers; the limitation of this character to Eastern Malesia within the enormous distributional area of *Ardisia* gives some weight to such a distinction on the generic level.

A number of new species has been added more recently to *Conandrium* mainly by Mez himself, all from New Guinea. They are considered by the present author to represent forms of *C. polyanthum* without taxonomic value. The wide range of this species in New Guinea and the Bismarck Archipelago is now apparent. Specimens cited are preserved at L, if not stated otherwise.

CONANDRIUM

Conandrium Mez, Pflanzenr. 9 (1902) 156. – *Amblyanthus* A.DC. sect. *Conandrium* K.Schum., Fl. Deutsch. Schutzgeb. Südsee (1900) 492, in adnot. – Type: *C. polyanthum* (Laut. & K.Schum.) Mez.

KEY TO THE SPECIES

- 1a. Inflorescence finely rufous-papillose. Drupe apiculate by the remnant style base
1. *C. rhynchocarpum*
- b. Inflorescence glabrous. Drupe depressed-globose, flattened at the top
2. *C. polyanthum*

1. *Conandrium rhynchocarpum* (Scheff.) Mez

Conandrium rhynchocarpum (Scheff.) Mez, Pflanzenr. 9 (1902) 156; Merr., Philipp. J. Sci. 11 (1916) Bot. 302. — *Ardisia rhynchocarpa* Scheff., Myrsin. Arch. Ind. (1867) 68. — T y p e : *A. Zippelius* s.n. anno 1828, fr., Moluccas, Amboina (L).

Shrub or treelet, 0.5–1.5(–4) m tall. Branchlets slightly compressed at tips, base thickened, glabrous. *Leaves* lanceolate to oblanceolate or sometimes lanceolate-elliptic, apex gradually attenuate to subacuminate, tip subacute or obtuse, base more or less elongately cuneate, chartaceous to subcoriaceous, brown when dry, with scattered thickish glandular points on both faces, edge subundulate or entire, (17–)26–30(–40) by (4.5–)7(–10) cm, midrib robust, impressed above, prominent beneath, or rather flat in dry specimens, lateral nerves 15 or more pairs, moderately curved-ascending, excurrent along the edge, slightly raised mainly beneath, reticulation of veins and veinlets dense, a little prominent on both faces; petiole robust, subulate, 0.5(–1) by c. 0.3 cm. *Racemes* solitary, simple, from the uppermost 1 or 2 (rarely more) axils, many-flowered, the flowers crowded in the upper part of the rachis, 15–23 cm; pedicels clavately thickened distally, fuscous-papillate all over, 0.5–1 cm; bracts green, caducous. *Flowers* 5-merous, pink to red-purple. *Calyx lobes* ovate, obtuse, glandular-punctate, ciliate, 2.5 mm. *Corolla lobes* ovate, glandular-punctate, ciliolate, 3–4(–6) mm. *Ovary* narrowly ovoid, attenuate to a short style; stigma punctate. *Drupe* subglobose-ellipsoid, apiculate by the slightly protracted remnant style base, c. 7 by 5 mm in dry specimens, on pedicel 1–2 cm.

D i s t r i b u t i o n. Moluccas and the extreme West of New Guinea.

E c o l o g y. In primary forest, from sea-level to c. 600 m.

N o t e. The determination of the New Guinea specimen remains somewhat uncertain, as flowers are missing.

M O L U C C A S. Sula Is., Mangole, Vesuvian Bay, *Bloembergen* 4794; Sulabesi, Kabauw, *Bloembergen* 4556. — Obi, Anggai, G. Batu Putih, *de Vogel* 3978, 3989. — Buru, Kajeli, *Teijsmann* s.n. Wae Kose, Wae Nibe, fl. fr., *Mogea* 5151. Wacha, fl., *van Balgooy* 4662. — Amboina, *Dolleschal* 332 (W, cit. Mez, n.v.), *Robinson* 1882. — Ceram, Central part, Kaniki, *Kornassi (Exp. Rutten)* 1388. Eastern part, Mt Kilia, *Buwalda* 5658.

N E W G U I N E A. Western part, Vogelkop Peninsula, Steenkool, road to Tambuni, km 1.5, fr. apiculate, 7 May 1954, *van Royen* 3555.

2. *Conandrium polyanthum* (Laut. & K.Schum.) Mez

Conandrium polyanthum (Laut. & K.Schum.) Mez, Pflanzenr. 9 (1902) 157, f. 25; K.Schum., Nachtr. Fl. Deutsch. Schutzgeb. Südsee (1905) 343; Streiman, The plants of the Upper Watut watershed of Papua New Guinea (1983) 146. — *Amblyanthus polyantha* Laut. & K.Schum. in K.Schum., Fl. Deutsch. Schutzgeb. Südsee (1900) 491. — T y p e : *C. Lauterbach* 1224, New Guinea, Madang Dist., Constantinhafen (= S of Bogadjim), 30 m, fl. fr., 12 Dec. 1890 (WRS�-Lauterbach; B, lost; L, iso).

Amblyanthus polyantha Laut. & K.Schum. var. *minor* K.Schum., Fl. Deutsch. Schutzgeb. Südsee (1900) 491. — T y p e : *G. Bamler II-13*, New Guinea, Morobe Dist., Sattelberg, fl., 12 Dec. 1898 (B, lost; WRS�-Lauterbach, iso).

Ardisia speciosa auct., non Blume 1826; Warb., Bot. Jahrb. 18 (Dec. 1893) 204, based on *F. Hellwig* 181, 461 & 464 from Kelana & Butaueng near Finschhafen, all lost in B; K.Schum., Fl. Deutsch. Schutzgeb. Südsee (1900) 488.

- Conandrium gymnopus* K. Schum., Nachtr. Fl. Deutsch. Schutzgeb. Südsee (1905) 344, ex descr. – T y p e : *E. Nyman 151*, New Guinea, Madang Dist., Stephansort (now Bogadjim), fl., Jan. 1899 (B, lost). No duplicate at S.
- Conandrium ledermannii* Mez, Bot. Arch. 1 (1922) 256, ex descr. – T y p e : *C. Ledermann 11138*, New Guinea, E. Sepik Dist., Hunsteinspitze (B, lost).
- Conandrium finisterrae* Mez, Bot. Arch. 2 (1922) 176. – T y p e : *R. Schlechter 18055*, cit. '19055', New Guinea, Madang Dist., Finisterre Ra., 900 m, fl., 22 July 1908 (B, lost; K, P, iso).
- Conandrium maius* Mez, Bot. Arch. 2 (1922) 175, ex descr. – T y p e : *R. Schlechter 18425*, New Guinea, Madang Dist., W. Finisterre Ra., Keneyia (= Ramu) R., gallery forest, fl., Sept./Nov. 1908 (B, lost).
- Conandrium multipunctatum* Mez, Bot. Arch. 2 (1922) 175. – T y p e : *R. Schlechter 17163*, New Guinea, Madang Dist., Kani Mts, fl. (B, lecto, lost; P, isolecto); *R. Schlechter 17107*, *ibid.*, Ibo Mts, fl. (B, syn, lost); *C. Ledermann 9761*, New Guinea, E. Sepik Dist., April R., fl. (B, syn, lost; L, isosyn); *C. Ledermann 10043*, *ibid.*, 'Lordberg', fl. (B, syn, lost; K, L, isosyn).
- Conandrium peekelii* Mez, Bot. Arch. 2 (1922) 175; Peekel, Fl. Bismarck Arch. (1984) 427, f. 683. – T y p e : *G. Peekel 845*, New Ireland, Lemakot (Lamekot), fl. (B, lost). Matched by *Peekel 52* from type area (BO, L).
- Conandrium forbesii* S. Moore, J. Bot. 61 (1923) Suppl. 29. – T y p e : *H. O. Forbes 597*, New Guinea, Central Dist., Mt Korkoko, Sogere area, anno 1885/86, fl. (BM; K, L, iso).
- ? *Ardisia conandroides* Kaneh. & Hatus., Bot. Mag. Tokyo 57 (1943) 217, f. 3. – T y p e : *R. Kanehira & S. Hatusima 12625*, W. New Guinea, Geelvink Bay, Ayeryat (40 km inland from Nabire), fr., 8 March 1940 (FU, n. v.; A, iso).

Glabrous shrub or bushy tree with spreading branches, 1–6(–15) m tall; bark smooth, gray to brown. Branchlets thickened at very base, compressed in the youngest parts, terete in the older ones, finely striate, pale grayish brown in dry specimens. *Leaves* elliptic or generally elliptic-oblong, sometimes lanceolate-oblong, apex broadly attenuate, subacuminate or obtuse, base cuneately attenuate, rarely obtuse, firmly chartaceous to subcoriaceous, sometimes almost coriaceous, dark to medium green and shining when fresh, usually of a gray-olivaceous-brownish colour and dull on both faces when dry, glabrous, with a thickish gland within each areola of veinlets distinct on both faces, entire, 9–18(–22) by (2.5–)3–6(–8) cm, variable in size in the same specimen, midrib narrow, a little or hardly impressed above, prominent beneath, lateral nerves 15–20 (or more) pairs, with additional shorter ones between, all rather straight or moderately curved from the midrib, parallel to each other, more curved towards the edge, slightly though visibly raised on both faces, reticulation of veins and veinlets fine and dense, somewhat prominent (lens!) on both faces; petiole canaliculate, 8–12(–15) by 1.5–2 mm. *Racemes* and/or panicles solitary from the uppermost 3–5 axils of generally already fallen leaves, composed of slender spreading partial racemose inflorescences, forming together a squarrose and seemingly terminal large panicle, (4.5–)6–14(–22) cm, peduncled to 5 cm; rhachis rather slender, often a little zigzag, glabrous, thickened at the very base, many-flowered; pedicels 5–8(–10) mm at anthesis. *Flowers* 5-merous, purplish red. *Calyx lobes* ovate-obtuse to orbicular, spreading or reflexed, greenish, ciliate and finely erose, thickly dark glandular-punctate, 1.2–1.5 mm. *Corolla* ovate in bud, lobed to almost the base at anthesis, lobes ovate-acuminate, manifestly ciliate in their lower part, glandular-punctate, 2.5–3(–4) mm. *Stamens* connivent over the ovary; anthers connate at least in their lower half, 2–2.5 mm; filaments free,

broadly triangular, 0.8 mm. *Ovary* globular; style filiform, 1.5–2 mm. *Drupe* globose, a little depressed, densely glandular-punctate, purple red to blackish at maturity, 3.5–4.5(–5) mm in diameter when dry, reported to be 6–7(–10) mm when fresh, on stoutish pedicel to 15 mm long; exocarp thin, fleshy; endocarp thin, hard.

Distribution. All over New Guinea and the Bismarck Archipelago, apparently also in the Aru Is., but absent from the Solomon Is.

Ecology. In coastal lowland to montane, also disturbed or secondary rain forest, often along bank of stream, occasionally in old gardens regrowth, swamp forest or closed savannah forest, from sea-level to 1400(–2195) m altitude.

NEW GUINEA. W. part: Geelvink Bay, Meos Num I., *BW 15033*. Idenburg R., Bernhard camp, *Brass 12870, 13873*. Bernhard bivouac, 50 m, *bb 25658*. Eipomek valley, *Hiepko & Schultze-Motel 1433*. Swart valley, *Bergman 440* (S). Baliem R. valley, *Brass 11707, Kostermans & Soegeng 852, 991*. Vogelkop Peninsula, Arfak Mts, *Mayr 26* (BO), *493* (BO). Minjambau, 1250 m, *BW 12706*. Warnapi, 80 km S of Manokwari, *Kostermans 4742*. Nassau Mts, Explor. bivouac, *Docters van Leeuwen 10748*. Hollandia (Jayapura), *Kostermans & Soegeng 304, 347*. Mt Cyclops, Ifar to Ormu, *BW 923*. – E. part: W. Sepik Dist., Telefomin, *Johns 124, NGF 20640, 41597*. – E. Sepik Dist., Dagua, *NGF 5446*. Prince Alexander Ra., Mt Turu, *Pullen 1538*. – Western Dist., Bensback, Weam, *NGF 33485*. Lake Daviumbu on Middle Fly R., *Brass 7872*. Kiunga, Ningerum, 1510 m, *Hydman 15*. Nomad area, *LAE 73925*. Mt Bosavi, 1700 m, *Jacobs 9035*. – Gulf Dist., Tauri R. area, *Craven & Schodde 948, 1028, Schodde (& Craven) 4538, 4624*. Kaintiba, *Kairo et al. 798*. Vailala R. area, *Schodde (& Craven) 4224, 4428*. – W. Highl. Dist., Jimi, Ruti cattle station, *LAE 56767*. Wankl, *Hoogland & Pullen 5805*. Baiyer R., *NGF 6802, Vinas 3252*. Gaharisuka Nat. Park, *LAE 77655*. Wabag, Lai R. valley, *Robbins 2882*. Lake Birip, *ANU 2747*. Hagen, Mt Kum, *LAE 52019, Robbins 507*. Nondugl, *NGF 4329, 4331*. Kubor Ra., *Vink 16404*. – S. Highl. Dist., Koroba, Tagari, *UPNG 1727*. Lake Kutubu, *NGF 8120, Schodde 2341*. Tari, Tigibi, *Vink 16805*. – E. Highl. Dist., Kainantu to Okapa, *Robbins 948, Stauffer & Sayers 5594*. Kundiawa, *LAE 58179*. Mt Michael, 2000 m, *Brass 31480*. – Goroka, Watabung, 2195 m, *NGF 48580*. Dunantina, 1400 m, *Hoogland & Pullen 5249*. – Madang Dist., Lower Ramu R., Bogia, *Pullen 1172*. Bogadjim (Stephansort), *Nyman 141* (S). Gogol R. valley, *LAE 63525, 75162, NGF 46610, Rau 187*. Saidor, Naho-Rawa divide, *NGF 21318*. Finisterre Ra., Damanti, *Pullen 5972*. Amiaba R., *NGF 45966*. Long I., *LAE 55029*. Karkar I., *NGF 33964, 43195, 43395*. – Morobe Dist., Lae, *Hartley 9660, NGF 1715, 13897, 18875, LAE 72384*. Labu beach, *Hartley 12365*. Oomsis creek, *Brass 29285, Hartley 10059, NGF 11613*. Bumbu R., *NGF 5691, 14848*. Lasanga I., *NGF 44176*. Gabensis, *Vinas 247*. Boana, Mt Jasop, *LAE 74624*. Buso R., *LAE 52040, 52050*. Finschhafen, *Hellwig 181* (B, lost), *461* (BO), *464* (B, lost). Umboi I., *LAE 66092*. Aseki Patrol area, *Craven & Schodde 1385*. Kajabit mission, *Clemens 10771* (A). Sattelberg area, *Clemens 182, 630, 630a, 1211, 8297* (B). Menyamya, Hekwangi area, *Kairo 497, 522, 524*. Wagau, *Hartley 12579, NGF 21649, 23418*. Herzog Ra., *NGF 17806*. Bulolo area, *Hartley 10913, Kairo 280, 284, 285, 286, 287, NGF 4078, 7244, 7478, 11199, 14473*. Wau area, *Conn & Kairo 145, Hartley 11463, NGF 23045, 26332, 26339, 42142*. Garagos creek, *NGF 7244*. Bakaia near Garaina, *Hartley 12642*. – Northern Dist., Tufi, Wanigela, *Hoogland 4779*. Popondetta, Nindewari, *NGF 31761*. – Central Dist., Port Moresby area, *NGF 10739, 32487, LAE 51514A*. Brown R. area, *NGF 2547, 22123, Schodde 2547*. Rouna, *Carr 12906, Hartley 10711*. Ononge road, 700 m, *Brass 3917* (BO ex NY). Gauguri, *Rau 468*. Sogere, *Forbes 554* (BM, cit. S. Moore). Magarida, *NGF 25802*. Boridi, *Carr 14714, 14841, LAE 60117*. Astrolabe Ra., *F.H. Brown anno 1898* (B, lost), *LAE 50345*. – Milne Bay Dist., Alotau, Pini Ra., *LAE 76974*. Baniara, *Saunders 121*. Medino, *Hoogland 4766*. Agaun, *LAE 58158*. Menapi, *Brass 21818*. Tagula I., *NGF 25392, LAE 74542*. Fergusson I., *NGF 49925, LAE 68615*. Kiriwina I., *UPNH 2102*. Goodenough I., *Brass 25108, NGF 20799*. Misima I., *Brass*

27388. Pana Muti I., *NGF 43346*. Woodlark I., *Brass 28780*. Rossel I., *Brass 28574*. Normanby I., *Brass 25366, 25475, NGF 8603, LAE 68867*.

ADMIRALTY ISLANDS. Manus I., *LAE 53624, 59204*.

NEW BRITAIN. Kandrian, Fullerborn harbour, *NGF 21861* (BO). Talasea, Cape Gloucester, *NGF 26649*. Willaumez Peninsula, *LAE 66518*. Keravat, *NGF 6690*. Gasmata, *NGF 26552, LAE 58344*. Kombi, Linga Linga I., *NGF 32266*. Kilenge, *NGF 30468*. Pomio, Mengen massif, *LAE 58726*. Wariai, Benim, *NGF 27319*. Cape Hoskins, *NGF 6435, 32349*. Kapiura T., *LAE 75342*. Mt Bango, *NGF 29443*.

NEW IRELAND. Lemakot area, *Peekel 52* (BO, L). Kavieng, Panapai, *LAE 65342*. Kapsu plantation (2°43' S-151°03' E), 50 m, *NGF 29652*.

ARU ISLANDS. P. Wokam, fr. slightly depressed-globose, *Buwalda 5040* (BO, fl. absent, determination thus somewhat uncertain).