

## CORONANTHERA GRANDIS (GESNERIACEAE), A NEW SPECIES FROM THE SOLOMON ISLANDS

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THE GENUS *Coronanthera* C. B. Clarke includes eleven species, ten of which are restricted to New Caledonia. A single species, *C. australiana* C. T. White, was described from material collected in Queensland. However, S. L. Everist (personal communication) indicates that White in a later collection (*White 10548*, Sept., 1936) confirmed that the Queensland species has fleshy, indehiscent fruits. This character would exclude it from *Coronanthera* and also from the tribe Coronanthereae, as delineated by Burtt (1962). Therefore, the presence of the genus in Australia may be questioned.

The tribe Coronanthereae is assigned by Burtt (*op. cit.*) to the subfamily Gesneroideae, and is comprised of *Coronanthera*, *Rhabdothamnus* A. Cunn. (1 sp., New Zealand), *Negria* F. Muell. (1 sp., Lord Howe Island), and *Depanthus* S. Moore (based on *Coronanthera glabra* C. B. Clarke, New Caledonia). These four genera, in addition to the genus *Fieldia* F. Muell. (1 sp., S. E. Queensland) of the tribe Mitrarieae, constitute the total representation in the Old World of the large (over 70 genera) New World subfamily Gesneroideae. It is perhaps noteworthy that this representation occurs in a somewhat limited phytogeographic area that includes New Zealand, Lord Howe Island, New Caledonia, and Queensland. The additional species of *Coronanthera* described in this paper is a first record for the Coronanthereae in the Solomon Islands. It is significant that the area of distribution presently excludes New Guinea, but it probably would not be excessively speculative to predict the representation of the Coronanthereae on that island.

The Coronanthereae are characterized by dehiscent fruit and cymose inflorescences. In the genus *Coronanthera*, the fruit dehisces along the sutures of the four apically coherent valves (FIG. 1, H). Dispersal, apparently, is by means of the shaker action of the capsule and the subsequent transport, by wind, of the very light seeds. It is this highly distinctive fruit that enabled me to recognize specimens of the new species in a survey of South Pacific material of the genus *Cyrtandra*.

***Coronanthera grandis* G. W. Gillett, sp. nov.**

FIG. 1.

Frutex procerus vel arbor ad 15 m. alta. Folia, ramuli et inflorescentia pilis velutinis septatis non capitatis 50–100 $\mu$  diametro, 1–2 mm. longis. Ramulis teretibus, 3–6 mm. diametro. Folia opposita, in eodem pari aequalia, petiolus gracilis, velutinus, 2–5 cm. longus, lamina elliptica

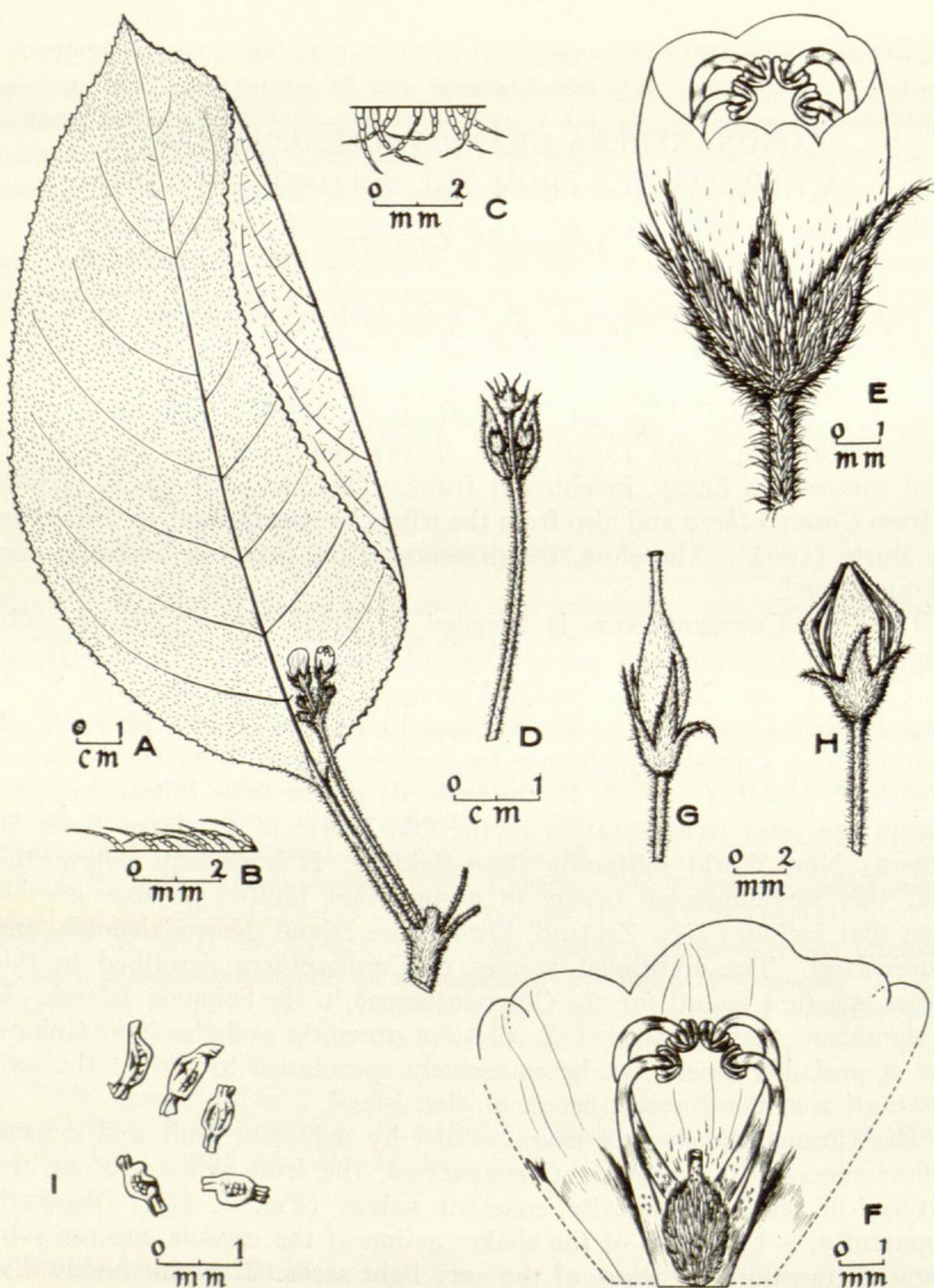


FIG. 1. *Coronanthera grandis* G. W. Gillett. All drawings from Kajewski 1749. A, leaf and axillary inflorescence; B, upper leaf surface showing antrorsely appressed sericeous hairs; C, lower leaf surface showing spreading hairs; D, cymose inflorescence, bracts, and peduncle; E, posterior view of flower; F, flower with corolla opened out on the posterior sinus; G, capsule prior to dehiscence; H, dehiscent capsule showing longitudinal fissures; I, seeds.

usque ovata, 12–20 cm. longa, 7–12 cm. lata, basis rotundata usque acuta, apex acutus usque acuminatus, margines serrati usque serrulati (3–8 dentibus in quoque cm.), superne pubescentia appressa sericea instructa, inferne dense villosa, nervi secondarii in quoque latere 6–8, curvi sursum, subter prominulis, venulae reticulatae supra obscurae, subter prominulae. Cicatrices foliorum conspicuae in ramulos, obtriangulares, infra rotundatae, 2–3 mm. latae, cicatrice fasce magna centrali. Inflorescentia axillaris cyma, floribus 3–8, pedunculus gracilis, 1 mm. diametro, 3–10 cm. longus, dense pilosus, ad apicem bracteatus, bractae duae, aequales, lanceolatae vel ovatae, 10–15 mm. longae, 2–5 mm. latae, pilosae, caducae, pedicelli inaequales, 1–2 cm. longi per anthesin, crescens ad 2–4 cm. quum capsulae maturae. Calyx 1 cm. longus, fissus per  $\frac{2}{3}$  longitudinis sua in lobos lanceolatos, aequales, acuminatos, extus intusque sericeus. Corolla urceolata, flavovirens, 8–10 mm. longa, 4–5 mm. lata, fissa inaequalis 1–3 mm. in lobos rotundatos, extus sericea intus superne glabra, inferne pilosa rare, limbus corollae bilabiatus, recurvus, labio superiore lobis duobus aequalibus 1 mm. longis, 1 mm. latis instructo, labio inferiore lobis tribus inaequalibus 1.5–2 mm. longis, 2–4 mm. latis. Stamina 4, filaments aequalia, 6 mm. longa, 2 mm. ad tubum corollae affixa, 4 mm. liber, curvata superne versus centrum floris, superne glabra, inferne indumento sparso pilorum capitatorum instructa, antherae aequales, sagittatae, cohaerentes, facientes figura lunata adversus basem labi inferni corollae. Staminodium 1, 4 mm. longum, 3 mm. ad tubum corollae affixa, 1 mm. liber, pars libra portata ad altitudinem stigmatis, adversus sinum superum corollae. Gynoecium 5 mm. longum, ovarium ovoideum, 3 mm. longum, 1.5 mm. latum, piloso pilorum non capitatorum ascendentium instructo, uniloculare, placentis 2 parietalibus instructo, stylus 1 mm. longus, cylindraceus, superne glaber, inferne indumento sparso vel denso pilorum capitatorum instructus, stigma peltatum integrum, in centro depresso. Fructus capsula fusca, ovoidea, subulata, tomentosa, 8–10 mm. longa, 3–5 mm. lata, quadrivalvis, valvae ad apices connatae, inferne fissuris tenuibus longitudinalibus separatae, fissurae 5–6 mm. longae, 0.5–1 mm. latae, seminibus per fissuras laterales elapsis. Semina numerosa, fulvo-brunnea, ovoidea, fusiformes, 0.75 mm. longa, 0.4 mm. lata, testa reticulato-foveolata. Holotypus *Kajewski* 1749 (A), insula Bougainville.

Solomon Islands (Australian Territory of Papua and New Guinea). BOUGAINVILLE ISLAND, Crown Prince Range: Kupei Gold Fields, 900 m. (Rupei, near Kieta), April 22, 1930, *Kajewski* 1749 (A, holotype; BISH, isotype); Koniguru, 950 m. (near Buin), *Kajewski* 2122 (A, BISH). SANTA YSABEL ISLAND (British Solomon Islands Protectorate): Kakatio, 900 m., Brass 3252 (A, BISH).

The local name on Bougainville Island is "Coru-cokor" (*Kajewski* 2122), while on Santa Ysabel Island it is "Momona" (Brass 3252).

Appreciation is extended to Drs. Richard A. Howard, Director of the Arnold Arboretum of Harvard University, and Roland Force, Director of the Bishop Museum, who permitted me to examine specimens under

their care. The financial assistance of the National Science Foundation (Grant GB-3336) is gratefully acknowledged.

#### LITERATURE CITED

BURTT, B. L. Studies on the Gesneriaceae of the Old World XXIV: tentative keys to the tribes and genera. *Notes Bot. Gard. Edinb.* **24:** 205-220. 1962.

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Gillett, George W. 1967. "Coronanthera grandis (Gesneriaceae) a new species from the Solomon Islands." *Journal of the Arnold Arboretum* 48(3), 245–248.

<https://doi.org/10.5962/p.67868>.

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