

Nov. 1988, *B. Johansen & M. Sørensen 138* (Holotype: C) (Fig. 1).

Warmingia zamorana satis similis, foliis coriaceis, late lanceolatis, subfalcatis, inflorescentia pauciflora (2-4 floribus), petalis rhombicis, appendicibus columnae porro directis ab ea diversa. Flores ante anthesin semet ipsos pollinantes.

Epiphytic perennial herb to 7 cm high. **Roots** numerous, 1 mm in diameter, white, smooth. **Pseudobulbs** small, composed of one internode, conical to ovoidal, unifoliate, 7-8 mm tall, 3-4 mm wide, covered with 3-4 withering brown sheaths arising from the very short rhizomatous part of the shoot. **Leaves** coriaceous, lanceolate, somewhat falcate, 3.5-6.0 cm long including the 0.6-1.0 cm long petiole, 1.0-1.7 cm wide, dark green. **Inflorescence** 1-(2) racemose, pendent, emerging from the sheath at base of the pseudobulb, up to 3 cm long, with 2-3-(4) ivory-white, semi-opaque flowers. **Bracts** triangular, 6 mm long, 3 mm wide at the base. **Ovary** 8-9 mm long including the short pedicel. **Dorsal sepal** elliptic-lanceolate, slightly concave, with a carinate, acute apex, 8 mm long, 3 mm wide near the middle. With three prominent nerves. Margins entire. **Lateral sepals** similar to dorsal sepal, slightly falcate, 7 mm long, 3 mm wide. **Petals** rhomboid, 8 mm long, 5 mm wide, 5-nerved, slightly carinate at the apex, margins denticulate-erose to somewhat crispate. **Labellum** trilobed just above the base, 8 mm long, 9 mm wide across the sidelobes when spread out; sidelobes erect, transversely elliptic to reniform, 3 mm long, 5 mm wide, with erose-serrate margins; midlobe broadly ovate, acute 3 mm long, 3 mm wide, with erose-serrate margins, 3-nerved. **Callus** bilobed, deeply sulcate, appear to originate

Warmingia margaritacea B. Johansen sp. nov.

TYPE: COSTA RICA, Turrialba, C.A.T.I.E. Epiphytic on *Hibiscus* sp. forming hedge, 600 m. 19

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²Warming, E. Orchidaceae brasiliensis I. Unpublished manuscript. Central Botanical Library, University of Copenhagen, Denmark.

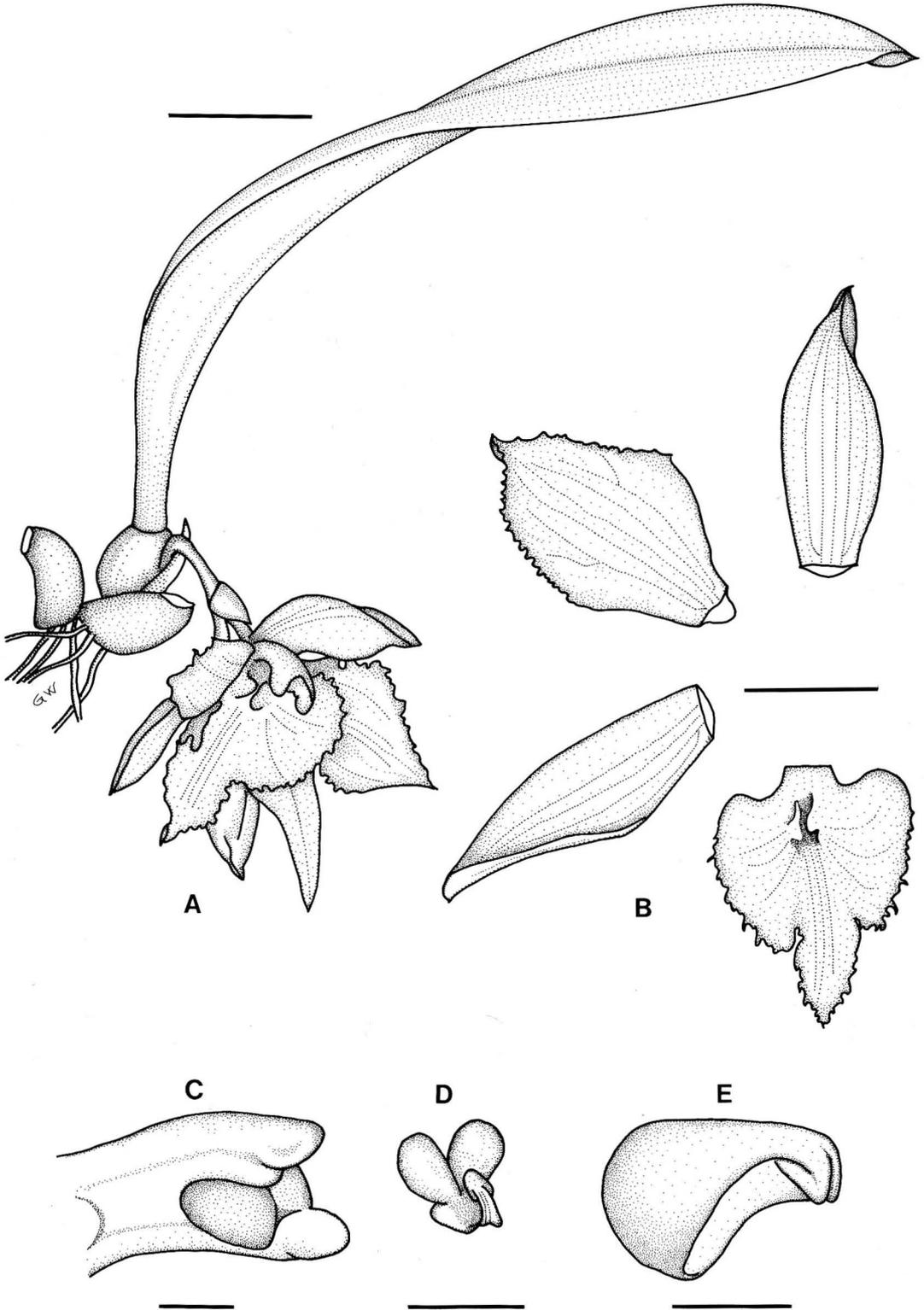


Fig. 1. *Warmingia margaritacea* B. Johansen, *sp. nov.* A. Plant. Bar = 5mm; B. Sepals, petal, and labellum (spread out). Bar = 3mm; C. Column. Bar = 1mm; D. Pollinarium, the stipe bent during self-pollination. Bar = 1mm; E. Anther cap. Bar = 1 mm.

from the base of the sidelobes. **Column** terete to semi-terete, 3 mm long, 1 mm wide, slightly expanded and with two appendages at the apex. Appendages erect, rounded. **Stigma** entire. **Anthercap** ovate, with a decurved truncate apex. **Pollinia** two, ovoid, yellow. **Stipes** obtriangular. **Viscidium** ovate, detachable. **Self-pollinating** by decurvature of the stipes before the flower opens. **Capsule** elliptic to obovate, 12 mm long, 8 mm wide. **Seed** with ivory-white testa.

Etymology: *margaritacea* (from Latin: *margarita* = pearl) describes the pearly appearance of the semi-translucent flowers.