CONTRIBUTIONS TO PAPUASIAN BOTANY II. A NEW SPECIES OF ACIANTHUS (ORCHIDACEAE) FROM BOUGAINVILLE ISLAND

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Acianthus vulcanicus Schodde, *sp. nov.* — **Fig. 1.**

Herba terrestris infirma ca. 7—13 cm alta, folio profunde cordato margine subtilissime crenulato, bracteis late ovatis acutis ovario sub-aequilongis, sepalo dorsali attenuatim lineari, sepalis lateralibus petalisque filiformibus, labello latissime rhombico glabro, in fauce callo compresso-linguiformi acuto praedito, ad columnam appendice ventrali acuto-mucronato aliformi. Distinctus ab omnibus speciebus notis Acianthi callo compresso-linguiformi et columna alata.

Typus: *R. Schodde and L. Craven 3889*, South rim of Lake Loloru crater, Bougainville Island, 23-8-1964; holotypus: CANB.

Delicate glabrous terrestrial herb *ca.* 7—15 cm tall. *Stems* erect, terete, with the solitary leaf ± half way up, and (1—)3—5(—8) flowers at the apex in a spicate inflorescence, the floral internodes 7—8 mm. *Leaf* very deeply cordate, sub-orbicular and unlobed, 2—2½ × 1½—2 cm, drying papyraceous, with the margin very finely crenulate. *Bracts* broad ovate, acute, (5—)6—8 × 4—6 mm, almost as long as the ovary at flowering stage, sessile, planate. *Flowers* large for the genus, early caducous, on a slender peduncle 2—3 mm long. Dorsal *sepal* linear attenuate, *ca.* 10—12 mm long, flexed over flower, pale green in life; lateral sepals attenuately filiform, *ca.* 11—13 mm long, horizontal below the labellum, crossed at the tips, pale green in life; *petals* attenuately filiform, *ca.* 10—12 mm long, flexed above the labellum, pale green in life; *labellum* planate broad rhombic, 10—12 × 11—13 mm, horizontal or slightly pendant, and maroon brown in life, with the margin entire except for fine crenulations about the acuminate apex, and a single laterally compressed, linguiform, acuminate callus *ca.* 2—2½ mm long in the throat. Column sub-erect and apically inflexed towards the labellum, *ca.* 4 mm long, with a single ventral, hyaline, acutely mucronate, wing-like appendage. Ovary terete, *ca.* 5 mm long in flower to *ca.* 8—9 mm long in fruit.

Distribution. Known only from the type collection from Lake Loloru crater, an old volcano at the south end of the volcanic cordillera on Bougainville Island, Solomons Group.

Ecology. Observed growing in colonies of 5—10 plants on decayed logs and vegetable matter on the ground in stunted cloud forest with *Pandanus*; altitude ± 1800 m. Flowering in late August.

Affinities. In the shape of the flower buds and the form of the perianth and labellum, *A. vulcanicus* appears to be most closely allied to the Australian species *A. reniformis* (R. Br.) Schltr. and *A. amplexicaulis* (F. M. Bail.) Rolfe, notably the form of the latter from the Atherton Tableland described by Dockrill (1955) as *A. sublestus*, and the New Caledonian species *A. tenellus* Schltr. It is distinct from all known members of the genus

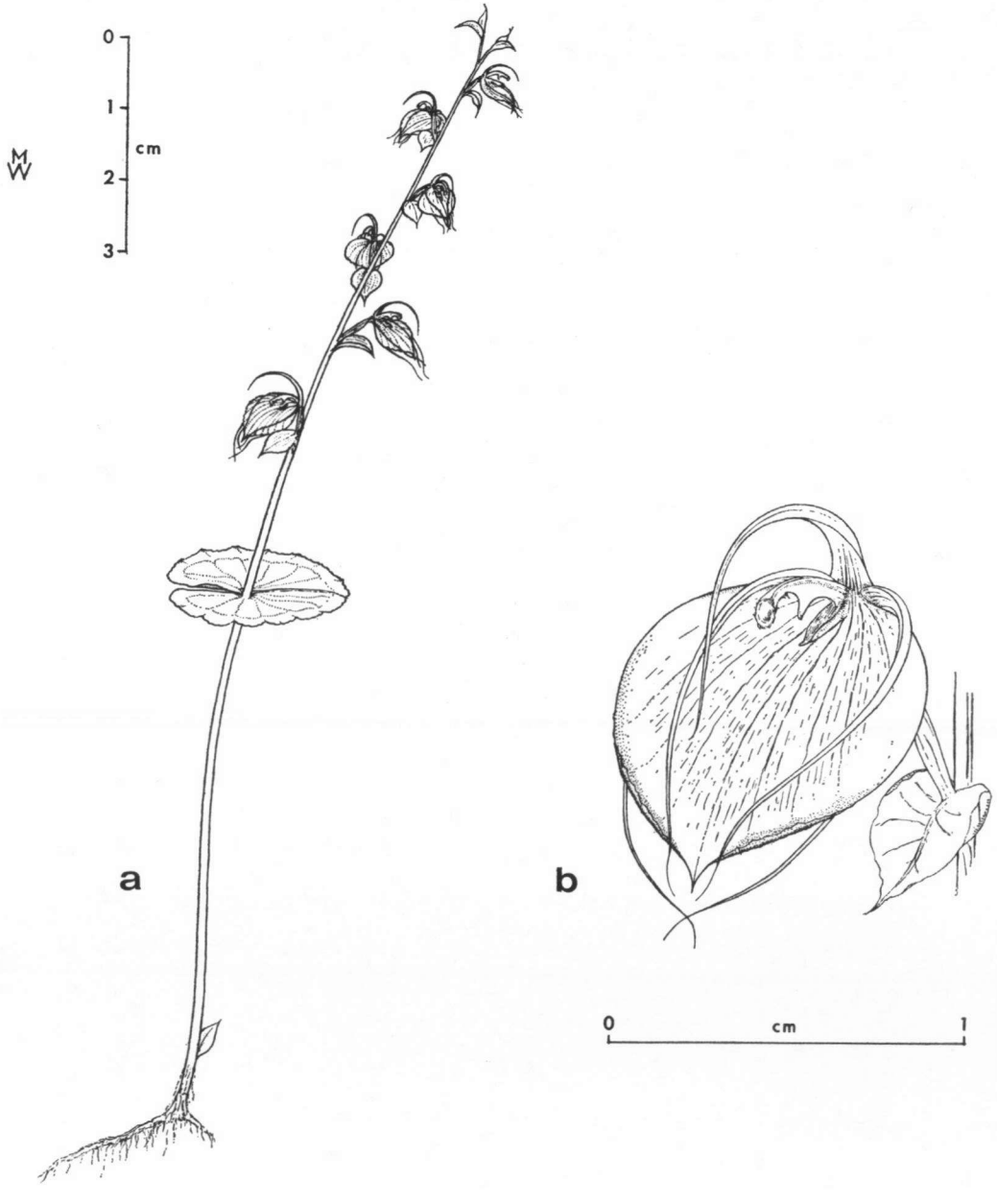

Fig. 1. *Acianthus vulcanicus* Schodde. a. Whole plant; b. flower. (*Schodde and Craven 3889*, type).

in its acute tongue-shaped callus in the throat of the labellum and hyaline wing on the underside of the column. Hooker (1864) and Rendle (1921) respectively record appendages on the column of some New Zealand and New Caledonian species, but none of these are in the form of a ventral wing.

Note. This is the first record of the genus *Acianthus* from the Solomon Islands; the genus has previously been known only from Australia, Tasmania, New Caledonia, and New Zealand. Professor C. G. G. J. van Steenis (pers. comm.) informs me that *Acianthus* has also been found in New Guinea by C. E. Carr (his numbers 16911 and 16928).

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