

POMATOCALPA MARSUPIALE (ORCHIDACEAE),
A NEW RECORD FOR AUSTRALIA

by
B. GRAY*

Pomatocalpa marsupiale (Kraenzlin) J. J. Sm. in *Natuurk. Tijdschr. Ned.- Indië* 72 : 32 (1912).

Basionym: *Cleisostoma marsupiale* Kraenzlin in K. Schum. & Hollr., 'Die Flora von Kaiser Wilhelms Land' 34 (1889).

Synonyms may be obtained from Schlechter, 'Die Orchidaceen von Deutsch-Neu-Guinea' 988-989 (1914).

Plant large with upright stems to 50 cm long. Leaves 20-30 × 4.5 cm, linear, rigid, leathery, yellowish-green, deeply channelled, clasping the stem at the base and unequally emarginate at the apex. *Inflorescences* erect, 30-45 cm tall, exceeding the leaves, branched in the upper third, the branches short, with 15-50 flowers on pedicels 8-10 mm long; the flowers all face upwards around the spike, with labellum innermost, and open successively as the spike extends, few flowers being open at any one time. *Flowers* 12-15 mm diameter; sepals and petals widely spreading at the base but incurved towards the apex, thick in texture, green. *Sepals* 6-8 × 2.5-3 mm, narrow-obovate to spatulate. *Petals* 5-6 × 2-2.5 mm, sub-falcate, narrow obovate. *Labellum* 4.5 × 3-4 × 3-4 mm, cream or yellowish; lateral lobes about 1 × 3 mm, erect and slightly incurved on the distal end; midlobe about 1.5 × 2 mm, deltoid, recurved, thick and fleshy; spur 4 × 3 × 3 mm, pyriform, the callus, linear to narrow oblong, valvular, almost covering the orifice. *Column* about 2.5 × 2 mm, narrowed toward the base; column-foot short, at right angles to the column. *Rostellum* about 0.6 mm long. *Anther* with a short upturned rostrum. *Pollinia* 4, in two closely appressed pairs forming almost globose bodies. *Stipe* about 0.8 mm long, slender, margins recurved. *Retinaculum* about 0.5 mm long.

VOUCHER SPECIMEN:

Queensland—Cape York Peninsula, McIlwraith Range, 12 km NE of Coen, 13°52' S; 143°15' E. *B. Gray* 26.xi.1973 (BRI 220908).

Previously recorded from New Guinea, *P. marsupiale* occurs in Australia in the McIlwraith and Iron Range areas of Cape York Peninsula where it is an uncommon species. First found in 1973 at the southern extremity of the McIlwraith Range (elevation 500 m), the species is now known to occur throughout its range at elevations below 100 m.

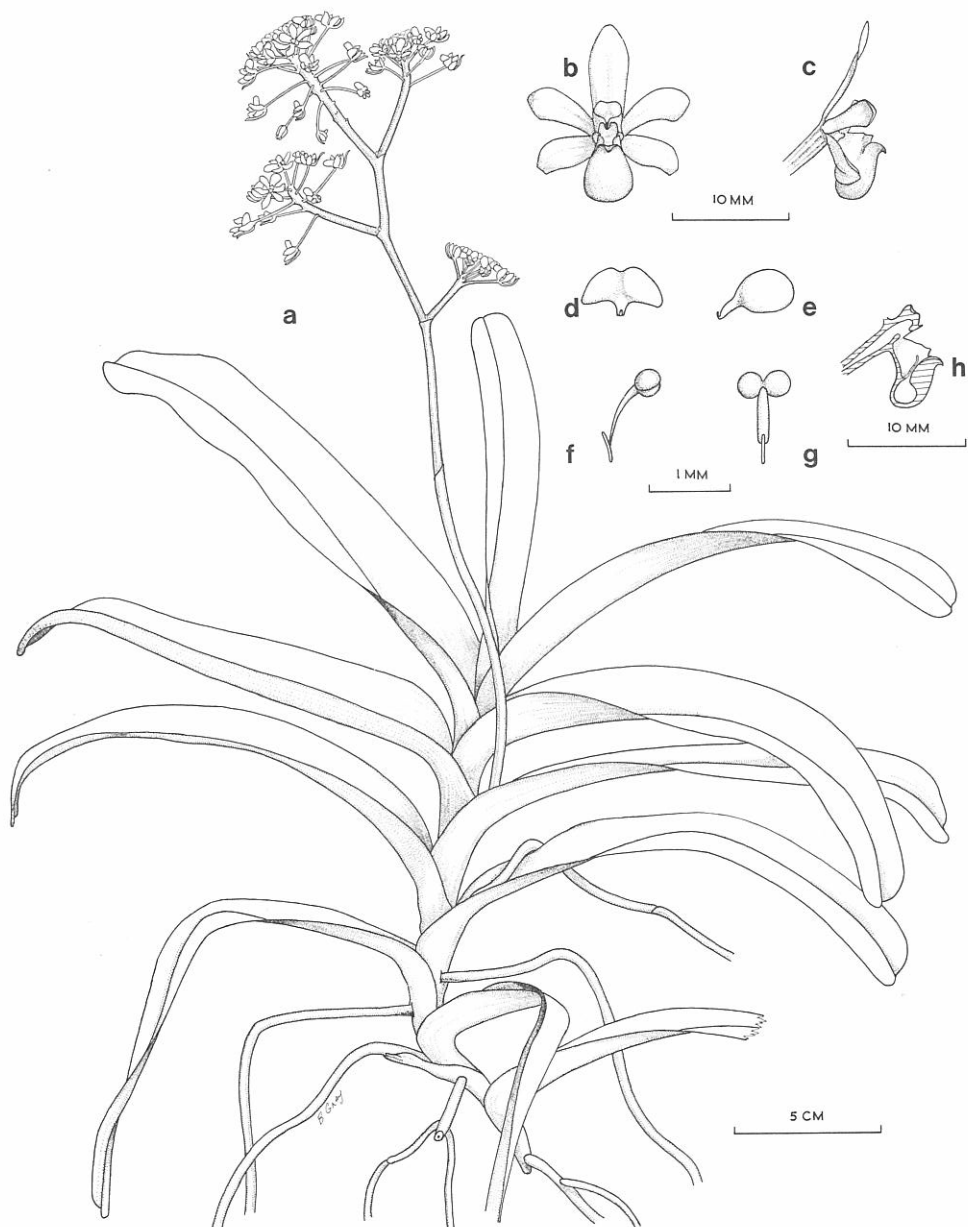
P. marsupiale is a robust epiphyte or lithophyte that occurs in tall semi-deciduous rainforest where it usually grows high up in the canopy or occasionally on exposed rocks.

Flowering usually begins in November and continues to April or May. Flower spikes extend by 20 cm or more as flowering continues.

P. marsupiale is readily distinguished from the other Australian member of the genus, *P. macphersonii* (F. Muell.) T.E. Hunt. A comparison of the main distinguishing features is given in the following table:

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Muelleria 4 (2): 201-203 (1979).



P. marsupiale

Stems upright, to 50 cm tall.

Leaves 25-40 cm long.

Inflorescence an upright panicle to 50 cm tall with the flowers crowded at the extremity of the branches. Branches extending over many months as flowering continues.

Flowering November to April or May.

Flowers creamish- or brownish-green.

P. macphersonii

Stems pendulous or slightly ascending, to 15 cm long.

Leaves 5-15 cm long.

Inflorescence a downcurved raceme (very rarely branched) 5-10 cm long with the flowers evenly spaced.

Flowering generally between July and October.

Flowers yellow with reddish-brown spotting.

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Fig. 1. *Pomatocalpa marsupiale*. a — habit of flowering plant; b — flower from front, showing natural spread; c — flower from side; d — anther from front; e — anther from side; f — pollinarium from side; g — pollinarium from rear; h — longitudinal section of column and labellum. Drawn from the voucher collection (BRI 220908).