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State Herbarium of South Australia  
PO Box 2732  
Kent Town SA 5071  
Australia



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## A NEW SPECIES OF *PRASOPHYLLUM* (ORCHIDACEAE) FROM SOUTH AUSTRALIA

J.Z. Weber

State Herbarium, Botanic Gardens, North Terrace, Adelaide,  
South Australia 5000

and

R. Bates

Portmamock Street, Fairview Park, South Australia 5126

### Abstract

*Prasophyllum goldsackii*, sp. nov., is described from Eyre and Yorke Peninsulas, South Australia. It appears to be close to *P. fitzgeraldii* R.S. Rogers & Maiden.

***Prasophyllum goldsackii* J.Z. Weber & R. Bates, sp. nov.**

*Herba* terrestris, 10-30 cm alta, glabra, tubere globoso, caule basi vaginis fibrosis vestito. *Folium* racemum superans, angustum, conduplicatum, 1-2 mm latum, viride; fistula caulis medium ultra. Racemus laxus, constans ex 5-12 floribus; bractea ovata, acuta, circa 2 mm longa lataque; *flores* breviter pedicellati, erecto-patentes, atropurpurei, cleistogami; *ovarium* viride, breve, turgidum, 4-7 mm longum, 2-3 mm latum. *Sepalum* dorsale ovatum, acutum, decurvum, 3-4 mm longum, circa 2.5 mm latum, concavum, viride, apicem versus purpureum; sepala lateralia demum distincta, 4-5 mm longa, circa 1.5 mm lata, falcata, incurvata, viridia, apice cum stria media purpureo. *Petala* triangularia, acuta, circa 3 mm longa et 1.5 mm lata, viridia, apicem versus purpurea, interdum sepalibus omnino occulta. *Labellum* triangulare, subacutum, circa 4 mm longum, basi 1.5-2 mm latum, recurvum, distaliter carinatum, apice inflexum, viride, marginibus apiceque pallido-pruinis; callobractea virida, basi concava, distaliter spissescens atque elevata, ad flexum in duabus cristis prominentibus abrupte terminata; marginibus integris, vix undulatis. *Columna* brevis, erecta, circa 1.7 mm longa et 1.5 mm lata; appendices erectae, lanceolatae, apicibus obtusis, rostellum brevioribus; stigma obcordata; anthera triangularis, circa 1.2 mm alta, *pollinia* duo, granularia; caudicula brevis. (Fig. 1.)

Holotype: *H. Goldsack* 611, 10.x.1954, Corny Point (34°54'S, 137°01'E) South Australia. (AD 97708491).

*Herb* terrestrial, 10-30 cm high, glabrous; arising from a globose tuber; the base of stem invested in fibrous sheaths. *Leaf* longer than raceme, narrow, conduplicate, 1-2 mm wide, green; sheathing above the middle of the stem. Raceme loose, 5-12 flowered, *flowers* shortly stalked, subtended by ovate, acute bracts about 2 mm long and wide, spreading, dark-purple, cleistogamous; *ovary* green, short, turgid, 4-7 mm long and 2-3 mm wide. Dorsal *sepal* ovate, acute, hooded, decurved apically, 3-4 mm long and 2.5 mm wide, green, purple towards apex; lateral sepals eventually free, 4-5 mm long and c. 1.5 mm wide, falcate, incurved, green with purple central stripe and apex. *Petals* triangular, acute, c. 3 mm long and c. 1.5 mm wide, green and purple towards apex, sometimes completely hidden by sepals. *Labellum* triangular, subacute, c. 4 mm long and 1.5-2 mm wide at the base, recurved and keeled distally with inflexed apex, green with pale prune-coloured edges and apex; callus-plate green, concave at base, increasingly thickened and convex distally, terminating as two prominent ridges in the bend of labellum, margins entire, slightly undulate. *Column* short, erect, c. 1.7 mm long and c. 1.5 mm wide; appendages erect, lanceolate with obtuse tips, shorter than rostellum, basally adnate to stigmatic plate; stigma obcordate; anther triangular, c. 1.2 mm long, *pollinia* two, granular and friable, easily removed; caudicle short. Seed small, oblong, c. 0.2 x 0.1 mm, numerous, cream-white.

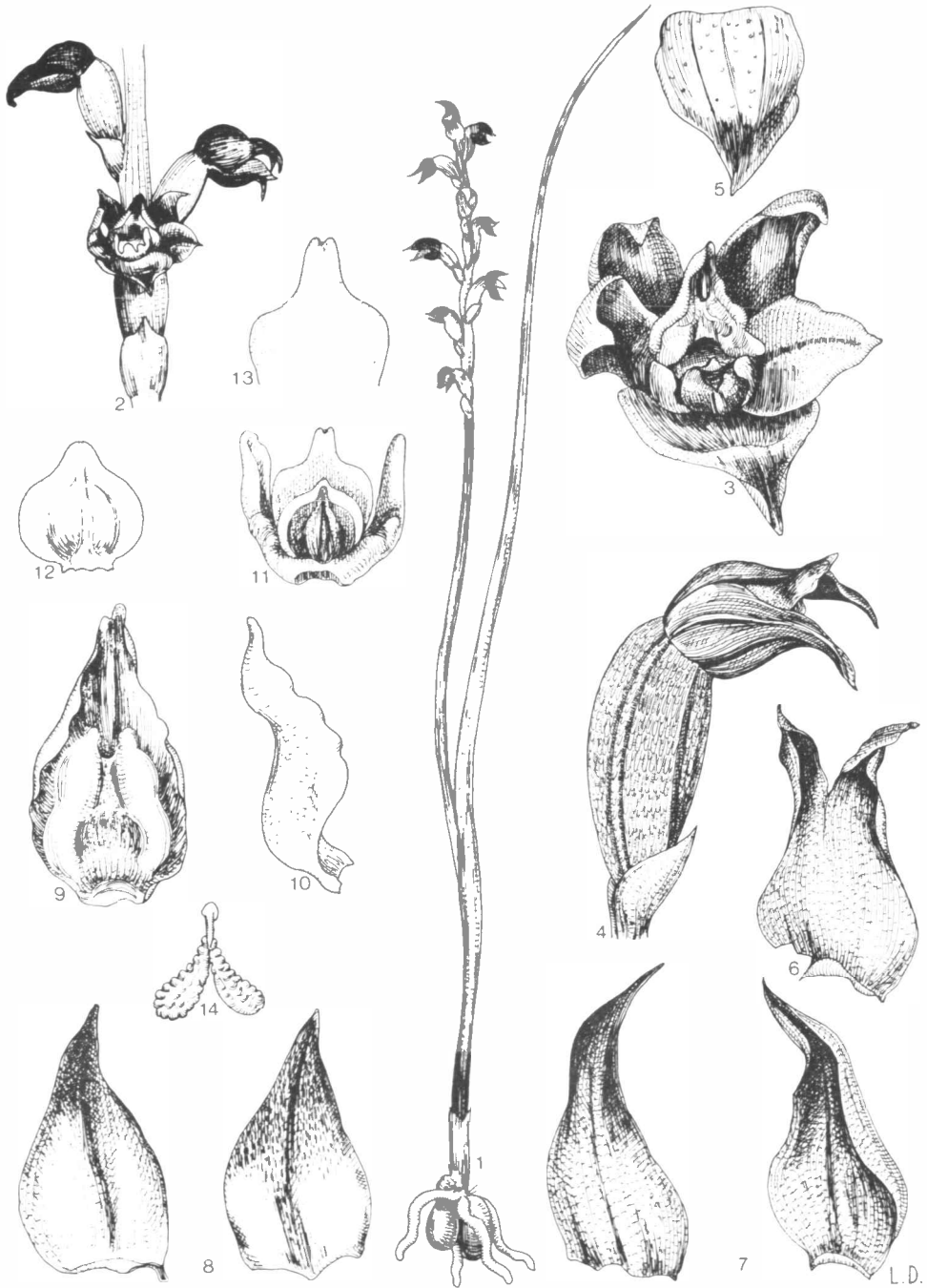


Fig. 1. *Prasophyllum goldsackii*, plant  $\frac{1}{2}$  nat. size: 2. inflorescence; 3. flower from the front; 4. flower from side; 5. dorsal sepal; 6. lateral sepals connate; 7. lateral sepals free; 8. petals; 9. labellum from the top showing callus-plates; 10. labellum from side; 11. column from front showing appendages; 12. anther; 13. stigma and rostellum; 14. pollinia with caudicle: (drawings made from cultivated specimen originating from Yorke Peninsula.)

Flowers have been collected in October, and the species is apparently endemic in South Australia, confined to Eyre and Yorke Peninsulas.

*Specimens examined*

Eyre Peninsula: *M.G. Clark s.n.*, Hundred of Koppio (34°26'S, 135°52'E) (AD). Yorke Peninsula: *H. Goldsack s.n.*, 12.x.1953, Corny Point (AD); *R. Bates 121*, 7.x.1973, Warranbeen National Park (33°10'S, 137°10'E) (AD); *R. Bates 692*, 10.x.1974, c. 10 km south of Moonta (34°09'S, 137°38'E) (AD).

*P. goldsackii* is reported by R. Bates to have been abundant on Yorke Peninsula in hard terra rossa limestone country, most of which is now under cultivation. It has presumably been overlooked by collectors in the past, because the flowers seldom open and appear withered even in early bud.

It has most similarities with *P. fitzgeraldii* R.S. Rogers & Maiden as regards the labellum but differs in the triangular, acute petals, the decurved dorsal sepal, the callus-plate terminating abruptly in two ridges well short of the tip of the labellum and the dark flowers. *P. fitzgeraldii* differs in having blunt linear petals, an incurved dorsal sepal, a triangular callus-plate reaching near the tip of the labellum, and usually more than ten flowers per raceme, fully open and fragrant. The flowers of *P. goldsackii* do occasionally open in hot weather, but probably only after self-pollination has occurred.

A key to the South Australian species of *Prasophyllum* has been prepared by the authors and will appear in the third edition of J.M. Black's 'Flora of South Australia'.

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