

# *Dendrobium carronii* —a New Species from Cape York Peninsula and New Guinea

by P.S. Lavarack\* and P.J. Cribb†

Recently *Dendrobium carronii* was described in *Austrobaileya*, the journal of the Queensland Herbarium. As this journal is not readily available to the majority of the Australian Orchid public, we have prepared the following notes on this new species.

For some time now a small but very attractive orchid has been known as the "pink form of *Dendrobium canaliculatum*". In plant habit it resembles *D. canaliculatum* quite closely but there are some major differences in the flowers which have a yellow lip, white sepals and deep brown or purple petals which are pink-white at the base. The two authors, quite separately, came to the conclusion that this so-called "pink form" was a distinct species and, after some correspondence, it was described in *Austrobaileya* as *D. carronii*. The following is the full description as published in that journal:

*Dendrobium carronii* Lavarack and Cribb, *Austrobaileya* 1 (5) 497-501 (1982).

An epiphytic herb. Pseudobulbs purple, clustered, short and swollen about the middle, often almost globose, 1.5-5 x 1-3 cm. Leaves usually 2 but up to 4 at the apex of the stem, fleshy, almost terete, with a groove on the upper surface, up to 12 x 0.5 cm. Inflorescences suberect, one to 3 per pseudobulb, from the apical nodes; rachis purple, up to 20 cm long, 2-12 flowers. Bracts ovate, acuminate, 2 mm long. Pedicel and ovary purple about 2 cm long; ovary borne at about 90° to the pedicel, minutely papillose. Sepals white, triangular, apiculate, 0.5 x 0.3 cm. Petals dark brown to purple with a white base and a darker stripe running the length of the petal, oblanceolate, acute, twisted once, 1.8-2 x 0.2-0.3 cm. Lip prominently 3-lobed, 1-1.4 x 0.7-0.8 cm; mid-lobe oblong acute, sidelobes erect to spreading, rounded; callus of 3 poorly-developed ridges scarcely reaching the midlobe. Column 0.3 x 0.2 cm., denticulate on the apical margin with 2 small, erect apical teeth; foot 0.5 cm long, mentum pointing backwards more or less parallel to the column. Anther papillose in front, shallowly notched at the base.

The flowering time is August to October.

This species is closely related to *D. canaliculatum* R. Br. and indeed the two species are difficult to separate when not in flower. *D. carronii* is usually more purple in its vegetative parts than *D. canaliculatum*. The major differences lie in the flowers. These differences are shown in the table given below:—

	<i>D. carronii</i>	<i>D. canaliculatum</i>
Sepals	triangular, half as long as petals, not twisted, apiculate	linear, as long as petals twisted, acute
Lip	yellow, midlobe oblong, straight	white with purple markings, midlobe ovate to almost circular.
Callus on lip	low, scarcely reaching midlobe	about 1 mm high, reaching to near the apex of midlobe
Mentum	approximately parallel to column	at an obtuse angle to column
Point of attachment of lip	about halfway between base of column and end of mentum	near end of column foot
Column	purple with white anther	yellow

*D. carronii* has been named in honour of William Carron (1823-1876) botanist to the ill-fated Kennedy expedition of 1848, who passed through the area where this species grows and may well have been the first to collect it. Carron was one of three survivors of this expedition, but his specimens were not recovered by the rescue party.



Fig. 1. *Dendrobium carronii*



Fig. 2. *Den. canaliculatum* var. *nigrescens*



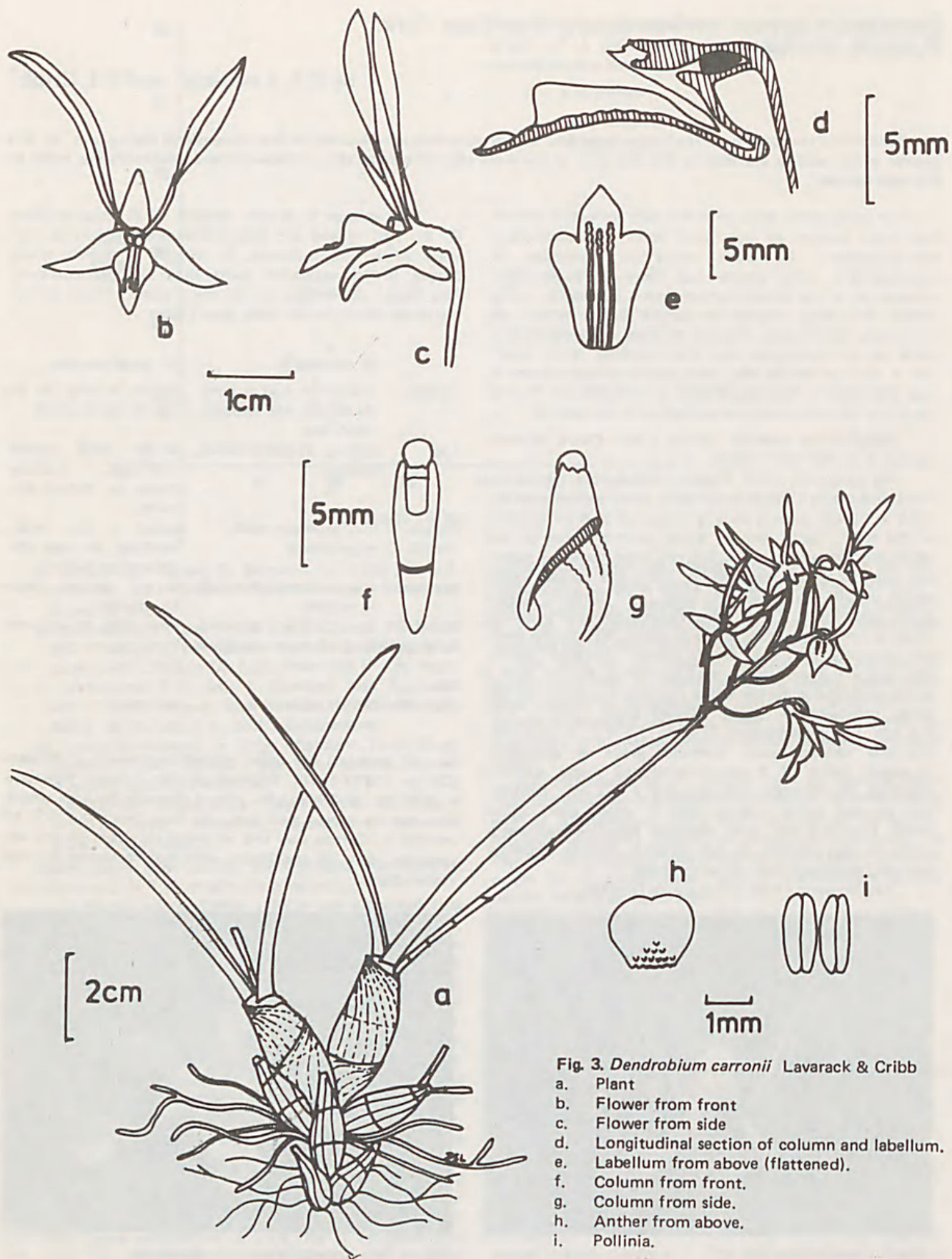


Fig. 3. *Dendrobium carronii* Lavarack & Cribb  
 a. Plant  
 b. Flower from front  
 c. Flower from side  
 d. Longitudinal section of column and labellum.  
 e. Labellum from above (flattened).  
 f. Column from front.  
 g. Column from side.  
 h. Anther from above.  
 i. Pollinia.



### Distribution and Habitat

This species appears to have been first collected at Lankelly Creek near Coen and has subsequently been reported at Massy Creek, Tozer's Gap and at the upper Jardine River area. All these localities are on eastern Cape York Peninsula in areas of year-round high humidity. It has not been observed in the central and western parts of the Peninsula which suffer a regular seasonal drought. It has been recorded from sea level to 500 m and grows in moister open forests and swamp forests often on papery-barked trees. Common host trees are various species of *Melaleuca* and *Tristania suaveolens*.

Dodd (1976) described a distinctive form of *D. canaliculatum* from Hula in the Central District of Papua New Guinea. From his description there is no doubt that this is identical with *D. carronii*.

### Sectional Classification

*Dendrobium canaliculatum*, which is undoubtedly closely-related to *D. carronii*, has usually been placed in the section *Eleutheroglossum*. However, the flowers of both species clearly are similar to those of species in the section *Ceratobium* and the present authors, in *Austrobaileya*, transferred both species to this section. Full details of the reasons are given in *Austrobaileya*.

Also given in that journal is a key to the members of the section occurring in Australia. This is repeated here with the permission of the Editor of *Austrobaileya*.

### Key to the Australian species of *Dendrobium* sect. *Ceratobium*.

1. Leaves fleshy, almost terete with a groove on the upper surface . . . . . 2
1. Leaves flat, coriaceous or subcoriaceous, never terete . . . . . 3
2. Mentum pointing backwards  $\pm$  parallel to the column; callus on lip of three poorly developed ridges; mid-lobe oblong, straight; sepals white, petals purple or dark brown; lip yellow . . . . . *D. carronii*
3. Mentum at an angle of c. 90° to the column; callus ridges on mid-lobe c. 1 mm high; mid-lobe ovate to almost circular, somewhat recurved; sepals and petals yellow or brown-tipped; lip white, marked with purple . . . . . *D. canaliculatum*
3. Inflorescence with sheathing bracts; pedicel emerging from a few mm above the bract axil; flowers white with green petals and marked with violet or purple on the lip. . . . . *D. antennatum*
3. Inflorescence with ovate or lanceolate spreading bracts; pedicels emerging from the axils of the bracts; flowers mostly yellow, brown or purple . . . . . 4
4. Petals and sepals undulate and crispate on margins often markedly so; bracts often 1 cm or more long. . . . . *D. discolor*
4. Petals and sepals with smooth entire margins; bracts mostly less than 5 mm long. . . . . 5
5. Flowers predominantly purple or lilac; lip mid-lobe transversely elliptic truncate; mentum mostly more than 1 cm long . . . . . *D. nindii*
5. Flowers yellow, brown or ochre,  $\pm$  marked with purple veins on the lip; lip mid-lobe ovate to broadly ovate, acute or obtuse; mentum less than 9 mm long. . . . . 6
6. Lip mid-lobe ovate or narrowly ovate, acute, purple-veined with undulate margins; callus of 5 continuous undulate ridges; side lobes with rugulose venation; flowers mostly self pollinating; leaves oblong-elliptic, obtuse. . . . . *D. mirbelianum*  
(syn *D. wilkianum*)
6. Lip mid-lobe broadly ovate, obtuse, with flat margins; callus of 3-5 ridges rather discontinuous and raised on mid-lobe; side lobes lacking rugulose venation; flowers cross-pollinating; leaves linear or linear-lanceolate, acute to sub-acute . . . . . 7
7. Mentum pointing backwards in flower; lip elliptic in outline; mid-lobe narrower than side lobes when spread; petals dark purple to brown . . . . . *D. johannis*
7. Mentum straight, not noticeably curved backwards; lip oblong in outline; mid-lobe as broad as side lobes when spread; petals ochre-yellow  $\pm$  veined purple . . . . . *D. semifusum*

### References

- Dodd, J. (1976) *Dendrobium canaliculatum* from Hula, Central District, Orchid Soc. Papua New Guinea Newsletter, Feb. 1976: 17-20.
- Lavarack, P.S. and Cribb, P.J. (1982). A New Species of *Dendrobium* from Cape York Peninsula and New Guinea. *Austrobaileya* 1 (5) 497-501.

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