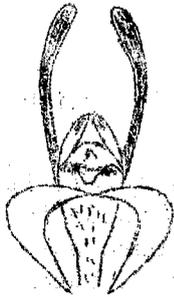


NATIVE ORCHID
SOCIETY
of
SOUTH AUSTRALIA



Diuris maculata

-- MAY 1979



NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

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NEXT MEETING

When: Tuesday, 22 May, 1979, at 8.00 p.m.

Where: Assembly Hall, Goodwood Boys High School, Hardy Street, Goodwood.

Why: Alwin Clements will speak on "The Flora of Western Australia".
Plant display and commentary, library, trading table, raffle.

LAST MEETING

Attendance 58

Guest speaker Colin Jennings took us on a tour of Milne Bay in New Guinea. This area has a very high rainfall, muddy beaches, a narrow coastal plain, and steep hills cut by rivers, which are impossible torrents in the wet, and gravel roadways in the dry. Many orchid species occur in the area. Some are found on trees overhanging the sea which are often sprayed with salt water. Les Nesbitt proposed a note of thanks to our guest.

The trading table was well stocked. Of particular interest were several clones of hybrid *Pterostylis*. These were snapped up by eager potential growers so we should see them on the benches later in the year.

Raffle prizes were *Spathoglottis pauline*, *Dendrobium aemulum* and *Dendrobium monophyllum*.

REMINDER

Subscriptions were due on 1st April!

DENDROBIUM MALBROWNII Dockr.

The editor has received a note giving further details on this species which was mentioned in our April Journal.

The type specimens of D. malbrownii were collected by Malcolm Brown in the McIlwraith Range - Central Cape Yorke Peninsula - in March, 1967. Dockrill subsequently described the species and named it after Malcolm Brown.

The species has since been found to occur in New Guinea where surprisingly it is rather common, but was apparently never described by either

J.J. Smith or Rudolf Schlechter. It will probably be found to occur in the overbridging area between New Guinea and Malaysia which is botanically unexplored.

The plant benched at the March meeting came from north Queensland and should be regarded as an "Australian Indigenous Species".

J.T. Simmons

PHOTOGRAPHY GROUP

Alwin Clements is prepared to lead a photography group again this year. The first session will be held at Roy Hargreaves place (1 Halmon Avenue, Everard Park) on Wednesday, 6 June, at 7.30 p.m. The second will be on 20 June. All members are invited to join this group. Two or three sessions are planned for this year.

FIELD TRIP

9 June, 1979 — PARA WIRRA

This is a gentle afternoon meeting! Meet at the MAIN ENTRANCE to Para Wirra Recreation Park at 2.00 p.m.

BOOK REVIEW

J.W.

"Native Orchids of South Australia" by Eileen Gentry and Pat Foreman; available from the Society for Growing Australian Plants. \$5.50.

The authors have attempted to produce a simple non-technical volume on our local orchids. The book itself is rather more limited than its title suggests containing details of only those orchids with which the writers are familiar - somewhat less than the nominal 124 species and varieties they have listed for the state. Of these, only 32 appear as colour illustrations, and their quality leaves much to be desired.

It is a private publication, and so presumably is mainly a labour of love, but unfortunately it contains several errors and inaccuracies, such as in some of the plant names and their interpretations as well as their rarity or otherwise. At \$5.50 it is rather expensive, especially considering the amount of information about South Australian orchids that has been omitted.

PLANTS ON DISPLAY — 24.4.79

Ray Nash commented on the terrestrials which filled a trestle table for the first time this year. *Calanthe triplicata* was seen in flower for the third month in a row. The white flowers were clustered at the top of the scape with very few buds still to open. There was one plant of *Spiranthes sinensis*, and four pots of *Eriochilus cucullatus* in flower. One of the *E. cucullatus* plants had three flowers while the majority had only one. The forms of this species from the east have a smooth leaf.

Acianthus was represented by three pots of *A. exsertus*. The largest pot won the popular vote because it contained robust plants with dark coloured flowers and stems. A superior clone grown to perfection. Unfortunately only a few of the flowers had opened by the night of the meeting. *Microtis* were represented by one pot of an unknown species which was not flowering. Species of this genus are difficult to identify at flowering time and virtually impossible when not in flower. *Prasophyllums* have similar leaves to *Microtis* (onion orchids). We saw *P. nigricans*, with tiny blooms on dwarf plants, and a potful marked *P. virida*, which no one could confirm or deny without detailed study under magnification.

The genus *Pterostylis* was well-represented on this occasion and will continue to provide the majority of flowers at our meetings for the next four months. A few early flowers were open on plants in two pots of *Pt. vittata*. Three pots of *Pt. truncata* ranged from the usual dwarf plants with large striped flowers to a tall plant form which does not multiply but always has a basal rosette alongside the flowering stem. Other species were *Pt. obtusa*, *Pt. fishii*, *Pt. revoluta*, *Pt. parviflora*, *Pt. acuminata*, *Pt. ophioglossa* and *Pt. (?)* (affin. *alata*) from S.A., which was in bud.

Colin Jennings described the epiphytes which were few in number. *Liparis reflexa* is easy to grow in a shadehouse but gives off a rather unpleasant odour at flowering time. The most numerous epiphyte was *Dendrobium bigibbum* with three plants on show. Good specimens from bush areas tend not to throw keikis (small growths from the tops of mature canes). Colin pointed out that there was only one flower out on several tiny pendulous racemes on a plant of *Oberonia palmicola*, a truly miniature specimen plant. Also seen were *Dendrobium striolatum* and *Den. cucumerinum*.

POPULAR VOTE

Terrestrials

First was *Acianthus exsertus* grown by Mr and Mrs Auliciems. Numerous very robust plants of dark colour growing in a 7" white plastic pot.

Second place went to *Pterostylis fishii*, grown by Les and Kay Nesbitt. A 7" black plastic pot held three tall flowering plants plus a number of non-flowering rosettes. One plant had a tiny bud which could develop into a second flower.

Epiphytes

Two plants belonging to H. and T. Tormet tied for the honours. They were *Dendrobium bigibbum*, with long sprays of large, attractive pink-purple flowers, and *Dendrobium striolatum*, which had greenish flowers scattered in small clusters over the plant.

SLIDE PROGRAMME

A 30 minute tape and slide programme has been prepared by Alwin Clements from NOSSA slides for our use. The programme contains 70 slides.

FIELD TRIP TO KANGARILLA AND HINDMARSH FALLS — 28.4.79 Peter Hornsby

The dull weather we have been experiencing lately gave way to a fine warm autumn day with long sunny periods, so it was not surprising that this trip proved to be one of the best turnouts we have had, with upwards of a dozen cars in attendance. It was also very gratifying to see a number of newcomers swelling the ranks.

Our leaders for the day, Bob and Sharon Bates, plus small assistant, just made the deadline - there's no doubt whatsoever that we would not have had much of a day without them!

Eventually we all gathered at a spot just off the Peter's Creek Road, where we parked alongside a patch of Leporella fimbriata, many with two flowers, and with colours ranging from pale green to a rich dark purple. Oddly enough, whenever plants have two flowers, they nearly always seem to face on another. Nearby, we saw the first examples of the literally hundreds of Prasophyllum rufum we were to see throughout the day.

Bob pointed out that the sandy soil here is very similar to that of the Ninety Mile Desert (the stretch of country between Tailem Bend and Bordertown in South Australia), and consequently the same could be said of their respective flora. The spot itself had been subjected to a controlled burn-off the previous November. Thus the area was littered with the blackened remains of brown stringybarks, Eucalyptus baxteri. The younger members of the party were rewarded with the discovery of the remains of an unfortunate echidna, that presumably had perished in the holocaust. While they foraged for such spoils the remainder admired P. rufum in full flower as well as in seed, together with numerous basal leaves of Lyperanthus nigricans, which could well flower later this year during the spring. Not far away the keenest spotted Pterostylis longifolia in bud, and the basal leaves of Glossodia major. Constantly catching the eye were the tubular red flowers of the flame heath, Astroloma conostephioides, and the prostrate cranberry heath, A. humifusum, as well as the orange and yellow "bells" of Correa reflexa.

From there we crossed the track, and were immediately rewarded with some handsome specimens of Parson's Bands, Eriochilus cucullatus. To all appearances, they live up to their common name by all flowering facing the same direction, though in this instance, like the ancient Incas, they are sun-worshippers, with flowers facing north instead of east! One consequence of this is that flowers between you and the sun are hard to see, whereas with the sun behind you, they are strikingly visible.

We also found basal leaves of Acianthus caudatus in the same vicinity, and of A. reniformis lower down the slope. Retracing our steps across the track again, we discovered some of the narrow dark-green-with-red-spots leaves of Caleana major, and nearly some tiny whiskers of the basal leaves of Paracaleana minor. These were dutifully pinpointed with one of the primary wing-feathers of a yellow-tailed black cockatoo.

Back by the cars again, we noticed the white star-flowers of Calythrix tetragona, and the violet flowers of Conospermum patens. The range for the latter includes the Mount Lofty Ranges and the Ninety Mile Desert, thus verifying Bob's assertion about the similarities of the two areas.

From there we moved to Hindmarsh Falls. Not surprisingly the "convoy" fell into four parts, but miraculously everyone eventually made it to the rendezvous, though each bit followed its own course! After lunch we made our way to the Falls themselves where we recorded our main "find" for the day - Pterostylis obtusa - one of South Australia's rarest orchids. As greenhoods go, these are fairly large plants, standing over 20 cm high. Their rich brown hoods stood out amongst the grasses with which they were growing. It

Field Trip - 28.4.79 (contd.)

must be a vintage year for them, since Bob said he had never seen so many on previous occasions. Nearby we found masses of basal rosettes of P. pedunculata, while a diligent search unearthed a few early Acianthus exsertus in flower. Bob pointed out that the further south we moved, the earlier things appeared — which made sense to an anglophile like myself; until I remembered this is the Southern Hemisphere! The explanation in this instance is more a case of the further south one goes, the greater the rainfall, and hence the earlier the autumn and winter orchids appear. According to this criterion, plants in the Belair Recreation Park, where rainfall exceeds 1000 mm per year, should be even further ahead than those at Hindmarsh Falls where the rainfall is somewhat less. A quick check revealed A. exsertus is in fact more advanced at Belair.

At this point, the more adventurous digressed to the foot of the falls themselves, where we saw the fern Pteris tremula, widespread in its distribution but rare wherever it occurs, and the exotic "chinese gooseberry" (Physalis peruviana?). The area seems to relish green flowers — a feature of all the species mentioned for this area, as well as the Correa sp. at the top of the steps leading to the Falls.

Here the maturer members called it a day, while the more youthful carried on for a quick stop at the rubbish dump at Nangkita where we saw Prasophyllum archeri in seed. From there we moved to what had previously been scheduled as our venue for the day, Scott Conservation Park. Once again we were met with an orchid feast, with P. rufum and Leporella fimbriata soon discovered in flower, and then E. cucullatus as we made our way towards Deep Creek. Here for the first time we also found specimens of E. cucullatus with two flowers, though again the plants were much smaller on the whole than those we saw at the beginning of the day. Once more we found basal leaves of Lyperanthus nigricans, Acianthus caudatus and Glossodia major, this time also adding Thelymitra sp. to the list. We also saw Pterostylis vittata, with the buds getting progressively larger until at last we found one in flower. Later, at the creekside, we found our best flowering specimens for the day of A. exsertus, and tracing our way along the creek bed, we discovered some P. nana rosettes. Our secretary, Roy Hargreaves, sighed wistfully at the sight of a bed of P. curta rosettes. For a few moments the creek banks assumed a slatey grey appearance while Roy imagined himself amongst his own curta in that legendary washtrough! One of the really astonishing sights at this point was P. curta growing in some moss on the trunk of a living Casuarina stricta, a good two metres above the ground — which led to a learned discussion about reclassifying P. curta as a lithophyte! (We felt it should be a little higher before justifying the title of epiphyte.)

After admiring the small yellow flowers of Goodenia varia, the "inner man" asserted itself, and the search tended to concentrate more on finding mushrooms than orchids, but in the end the Batesian intrepidity prevailed and we recorded our last species with a solitary P. alata var robusta in bud. Then we plodded our way back to the cars, parked close to some striking green-flowered Prostanthera chlorantha. On our way back we had glimpses of the ubiquitous yellow-flowered Hibbertia sp. that had been with us all day. There, for the second time, my assistant and I had to be pushed out of the sand and sped on our way. Overall, a more than successful day, and our thanks go once again to the Bates family for their efforts and organisation.

Plants seen:

In flower: Acianthus exsertus,
Eriochilus cucullatus, Leporella
fimbriata, Prasophyllum rufum,
Pterostylis obtusa, P. vittata.

In bud: Pterostylis alata var robusta
(syn P. scabra var robusta), P. longi-
folia.

In seed: Prasophyllum archeri.

MT. FINKE

J. Clayson

The report by R. Bates in the February issue of the Journal on his trip to Mt. Finke was of great interest to me as I worked in this area from 1934 to 1940. The fence line running south that was followed was erected by John Martin and myself under contract for Mr Dewar Good, the then owner of Malbooma Station in 1937. Also I worked for Mr W. Robins, who owned Corraldell Cattle Station, which adjoins Malbooma Station on the western side and included Mt. Finke.

Unfortunately, like a well known book title "No Roads Go By", sometimes these areas are not seen in their full - some of the benefits are there, as described in R. Bates' article. Harsh as this country can be in years of drought, heavy thunderstorm rains can change the scene overnight, the mulga water-course country, the red sandhills are soon covered with parakeelia, Sturt pea, spear grass, roly-poly bush and other species. Saltbush and bluebush on the limestone gibber country quickly respond - the recovery is amazing.

However, interspersed through this area are many granite outcrops, varying in size and shape. A well sunk on a soak at Malbooma rocks and equipped with a windmill supplied the homestead. The run off from Kalladin rocks 12 km north-west of Tarcoola was collected into a large Government tank and carted to the mining settlement of Tarcoola and used for domestic use. Also various soaks are to be found on the south-west slopes of Mt. Finke, also at little Mt. Finke south-west of Mt. Finke, and many other granite outcrops in this area. The run off, no matter how small, from these outcrops was well known to the aborigines and also gives a small amount of green vegetation for kangaroos, birds, etc.

"Thanks" R. Bates for allowing me to look back. Don't judge this country too harshly, and if you do visit this area make it a winter trip - May/August - and if possible, after heavy summer or autumn rains.

CULTURAL NOTE

J.T. Simmons

The article by Les Nesbitt on Calanthe triplicata in the April Journal mentions the problem of "black rot" which usually starts at the leaf tips and will rapidly destroy the whole plant if not controlled. The writer had experienced a similar problem with Phaius - which is a closely-related genus and also Corymborkis veratrifolia.

The problem is possibly due to the "mycorrhizal relationship" between the plant and the compost. Where I previously used a standard Cymbidium mix with leaf mould added, a mix of sharp sand, leaf mould and peat moss appears to give a better result but some essential fungus is probably missing.

At the first sign of black at the leaf tips I cut back the infected section and water the plant with "Natriphene" which is a fungicide/bactericide. This is usually effective for two or three months.

The other problem with these orchids is their attraction to "mealy bug" and the difficult task of removal. The writer lost several flower spikes last year through this pest. The best control appears to be one of the systemic insecticides such as "Disyston 5" applied around the base of the plant about every six weeks and watered in.

In spite of the cultural problems that may be encountered both the Calanthe and Phaius are most rewarding genus to cultivate and some good examples were benched by members late last year.

THE VARIETIES AND FORMS OF CALADENIA CARNEA IN SOUTH AUSTRALIA

B. Bates

About a dozen varieties of C. carnea have been described and named and at least five of these occur in South Australia. The commonest and most widespread is the variety carnea with flowers which can vary from a glossy crimson to a pure white. Numerous clones exist that remain true in cultivation to such characteristics as tepal shape, flowering time and stem length. This variety has proved reliable in cultivation, though increase is slow. In areas where C. deformis flowers at the same time hybrids may occur. It has never been seen an obvious hybrid between the two but I have seen purple and blue flowers of C. carnea that possibly owe their colour to hybrid influence.

A controversial variety is the var. alba. Plants I have had growing from New South Wales produced flowers the same size and shape as one of our bright pink var. carnea from South Australia. Var. alba is said to produce a larger flower than var. carnea and Nicholls reports that pink forms of var. alba are known. How confusing it would be to have a pot of albino var. carnea alongside a pot of pink var. alba!

The var. alba is certainly not a mere albino form of var. carnea but a distinct "true breeding" white race. The South Australian populations of var. alba in the Southern Flinders have much rounder sepals than eastern states specimens.

Also found in the Southern Flinders, where it is very common in places, is the var. gigantea, up to 80 cm tall with three or four bright pink flowers about 5 cm across. Some have the added bonus of being perfumed. Quite often the flowers have four rows of orange calli on the labellum instead of two as in var. carnea, but this is by no means a stable feature and the var. gigantea should perhaps be reduced to forma gigantea. It has been suggested that it is merely a tetraploid form of C. carnea. A polyploid series is very likely in C. carnea and cytological studies are warranted. Certainly a polyploid series would explain why hybrids have not been found between the different varieties of C. carnea. In the Flinders Ranges C. carnea var. alba have been found growing with var. gigantea but neither hybrids nor intermediates could be found. Var. gigantea would be an excellent species in cultivation.

The diminutive var. pigmaea is common in the harder, poorer soils of the Mt. Lofty Ranges. It remains a dwarf in cultivation, seldom exceeding 8-10 cm. The tiny deep pink or rarely white flowers are greenish on the outside and rarely remain open for more than three days. Quite often the lateral sepals are joined together. The rounded tepals add to the "babyish" appearance. Not really suited to cultivation.

Even less suitable for cultivation is the var. attenuata. Though the stems are taller than var. carnea the flowers are as small as var. pigmaea. In South Australia this variety is self-pollinated, most forms only opening for a day. Flowers are a dull greenish white and wholly green forms occur which never seem to open at all. This variety has an unusual elongated, often flaccid, leaf and appears to grow best in deep bark litter around Eucalypts. All its characteristics remain true in cultivation.

The terrestrial grower should be very selective of the forms of Caladenia carnea he grows. Even in the type variety so many different clones occur — some with flowers blooming only 4-5 days, others possess blooms lasting 3-4 weeks. I suspect that the difference is due to the degree of dependence of each clone on insects for pollination. It is likely that several different insect species will be found to be pollinators of the different varieties. A desirable attribute of some clones is their tendency to "clumping" (one plant dividing vegetatively to produce several close together).

Certainly C. carnea is a fascinating species and one with a future among terrestrial growers.

PLANT RECORDER REPORT FOR 1978

K. Western

Orchids benched at tableshows during 1978 continued the pleasing standard for diversity and quality which was set so amazingly during the inaugural year of 1977. From a rough scan at this years benching, so far, thanks to the support of members, it would appear that the trend is likely to continue.

Comparison of Data Relating to Tableshow Benching 1977 and 1978

	<u>1977</u>	<u>1978</u>
Total Genera Seen	26	32
Total Species/Varieties Seen	163	168
New Species/Varieties Seen 1978	=	50
New Genera Seen 1978	=	8
Species/Varieties Seen 1977 but Not 1978	=	55
Genera Seen 1977 but Not 1978	=	2

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
ACIANTHUS											
caudatus						x					
exsertus			x	x	x						
fornicatus						x					
reniformis						x		x			
BULBOPHYLLUM											
+ aurantiacum						x					
crassulifolium	x					x					
+ elisae										x	
exiguum		x									
+ gadgarrense						-					
+ macphersonii					x						
+ newportii			x								
CADETIA											
+ taylori				x							
CALADENIA											
+ alba							x	x			
caerulea						x					
carnea						x		x			
o carnea var attenuata											
o caudata											
o clavigera								x			
o cucullata											
o deformis						x	x				
dilatata				-				x	x		
dilatata var concinna							x				
o filamentosa											
gladiolata							x	x			
latifolia							x				
leptochila								x			
menziesii								x			
+ patersonii								x			
o radiata											
o reticulata (hugelii var reticulata)							x	x			
rigida							x	x			
tessellata								x			
	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

- = plant benched * = cut flower + = New Species/Variety 1978 only
 x = plant benched in flower o = Species/Variety 1977 but not 1978

Plant Recorder Report for 1978 (contd.)

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Dendrobium (contd.)											
o falcorostrum								x			
o fleckeri											
o gracilicaule						x		x			
+ jamesianum						x					
o johannis											
o kingianum	-						x		x		
o kingianum var hastings					x						
o lichenastrum forma auran-											
tiaco-purpureum											
o linguiforme						x			x		
+ malbrowonii		x									
o monophyllum			x						x	x	
o mortii										x	
o pugioniforme											
o rigidum			x								
+ ruppianum						x			x		
+ schneiderae			x	x							
o speciosum	-							x			
o striolatum											
o teretefolium						x	x		x		
o tetragonum								x			
o tetragonum var giganteum				x	x						
o tetragonum var kennediae						x				-	
o speciosum x tetragonum (Hilda Poxon)	-				x	x					
o kingianum x gracillimum (Penny Ann)								x			
o kingianum x gracilicaule (Suffusum)	-					x	x	x			
o kingianum x falcorostrum (Bardo Rose)	-						x				
o kestevenii x tetragonum (Nowen Dog)											
o fleckeri x gracilicaule var howeanum						x	x	x			
o kingianum x tetragonum (Ellen)					x	x		x			
o falcorostrum x gracilicaule var howeanum (Susan)											
o speciosum x gracilicaule											
o Dendrobium x gracillimum								x			
o linguiforme x striolatum											
o kingianum x speciosum (= x delicatum)	-						x	x			
o kingianum x fleckeri (Hastings)					x						
o discolor x canaliculatum (Gloucester Sands)											
o kingianum x ruppianum Ella v Leaney									x		

- = plant benched * = cut flower + = New Species/Variety 1978 only
 x = plant benched in flower o = Species/Variety 1977 but not 1978

to be completed next month.