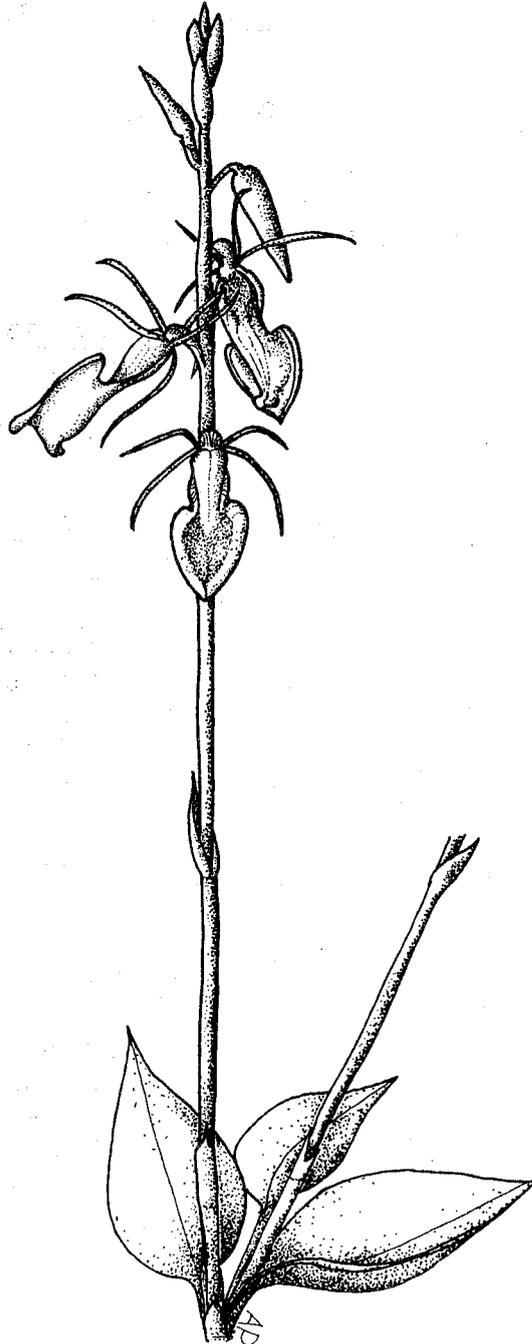


NATIVE ORCHID SOCIETY

of

SOUTH AUSTRALIA

Incorporated
JOURNAL

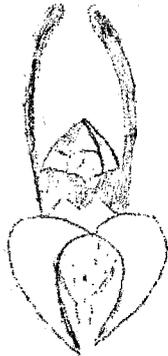


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NEXT MEETING

When: Tuesday 22nd October, 1985, 8.00 pm

Where: St. Matthews Hall, Bridge Street, Kensington

Subject: Practical Techniques for the cultivation of our native orchids.

This will include artificial pollination, re-potting and mounting of epiphytes.

*NB: Please bring any problem plants along this evening, as our demonstrators will be pleased to assist in solving your problems.

FIELD TRIP

This will be held on Sunday 3rd November at Mt. Magnificent, Glenshera. We will be looking for *Gastrodia Calochilus paludosus*, *Diuris brevifolia*, *Thelymitra merranae*, *Caleana major* (duck orchid) and the recently reported *Pterostylis furcata*.

Where to meet: Prospect Hill Pioneer Museum (8km south of Meadows)
10.00 am This is the final trip for 1985.

SPRING SHOW 1985

Our Spring Show was held on the 14th & 15th of September. A staggering 962 tickets were sold during that weekend. As usually, a raffle was conducted, the prize winners are as follows:

1st Prize: Mrs Cushway - Fulham Gardens
2nd Prize: Mrs Powell - Parkholme
3rd Prize: Mr K. Western - Coromandel Valley

NEW MEMBERS

We welcome these people to our society:

Mr C.J. & Mrs L.Y. Hall - Plympton
 Mr B.E. Grose - Eltham (Vic.)
 Mr S.A. Crawford - Pasadena
 Mrs L.A. Woodcock - Kidman Park
 Mr M. & Mrs N. Reese - Woodville West

IRA BUTLER

The Ira Butler Award will be presented at the November meeting.

PLANT COMMENTARY FOR SEPTEMBER MEETING 24/9/85

Terrestrials benched:

*Acianthus reniformis var.

huegellii

*Caladenia bryceana

Cal. cardiochila

Cal. clavigera

Cal. carnea

Cal. dilatata

Cal. grandis*

Cal. latifolia

Cal. lyalli

*Cal. longiclavata

Cal. leptochila

Cal. patersonii

Cal. reticulata

*Cal. latifolia x Cal. rigida

Cal. patersonii x Cal. latifolia

Diuris laxiflora

D. longifolia

D. maculata

D. sulphurea

*D. sheaffiana

*D. punctata (yellow form)

Pt. pedunculata

Diuris pedunculata

D. Pioneer

*D. aurea x D. brevifolia

D. longifolia x D. pedunculata

Chiloglottis gunnii

*Ch. pescottiana

*Prasophyllum affinity

triangulare (W.A.)

P. occidentale

P. goldsackii

P. fitzgeraldii

P. pallidum

P. fuscum

*P. rostratum

P. macrostachyum

*P. ovale

*P. truncatum

Glossodia major

Pt. setifera

Pt. baptistii

Pt. curta

Pt. x ingens

Pt. 'Cutie'

Epiphytes benched:

Phaius tankervilleae

Den. aemulum

D. gracilicaule

D. gracillimum

D. kingianum

D. linguiforme

Den. Bardo Rose

D. Star of Dawn

D. Ella/Leaney

D. x suffusum

D. Hastings x Den. speciosum

*Den. tetragonum x D. fleckerix

Epiphytes benched cont:D. speciosumD. striolatumDen. teratifoliumD. gracilicauleSarcochilus falcatusDen. tetragonumPOPULAR VOTEEPIPHYTE: Den. linguiforme by Noel OliverTERRESTRIALS: Cal. dilatata by Don Wells

Well done Don!

This was a phenomenal display of terrestrials. A record breaking eleven different Prasophyllums were on display. It must be a popular genus. Two different man-made Caladenia hybrids with C. latifolia as a parent, astounding! And how about that set of C. dilatata - over 30 plants in flower and numerous seedlings, then there was the set of Glossodia. Over 40 plants in flower. * Plants with asterisks were displayed for the first time. This included 3 terrestrial hybrids.

SEPTEMBER MEETING1. Popular VoteTerrestrials Caladenia dilatata grown by Don Wells

Epiphytes

Two plants drew for this popular vote,

a) Dendrobium x gracillimum grown by Don Wellsb) Dendrobium linguiforme grown by Noel Oliver2. Speaker

Mr Rick Datodi spoke on "Terrestrial Orchid Cultivation in Melbourne". He opened by saying how pleased he was that members of ANOS Victoria and NOSSA would be meeting this coming weekend and how we have all advanced greatly in a short time in our level of expertise in terrestrial orchid culture.

Cont:

2. Speaker Cont:

He went on to say that the talk was designed for people with little or no experience in terrestrial orchid culture (I might hasten to add, that I expect all calibre of growers gained something from his discussion). His narrative coupled with a complimentary set of slides depicted the underground sections of various genera and species of orchids and the comparison between orchid "root" systems and the true root systems of other plants. He demonstrated vegetative reproduction by means of new tubers produced at the tips of orchid "roots" and showed and described a means of removing new tubers from slowly or non-vegetatively reproducing *Pterostylis* species at about flowering time followed by replanting of the original plant (*Pterostylis barbata* in this instance) and allowing it to produce another set of new tubers which it would not normally have produced. Other slides showed terrestrial orchids in cultivation, in the wild state and thriving even after clearing and pasture conditions. Rick then went on to show and describe a terrestrial orchid potting formula designed so as to be able to be manufactured universally for terrestrial orchid culture. The formulation comprised:

	Coarse river gravel	2 parts
	Aged hardwood buzzer-chips	1 part
(mix thoroughly	Heavy loam (fertiliser free)	1 part
	Partly decomposed leaf mould	1 part

For species prone to rot in the above mix the heavy loam component was removed and coastal-collected sandy loam was substituted in its place.

Further slides and commentary showed the types of extremely well drained pots used in Victoria, depotting and sieving to separate tubers from soil mix, seedlings raised by sewing seed around parent plants and typical Victorian terrestrial orchid houses - with fibreglass roofs to combat the generally higher rainfall and avoid rotting. Rick described how one should only alter ones potting mix formula slightly and run an experiment involving only a few plants to evaluate the success (or failure) of the modifications e.g. seiving, addition removal or alteration of components, etc. He explained how rescued orchids were always planted into the above formula together with a minimal amount of bush soil to increase mycorrhizal concentration and went on to confirm that conservation through cultivation is an essential aspect in assuring survival of some orchid species or varieties e.g. *Diuris punctata* var. *alboviolacea* which, since its re-discovery, is now far more numerous in cultivation than in nature.

TUBER BANK (Don Wells)

In the December journal a list of tubers available will be printed.

As the information has to be compiled ready to supply the editor and printers before the end of October, beginning of November period it is necessary to ask members to look over their terrestrial pots and assess what they can spare for the tuber bank now. No donation is too small and as the bank supplies several club functions any species no matter how plentiful will be gladly accepted, i.e. Curta. Would you please let me know the species and number of tubers available at your earliest convenience either by phone, mail or at the meetings.

Last year's record distribution has made a special appeal necessary as no rescue has been available to us this year. Thank you in anticipation.

Don Wells
86 Pitman Road
WINDSOR GARDENS, S.A. 5087

Phone: 261 6030

CALADENIA DILATATA (Don Wells)

It was requested that an article be written about the culture of the pot of Caladenia dilatata benched at the September meeting.

The tubers in this pot were rescued 3 years ago, before sand was quarried from the area with the intention of replanting them back when quarrying had been completed and the native vegetation planted back is regenerated sufficiently to nurture native orchids again. This enables us to multiply by seed the plants while in our care.

The clay pot was chosen to allow dissipation of excess water the drainage hole heavily clogged. The soil used is red soil from private property in the Cherry Gardens area, with a topping that was collected from where the original plants grew (litter from under bushes). The pot has been undisturbed for 2 years with seeds sprinkled on both years, but seeds only germinated the second year. My theory is it has taken 2 years for the fungus to spread sufficiently to germinate the seeds. They are housed on a wire mesh bench under 50% shade cloth, north-east of Adelaide, with a north easterly aspect. A plastic sheet covering is used after the first winter rains, this enables me to have control of the watering. Rain water is used, no fertilizer is used.

Cont:

Caladenia Dilatata Cont:

The specimen plant of Gnacilimum was purchased from a roadside stall in northern N.S.W. 5 years ago. It was on its natural host then, found in a corner covered with scale and looking very neglected. It has hung high in a cymbidium house of 72% shade cloth with an exposed situation ever since. It is watered only when the cymms are watered and never fertilized because it is too high and awkward to reach. It flowers regularly at this time each year.

FIELD TRIP TO BELAIR PARK - SATURDAY 14 SEPTEMBER 1985

A group of 15 or so assembled at 2.00pm near the Woods and Forests Nursery in cool, fine conditions. Two were visitors from N.S.W. and were eager to see what our 'Adelaide Hills' had hidden away, especially in the way of Greenhoods.

The real Spring sunshine had yet to come this year and we were worried that some of the Diuris sp. may still be in bud.

The excursion was similar to that of last year with an extra location, Melville Gully, added by Bob Bates.

We first searched the area west of Govt. Farm Oval, finding it rather soggy underfoot in places - some excellent Thelymitras could result in October. The donkeys were just starting to flower, both pedunculata and longifolia. We soon located the natural hybrid between the two, one specimen having 5 open flowers on a stem. In all the hybrid is fairly well distributed throughout this patch of scrub. Many other orchids exist here, making it one of the best areas in the Park.

Long Gully was the next stop, near the junction of Saddle Hill Road and Long Gully Station Track. The gully runs east-west giving the ridge in front of us a south-east aspect and fairly steep, too.

The first sighting was Pterostylis pedunculata right at the edge of the road, with Pt. curta mixed in. The latter was easily overlooked, but once seen hundreds appeared. In flower was the natural hybrid between these two greenhoods and the cameras had to queue up.

More difficult to spot was the Pt. cucullata in flower. In a few minutes, though, we had sighted dozens in a long band amongst more Pt. curta stretching up the gully. The slope was also adorned with delicate maiden-hair fern which added to the enchanting spectacle. We carefully returned to the cars lest we trod on any of the large brown greenhoods.

Cont:

Orchids Seen Cont:

In flower-bud	<u>Glossodia major</u>	(1) (4)
	<u>Caladenia dilatata</u>	(1) (4)
	<u>Calochilus robertsonii</u>	(4)
	<u>Thelymitra antennifera</u>	(1)
	<u>Th. luteocillium</u>	(1)
	<u>Th. rubra</u>	(1)
In leaf	<u>Microtis unifolia</u>	(1)
	<u>Acianthus exsertus</u>	(1) (4) (2)
	<u>A. reniformis</u>	(4)
	<u>Caladenia leptochila</u>	(1) (4)
	<u>Prasophyllum elatum</u>	(4)
	<u>Thelymitra nuda</u>	(1)
	<u>Th. longifolia</u>	(1) (4)
Setting seed	<u>Pterostylis longifolia</u>	(4)

TOTAL SPECIES SEEN = 30

16 of which were in full flower.

Paul Reece

ORCHID INDEX

- 1) Notes on the Biology & Ecology of Spiculea ciliata. Lindley,
R. Bates
An article outlining distribution, habitat, growth, pollination strategy, etc. (Photos included)
The W.A. Native Orchid Study & Conservation Group.
August 1985 pge 7 to 11
- 2) Functions & Life processes of Orchid Plants, by T.W. Morrison
An article which discusses the 'workings' of an orchid (epiphytic)
Gawler Districts Orchid Club Inc. Vol. 5 No. 7 August 1985 pge 7 to 8
- 3) Culture of Corybas, by Dr D. McAlpine
A cultural article on Corybas fimbriatus
Warringham Group of A.N.O.S. July-August, 1985 page 2

FIELD TRIP CONT:

The convoy had no sooner started off for the next location, when the lead car stopped. Here was some more Pt. curta only this time as a close packed colony of about 2000, 3 metres in diameter. A solitary flower of Pt. nutans stood out amongst the multitude of Pt. curta. The former is rarely seen in Belair Park.

The next spot was Melville Gully where Bob Bates had earlier made a find - a second colony of the uncommon Pterostylis cucullata, which made it a little more common than previously thought in the Park (and in the Mt. Lofty Ra.). We located the colony of about 100 flowers together with plenty of Pt. curta. The slope on which these were found had more of a SW aspect.

The last location was Melville Hill near the Eastern Entrance. The sky was cloudless. The only hint of the good rains that had fallen in the last two weeks was a large puddle in the middle of the fire-track which the young children with us used to test their rubber boots for leaks.

We saw plenty of Diuris maculata in flower and the hairy leaves of Caladenia dilatata. The highlight of this section was locating 3 examples of Acianthus caudatus in its rare green form, the red form and leaves of A. exsertus and A. reniformis. The group dispersed, well satisfied with the afternoon's hunt.

Locations Visited

- 1) West of Govt. Farm Oval
- 2) Long Gully
- 3) Melville Gully
- 4) Melville Hill

Orchids Seen

In flower:	<u>Pterostylis vittata</u>	(4)
	<u>Diuris longifolia</u>	(1)
	<u>D. pedunculata</u>	(1)
	<u>D. pedunculata</u> x <u>longifolia</u>	(1)
	<u>D. maculata</u>	(4)
	<u>Pterostylis pedunculata</u>	(All)
	<u>Pt. hana</u>	(All)
	<u>Pt. curta</u>	(2) (3)
	<u>Pt. pedunculata</u> x <u>curta</u>	(2)
	<u>Pt. cucullata</u>	(2) (3)
	<u>Pt. nutans</u>	(2)
	<u>Caladenia deformis</u>	(1)
	<u>Acianthus caudatus</u> (red)	(4)
	<u>A. caudatus</u> (green)	(2)
	<u>Corybas dilatatus</u>	(2)
	<u>C. diemenicus</u>	(2)

METHODS AND MADNESS OF AN ORCHIDOLOGIST

12/7/85 by R.C. Nash

Confusion, Chaos, Caladenia, etc.

I'll bet you are wondering what all that means? Well, to begin with, do you get confused with all the name changes that have been going on amongst our orchids? It could be said that the way things are at present, that chaos exists to a certain extent, over the names of some of our plants. In fact, much has been said by the professional botanist in our mutual interest, against the amateurs in the past which would lead one to think the latter are a lot of evil doers and the former angels.

Much of our present trouble comes from the efforts of the professionals trying to sort things out, but instead they seem to have only made the problems worse. To some extent this is not quite true for the latter day amateurs did their bit too, this zone included. I shall explain my part later.

In the past there existed some very clever botanists, but as today, there also occurred much competition between these people to get things published and as much as possible. For a first name given to a plant becomes that plant's botanical name for all time in most cases. Too often the type description was brief (too brief with many early named plants) and the Latin used not standard. Much of this latter problem arose because there was no real botanical Latin in the early days of systematic botany. Communications were another big problem, publications took time to prepare and distribute (although even today it takes quite some time to get material published).

Years ago it could have taken a full year to obtain information from Europe on a plant, today it still takes far too long to do this, but if you have a pal overseas and both have access to a communicating computer system, then, with the right equipment even drawings can be sent or received in a matter of hours. The big snag here is the expense, so most communication still goes by mail or people make visits to Berbaria overseas to make first hand examinations. Even by this last method errors still occur, for in examining pressed material one may not be able to learn all about the plant in question as features become distorted in the processing. To make these overseas examinations, in fact any examination of pressed material, one must have experience with the living plants of some of the material being investigated and understand what happens to plants as they dry out.

So having briefly dealt with the reasons for the confusion, I hope you will understand and have some patience with the experts, for the amateurs are mostly trying to out do each other, while the professional person has to justify his/her salary. With the professional person, many are doing a job and they do not have the interest in that job as they should and as they have to justify their position, often invent new combinations etc, either by lumping or splitting (some prominent amateurs in the past have also fallen into this trap). They also dislike being advised by amateurs on the subject, but often are quite willing to acquire information from these people and present it as their own. Sometimes they get caught and this, I think is one of the reasons why they dislike the amateurs.

If the professional people could only fill the position they should, that is, be the leaders and help and guide the amateur, I am sure things would be smoother for all and many mistakes would not be made. With this type of alliance, much more data would be gathered and more thoroughly processed, as well, ideas could be examined by a greater and more varied group. Also, the professional person should acknowledge that work done by the amateur when publishing material. These things are not difficult to do and the outcome makes very good P.R. for the Botanical organisations.

Now having said that, I caused some confusion in the not too distant past with our orchids, I shall now explain. About 10 years ago, I was shown a Caladenia that had been collected at Alligator Gorge. On a personal visit to the area and on comparing pressed material of this Spider held by the Ranger at that National Park, I came to the conclusion that these plants were identical with pressed material I had from Western Australia, which had been lumped under Caladenia huegelii Reichb. f., by the then prominent Botanical worker on orchids in W.A. I also examined material at the state Herbarium from the southern Flinders Ranges and W.A. and convinced the Botanist there that our plants were conspecific with the western material.

Eventually when the new revision of the S.A. Flora came out Caladenia huegelii was included. However, I now know that Caladenia huegelii does not exist in S.A. and that the plants concerned are just robust forms of Caladenia reticulata Fitz., or an un-named species. So you can here see how I was misled by a professional botanist and in my turn I misled another botanist as well as most other people. My biggest error was not to have examined the original Type specimens of Caladenia huegelii, relying upon another person who I thought had done a capable job.

I could still be misleading people in this series of articles, but I hope that you are taking notice of my continued warning not to take what I have to say for granted, please always have a good think about my writings for nobody is infalable.

If you are in doubt about a plant's Botanical name, especially those that seem to be always changing, use the older of the known names and place the Author citation after it. I now do not accept any name changes unless I can read material which explains that change, e.g. the reasons given for changing Monadenia macrantha to Monadenia bracteata as presented by Mark Clements in the Orchadian of June 1983 on page 196. Changes that occurred in the new edition of the S.A. Flora, had no reasons given or mention of published reasons, and are therefore doubtful. These two illustrations are given to demonstrate a point and bear no inference of inadequacy by the authors.

Now the interesting part starts, I hope. Caladenia and the culture etc., thereof. Personally, I have always been fighting a losing battle with this genus, even those that grew and multiplied well for me, do not do so now. Yes, I have grown them for many years and find those grown from seed usually last the longest.

One species that I had very good success with is Cal. latifolia R. Br., this plant used to thrive for me when compared to others in its genus, but never flowered very often. By thrive I mean it multiplied like some of the Pterostylis. My first few plants were collected about 30 years ago from the scrub behind Sellicks Beach (Sellicks Scrub). As they grew in almost pure sand, I grew them in the same media with a very small amount of humus added.

At the peak of numbers, I had three 20 cm pots full of them, that was before I went to Canberra. When this lot used to flower, which was not often, they made lovely dark pink flowers. I still have two plants of this group.

The next group I tried came from Fairview Park, at the time this area was being developed for housing. There used to be a colony on the southern side of and about halfway along what is now Finsterwald Way. A friend interstate, had asked for some specimens of this species and I decided that the above area would be the best to obtain these, as houses were going up all over it. On my visit, I found that just about every plant was in bloom, the next year their spot of ground was covered by the concrete slab of a car port. Were these plants trying to tell us humans they were beautiful things and that they were there?

I made a small collection of these plants and those with tubers on I sent off to my friend, those without tubers I kept myself. Most of the plants I kept, made new tubers and flourished for a number of years, often making many flowers. I still have a few of these plants. Those plants I sent to my friend, failed to grow on into the following year.

Having been so successful in the past with this species, and now almost utter failure, you may well ask why? First, I tried to make them flower by burning leaves etc, over them in the summer, growing them in well shaded areas then putting them out in a very sunny spot the following winter and other not too kind treatments. All of these treatments failed to produce flowers, but did stop them from multiplying and in some cases cut the number of plants back. One of the main reasons why I have failed so miserably lately may be due to the fact that I have not been re-potting this species very often.

Due to the method that this species uses to multiply, e.g. the production of new tubers on the ends of quite long stems (or roots if you like), it does not take too many years for all the tubers to be placed at the bottom of the pot. As these plants have always been grown in relatively deep pots, I think you can see what has happened, they just did not have the energy to grow to the top and so perished. I am now trying to overcome my failures by re-potting each year, but I find this is not working out as I would have expected, for many tubers still fail.

Caladenia latifolia is quite a widespread species around the southern coast of Australia being quite numerous amongst the dunes behind many beaches. It also occurs in inland areas well away from the coast. It prefers light sandy soils and used to grow amongst the rocks on one of our prominent peaks in the Mt. Lofty Ranges.

This species has apparently hybridised with other species in the wild, the only combination I know of in S.A. was between this plant and Cal. carnea in the south east. In W.A. it has far more scope to hybridise as there are several other species there that are close to it in form and nature.

Another plant that I had used to grow well until I tried to make them flower by putting ash upon them is Cal. menziesii R. Br. I started out with four plants collected from the River Sturt Valley above Coromandel Valley in 1967, they multiplied well until I had a 30 cm pot full of them, that is when I tried to make them flower. They very quickly reduced themselves to about four plants and no matter what I try I cannot get them to increase to more than 10 plants. I find they do grow better in a loam mixture than a sandy mix, which is typical of many Caladenia. Re-potting each year has not helped either and I am beginning to wonder if I have lost the fungus they live with? X

