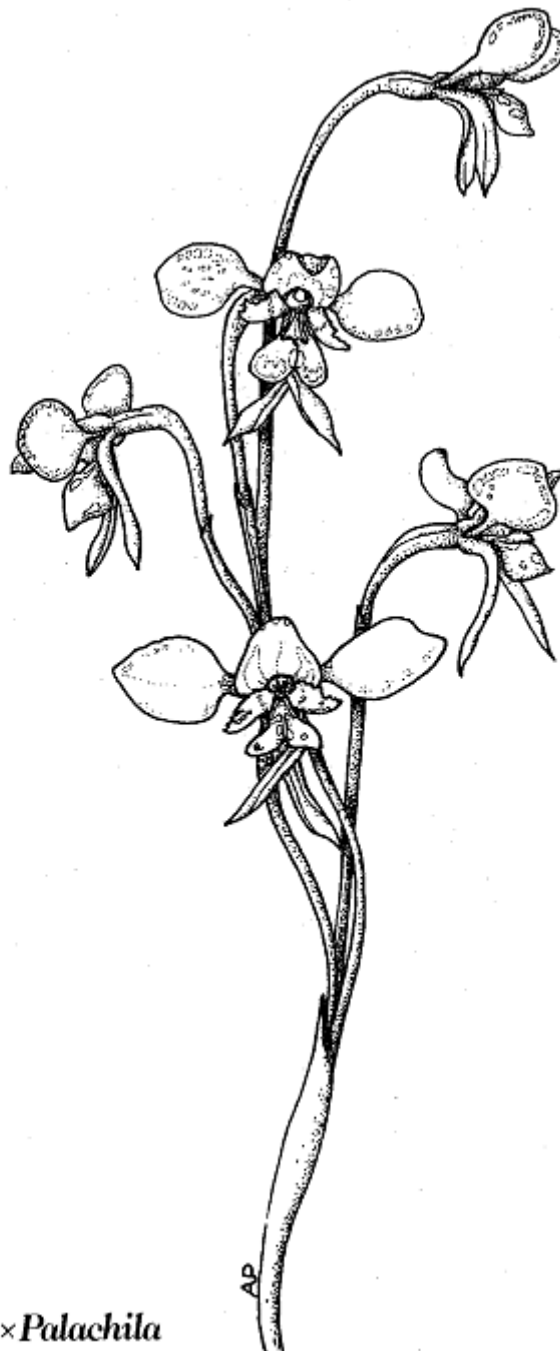


NATIVE ORCHID
SOCIETY
of
SOUTH AUSTRALIA



Diuris x Palachila



NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

JOURNAL

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NEXT MEETING

When: Tuesday 24 May, 1983 at 8.00 P.M.

Where: St Matthews Hall, Bridge Street, Kensington.

Subject: Mr B. Lay from the Department of Agriculture will speak on "Re-establishing Native Vegetation".

There will also be the usual features of trading table library and raffle, as well as the plant commentary. Visitors are welcome.

LAST MEETING

National and international photographic award winner, Allwyn Clements, gave us a marvellous talk, demonstration and slide show last meeting. Firstly, what equipment to use: his camera bag was like the magicians hat yielding all sorts of lenses, tubes, bellows, tripods and anything that could be of assistance to take that perfect shot. He then proceeded to show us slides: how they should be taken and one or two just to show how to avoid mistakes.

It became obvious fairly quickly that one does not need the most expensive equipment to produce results, a 35 mm single lens reflex camera with a standard 50 mm lens, a set of extension tubes, cable shutter release, flash-gun and most essential a sturdy tripod is all one needs for good slides or photographs. Even if one had no interest in photography it was worth coming along just to see the wonderful slides of orchids and wildflowers. Thank you Allwyn.

The Australasian Native Orchid
Society, Newcastle Group.

8th March, 1983.

The Secretary
Native Orchid Society of
South Australia

Dear Sir

It was with great horror and deepest sympathy that the members of our Society learned of the sad losses and great destruction wrought by the bushfires in your area. We have resolved to support the relief appeals in an appropriate way.

We realise that you would probably have a greater awareness of the areas of need of the unfortunate people left destitute by these terrible fires.

Please find enclosed a cheque for the amount of \$250.00. We request that you, the Native Orchid Society of South Australia, please pass this money on to the appropriate relief organisation in an area of great need.

Thanking you for your co-operation,

Yours sincerely,

S. Head (Ass. Hon. Sec.)

It is with deep gratitude we received the above letter and enclosed cheque. It is times like these we realise that, although we Australians often live thousands of kilometres apart in this great country of ours, tragic occasions such as the recent bushfires prove that distant friends are more like close neighbours. The above letter shows they are not so distant after all.

AUDITOR

Neil Christoph, one of our own members, has kindly agreed to be our auditor. Thank you Neil.

NEW MEMBERS

We would like to welcome these new members to our society:

Miss J.A. McLean

Mrs D.M. Patterson.

Mr B.T. Hutchinson

Miss L.M. Burden

Mrs and Mr M.B. Stoner

(with notes on cultivation)

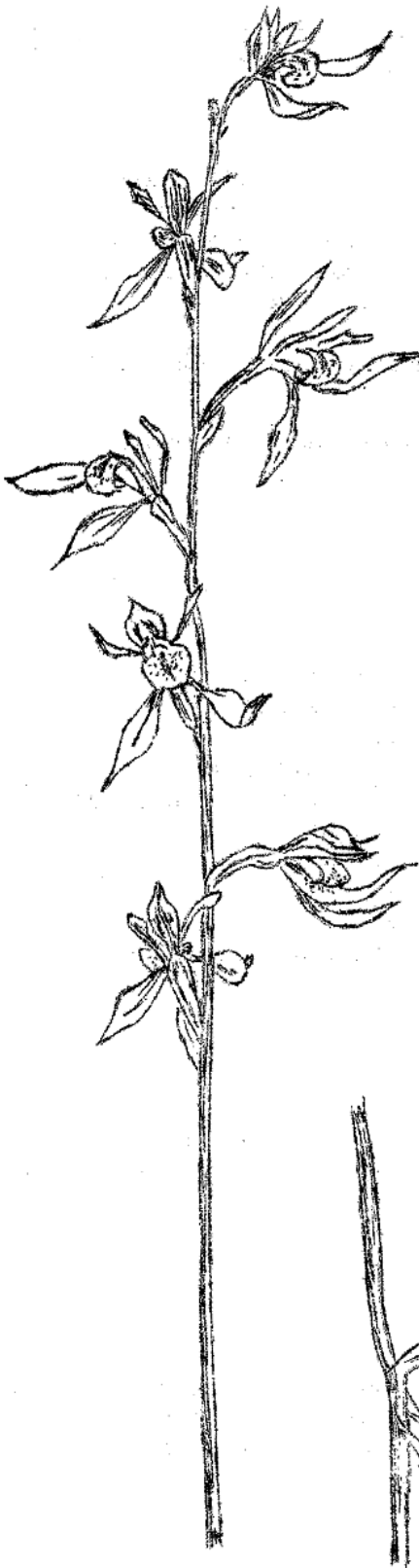
Eriochilus dilatatus is a most attractive autumn-flowering species from the south-west of Western Australia, where it is common in a wide range of habitats from coastal dunes to rock outcrops far inland, from swamp margins to mountain summits, in clay or in sand.

The plant (shown natural size) is very variable and several names have been given to different forms. The clear white sepals contrast delightfully with the pink and green pubescent labellum. The coastal form commonly produces up to ten flowers and is most desirable in cultivation.

It is interesting to notice how similar the flowers are to the South Australian *E. cucullatus*, but note how different leaf forms are, the velvety ground-hugging leaf of *E. cucullatus* contrasting with the glabrous upright leaf of *E. dilatatus* which is situated halfway up the flower spike!

Cultivation

My plants are doing well in straight gravelly bush soil in a small plastic pot. They do not increase vegetatively but plants repotted in October make a small new tuber if the one produced in winter is removed. Plants do not require water in summer as the soil in their natural environment gets very dry. Plants appear after the first autumn rains and reach a height of 20 to 30 cm in about four weeks when the flowers are produced.



Eriochilus dilatatus

PLANT DISPLAY (April 1983)

Epiphytes

As far as size was concerned *Dendrobium dicuphum* hybrids stole the show but the prize for colour surely went to the deep purple *D. bigibbum* x *D. johannis*.

Terrestrials

As expected the display was dominated by the "greenhoods". No less than 12 species were benched. One 10" pot of *Pterostylis coccinea* contained about 30 plants with bright red flowers. Other eye catchers included giant sized *Pt. revoluta*, *Pt. obtusa* flowering in concentric circles and *Eriochilus* up to 30 cm tall with six flowers on one spike.

Commentaries were given by L. Nesbitt (terrestrials) and Wayne Harris (epiphytes).

Popular votes went to *Pterostylis coccinea* (A. Clements) and *Dendrobium Chineo* (*D. dicuphum* x *D. discolor*) (Reg Shooter).

On Display:

<i>Dendrobium bigibbum</i> (3)	<i>Pt. fischii</i> (3)
<i>D. antennatum</i>	<i>Pt. obtusa</i>
<i>D. bigibbum</i> x <i>D. johannis</i>	<i>Pt. parviflora</i>
<i>D. discolor</i> x <i>D. dicuphum</i> var. <i>album</i>	<i>Pt. ophiglossa</i>
<i>D. dicuphum</i> x <i>D. strebloceras</i>	<i>Pt. pulchella</i>
<i>D. dicuphum</i> x <i>D. lineale</i>	<i>Pt. revoluta</i> (2)
<i>D. dicuphum</i> x <i>D. gouldii</i> var <i>guadalcanal</i>	<i>Pt. affin. revoluta</i> (Qld)
<i>Liparis reflexa</i>	<i>Pt. robusta</i>
<i>Eriochilus cucullatus</i>	<i>Pt. truncata</i> (2)
<i>E. dilatatus</i>	<i>Pt. x toveyana</i> (2 forms)
<i>Pterostylis alata</i>	<i>Pt. vittata</i>
<i>Pt. coccinea</i>	<i>Prasophyllum nigricans</i>

HYBRID EPIPHYTE SERIES

Epiphyte growers are having a feast this month. Reg Shooter has volunteered to write some articles on hybrid epiphytes (see page 37). As you can see we have a wealth of hidden talent in our Society.

HYDROPONICS FOR ORCHIDS?

Seen at the last meeting, *Pterostylis curta* growing in a container of water and putting out a healthy new root 30 mm long. Could some terrestrials be grown hydroponically? What a wonderful new field to explore. Why not have a go!

"WHY ARE THERE NO ORCHIDS HERE? R. Bates.

It is quite a common experience in South Australia to come across areas of bushland which, at first glance, appear to be ideal for orchids and yet on careful investigation are found to be almost or completely devoid of any orchid plants! There may be several reasons for this.

The most common one is for the area to have been previously logged, rolled, ploughed and burnt and then allowed to regenerate after heavy grazing or cropping. Usually the tell-tale plough marks can still be located.

Control burning is another factor. If an area is consistently fired over many years, each time in the early spring or late autumn, all orchids will eventually disappear. The signs of this having occurred are the excessive amounts of charcoal, blackened tree trunks and an absence of dead timber, i.e. logs on the ground.

Sometimes small areas of bushland are fenced off and all animals excluded. Such areas become so dense that the orchids are smothered out. The opposite can occur when a small relict patch of scrub is left in completely cleared country. Such an area of scrub provides shelter for numerous kangaroos, sheep, rabbits, etc. Excessive numbers of animals soon destroy the orchids.

Orchids are very sensitive to superphosphate. Once when I was investigating a relict area of forest in the Clare district a light plane flew over and I was showered with a fine rain of "super". That area is now devoid of orchids but it does have a fine ground cover of clover.

Most roadside verges in the settled areas have been sprayed at some time with herbicide, consequently such areas are devoid of orchids, but contain a fine cover of weeds.

An over abundance of weeds, particularly Bridal Creeper, Boneseed Daisy, Blackberry and Soursobs will soon exclude orchids from any area, even in Conservation Parks.

Quite often low lying areas, even in large tracts of undisturbed bushland will be without orchids as water may remain there for long periods after flooding and frost damage too is heaviest in such areas. Other apparently undisturbed areas may have been subject to invasion by such pathogenic fungi as *Phytopthera cinnamomi*.

Many roadsides in the state are flanked by narrow strips of native vegetation but few contain orchids. Besides the toxic exhaust fumes and oil washed off the road after rain, such areas are generally invaded by pasture grasses and too narrow to support viable populations not only of the orchids but also of the insects which pollinate them. Prevailing winds generally blow any seeds produced out into the bare paddocks on either side and these are wasted.

Of course in any very small isolated pockets of native vegetation pollen vectors are unlikely to survive so one usually finds only self-pollinated or vegetatively reproducing orchid species and not the more attractive species.

So next time you find yourself asking "Why are there no orchids here?", perhaps your answer lies above.

TERRESTRIAL STUDY GROUP REPORT

Slides of 40-50 different *Caladenia* species were shown. Some of us were amazed at the variation in the flowers of *C. patersonii* and *C. dilatata*. Many thanks to our Western Australian member Herb Foote who sent a selection of Western *Caladenias* including some hybrids none of us had seen before. A plant of *Prasophyllum striatum* on display was the first any of us had seen. Its odour was rather unpleasant!

Next meeting will be on Tuesday, June 14
at the home of Dr and Mrs Fuller,
 14 Warrego Crescent;
 Linden Park.
 Telephone 79 4416

Please bring slides of genera starting from *Acianthus* to *Glossodia* excepting *Diuris*, also any orchids in flower.

SHOWS

The Northern and Eastern Districts Orchid Society
are having their winter show on
Friday 22 and Saturday 23 July in
St Philips Parish Hall
Galway Avenue
Broadview
from 10.00 a.m. to 9.00 p.m.

The Society for Growing Australian Plants (S.G.A.P.) Show
will be held on
September 24 and 25.
Saturday 10.00 a.m. to 6.00 p.m.
and
Sunday 1.00 to 6.00 p.m.
We'll be there.

WANTED

Wanted: helpers to make up an index for the past issues of our Journal.
We have some offers, but many hands make light work.

Contact George Nieuwenhoven at 264 5825 or at the meeting.

Hilda Poxon

This is one of the most sought after Of the native hybrids and anyone who has seen a well grown plant with a number of flower spikes in full bloom will realise why.

D. Hilda Poxon is a primary hybrid and was registered by Dr N. Grundon in 1977, the cross being made by the late Ira Butler using the species *D. speciosum* (= showy, splendid) and *D. tetragonum* (= four angled, referring to the angular pseudobulbs). Unfortunately Ira Butler died before seeing the result of his crossing.

D. speciosum is a member of the section *Dendrocoryne* and is an extremely widespread and variable species. It is found from north-eastern Victoria right up the east coast as far north as the Endeavour River in Cape York Peninsula. It grows either as an epiphyte (on trees) or as a lithophyte (on rocks), depending on its locality, and it flowers from July to October.

The pseudobulbs of this species are extremely variable - from about three inches long up to three feet long. There are two to five leaves near the top of the pseudobulbs which are thick and leathery. The racemes arise from near the top of the pseudobulb and are up to two feet long, carrying many white, cream or yellow flowers with purple to red spots on the labellum.

D. tetragonum is also a member of the section *Dendrocoryne* but the morphology of the plant is vastly different to the preceding species. It is a true epiphyte, growing in small clumps with semi-pendulous stems, slender and wiry at the base but distinctly swollen and four-angled for the remainder. There are two to five leaves near the apex of the stem, somewhat curved and very thin textured. Racemes come from between the leaves apically very short, not much more than $\frac{1}{4}$ inch long, carrying one to five flowers which vary between $1\frac{1}{2}$ and $3\frac{1}{2}$ inches from the tip of the dorsal sepal to the tip of a lateral sepal. They are widely spreading, greenish yellow with brown, red or purple markings on the labellum; very sweet smelling (resembling vanilla) and flower any time between May and October, sometimes more than once a year.

The progeny resulting from this cross have inherited the best characteristics of both species. Plants are big and sturdy but not too big, as *D. speciosum* can get. The pseudobulbs are four-angled but not so pronounced as in *D. tetragonum*. The flowers are *D. tetragonum*-sized on *D. speciosum* spikes, carrying up to 30 flowers which vary in colour from yellow con-colour or yellow with red or brown blotching, through to a beautiful apple green, some of which have wonderfully contrasting labellums. The flowers display themselves well and have retained the perfume, although in my opinion not quite so intense. Perhaps the most endearing trait inherited is the ability to flower several times a year. As I write this article in late March I have a plant carrying one spike in full flower. It produced two spikes in February and on another pseudobulb on the same plant I have two more spikes appearing. What more could you ask! And the good news is for people who have been trying to purchase a plant without success, is that the cross has been remade and seedlings are appearing for sale in some of the orchid nurseries catalogues.

Australian Native Hybrids No. 1 (contd.)

D. Hilda Poxon grows quite happily in a bark and charcoal mix under 50% shade cloth. Keep them on the dry side in the winter months and when new growth appears in the spring (once they are clear of the compost and commencing to put out roots), start watering them regularly giving small, weak doses of fertilizer fortnightly. When the flower spikes appear place the plant under cover to protect the blooms from the elements and to keep them clean and fresh-looking, then take it along to the next NOSSA meeting for everybody to enjoy.

METHODS AND MADNESS OF AN ORCHIDOLOGIST R.C. Nash

(Continued from NOSSA Journal Vol. 7, No. 2, page 19.)

In my experience I find that most *Diuris* prefer plastic pots which are deeper than wide, the exception being *D. longifolia*, which does far better in squat pots. The reason for this is due to the tuberous roots growing deep in the deeper pot and becoming lost when they shoot upwards in the following growing season. Sometimes they will even grow from the drain holes in a deep pot.

Many of the species I have grow quite happily in the 300ml cream containers with one or two plants in each.

Diuris do not like being repotted too often. If your plants are growing well, then leave them as long as possible before repotting them. Quite a number multiply vegetatively and must be repotted every few years. With many you will find that too much repotting will give poor flowering results, so be patient and ignore that urge to just have a peek.

As I consider the *Diuris* to be the one genus amongst our terrestrial orchids that will become very prominent in horticultural activities, especially shows, in the future, some explanation of a few members attributes is essential. The idea being to encourage growers to try and improve the cultural forms, as well as hybrid breeding.

In this genus we have a good selection of size, shape, colour and in some members, perfume. If these features are to be enhanced, then set programmes on breeding techniques should be started now. Already hybridising has started with some very interesting results. Naturally this genus is very prone to hybridising, a reason for many taxonomical problems among these plants in New South Wales. We in South Australia are lucky in this concern to some extent, but we could have a few small problems.

These problems should not deter those who wish to carry on a well-documented and managed hybridising programme, for from such work many of the taxonomical muddles will eventually be solved.

In the following notes I hope to give a brief outline on the distribution, size, colour, etc., of various common species as well as generally discussing other features of these plants. Mostly the later will be about trivia which allows some digression.

Methods and Madness of an Orchidologist (contd.)

One of the plants that has in the past been greatly sought after by wild flower collectors, and now keenly required by the cultivator of these plants is *D. pedunculata*. In my youth this species was very common in various bushland areas in the Eden Hills, Blackwood and Belair districts. The Belair Recreation Park, when it was one of our few National Parks, also contained many plants of this species. The old 28-acre Floral Reserve, which was surrounded by the old Golf Course in the above park, contained large numbers of this beautiful yellow flowered plant. Some 20 to 30 years ago these plants suffered greatly in the above park, due to over picking of the flowers resulting in greatly reduced numbers inside the park and the districts mentioned above. This species is all but extinct in the above park now. Before the old 28-acre area was destroyed to make way for fairways in the upgrading of the golf course, Mark Clements and myself were able to improve the numbers of this species in this area by hand-pollinating as many flowers as possible. The total destruction of the above area came as a great disappointment to us both.

Besides the above occurrences this plant was also locally common in many areas throughout the Mount Lofty Ranges, as well, isolated plants could be found in the most unlikely places. It was this species along with *Thelymitra luteocilium* that grew about 100 metres from my home back in the 1940s and this area was well developed then. I also remember seeing this plant growing along many roadsides in the Mount Lofty Ranges. For instance along some sections of the road between Kersbrook and Williamstown I remember seeing patches of these yellow blooms as late as the early 60s. During the late 40s and early 50s isolated plants were to be found on the Adelaide Plains about Glen Osmond. Furguson Park also held a very good population of this species in these times.

Due to over-picking, land development, councils spraying the roadsides and the ingress of weeds, this species is fast becoming an candidate for Mr. R. Bates' "Our Rarest Orchids".

There are, however, many small areas left in the Mount Lofty Ranges where this beautiful plant is still to be found, but most are under threat. I always pollinate as many flowers as possible when I visit such areas at flowering time. This small effort at preserving this species has improved the numbers in many of these "spots"? If I think that wild flower pickers are about I remove the large floral segments; yes, it is I who mutilates these flowers if you have found such treated plants. At least the pickers are not interested in removing these much needed flowers with all the promise of seed for many new plants. I do have one problem, how do you protect them from the diggers?

This species has quite a good range in South Australia, being found south from the southern Flinders Ranges into the south-east, as well as the Lower Eyre Peninsula. It even occurs in the better watered Mallee lands east of the Murray River. I have seen plants of *D. pedunculata* in many areas in Victoria from the South Australian border to the high Alps and into New South Wales. In the alpine areas plants can often be found flowering freely along ridge tops prior to Christmas, while it flowers about the New Year in the sphagnum bogs in the snow gullies in these high lands. In these high places the land is snow-covered during winter when all orchids, including *D. pedunculata*, are dormant.

(to be continued) © Copyright

Dendrobium linguiforme (Tongue Orchid)

The plant is epiphytic or lithophytic, forming large masses on trees or rocks. Its range is from the extreme south-east of New South Wales to at least the Burdekin River in Queensland. It grows from sea-level to altitudes of around 1000 metres, but is confined mainly to the coastal areas, although it has been found up to 250 kilometres inland. The inland plants have smaller, tougher leaves than those of the coastal areas, due no doubt to the harsher conditions under which they exist. It is not confined to a specific host but is found on quite a large variety of trees.

The rhizomes are prostrate and branching with thick, tough ovate leaves, 3 to 4 cm long having distinctive longitudinal furrows on top.

The racemes, up to 15 cm long, grow from just below the base of the leaf and bears from six to 20 flowers. The flowers are usually white or cream with a number of faint purple markings on the labellum.

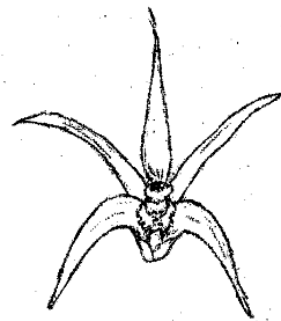
The flowering time is usually August-September here but earlier in the tropical areas.

It does not lend itself to pot culture but is very hardy and with a little care will grow freely on cork or hardwood slabs. I have had good success using pieces of *Melaleuca* on which it readily establishes itself. It receives approximately 75% shade. It should be protected from our frosts and can be fertilised using foliar fertilisers at half the recommended strength.

This is the variety of the species on which the genus *Dendrobium* was founded. It was first described by D. Swartz.

There are three varieties of this species, the best known of which is var. *nugentii*, which is a tropical form from about the Burdekin River north to Bloomfield River in the south-east of Cape York Peninsula.

This form has broader, thicker leaves which are more rounded at the apex and in addition to the longitudinal furrows it often has transverse furrows. The flowers of this form are slightly smaller and age quicker.



Dendrobium
linguiforme

