

NATIVE ORCHID
SOCIETY
of
SOUTH AUSTRALIA



*Acianthus
reniformis*

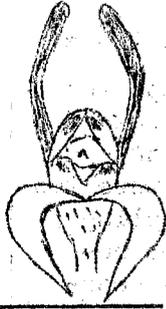
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NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

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EDITOR:	Mr L.T. Nesbitt		

NEXT MEETING

When: Tuesday, 24 July, 1979, at 8.00 p.m.

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

Why: Guest Speaker Mr John S. Womersley B.Sc., formerly Assistant Director (Botany) Department of Forests, Papua New Guinea, will present the second part of his "Pictorial Introduction to the Native Orchids of New Guinea".

Trading Table, Library, raffle, plant display and commentary.

LAST MEETING

Attendance 60

There was a good attendance to see Fred Hall show the first movie film to be screened at our meetings. It recorded scenes of early Tea Tree Gully and the plants that grew there in areas such as Hancock's Scrub. Fred also showed us slides of the native vegetation still to be found in a few isolated pockets of bushland that remain in the area.

Raffle results: Dendrobium prenticei won by Berna Clements; Sarcochilus falcatus won by Brian Holmes; and Pterostylis nana won by Jim Simmons.

RESCUING PLANTS

Do you know of any areas to be cleared? Can you arrange for written permission from the owners to collect and either let the Society know or collect the plants yourself for distribution to other members or for donation to the tuber bank when dormant?

GREENHOOD PLANT FLOWERS TWICE IN A SEASON

Jean Galbraith, Tyers

Three years ago I had a clump of 13 Blunt Greenhoods, Pterostylis curta, all seedlings from one plant but Satin Bower-birds are fond of orchid tubers (and anything else edible). When I discovered they were taking the tubers only one plant remained and I protected it with wire.

This year it flowered, not with one flower but two, as occasionally happens with many orchids. Unfortunately, my cover was not high enough to save the flowers which were nipped off. To my surprise another flowering stem grew up from the same rosette. By that

time, as usual in the spring, the bower birds had left the garden to nest in the forest, so the second stem matured. Again there were two flowers. It will be interesting to see whether the character re-appears next year or in any seedlings — though it has now (21 Oct. 1978) been in flower for two weeks and has not been pollinated, possibly because it is late and the pollinating insects are not about or possibly because of cold dull weather.

The flowers die within a day or two of pollination though without it they may last for six weeks before closing.

The above article first appeared in Vol. 96 (January/February 1979) of the Victorian Naturalist, the publishers of which have kindly permitted us to reproduce it in our journal.

DONATION TO AUSTRALIAN ORCHID FOUNDATION

NOSSA has sent a donation to the Australian Orchid Foundation of \$40.60, which includes \$20.60 from the sale of plants donated by Ray Nash.

EPIPHYTES FOR SALE

Contact D.H. Wells of Windsor Gardens. Telephone 261 6030.

NEW MEMBERS

Mr R. Stradwick, Ridgehaven.
Mr J.N. Henderson, Glengowrie.

PHOTOGRAPHY GROUP

This group, comprising ten members under the able leadership of Mr Alwin Clements, met on two occasions in June. Macro-photography was the subject and many questions and problems were dealt with, leaving members better informed than before.

This series will be continued at the home of the Secretary on Wednesday, 12 September, at 7.30 p.m. All members welcome.

SHOWS - 1979

1. NOSSA exhibit at South Coast Orchid Club of South Australia Show, Marion Shopping Centre. Put in Saturday, 29 September, take out Saturday, 6 October.
2. Society for Growing Australian Plants Show, Walter Duncan Hall, Wayville Showgrounds on 13 and 14 October.

Note the dates in your diary. More details later.

PLANTS ON DISPLAY - 26.6.79Terrestrial

Harold Goldsack commented on the terrestrials which included no less than 12 species of Pterostylis plus four other genera in flower. It was a very good display, certainly the best for this year. Reg Preuse showed an attractive red form of Pterostylis alata var robusta from Yorke Peninsula which contrasted with the local green form also on display. We saw two large pots of Pterostylis longifolia containing very robust local specimens to contrast with the smaller Victorian clones alongside. This is one species which is more robust in South Australia than anywhere else. Do you know of any others? Other plants to catch my eye were the very large flowers of Pt. baptistii, the pure white Caladenia alba and the curious pinched-in flower of Pterostylis angusta from Western Australia. Les Nesbitt displayed three flasks of hybrid seedlings and one of mould.

(F = flowering, L = leaf, B = bud)

<u>Acianthus exsertus</u> , F.	<u>Pt. baptistii</u> , F, F.	<u>Pt. ophioGLOSSA</u> , F.
<u>A. reniformis</u> , F, B.	<u>Pt. concinna</u> , F, F, F, F.	<u>Pt. ophioGLOSSA</u> var
<u>ChiloGLOTTIS formici-</u>	<u>Pt. cucullata</u> , B.	<u>collina</u> , F, F.
<u>fera</u> , F.	<u>Pt. grandiflora</u> , F.	<u>Pt. plumosa</u> , B.
<u>Caladenia alba</u> , F, F.	<u>Pt. longicurva</u> , F.	<u>Pt. alata</u> var <u>robus-</u>
<u>Corybas dilatatus</u> , L, B.	<u>Pt. longifolia</u> , F, F, F, B.	<u>ta</u> , F, F, F, F.
<u>Glossodia major</u> , L.	<u>Pt. nana</u> , F, F, F, F.	<u>Pt. vittata</u> , F, F.
<u>Pterostylis angusta</u> , F.	<u>Pt. nutans</u> , F, F.	

Epiphytes

Commentary by Ron Robjohns. Although not as numerous as the terrestrial section there was a good display of Dendrobium tetragonum hybrids to prove that this species is extending the flowering season for growers here.

(F = flowering)

<u>Bulbophyllum macphersonii</u> , F.	Den. Star of Gold (<u>falcorostrum</u> x
<u>Dendrobium racemosum</u> , F.	<u>tetragonum</u>), F, F.
<u>Den. bigibbum</u> , F.	Den. Penny Ann (<u>kingianum</u> x X <u>gra-</u>
Den. Hilda Poxon (<u>speciosum</u> x <u>tetra-</u>	<u>cillimum</u>), F.
<u>gonum</u>), F, F, F.	<u>Den. tetragonum</u> x <u>gracilicaule</u> , F.
Den. Ellen (<u>tetragonum</u> x <u>kingianum</u>), F.	

POPULAR VOTETerrestrial

First — Pterostylis baptistii grown by Les and Kay Nesbitt. There were eight flowers with 12 more buds to come. This north Queensland form flowers over a long period making it almost impossible to flower a potful all at the same time.

Second — Pterostylis concinna grown by Les and Kay Nesbitt. A 10" pot containing 50 dwarf flowering plants.

Epiphytes

First — Dendrobium Hilda Poxon (speciosum x tetragonum) grown by Ron Robjohns. This attractive plant bore five sprays of yellow flowers and was growing in a 5" squat pot.

Second — Dendrobium Hilda Poxon grown by Jean Attenborough. Another nicely grown plant with six sprays of flowers.

THIS MONTH'S COVER

For this month's journal the cover illustration is Acianthus reniformis, sometimes known as the "Gnat Orchid". Here the generic name is a combination of the two Greek words "acis" (meaning a pointed instrument), and "anthos" (a flower) - a reference to the general "spikiness" of the flowers. There are but three representatives of the genus occurring in South Australia. These include firstly A. reniformis, where the species name comes from two Latin words: "renes" (the kidneys), and "forma" (form); giving "kidney-shaped" - an allusion to the distinctive shape of the labellum.

The genus and the species A. exsertus, A. fornicatus and A. caudatus, were all named by Robert Brown. He also named A. reniformis, but in this instance the full title allocated was Cyrtostylis reniformis, with the generic name coming from the two Greek words "kurtas" (meaning curved) and "stulos" (a column). Rogers, in his little book "An Introduction to the Study of South Australian Orchids", reported that C. reniformis is "fairly common, growing in similar places to Acianthus, which to a careless observer it closely resembles"! One observer was F.R. Schlechter, on whose authority Cyrtostylis became included in the genus Acianthus. The most curious aspect of this is that Schlechter's revision predated Roger's book by five years.

There was also a suggestion that A. reniformis may be one of the Caladenias. Reichenbach referred to it as Caladenia reniformis. The similarity becomes more apparent in another of the Acianthus species found in South Australia, namely A. caudatus, where the species epithet comes from the Latin "cauda" (meaning a tail) - a reference to the elongated sepals. Fitzgerald, in his "Australian Orchids", Vol. I, illustrated A. caudatus alongside Caladenia filamentosa "in order to show the distinctions between the two closely allied genera by contrasting the most similar species".

Neither A. caudatus nor A. exsertus are found in Western Australia. By contrast A. exsertus, the third South Australian species, must be one of the most prolific orchids in the Adelaide Hills, particularly during its main flowering time of late May and early June. In this instance, the species name is directly similar to the English adjective "exserted" (meaning projecting) - an allusion to the prominent column.

On the other hand Fitzgerald referred to A. fornicatus, a species similar in appearance to A. exsertus, as the commonest orchid on the east coast of Australia. It also occurs in New Zealand, but is totally absent from Victoria and the westerly states, including South Australia. Here again, the species epithet is very similar to the English adjective "fornicate", from the Latin "fornicatus" (meaning an arch) - a reference to the way in which the dorsal sepal arches forward over the column.

FIELD TRIP (more field trips, page 6)

YORKE PENINSULA - weekend

Meet at Warooka at 10.00 a.m. on Saturday, 22 September and 8.30 a.m. Sunday, 23 September. Book your own accommodation now. Suggestions are the Warooka Hotel or Point Turton Caravan Park.

Orchids will be inspected at Innes National Park.

FIELD TRIP TO PARA WIRRA - 9.6.79

Peter Hornsby

A kindly day resulted in another good turnout for this trip, and we were met at the entrance to the Park by the Ranger, Colin Waters, himself a keen student of native orchids. We set off with his assurances that although we would find some orchids, the best were only to be found in the deeper penetrations of the Park - beyond where we anticipated venturing! In the event, we still did quite well.

Our first searching point was a kilometre or so along the track to the Devil's Nose. Here, near the western edge of the elevated ridge, we found an extensive patch of the green form of Acianthus exsertus. The patch was roughly rectangular, measuring two metres by five. It contained hundreds of plants, all completely green. The prosperity of the individual plants varied, but it was noticeable that the finest specimens were in the most sheltered spots, either at the base of rocks or around tree trunks - both spots where natural litter is deepest and the rainfall is accentuated. A. exsertus may be characterised by this propensity to aggregate around the trunks of trees; at this point there is a belt reaching out to about 75 cm from the trunk, within which mature trees do not absorb moisture through their root systems and where any run-off of water down the trunk accumulates. This, coupled with the bark peelings that build up there, provide an ideal environment for Acianthus exsertus. In fact, many of the tubers develop in the litter itself, never penetrating the soil beneath.

In addition to the green A. exsertus, some of a more normal colour were also found in the same vicinity, as were the basal rosettes of Pterostylis nana, while on the opposite side of the track, P. alata var robusta was found in bud.

Having been held together as a group as far as this point, we then drifted back to the cars. The sun, now behind us, made it easier to see the orchids against a background of predominantly dried out eucalypt and acacia leaves. The closer examination afforded by the more leisurely progress soon brought to light plants overlooked on the way out. Perhaps the most prominent was a mass of P. alata var robusta in flower in a secluded spot beneath some scrub. We have been used to finding an odd flowering specimen amongst masses of non-flowering basal rosettes, but here we found at least a dozen flowering in a small area, with eight so close together that they were nearly touching each other. A remark that "It reminds me of my pot at home!" shows that at least one of our members has discovered the secret of getting them to flower.

Scattered through the undergrowth we also found Glossodia major leaves, and occasionally leaves representing all that remains of this year's Eriochilus cucullatus. At the other end of the scale we found newly emerged "spikes" of Microtis sp. and Thelymitra sp. Those with sharper vision also spotted basal leaves of Acianthus reniformis, while an examination of some yaccas near the car park revealed Corybas dilatatus with flower spikes already in evidence.

The most outstanding individual item was a robust and multiple-flowered specimen of P. vittata at the side of the track.

By now we were back at the car park and ready to move on to our second venue behind the Information Office. On first entering the Park we had spotted some emus, whereas we now paused to admire a dozen western grey kangaroos, some with pouch joeys, who were grazing in the late afternoon sun. From there we passed the aviaries containing various birds of prey, crested pigeons and several species of parrots - plus their free-loading relatives scrounging for seeds that had been scattered through the wires.

Field Trip to Para Wirra (contd.)

Returning to the business at hand, we made for a patch where the stringybarks were reasonably clear of undergrowth. Here we started with the very reverse of our original find: a solitary green A. exsertus in a patch of conventional ones. In this area we found many examples of Prasophyllum nigricans in seed, and frequent plants of Pterostylis vittata and P. longifolia. Most P. vittata were in flower, though the plants themselves were generally small. Many of the P. longifolia were in bud.

The ground at this point slopes gently to the north, but it is the soil which is so interesting. It is a light grey colour, with a fine powdery consistency, suggestive of clay with a very high kaolin content. The upper layer is a solid mass of it with not a grain of sand or gravel to be found in it. Judging by their relative incidence here, compared with other parts of the Park, it is relished by such species as Prasophyllum nigricans, Pterostylis longifolia and P. vittata; however P. nana and A. exsertus (both of which were found on the slope) were not so keen, judging by their relative paucity. Thelymitra sp. leaves showed no difference in their incidence. It would though be necessary to know the species details before firm conclusions can be drawn. On the other hand, this is the only spot where we found leaves of Calochilus sp.

All in all, it was a successful trip, and our thanks go to Colin for his advice as to where to look.

Plants found:

In flower: Acianthus exsertus, A. exsertus (green form), Pterostylis alata var robusta, P. vittata.

In bud: Corybas dilatatus, Pterostylis longifolia.

Past flowering: Eriochilus cucullatus, Prasophyllum nigricans.

MORE FIELD TRIPSPARRAKIE - weekend

This is a weekend trip. Rendezvous at 8.00 p.m. on Friday, 27 July, at the Geranium Area School, where we will attend the meeting of the local S.G.A.P. group.

There will be tours to see local orchids on the Saturday and Sunday. Our contact is Mrs W. Lithgow, telephone Parrakie 516.

FERRIES MACDONALD CONSERVATION PARK - Sunday

Meet at the silos at the Monarto South turnoff from the old Murray Bridge road at 10.00 a.m. on Sunday, 19 August. This is an all day trip so don't forget your lunch. The leader for the day is Harry Wright.

OUR RAREST ORCHIDS - No. 13

R. Bates

The veined sun-orchid, Thelymitra venosa R. Br. is the only Thelymitra to have zygomorphic flowers. The lowest sepal is larger than the others and has crenulated margins. Flowers are sky blue in colour with dark blue venation. Unfortunately the flowering period is very short, being restricted to the two weeks before Christmas in our state. Flowers open only on the mornings of hot sunny days and being cleistogamous, the plant sets seed even if the flowers don't expand.

The species is restricted in South Australia to a small area of swampy land near Mt. Compass and Myponga in the southern Mt. Lofty Ranges, avoiding the deeply-shaded areas. Unlike most sun orchids Th. venosa increases vegetatively, a second new tuber being produced each year on a side root 2-3 cm away from the main tuber.

Sadly Th. venosa does not occur in any conservation park in South Australia.

The Mt. Lofty Range clone is not suitable for cultivation but Nicholls described a large-flowered form from the Blue Mountains which has flowers remaining open, even at night. Pink and white-flowered forms are recorded from the eastern states.

Thelymitra venosa extends to New Zealand and New Caledonia and is reasonably common in parts of New South Wales, Victoria and Tasmania, ranging from coast to alpine regions.



Thelymitra
venosa

WESTERN AUSTRALIAN UNDERGROUND ORCHID

One of the world's rarest orchids has been in the news lately. Known to occur only in the southern portion of Western Australia, the underground orchid Rhizanthella gardneri has been seen only five times since it was originally discovered in 1928 by a farmer clearing land. The plant has no leaves and is thought to grow and bloom entirely underground. This unusual orchid is believed to flower between May and August.

Last year Mr Jack Trott, who found the first plant, offered \$100 reward for any confirmed new sighting. Earlier this year it was announced that the World Wildlife Fund had set out to raise \$29,000 to finance a two-year search for the orchid.

The latest issue of the Western Australian Native Orchid Study and Conservation Group's Bulletin bears the news that not one but 15 plants have been found. We await further details on these latest discoveries.

ADDITIONS, CORRECTIONS AND NOTES ON THE
 ORCHIDACEAE IN "BLACK'S FLORA", S.Aust, Part 1, Ed. 3

R. Bates

- Page
- 395 Add to distribution of Caladenia dilatata var concinna - York Peninsula region; (Weber and Bates J. Adelaide Bot. Gdn. 1(2) (1977)).
- 401 Note that C. radialis collected at Wilpena Pound, although morphologically identical with Western Australian material appears to be of hybrid origin (C. filamentosa x C. dilatata var concinna). This putative hybrid has also been collected in the Gawler Ranges.
- 418 Add to distribution of Eriochilus cucullatus - northern Lofty, Murray regions.
- 430 Add to distribution of Prasophyllum fuscum var fuscum - Murray Region (as P. constrictum Rogers, the type from Taillem Bend).
- 433 In description of P. pallidum in line 18 put ". . ., increasing in thickness and pubescence beyond the bend," (referring to labellum callus plate).
- 434 Alter citation of P. patens var pruinorum to read var pruinorum (R.S. Rogers) R.S. Rogers in J.M. Black, . . .
- 438 Delete P. hamiltonii non Nicholls, sensu J.M. Black as a synonym of Pterostylis alata var robusta as this plant appears to be a separate species.
- 441 Note P. ingens is usually referred to as P. x ingens (Rupp) D.L.
- 442 P. hamata: there is some doubt as to the application of this name to South Australian material. The plant concerned is the most widespread orchid in the drier areas of S.A. Some present botanists regard it as representing an extension of the known variation of P. mitchellii Lindl.
- 443 P. mitchellii: doubt must be cast on the use of this name for the species described and illustrated here which is most likely an unnamed plant.
- 447 P. rufa: Blackmore and Clemesha, Orchadian (1968) divide this species into s.sp. rufa and s.sp. aciculiformis, referring S.A. material to s.sp. aciculiformis, however, neither of the two forms occurring in S.A. agree very well with Nicholls type spec.
- 449 23 p. sp., undescribed - a number of possibly undescribed Pterostylis of the "rufous" group have been collected in South Australia. The one illustrated here came from Eyre Peninsula and not from Murray Region.
- 454 T. aristata: the vernacular name "Scented sun orchid" does not usually apply to this species but rather to those fragrant forms of the Th. longifolia - nuda - megcalyptra complex. New Zealand and Queensland should be deleted from the distribution of T. aristata.
- T. canaliculata. This species is common on Kangaroo Island but that region is not included in its distribution here as it is not represented by specimens in the Adelaide Herbarium collection. A similar situation exists with several other species which are known to occur in a region but do not have that region listed as part of their distribution due to an absence of herbarium specimens. This could be rectified by NOSSA members.
- 456 T. decora. Correct the spelling of the synonym to read T. ixioides var truncata.