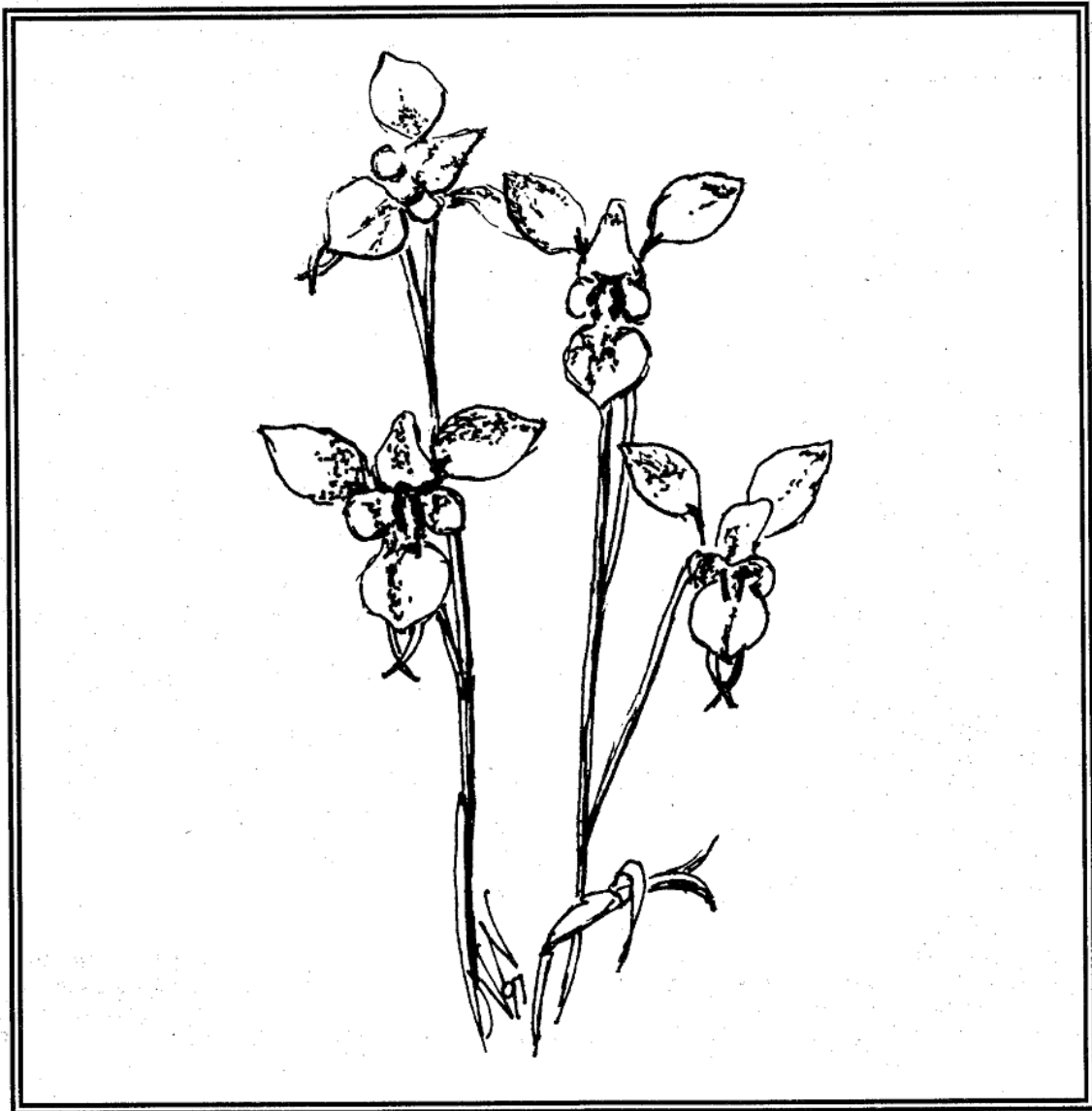




Journal
of the
Native Orchid Society
of
South Australia Inc



NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

Post office box 565 Unley 5061

The Native Orchid Society of South Australia promotes the conservation of native orchids through cultivation of native orchids, through preservation of naturally-occurring orchid plants and natural habitat.

Except with the documented official representation from the Management Committee of the native orchid society of South Australia, no person is authorised to represent the society on any matter.

All native orchids are protected plants in the wild. Their collection without written Government permit is illegal.

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NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC JULY 1998 Vol. 22 No. 6 JOURNAL

JULY MEETING

Tuesday July 28th at 8.00 pm: Saint Matthews Hall, Bridge Street, Kensington. Les Nesbitt & George Nieuwenhoven will give a practical deflasking display using various media!.

Doors open at 7.15 to allow trading table and library to proceed. Don't forget tea and biscuits afterwards!

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August 2	Warren and Hale CP	Williamstown
August 16	Lowan CP & Perponda	Bow Hill
August 25	Edda Viscic on Costa Rica Ecology	General meeting
Sept 5-6	Yorke Peninsula weekend	Innes CP
Sept 13	?Balaklava- Halbury	Lower North
Sept 19-20	Spring Show	St Peters
Oct 10	<i>Prasophyllum</i> Special	Sandy Creek
Nov 2-4 8	Combined ANOS Vic-NOSSA Excursion	Naracoorte
Nov	<i>P. arenicola</i> working bee	Grange
Jan	<i>Dipodium pardalinum</i> and Wirraminna visit	Ironbank
March '99	<i>Genoplesium</i> special to Simpson	Victoria

Coming Field Trips:

Warren & Hale: Sunday August 2nd. Meet Kersbrook Shop at 10am. Bring a picnic lunch. Lots of lovely *Corybas* and *Pterostylis*!

Lowan CP and Perponda Survey: Sunday August 16. Meet at the NW corner of Lowan CP on the road from Bow-Hill at 10am. This will be a once off as we will never repeat this trip. We expect to see lots of mallee greenhoods and we need many pairs of eyes to spot those hidden species! Bring a picnic lunch and a compass (its so easy to get misplaced in the mallee!)

Monarto Alternative. Some members may prefer the Monarto alternative same day as there will be more orchids there :meet Callington 10am

ON THE BENCH:

Epiphytes---- *Bulbophyllum schillerianum*, *Dendrobium bigibbum*, *D. Aussie Heart*, *D. Annes Rainbow Surprise*, *D. atrovioleaceum*, *D. Bright Spark*, *D. Bellinghen*, *D. Brolga*, *D. Ellen*, *D. Ellen x Kuringai*, *D. Hilda Poxon*, *D. Glenn Star*, *D. Jesmond Dazzler*, *D. Lorikeet*, *D. Peewee x Kim*, *D. Silvereye*, *D. Violet Yamagi*, *Dockrillia rigida*.

Terrestrials ---- *Acianthus fornicatus*, *A. pusillus*, *Caladenia pusilla*, *Chiloglottis longiclavata*, *Corybas incurvus*, *Pterostylis longifolia*, *P. nana*, *P. robusta*, *P. truncata*, *P. vittata*, *P x furcillata*.

The most unusual item on display was a flask of *Caladenia pusilla* less than one year since sowing but with many plants in flower! It was interesting to note that one plant of *Acianthus pusillus* had its leaf 20cm above the pot while the *A. fornicatus* all had leaves flat on the ground. Amongst the epiphytes one plant really stood out and that was *Dendrobium* Violet Yamagi which is *D. atrovioleaceum* x *D. superbum* x *D. spectabile* or something like that.

PLANT COMMENTARIES Les Burgess and Reg Shooter

JUDGING

Terrestrial species

- 1st *Pterostylis vittata* grown by G. Nieuwenhoven
- 2nd *Pterostylis nana* grown by Black Hill
- 3rd *Acianthus fornicatus* grown by Judy Penny

Terrestrial hybrids

- 1st *Pterostylis* x *furcillata* grown by Black Hill

Epiphytic species

- 1st *Dendrobium atrovioleaceum* grown by G. Nieuwenhoven
- 2nd *Dockrillia rigida* grown by "
- 3rd *Dendrobium bigibbum* grown by "

Epiphytic hybrids

- 1st *Dendrobium* Peewee x Kim grown by R. Herraman
- 2nd *D. Jesmond Dazzler* grown by Bodo Jenson
- 3rd *D. Glenn Starr* 'Windemere' grown by R. Herraman

Nothing helps to grow orchids better than plain common sense. RR

Plant of the Night *Dendrobium* Peewee x Kim

POPULAR VOTE

Best Terrestrial: *Pterostylis vittata*

Best Epiphyte *Dendrobium* Annes Rainbow Surprise

NEW MEMBERS:

NOSSA welcomes Maurice Roach and Nola Cavallaro.

Next Committee Meeting will be held at 7:30 Wednesday August 5 at the home of G & N Nieuwenhoven 15 Robin Terrace Hope Valley

CONSERVATION REPORT

Halbury Kerry Bates

The weeding day at Halbury in June unfortunately ended in rain! The main weed, Bridal Creeper needs to be painted with Roundup to be killed and as the rain would have washed it off we were mostly reduced to digging up small plants and hand-pulling weed grasses: hardly satisfactory with the huge amount of Bridal Creeper present.

It was good to see that in the area treated for weeds last year orchids were abundant! Besides large colonies of normal, green -flowered *Pterostylis robusta* just coming into flower there were a few plants of an earlier flowering taxon with red tinted hoods and narrow labellum (and crenulate leaves). It was guessed that these were hybrids with *P. dolichochila* a species reported to grow in the area but never collected there. In any case it was something of a new record for Halbury scrub.

Other orchids just coming into flower were *Cyrtostylis robusta*, *Pterostylis mutica* and an undescribed *Pterostylis rufa* group species. This is ridiculously early for a species of this group and we will have to add July to its official flowering time! As there were two distinct rosette forms of *P. mutica* we realised that the two common forms of that species in SA are both at Halbury. (See Orchids of South Australia). Unexpected plants added to the list for the park include *Drosera whittakerii* and *D. planchonii*, two wonderful insectivorous plants.

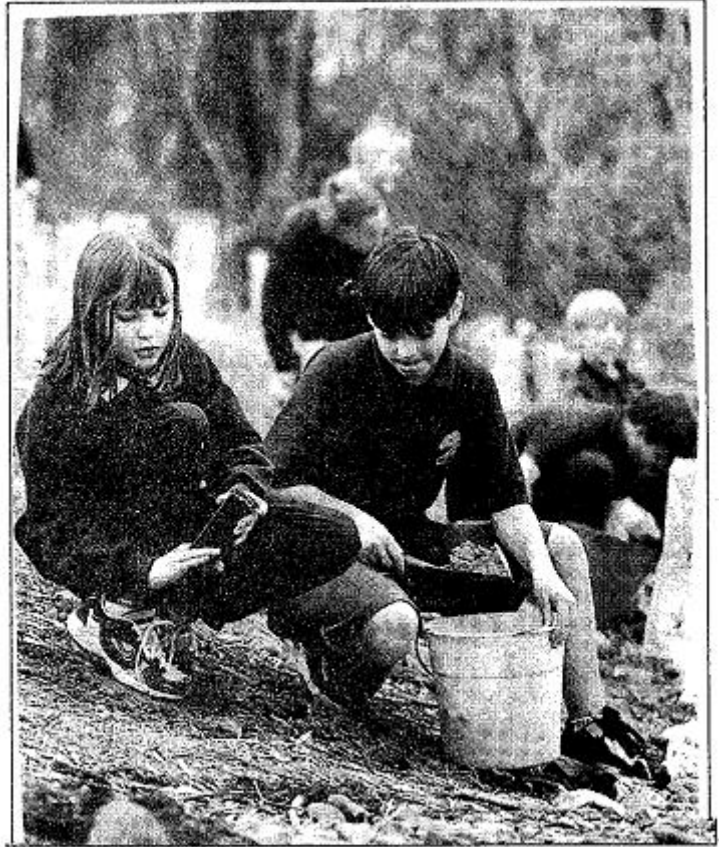
We gave up weeding after a heavy shower and went to Hoyleton's historic hotel to enjoy the open fire. Hoyleton, just north of Halbury is one of the few surviving towns near Adelaide which are not reachable on a sealed road. There seems to be no real need for a town on this flat cleared plain - even more strange, the road through town soon peters out so its not even a place to cater for people passing through. (Perhaps that's an exaggeration as a track heading east from the pub leads into the beautiful Clare Hills, a wonderful alternative route to the Clare Valley; at least in fine weather when the road is open!)

ORCHIDS and ARBOR DAY

A report in the Advertiser on June 15 noted that children at the Belair Schools planted 'native shrubs and orchids' on Arbor Day this year! I wonder where the orchids came from.

The Advertiser has had a marvellous series of articles on **ENDANGERED SPECIES OF THE WORLD** for most of June, but did you notice any orchids or indeed plants in the series? Don't plants matter! It was good to see that the project was designed to raise awareness of the work done by our sister group the Threatened Species Network as well as provide funding for conservation!

NOSSA has quite an association with schools such as Upper Sturt and Heathfield advising and assisting on conservation of orchids and wildflowers.



GREEN DAY: Year 5 students Claire and Dylan, front, get closer to nature for their school.
Picture: NAOMI JELLICOE

SPRING SHOW

Yes its only few weeks to our Spring Show at St Peters Town Hall! We need trading table plants. How much space will you need for your display. Please let our President know.

JUDGING TRAINING

Our next training session will be on the 1st Saturday in August not the second!

SEEDLING COMPETITION

There are still 20 or so plants of our special *Sarcochilus* hybrids which will be for sale at the next meeting.

YORKE PENINSULAR EXCURSION

Please ring our Secretary and let her know if you wish to take advantage of the cheap accommodation!

JUNE SPEAKER

Firstly our apology to George for advertising the wrong speaker in the June Journal!!

Our President George Nieuwenhoven spoke on the genus *Sarcochilus*. He began his discussion with the audience by eliciting which species were most commonly cultivated in Adelaide and how people were growing them.

Most commonly grown and apparently the easiest was *S. hartmannii* which grew well in bark chips in a shadehouse. Another common and easily grown species is *S. ceciliae*, this was followed by *S. falcatus* which although not as easy as the previous two was popular because it is spectacular. Several members had *S. fitzgeraldii* which seems to be growing well in sphagnum but after that the other species were described as 'too hard'. A few grew *S. moorei* but reported that it was the only one to need heat. The remaining 6 or 7 species are not able to deal with the heat and low humidity of Adelaide's summers. Perhaps more popular than the species are the numerous hybrids which grow faster and larger than most of the species. This month's competition plant was of course a *Sarcochilus* and yes there are still some left if you missed out! George showed a set of very colourful slides of *Sarcochilus* many of which we don't see live in Adelaide. These included *Parasarcochilus*.

Roy Hargreaves thanked both George and those who provided the slides.

Australian Orchid Foundation - A Letter from the Directors

When NOSSA first began 21 years ago we were asked to support the newly formed AOF trust fund which had been set up to foster research especially into Australasian orchids. A cheque for \$10 was duly sent. That might not sound much today but NOSSA has continued to support the fund, to date contributing \$1 750 directly since 1977, as well as providing much support incidentally as a Society and through our members individually.

In 1997 the AOF allocated \$28 000 in support of projects in orchid studies! However the more donations AOF receive the more projects can be funded.

The Australian Orchid Foundation has been approved a "Scientific Research Institution" and invites applications for grants or support by any person or group who desire to carry out specialised work on any subject related to orchids whether endemic or not, the work must be performed in Australia.

This information is from octogenarian Director Gerald McCraith who recently returned from several weeks in South America via Tahiti and Easter Island!

MORIALTA TRIP REPORT

by Gary Guide

Despite the forecast of rain, hail, thunder and the like, this late afternoon, mid-June walk up to the waterfalls at Morialta, just 10 minutes from the centre of Adelaide, turned out rather pleasant. This trip was ostensibly to look at the undescribed *Pterostylis* aff. *alata* which is common in the area.

We found the first flower only 50m from the car-park, a red tinted specimen too and before long we had found a hundred or so, including several double headers! They were especially common at the main lookout, although it was hard to take our eyes off the spectacular view. As the lookout is on a cliff-top which juts out into the valley some of us were worried that with all the recent rain it (and us!) would tumble!

Many of the *P. aff alata* had fat seed pods and obviously they had been flowering since May, making them one of our earliest flowered local species. Also growing along the track were small colonies of the similar but better known *Pterostylis robusta* which has larger, less distinctly striped flowers on very short stems. These were just starting to flower and will still be found in late August-September as the flowers last for months.

Another common species with long lived flowers is *Pterostylis sanguinea*; there were dozens present. Similar but much rarer here is *P. smaragdina* and we saw only a plant in bud. The apparently undescribed *Pterostylis* 'hills nana' with its white haired stems was almost in flower and very common. The two species of *Corybas* were also in bud. There was a spectacular group of blood red *Acianthus pusillus* nestled against a tree trunk, all in full flower, but both *Cyrtostylis reniformis* and *C. robusta* were still in tight bud. It is not unusual for these two to grow together but usually the *C. robusta* is in flower two months before the other. It was great to see leaves of many spider and sun orchids but sad to see the abundance of weeds.



Some of us had removed a patch of weeds a few months earlier and in that patch the greenhoods were now flowering in profusion where in previous years there had been none. One would think that with thousands of unemployed people lounging around all day with nothing to do, there would be some way of getting a few hundred of them out removing weeds. The whole park could be cleared of weeds in a few months.

We humans are not very well organised socially! NOSSA as usual did their bit by pulling up Boneseed plants adjacent the track. Curiously most of us are employed full time in at least one job and yet still find time to do community service! We finished the afternoon in semi darkness at the base of the spectacular First Falls.

HERB SPRAY RECIPE

Coriander Spray controls aphids and mites: simply boil the coriander for ten minutes then strain before spraying.

from Philip Moore at Renaissance Herbs.

A BIT MORE ABOUT JACK WARCUP- -1921 -1998

.. by Kerry Bates

John Henry Warcup, M.Sc, Ph.D, Sc.D. and Reader in Plant Pathology was born in Auckland New Zealand in 1921. He studied at Canterbury College where he earned a scholarship to attend Cambridge University England. He excelled there and earned his doctorate in 1949. After two years working for British Forestry he applied for and was given the position of senior lecturer in Plant Pathology at Waite Agricultural research Institute in Adelaide in 1951. He lived at Kingswood for the rest of his life apart from a year spent on sabbatical in The United States. Although Jack retired in 1986, he was often visited by students (both local and overseas).

A quiet, gentle man, Jack was most happy in the company of his family, his dogs and his garden. In the last ten years Jack had been troubled by ill health; he died at home in May this year.



Jack was a typical quiet achiever and published several ground breaking papers on soil microflora. He encouraged independence in his postgraduate students. Although he rarely approached others he was happy to assist anyone who asked for advice. He is probably best known in the orchid world as the man who grew underground orchids *Rhizanthella* from seed. Who could forget Jack holding up a pot with a straggly *Melaleuca uncinata* in it and asking "What else do you think is in here?" before scratching away to reveal an inflorescence of the tiny *Rhizanthella*. Jack's best known papers include-

1. Specificity of association between orchids and their mycorrhizal fungi in New Phytologist 70: 41-46 in 1971.
2. Ectomycorrhizal associations of Australian Indigenous plants in New Phytologist 85:531-535 in 1980.
3. *Rhizanthella gardneri*; its Rhizoctonia endophyte and close association with *Melaleuca uncinata* in Western Australia; New Phytologist 110, 227-231 in 1985.
4. Jack also provided a chapter on Orchid Mycorrhiza in Orchids of South Australia in 1990 which gave me a chance to work closely with him.

Jack was happy to receive seed from various NOSSA members which he germinated symbiotically. Many of our unusual terrestrial orchid hybrids began life in Jack's laboratory although others such as *Calochilus* sp. x *Thelymitra* sp. which grew well in Jack's flasks never made it to flowering once NOSSA growers got hold of them. One feels they may have made it if grown in sphagnum!

Jack freely admitted that when he began his research he didn't know what a native orchid looked like. One of the orchid world's greatest honours, the AOF Award of Honour was conferred on Dr Warcup in 1996 in Adelaide and presented at a NOSSA meeting last year. Jack lost his wife Margaret in 1990 but is survived by his four children John, Susan, Cathy and Andrew and grandchildren Emma and Craig.

AUSTRALIAN DENBROBIUMS No 27

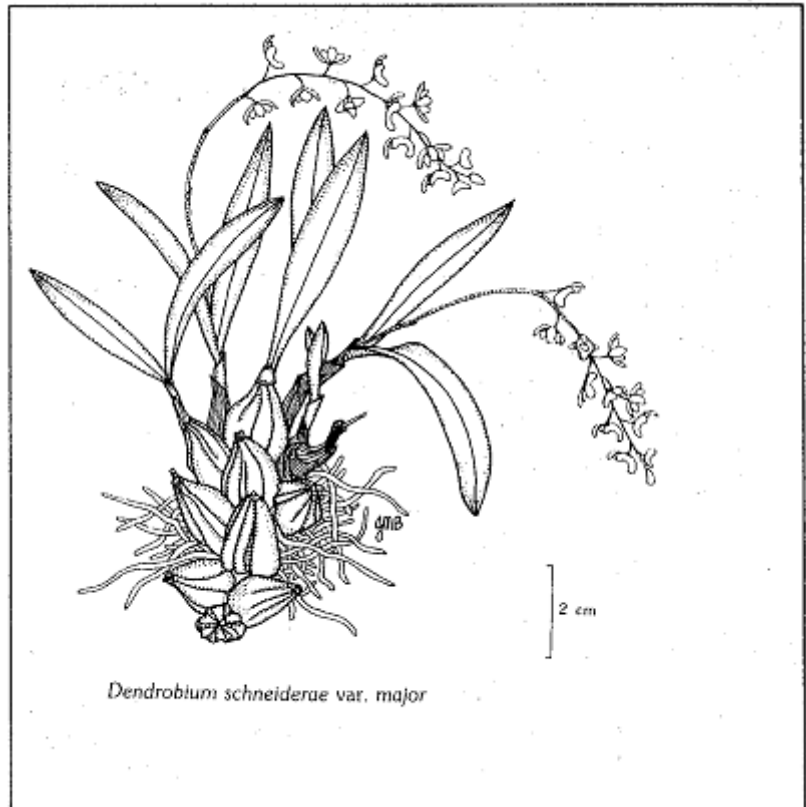
Dendrobium schneiderae Bailey

The name honours the Mrs Schneider who collected the type specimen near Eagle Heights in South-east Qld in 1886.

This species is an epiphyte but sometimes forms large clumps on exposed rocks. It is restricted to the area along the Great Divide from Gympie south to the Clarence River in humid yet well lit situations especially on Hoop Pines.

The distinctive furrowed conical pseudobulbs to 25mm high and the paired leaves make this a very distinctive species!, The flowers are borne on 20cm long arching stalks. Each of the 20 or so waxy, cupped, pale green flowers is 10mm across and may have rosy streaks or blushes.

There is a named variety ie var. *major* Rupp from the Eungella Range.



Best grown on a mount high in a cool glasshouse with plenty of air movement. Does not like Adelaide summers but some attractive specimens have been shown at times.

Flowers in Autumn and often used in hybridising to produce ever-flowering cultivars. Apart from the Eungella Range we have seen some attractive plants on Mt Tambourine near the Gold Coast.

THE R.D. FITZGERALD TROPHY

This new trophy to be presented when appropriate by the Ira Butler Trophy Committee, is to be made for major contributions to the advancement, conservation or propagation of Aussie native orchids.

Submissions may be made by any ANOS group or affiliated society and must show how the nominee has made such a contribution. It should be detailed yet easily understood by the referees who may know nothing of the person nominated!

Submissions in South Australia need to be made to NOSSA who will pass them to Ruth Rudkin the Trophy Committee Secretary.

Robert D. Fitzgerald (1830-1892) was an Irish engineer who migrated to Australia in 1856 (during the Great Potato Famine!) to join the staff of the Surveyor-General in the NSW Lands Dept. He first saw Australian orchids at Wallis Lake whilst collecting bird specimens. These were enormous clumps of 'rock lilies' *Dendrobium speciosum* which Fitzgerald established at his home in Hunters Hill. As a surveyor he was able to collect many native orchids and was soon in contact with botanist Ferdinand von Mueller Who named *Sarcochilus fitzgeraldii* in his honour.

An accomplished artist he soon began to lithograph the orchids and hand paint them and in 1882 the first volume of 'Australian Orchids' was published. Fitzgerald was also a conservationist so the Ira Butler Trophy Committee had no hesitation in naming this new award after such a great man!

LIBRARIANS REPORT for June & July

By Geoff Edwards

I thought after a most enjoyable non orchid topic at our May meeting, a few non orchid books would be the order of the day (or night) this month. Ferns have an affinity with our orchids, or at least with the displays that we enter or see at various shows during the year (or see on the field trips undertaken).

Australian Ferns and Allies, 2nd Edition, by Jones and Clemesha is a 232 page hard cover revised publication issued in 1981. The first edition was sold out, proving its popularity and correctness. The volume covers 358 species with extensive notes giving (where known) distribution, habitat, cultivation and means of identification. A line drawing illustrates each species and related plants are grouped where possible into chapters. The remainder, which includes the bulk of the ferns are gathered into one chapter and arranged in alphabetical order for ease of identification. Lists of Australian ferns and fern allies, their classifications and common synonyms are included to further aid reader information. Some colour plates add interest to the book.

Ferns for Modern Living is a soft covered book published in 1977, with the content coming from a number of experts connected to The American Fern Society. The 80 page book provides plenty of growing tips (and makes for good comparison with the above Australian book). The book is easy to read with commentary on basic culture (sounds like orchids with light, watering, humidity, temperature, fertiliser etc) and photographs accompanied by plant description.

Bromeliads for Modern Living is another of the series produced by the American Societies, with the authors of this 80 page soft covered book being members of the Bromeliad Society. Very colourful and easy to read , it too covers basic culture, pests, diseases and disorders.

A third in the same series is called Hanging Plants for Modern Living and is prepared by the technical writer for the publishing company producing the series. Basic culture once again easy to read with lots of colour photographs (which makes one envious of the results!). Descriptions are also covered.

Finally, something very old from the North American Lily Society - called Let's grow Lilies an illustrated handbook of lily culture. This 50 page soft cover book is produced in an interesting style, with plenty of drawings and descriptions.

Pleasant reading !

ORCHID VIRUS

Reprinted (in part) from ANOS Geelong Group Bulletin

by Don Gowanlock

It is possibly little comfort to know that orchids have more virus problems than most horticultural crops. At last review, 25 viruses were listed as being isolated from orchids. Of that 25, *Odontoglossum* ring spot virus (ORSV) and *Cymbidium* mosaic virus (CyMV) have received most attention. In Queensland ORSV and CyMV are probably the most common viruses in orchid collections which can be attributed to the stability of both viruses. It has been reported that ORSV can remain viable for up to seven months in dry sap. These two viruses are spread easily by mechanical means. A small rhabdovirus is also becoming a common problem in some orchid collections. This virus seems to be going unnoticed by growers because some species symptoms can be mistaken for a fungal infection.

A virus is really a bag of nucleic acid surrounded by a protein coat. The core of the nucleic acid carries all the genetic information needed for the virus to replicate. All viruses are obligated parasites and so can only multiply in living cells and this multiplication is at a very rapid rate. Plant viruses occur as either short still rods, longer flexuous rods, bacilliform or spheres. The particles vary in size. ORSV, a short still rod for example is 300nm long (1 nm 1 millionth of a millimetre). This small size allows viruses to enter a plant through the smallest wounds.

Symptoms on leaves are many and varied and are not a good indication of a virus problem. Plants showing no symptoms can be infected. Virus induced colour break is well known on *Cattleya* and *Dendrobium* flowers. Colour break is the result of either ORSV or CyMV infection. Colour break is especially prominent in lavender flowered *Cattleyas* and on white *Dendrobium* flowers. Leaf symptoms are also not a good indication of viral infections but are an indication that further investigation should be carried out.

Who is this NOSSA member who ignores 'KEEP OUT' signs and electric fences in his quest to find orchids?



FRIENDS OF
CLELAND



Drawing made by Barbara Bayley on excursion to Jupiter Creek.

ORCHIDS OF THE MOON PLAIN Near Coober Pedy