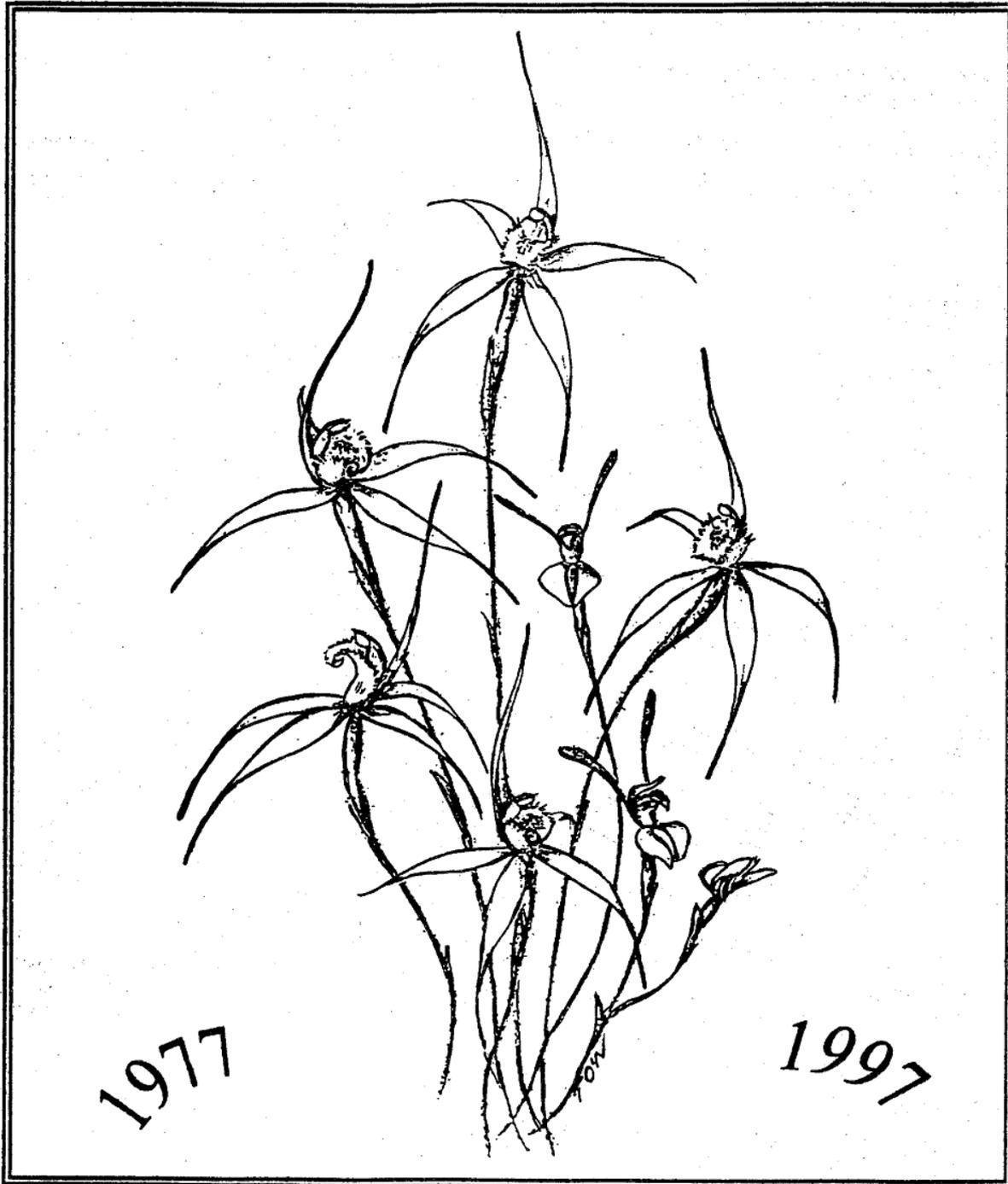


JOURNAL
of the
NATIVE ORCHID SOCIETY OF
SOUTH AUSTRALIA INC.



NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC.

PO Box 565,
UNLEY SA 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
MAY 1997 Vol. 21. No. 4 JOURNAL

MAY MEETING

Tuesday, 27th May 8.00 pm: at St Matthews Hall, Bridge Street, Kensington. The speaker will be well known nature photographer Bob Markwick who will speak on 'Photographing Orchids'.

Doors to the hall will be open at 7.15 pm for those wishing to borrow books from the library or take in items for the trading table.

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DIARY DATES

Jun 4 Conservation Group Meeting
 Jun 30-Jul 5 Gawler Orchid Club Show at Hollywood Plaza.
 Jun 15 Open Day Visit- Nesbitt's & Nieuwenhoven's
 Jul 16 Open Day to be decided
 Jul 21-27 OCSA Show at Golden Grove Village Shopping Centre.
 Sep 19 - 21 N.O.S.S.A. Spring Show
 Sep 29 NEDOS Show North Park Plaza
 Oct 27 - 28 S.G.A.P. Show & Conference
 Nov 30 Christmas Barbecue

COMMITTEE MEETING

To be held at 7.30 pm Monday May 30th at the home of Les Nesbitt

OPEN DAY

Sunday June 15th -

2pm - Les Nesbitt's 18 Cambridge Ave, Vale Park

3.30pm - George Nieuwenhoven 15 Robin Tce, Hope Valley

All welcome!

CONSERVATION GROUP MEETING

Wednesday June 4th at 7.30pm

To be held at Karen & Hugh Possinghams 61 Salop Street, Beulah Park

All persons interested in conservation of orchids (and it is one of N.O.S.S.A.'s major thrusts) welcome to attend.

Please bring supper and ideas.

David Pettifore is now our Refreshment Convenor

TEA & COFFEE:

At the last meeting about half the audience raised their hands in support of tea and coffee after meetings so this is likely to become a regular feature.

Tea & coffee & cordial available after the next meeting - 50 cents donation.

OPEN DAYS:

It is great to have these Open Days starting up again. They are especially useful to new members but I know the 'older' members love to go just for the social aspect.

RAFFLE:

A few tickets are still available for the raffle of Schlechter's 'Orchids New Guinea', this raffle will be drawn at the May Meeting.

ORCHADIANS:

Our Librarian would like to have a complete set of 'The Orchadian' from 1994 - 1997 to be bound and go in the Library but we are several issues short. If you can help please ring Geoff Edwards or see him at the Meeting.

SUBSCRIPTIONS:

These are now overdue. If you have an orange spot on your journal address you are unfinancial.

NEW MEMBERS: NOSSA is pleased to welcome -

D. & N Venari of Flagstaff Hill

ON THE BENCH

Terrestrials: *Eriochilus cucullatus* (2), *E. dilatatus*, *Leporella fimbriata*, *Pterostylis* aff. *alveata*, *P. decurva*, *P. x furcillata*, *P. grandiflora*, (2), *P. longipetala*, *P. obtusa*, *P. ophioglossa* (2), *P. truncata* (4), *P. Trunkfish* (2).

Pterostylis aff. *alveata* soon to be named as a South Australian endemic.

Epiphytes: *Dendrobium* Aussie Treat, *D. bigibbum*, *D. bowmanii*, *D. lithicola* (2), *D. Troppo Splendor*, *D. Virginia Jupp x racemosum*.

Noel Oliver gave the commentary on the Terrestrials

Reg Shooter gave the commentary on the Epiphytes

POPULAR VOTE

Terrestrial species *Leporella fimbriata* (Penola rescue dig) grown by Les Nesbitt

Terrestrial hybrid *Pterostylis* Trunkfish grown by Les Nesbitt

Epiphyte species *Dendrobium bigibbum* grown by George Nieuwenhoven

Epiphyte hybrid *Dendrobium* Virginia Jupp x *racemosum* grown by Reg Shooter

JUDGING RESULTS:

Best Terrestrial:

Pterostylis truncata from Black Hill,

P. ophioglossa grown by Les Nesbitt.

P. Trunkfish grown by Les Nesbitt

P. x furcillata from Black Hill

Best Epiphytes: *D. bigibbum* grown by George Nieuwenhoven, *D. Virginia Jupp* x *racemosum* grown by Noel Oliver and *D. Aussie Treat* grown by Steve Meszaros.

Plant Of The Night: *Pterostylis* Trunkfish

APRIL MEETING - SPEAKER

Foundation President Les Nesbitt spoke on his work Hybridising Terrestrial Orchids.

Les has concentrated recently on the Sun orchids *Thelymitra* using the big 4 as parents ie *T. grandiflora*, *T. nuda*, *T. antennifera* and *T. rubra*.

Les then spoke on Orchid Conservation on a Bush Block. Les has a 50 hectare block at Bridgewater which has numerous orchids mostly on bare rocky sites or disturbed edges such as fire breaks. This obviously indicates that good management not only requires weed control and prevention of serious bushfires but some degree of slashing and disturbance to increase the orchid population. Interesting orchids include *Pyrorchis nigricans* which Les has never seen in flower (perhaps a small control burn would be useful). Les calls the property 'Big Bush'

Also at the last meeting the following new officers were made welcome:

- Cathy Houston is our new Society Secretary
- Doug Bickerton and Gerry Carne are now Conservation Officers (8278 3416)
- Gerry Carne is Field Trip Coordinator (8332 7730)
- Geoff Edwards is Librarian

It is great to have so many volunteers to share the work load.

(Editors comment - We are especially pleased as Doug, Geoff & Gerry have promised regular articles for our Journal!)

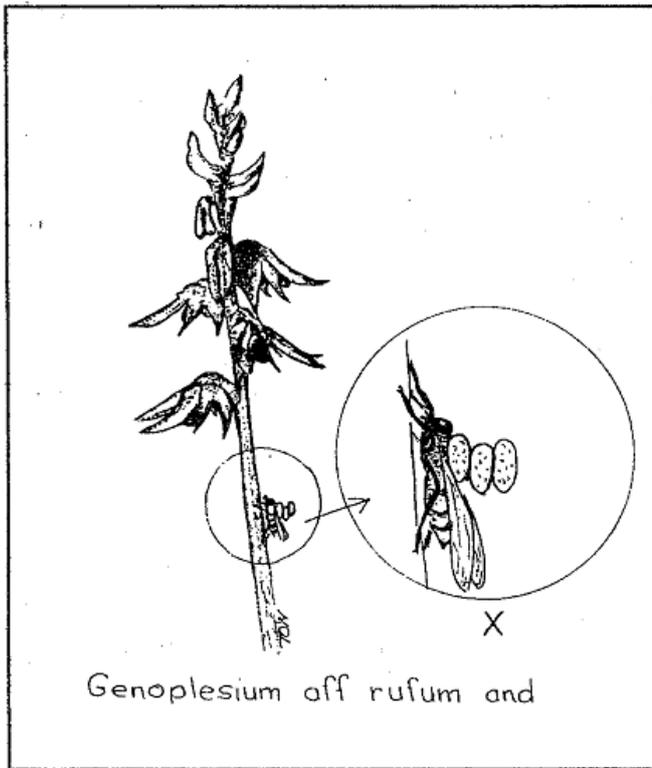
AUTUMN FLOWERING ORCHIDS FIELD TRIP TO SCOTT CONSERVATION PARK

by THELMA BRIDLE

Sunday 20th April was a beautiful autumn day with a temperature in the mid 20's. As, we gathered together in Mt. Compass some reminisced over the many passing vintage and veteran cars and motorcycles also heading for a day out.

Under the leadership of Gerry Carne a party of 13 drove through the pretty green Tookayerta Valley, then onto the dusty road which leads to Scott Conservation Park. At the north-eastern entry we walked along the sandy track through very dry bushland. Virtually the only green was that of the resilient and obviously drought tolerant bridal creeper (*Myrsiphyllum asparagoides*). It was easy to find flowers of *Eriochilus cucullatus* with their small white flowers standing out against the dry, bare, sandy earth. A closer inspection is required to observe the small (at flowering time) dark green, veined, leaves with stiff white hairs on the upper surface and a purplish colour

underneath. Whilst on hands and knees the tiny *Genoplesium* aff. *rufum* plants are easier to see. In this area most plants had green-sepaled flowers, which were mainly finished flowering.



Growing in white sand and just outside the park boundary were many very attractive groups of *Leporella fimbriata* in flower and in the same small area *Eriochilus cucullatus* and *Genoplesium* aff. *rufum*.

Many of the *Genoplesium* flowers were over, again especially those with green sepals, but a number of stouter plants with long maroon sepals were in full flower. One of these, of particular interest to the photographers, had three of the tiny wine/vinegar *chironomid* fly pollinators. Two of these were dead and the other was seemingly unable to detach the pollinia in order to be able to leave the plant.

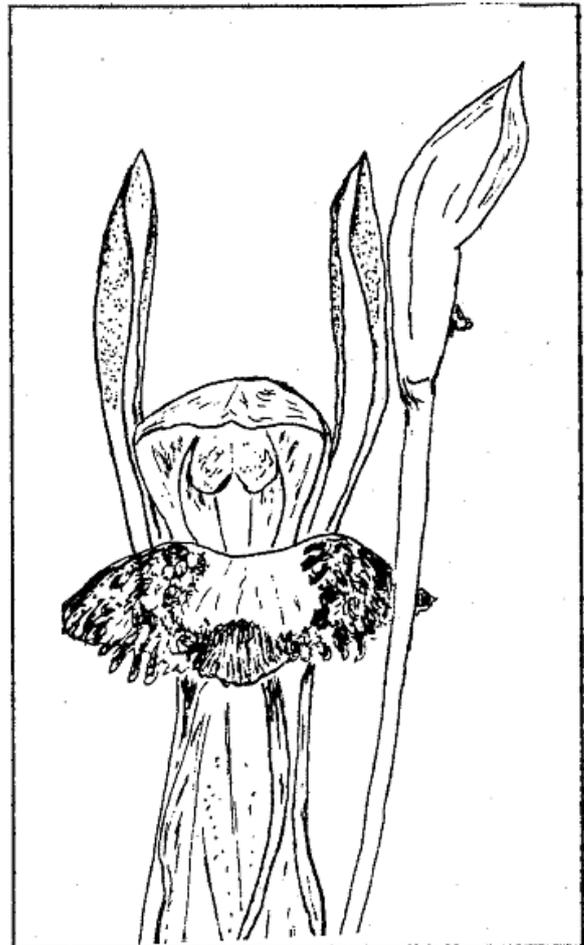
All of the four orchids mentioned flower without the need for autumn rains, relying on nutrients stored from the previous season.

In the same area were a number of *Thelymitra* seedpods, including *Thelymitra flexuosa*, recognisable by their zig-zag stems. In a sheltered spot *Pterostylis sanguinea* plants were already several inches tall.

After lunch we drove through the Nangkita Valley to visit a swamp in the hope of finding *Genoplesium ciliatum*. Due to the dense undergrowth built up around the swamp margins it is unlikely the orchids were there, and even less likely that we would have been able to locate them.

The *Sprengelia incarnata* (swamp-heath) bushes were in full flower and a few flowering *Leptospermum continentale* (prickly tea tree). Flocks of red-browed firetails were feeding on rush and sedge seeds whilst along the track a flock of about 15 elegant parrots were observed, also feeding on seeds.

With steadily diminishing numbers of orchid enthusiasts - the inaugural Port Power vs Adelaide Crows football match was now in full swing, only a few of us visited the Mount Compass boardwalk. Here we found a few spent flowers of *Spiranthes sinensis*. This



species is bee-pollinated and multiplies largely from seed, so it was disappointing to find no seedpods. (Phil and I have observed a decline in *Spiranthes* plants here over the last three years), The encroaching reeds, tea-tree and coral fern are certainly reducing the numbers of swamp orchids seen. A small area on the eastern side of the boardwalk had been slashed - hopefully more orchids will be seen here in the next season. The slashing only narrowly missed *Cryptostylis subulata* and only one of the two plants at this site could be located. There were a number of *Thelymitra* seedpods of both *T. holmesii* and *T. cyanea*. Being late in the afternoon there were a number of golden-headed cisticolas calling continuously whilst feeding in the reeds. Since removal of the pine trees from the swamp rival calling between the southern emu wrens and cisticolas has ceased and emu wrens are not observed from the boardwalk.

Just outside the boardwalk area were again a few finished flowers of *Spiranthes sinensis* and a lovely colony of *Utricularia dichotoma* the purple carnivorous bladderwort or fairies aprons. This rounded off an excellent day at this time of year, when flowering orchids are very small and limited in variety.

Orchids seen:

Scott Conservation Park: - *Eriochilus cucullatus* (F), *Genoplesium* aff. *rufum* (2 species) (F), *Leporella fimbriata* (F), *Thelymitra* sp. (S). *T. flexuosa* (S), *Pterostylis sanguinea* (L).

Nangkita swamp: - *Thelymitra* sp. (S)

Mount Compass boardwalk: - *Spiranthes sinensis* (FO), *Cyrtostylis subulata* (L), *Thelymitra holmesii* (S), *T. cyanea* (S).

F = flowers; S = seedpods; L = leaves; FO = flowers over,

FROM YOUR LIBRARY

by GEOFF EDWARDS, Librarian

This is the first of a series of articles which will bring to you information about our library and new material as it is placed therein. If there is no new material for the month being covered I will identify existing books or articles of interest. Hopefully this will keep you abreast of what is available and help you to decide on what you could take away for one month's enjoyable reading.

It is not my intention to pass judgement on the content or literary merit of the material I present, that is for each and everyone's own opinion. I trust however that I can identify each item in a way that will enable you to decide on whether it will satisfy your needs.

This month five new items are being placed in the library;-

- Field Guide to the Orchids of NSW and Victoria, by Tony Bishop. This book is described as the first comprehensive, full-colour guide to the native orchids of south eastern Australia. It describes all of the known native orchid species - more than 550 of them. Everyone is illustrated with a colour photograph, wherever possible taken in the field. The book contains comprehensive and authoritative descriptions, identification and field notes. It is handy in size and organisation of species by botanical affinities rather than alphabetically should make it particularly suitable for use in the field.

- Field Guide to the New Zealand Orchids by St. George, Irwin and Hatch. Published by the New Zealand Native Orchid Group the book is a simple guide to native orchids - where they are likely to be and what they look like. The one orchid per page makes for ease of reading and provides clarity in drawings and descriptions.
- Disease of Orchids - Report on a project funded by the Australian Orchid Foundation, 1994-1996, by Gowanlock and Ogle. This paper describes two projects, one investigating orchid viruses and the other fungal, and to a lesser extent bacterial diseases in orchids. The research and results are described in detail, and are supplemented by colour photographs.
- The Orchadian, Volume 12, Number 3. Ira Butler trophy and certificate plants are identified and Bill Murdoch trophy nominations are provided. Our conference and Show, along with our own Roy Hargreaves, AOM, are covered by articles.
- Australian Orchid review - April 1997 Not a lot for 'native' growers, apart from an article on *Dendrobium monophyllum*. There are articles covering the orchids of Panama, Papua New Guinea, Insects that attack Orchids and Cymbidiums.

HAPPY READING!

UNDISCOVERED PLANT SPECIES IN SOUTH AUSTRALIA

by R. BATES

About twenty years ago I was asked what percentage of South Australian (wild) plants were unknown to science. I suggested it was about 50%. The gentleman to whom I was speaking thought that a little ridiculous and offered 10% as a more realistic estimate.

The number of known plant species in South Australia has already increased by more than 10% since that day. On average one new Eucalypt species has been discovered in South Australia each year since 1977! Work on other genera has shown even more spectacular increases. In 1977 just one *Wurmbea* species (native lily) was known for South Australia. In a recent paper (Bates 1995) eight *Wurmbea* species were recognised in S.A. and since then naturalist, Frank Badman, has collected another new species from near Lake Eyre (of all places). Since 1977 some fifty new orchids have been recognised in South Australia - some just distribution extensions of known species but many totally new to science or not recognised as different.

Huge tracts of South Australia have never been botanised particularly in the North West. New plant records turn up every year in the Adelaide Hills which have been a thousand times better collected, so imagine the potential for new species or records in the north-west.

Where are these undiscovered plant species?

Many are right under the noses of botanists and naturalists! These are the cryptic species (see Bates 1995) which look very similar to common known ones. A recent paper on the genus *Cardamine* doubled the known species in South Australia yet collections had been made a hundred years ago. Once pressed they all looked so similar even the botanists had not been able to tell them apart. Modern botanists however have new techniques available to them - chromosome counts, DNA testing, computer technology! Curiously field naturalists had generally believed they were looking at more species than herbarium botanists recognised.

Many species only flower or germinate under exceptional circumstances. The recent flooding up north provides a good example. The flora of South Australia lists only two species of *Amaranthus* (summer growing annuals) for the Eastern Region but on a recent trip to the flooded Mannahill - Cockburn area the author collected six species in an afternoon! Most summers these *Amaranthus* (which all look very similar anyway) would not even have germinated or been present in such low numbers that even a detailed survey would miss them! After record rains some were present in huge numbers and hidden amongst them the cryptic species! My estimate is that there are not two species of *Amaranthus* in the area but more like eight as many specific habitats were not visited on the survey!

Lots of summer ephemerals are not picked up because botanists will not go into these areas in summer heat!

Another exceptional circumstance is fire: well known as a flowering stimulant in orchids - but about 10% of all South Australian plants are dependent on fire in some way or other either to make them flower or to effect germination. N.O.S.S.A. is surveying Cape Ganthaume Conservation Park on Kangaroo Island this year specifically because of the bush fire. We expect to see species not previously recorded: species obvious only after fire!

A large number of species are relict ie hanging on as tiny populations in seldom visited locations. Many will never be found, perhaps succumbing to rabbits, sheep or changes to their environment. An estimated 10 species of plants reach extinction in South Australia each year,

Other species are particularly habitat specific, There may be only a hectare or two of their habitats in South Australia. If no botanist or naturalist ever stumbles across the unusual habitat there is little chance such species will be found.

Then there are the tiny plants, the hidden plants which only grow underground or as parasites in the tissues of others. Yes there are flowering plants only a millimetre across (*Wolffia*) underground species (*Rhizanthella*) and tissue parasites (*Rafflesia*) already known, there may be others never seen. Then there are the mobile species; those which weren't in South Australia in 1996 but may be in 1998. Seeds transported by wind, birds or vehicles or even water. Several Queensland species may even appear in South Australia this year brought down by the Diamantina floods!

Every year new weeds appear in the wild brought to South Australia in various ways. At least two orchids have been added this way in the last ten years.

In Summary The undiscovered plant species in South Australia belong to the following categories.

- A. Cryptic species
- B. Species appearing only after fire or disturbance
- C. Species appearing only after floods or exceptional rainfall events
- D. Tiny or hidden species
- E. Extremely rare species or with highly specific habitats
- F. Casual visitors - border hoppers
- G. Species in poorly botanised areas

In total 40% plus of our flora!

AUSTRALIAN NATIVE ORCHID HYBRID REGISTRATIONS

New registrations from the Royal Horticultural Society May to October 1996 registrations (Reprinted from the Orchadian).

Continued from April Journal

Dendrobium		
Rigidigge	rigidum x bowmannii	G. Rex
Silver Milestone	Ku-Ring-Gai x Colin	Don Massey
Star Bright	Berry x Chrystaline	Orchid Zone (M. Pendleton)
Striking	kingianum x striolatum	His & Hers
Stunning	Elegant Heart x Aussie Victory	N. Finch
Suntery	Sunglow x Pinterry	Florafest
Tawhai Gold	speciosum x Aussie Springtime	S. Wray
Tie-Dye	Brinawa Charm x Candice	N. Finch
Timothy Heydon	Ellen x Zeppelin	J. Donovan
Vern Frampton	Brinawa x bigibbum	G. Rex
Watervale	Hot Shot x kingianum	Adelaide
Yellow Dawn	Eleebana x Harold Hirsch	W.T. Upton
Yondi Beck	Yondi Brolgaxfalcorostrum	S. Batchelor
Yondi Harvest	Wesley Rose x falcorostrum	S. Batchelor
Yondi Honey	Suzanne x Peach Glow	S. Batchelor
Yondi Neon	Kathryn Banks x falcorostrum	S. Batchelor
Yondi Pearl	Kathryn Banks x Peach Glow	S. Batchelor
Yondi Topaz	Jamie Upton x Star of Gold	S. Batchelor
Zelma Mitchell	Yondi Star x Dot Sheen	N. Mitchell
Zeus	Aussie Ira x Peewee	R. Angus (K. Russell)
Zoom	Kathryn Banks x Zip	N. Finch
Plectochilus		
Longwarry	Plrhz, tridentata x Sarco, Heidi	Riviera (G. Hicks)
Sarcochilus		
Emerald	Judith x spathulatus	Florafest
Flirt	Riverdene x hartmannii	N. Finch
Glenn	ceciliae x olivaceus	R. Currell
Julie-Anne	hillii x hirticalcar	R. Currell

SARAH JANE BARTHOLEMW-BINKS
By Trudy Deer 1996

©

Dr and Dr Bartholemew-Binks
Moved out to the country to live.
Sarah Jane Bartholemew-Binks went too.
Well, Sarah was only nine years old
What else could the poor girl do!

Dr and Dr Bartholemew-Binks
Were happy as happy could be.
But for Sarah Jane Bartholemew-Binks,
Life was just a misery.

She hated the country, she hated the smells,
She hated the quaint little school.
She longed for the life she'd had in the town,
A life that was totally cool!

These country kids were rough and loud
And very poorly dressed.
Sarah wore some beautiful clothes
But these kids weren't impressed.

Sarah really missed the friends
That she had left behind.
She'd tried to make some new ones here
But these kids weren't her kind.

She even took her horse to school
But no one came to see
"They'd rather play those silly games
Than take a ride with me!"

So Sarah spent playtime alone
Beneath the old gum trees.
Then one day as she ate her lunch
She stumbled on a mystery!

There alone among the leaves
There stood a tiny flower.
A perfect little tower.

She learned that lots of orchids
Of different kinds abound,
So she set off with her camera
And hunted all around.

But though she searched both high and low
In all of her spare time.
There were some orchids in the book
That Sarah couldn't find.

Then Sarah found out something
That too few people knew.
That many of our native plants
Were now endangered too.

She knew that like the bilby,
Some animals were rare
But she never knew that there were plants
That needed special care.

So Sarah Jane made up a map
Of each new find she'd made
And added all her photographs
To make a fine display.

Then she rang the network
For Threatened Species Care
And told them of her orchid finds
Some of which were rare.

The network people came to school
To study her display
And Sarah's classmates gathered round
To talk to her that day.

They asked her lots of questions
For they could not believe
That these perfect little flowers
Just grew wild among the trees.

So Sarah took the net work crew,
Her teacher and her class,
Out to where the gum trees stood
And knelt down on the grass.

And there to the amazement
Of the students gathered round,
Sat the leafy greenhood orchid
The first that Sarah's found.

Then they followed Sarah's map
Which showed where orchids grew.
The leopard, the mosquito
And the spider orchid too.

The children loved the orchids
And the network people knew
That the orchids in this area
Would be protected too.

The school now has a programme
Entitled 'Species Care'
And they've set out, to learn about
Threatened species everywhere.

Now Sarah Jane Bartholemew-Binks
Is happy at her new school
And all of her friends have learned
That conservation's cool!