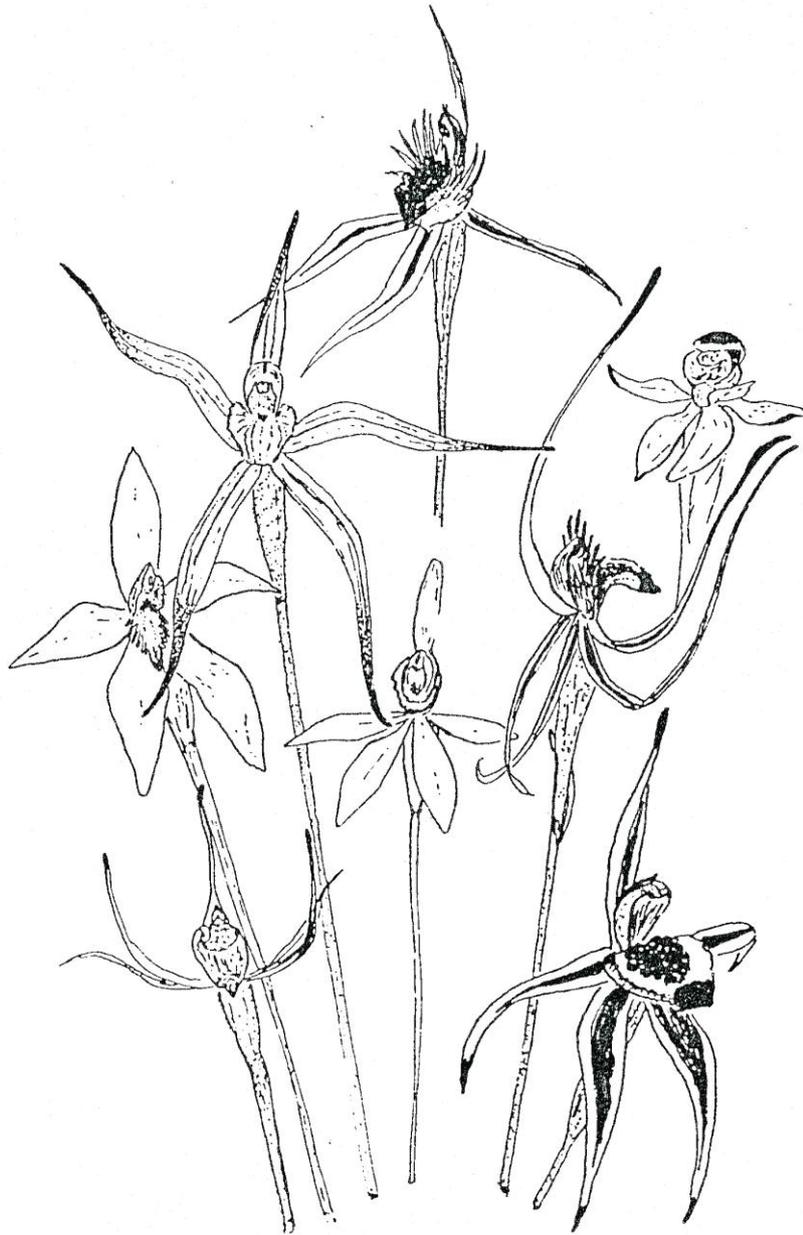




Journal
of the
Native Orchid Society
of
South Australia Inc



NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

POST OFFICE BOX 565 UNLEY SOUTH AUSTRALIA 5061

The Native Orchid Society of South Australia promotes the conservation of orchids through the preservation of natural habitat and through cultivation. Except with the documented official representation from the Management Committee 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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The Native Orchid Society of South Australia Inc. while taking all due care, take no responsibility for the loss, destruction or damage to any plants whether at shows, meetings or exhibits.

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MARCH MEETING

Life Member Bob Bates presented a most interesting and enjoyable talk which covered the *Dipodium* complex in South Australia and in addition NOSSA's recent field trip to Dutchman's Stern in the Southern Flinders Ranges. Several records for the most northerly presence of several orchid species were noted and several albino forms were seen. Breathtaking scenery, a large variety of orchid species, many not seen in the Adelaide Hills, and good company made the trip one that will not be forgotten by those who participated.

Plants Benched

Terrestrial Species: *Pterostylis furcata* (Auchope NSW), *Pterostylis bryophila*, *Eriochilus cucullata* (Bendigo)

Epiphyte Species: *Dendrobium cucumerina*, *Bulbophyllum mcphersonii*, *Dendrobium kingianum*, *Dendrobium prenticei*, *Dendrobium bigibbum* var. *superbum*, *Dendrobium lithocola* (previously *Dendrobium bigibbum* subvar / forma *compactum*)

Epiphyte Hybrids *Dendrobium Superbiens* var. *Superbia*, *Dendrobium Aussie Victory*, *Sarcochilus Riverdene*

Popular Vote Terrestrial: *Pterostylis furcata* grown by David Pettifor

Popular Vote Epiphyte: *Dendrobium lithocola* grown by George Nieuwenhoven

Epiphyte Commentary: Margarie Chance

Terrestrial Commentary: George Nieuwenhoven

FOR YOUR ATTENTION - N.O.S.S.A. NEWS

Terrestrial Study Group: The initial meeting will be held at Bob and Kerry Bate's house - 17 Carnarvon Street, Redwood Park on Sunday 28th May at 6:00 PM. The discussion will be on the *Caladenia dilatata* complex and all NOSSA Members are invited, and indeed encouraged, to attend.

Have you *Pterostylis hians* (the Opera House Orchid) in your collection? ANOS is looking for seed from *Pterostylis hians*. This rare orchid species appears to be extinct in the bush. Members who have this orchid in their collection are encouraged to assist in bringing your plants to seed. If you are not certain how to go about this, please contact a Committee Member. The plan is to reintroduce the orchid into its original habitat. One of the main reasons for cultivating the less common species of orchid is to have plants/seeds that can be reintroduced should things go wrong in their natural environment. Please advise a Committee Member if you have a this orchid and we can begin planning now. See article page 30.

Northern Lofty Recovery Workshop: This has been deferred to Friday 12th May. A number of invited speakers are coming from interstate - Victoria and Western Australia - to address this workshop. It is hoped that a number of NOSSA Members will be free to attend what promises to be a very interesting day. The workshop will be held at Black Hill from 9am to 4pm. An agenda will be issued prior to the meeting date. Contact Thelma Bridle (8384 4174) if you are interested.

A repeat announcement!! I would like to publish in a future Journal a listing of Top Growing Tips as put forward by our Members. Please give me a listing of your tips be it a list of one or many, be it a tip(s) specific to one species or general, terrestrial or epiphyte. See or contact Gerry Carne

Annual Dinner at the Buckingham Arms Hotel. 7:00 PM, 5 May (Friday Evening). This has always proven to be a most enjoyable and well attended social event and all Members and Partners are urged to attend. Cost is \$18.00 per head. Our Treasurer, Iris Freeman, would like a deposit of \$5.00 in order that she can make a booking.

Raffle Ticket Sellers will be rotated on a monthly basis. Many thanks to those who will be taking on the task. Malcolm Guy will co-ordinate.

Reg Shooter has started up Judging Classes. If you are interested in learning more about Australasian native orchids and their cultivation, and to become involved in judging native orchids, please contact Reg (8235 2323). A meeting is scheduled for the morning of Saturday 27th May from 9:30 am. Details next Journal.

Membership Fees are due. Although all costs have risen, the membership fee will remain unchanged from last year.

Fourth Australasian Native Orchid Conference and Show
Melbourne 5-9 October 2000
"Native Orchids - Our Natural Heritage"



Large Duck Orchid
Caleana major

The Karralyka Centre is in Mines Road Ringwood. Melways reference 50-A-6. Judging will take place on Thursday 5 October, commencing early in the morning. The show will be open Thursday afternoon, once judging is completed and certificates and ribbons are in place. Thursday evening for the Cocktail Party which will take place in the Show and Central Display venue, Friday and Saturday from 9AM to 5pm, and on Sunday from 9:00 AM to 4:00 PM. Setup is on Wednesday 4 October from 12 Noon until 9:00 PM.

There will be an arts and crafts exhibition/competition at the Conference. Thelma and Phil Bridle are willing to transport your work to and from the show if you are unable to attend. There will also be a Photographic Competition. Photos must be entered by 5 August. Thelma has indicated that she will be able to bring submitted photos back to Adelaide.

NOSSA will have a Sales Table at the Conference, selling arts and crafts. If you have any items that you may be able to contribute, please contact Thelma. Again Thelma (and of course Phil) have agreed to transport if you are unable to attend.

A Conservation Forum will be held at the end of the Conference, probably on the Friday Evening. Once again Thelma is the contact person for this (8384 4174)

SOME AUSTRALIAN NATIVE EPIPHYTES Part 2 of 2
BY REG SHOOTER first published in the OCSA Bulletin (1997)

The most spectacular of the species would have to be *Dendrobium speciosum*, commonly called the Rock Lily or King Orchid. The specific epithet, *speciosum*, comes from the latin 'specious' meaning showy/beautiful and it certainly is that.

This is a species made up of six varieties. The botanists have recently split the one species into 6 separate species. This has not universally been accepted by the orchid fraternity and, for the purpose of this paper, I will treat it as a species with 5 varieties.

Flowers vary in colour from white through to deep yellow and are produced in profusion on long racemes. Plant form is also variable. *Dendrobium speciosum* var. *hillii* can have relatively slender pseudobulbs, up to a metre in length, while var. *pedunculatum* has short, squat pseudobulbs up to 16 cms long, with the other varieties in between. Variations make a great difference to the hybrids when used as a parent.

Dendrobium speciosum is not very dominant as regards flower shape or colour, as a parent, but does have the effect of increasing the flower count in its progeny. An easily grown species it requires a very open mix. Use the larger size pieces in the mix, 1 ½ - 2 cm size. A good compost is pine bark and chunks of sandstone, 50 percent of each. Squat pots are preferable. As much light as possible without sun scorching

during summer and, from April to September, full light with no shade. This helps the pseudobulbs ripen and mature prior to flowering in the spring.

Another species closely related to *Dendrobium speciosum* is *Dendrobium kingianum*.

Its natural habitat is growing on rocks, rarely on trees, from southern New South Wales to central Queensland. Its common name is the Pink Rock Lily. It was named after Captain King, one of the early plant collectors, who was the son of Philip King, Governor of New South Wales.

Dendrobium kingianum is very dominant in size, shape and colour of flower when used in hybridizing. Even after several generations the colour will come through in the progeny.

It is very variable in colour, ranging from pure white through pink to deep red, with some having all three colours in them.

Probably the easiest of the native orchids to grow, do not over-pot. Use squat pots or terra-cotta saucers. Prevent over-watering. This species is most intolerant of constantly wet roots. It requires high light (50% shade) and plenty of air movement. Leaves should have a purplish tinge if getting enough light.

The third species, *Dendrobium falcorostrum*, is probably the most difficult of the species I am discussing to grow in South Australia, although, with attention to detail, they can be grown into large floriferous plants.

The common name is the Beech Orchid, so called because it is found high up on the Antarctic Beech trees at altitudes of over 800 metres, where it regularly experiences snow, high winds and near freezing conditions of high humidity. It is obvious why it can be so difficult to grow in South Australia. However, orchids are very adaptable and if conditions of cool humidity can be provided, such as is found under the leaves of mature cymbidiums for instance, it is possible to produce plants carrying crystalline, white, highly perfumed flowers of great beauty.

In a nutshell, *Dendrobium falcorostrum* requires lots of fresh moving air, plenty of water when in active growth and cool humid conditions at all times. It will not tolerate hot humid conditions, but will accept temperatures down to 0°C.



Dendrobium tetragonum, from the latin tetra = 4 and gonia = angled, meaning four-sided pseudobulbs, are pendulous in habit and this is one species that is best grown on a mount of durable material such as a piece of tea tree log. This means that in warmer months, strict attention must be given to watering to prevent the roots dehydrating. This can be quite time consuming and one way this can be overcome is by the use of terra-cotta pots in the following manner.

Take a 10 cm clay pot, carefully enlarge the drain-hole in the bottom to about 3 cm wide, then pass the roots of *Dendrobium tetragonum* through the bottom of the pot - from the outside - so that the roots are spread inside the pot and the orchid is hanging from the pot. Place some larger pieces of bark over the roots to anchor the plant, then top up with a free-draining mix. Place a wire or line around the pot under the raised lip and suspend it high up in the shade-house. In this way it can be watered with the rest of the collection.

Dendrobium tetragonum has three varieties, but only two are seen in a regular basis. *Dendrobium tetragonum* var *tetragonum* has rather small pseudobulbs, about 30 cm long, bearing up to 5 fragrant, starry flowers which vary in colour from green to yellow with more or less brown to

reddish purple blotches, whereas *Dendrobium tetragonum* var. *giganteum* has bulbs up to 50 cm long, carrying up to five flowers of similar colouration, but are much larger, up to 9 cm long. This is the variety that has been used extensively in hybridising to produce some stunning progeny.

The final species I wish to discuss is not very often seen here in South Australia, but is significant in that it has been used quite a lot in hybridising. It is *Dendrobium fleckeri*. It is a tropical species but grows at high altitudes so adapts quite readily to conditions in South Australia.

It is named after Hugo Flecker, who collected it from Mount Barille Frere as recently as 1937.

It is a beautifully shaped and coloured orchid, having wide segments and a frilly lip. These attributes have been passed on to many of its progeny. The one disadvantage with this species is that it carries 2 or 3 flowers per raceme and usually only one raceme per bulb. However, when it is crossed with more floriferous species, the flower count is invariably increased. *Dendrobium fleckeri* requires a fair amount of light (50% shade), plenty of water in the growing season, high humidity and good air movement.

From these five species there has been some 200 hybrids registered to date. I will list just a few of them, but for a more complete study, I suggest you read Walter T Upton's book "Dendrobium Orchids of Australia" and try to visit a native orchid nursery during the flowering season of September to October.

A very floriferous hybrid between *Dendrobium speciosum* and *Dendrobium kingianum* is *Dendrobium x delicatum* which is easily grown into a specimen plant and has masses of good-shaped flowers varying in colour from white through to pink. It likes growing in a shallow pot or saucer.

Dendrobium x gracillimum is a cross between *Dendrobium speciosum* and *Dendrobium gracilicaule*, has lovely yellow flowers on long racemes and, if a good form of *Dendrobium speciosum* is used, then the flowers are of a very good shape. It is easily grown.

Dendrobium Hilda Poxon is often seen on show benches these days. It is the hybrid that is probably responsible for the upsurge of interest in Australian Natives. The crossing was made by Ira Butler who, unfortunately, died before the seedlings bloomed. The flowers are produced on squarish pseudobulbs (from *Dendrobium tetragonum*) on racemes of up to 20 flowers (the flower count from *Dendrobium speciosum*). They are spidery and vary from pure yellow to yellow with more or less brownish-red markings.

By back-crossing *Dendrobium Hilda Poxon* (*Dendrobium tetragonum* x *Dendrobium speciosum*) to *Dendrobium speciosum*, the floriferous hybrid *Dendrobium Essie Banks* is produced, with 2-3 racemes per growth of creamy, good-shaped flowers and up to 20 flowers per raceme. The same growth will produce flowers for 2 - 3 years.

As I stated earlier, *Dendrobium kingianum* is a very dominant species in its influence as a parent. When *Dendrobium Hilda Poxon* is crossed with *Dendrobium kingianum*, it produces a very colourful hybrid, *Dendrobium Telekon*. This is a compact plant that has beautifully marked purplish flowers shaped very much like *Dendrobium kingianum*.

One of the older hybrids registered is *Dendrobium Ellen*. This was done in 1928. It is *Dendrobium kingianum* x *Dendrobium tetragonum*. This orchid is readily available and is a good one to start with. It has lilac coloured flowers halfway in shape between the two parents.

Another fairly old hybrid, but one that keeps getting remade using selected parents is *Dendrobium Bardo Rose* (*Dendrobium kingianum* x *Dendrobium falcorostrum*). This orchid has the nicely shaped flowers of the *Dendrobium kingianum* persuasion, varying in colour from white through to deep pink and is easily grown.

When *Dendrobium falcorostrum* is crossed with *Dendrobium gracilicaule* it produces a very fragrant hybrid, *Dendrobium Susan*. The flowers are *Dendrobium falcorostrum* shaped but not quite as large and are a lovely, soft, creamy colour.

By mating *Dendrobium falcorostrum* with *Dendrobium fleckeri*, *Dendrobium Peter* is produced. This is a very attractive, solid yellow hybrid produced on small plants.

The species that has had the greatest effect on hybridizing would possibly be *Dendrobium tetragonum*. I have already discussed *Dendrobium Hilda Poxon*. A similar one is *Dendrobium Kim Heinze*, which has no less than five species in its background, but *Dendrobium tetragonum* being so dominant, has stamped its mark on it. - starchy flowers on slim pseudobulbs, varying in colour in the yellows, greens and browns with purple markings.

In recent years, the breeders have tried to introduce other colours into the cool-growers which are predominantly white, yellow or pink. They have done this by using the tropical species *Dendrobium bigibbum* and, in doing so, have bred a certain amount of cold-tolerance into the progeny. One of the first was *Dendrobium Pee Wee* (*Dendrobium bigibbum* x *Dendrobium tetragonum*), which is a lilac coloured flower about 6 cms across and having segments about 6mm across. Easily grown if given a favoured position in the shadehouse during winter.

When *Dendrobium Pee Wee* is back-crossed to *Dendrobium tetragonum* it makes *Dendrobium Rosella*, an aptly named hybrid having all the colours of that well known bird. Treatment is the same as for *Dendrobium Pee Wee*.

These, of course, are only a few of the many hybrids currently registered and more are being produced every month.

Australian epiphytes are easy to grow, very rewarding and, they are our own orchids....why not grow a few?

RECOMMENDED FURTHER READING

Dendrobium Orchids of Australia - Walter T Upton.

Native Orchids of Australia - David L. Jones

CONSERVATION NEWS Bob Bates

N.O.S.S.A. Conservation group continued its bush-care work at Scott Creek Conservation Park on Sunday 26 March with a visit to Fox Bog. Twelve Members spent three hours each cutting and spraying blackberry re-growth.

This high potential conservation site was once the scene of an intensive garden with goats, vegetables and an orchard. Needless to say, once it became part of the Park, blackberries, willows and grasses took over. The bog, set in a small gully, is rimmed by a 10m sandstone cliff at one end and a waterfall at the other. The cliff was covered with ivy but this is gone now. Over recent years, New Zealand flax has been dug out and blackberries slashed and poisoned. The willows were cut down and grasses sprayed with herbicide.

Already the bog is recovering with silky ti-tree, sword fern and rushes returning. During our visit many orchids were noted. Some such as *Eriochilus* aff. *cucullatus* and *Genoplesium* aff. *rufum* were in flower along the track while the seed pods of *Dipodium* were in evidence. A walk through the local area showed up *Genoplesium* of another species, also undescribed. These were our reward for the hard work done in bush care.

KNOW YOUR MEMBERS Gerry Carne

The Native Orchid society of South Australia owes its foundation primarily to two of our Life Members: Roy Hargreaves and Les Nesbitt. Both saw a need in South Australia for a group to be available to be

called upon to rescue native orchids from natural sites about to be developed, to grow native orchid species and to promote the need to conserve and protect South Australia's native orchid species. The inaugural meeting of the Society was held in the Assembly Hall, Goodwood Boys High School on the 22nd March 1977. Forty eight persons were present of whom 44 became Foundation Members. Les Nesbitt was elected the Society's first President, Roy Hargreaves the Society's first Secretary and Ron Robjohns (also a Life Member) the Society's first Treasurer. Since its inception, NOSSA has grown to be recognised both nationally and internationally as a group dedicated to and active towards the conservation of native orchids (and all native flora and fauna) in South Australia.

The following is the first of several profiles that will be presented on a monthly basis, one per month, of NOSSA Members who have made significant contributions to our Society.

Roy Hargreaves (Life Member)

As was mentioned in last month's Journal, Roy Hargreaves has had to step down as a Committee Member after actively serving NOSSA in office for 23 years. During this time Roy missed only 5 meetings, two of these in the past few months. One of the two real founders of the Native Orchid Society of South Australia, Roy served as its first Secretary (a position he held for six years) and remained a Committee Member from 1977 through 1999. Until very recently, Roy was involved with the NOSSA Journal since our very first Journal some 22 years ago. Throughout his 23 years on Committee, Roy was an up front participant in virtually all of NOSSA's activities; a keen conservationist, a mentor to many, a public relations officer, an ambassador and a liaison person with numerous groups including SGAP, OCSA, Parks and Wildlife, the Adelaide Botanic Gardens, Black Hill Flora Research Centre, various journalists and broadcasters and perhaps most importantly, with primary and secondary school children. Roy has given away hundreds of pots of *Pterostylis curta* in an endeavour to encourage others into developing an interest in Australian native orchids, and as a consequence is often affectionately known as Mr Curta. Roy was one of the initiators of the R S Rogers Orchid House which was originally located in the Botanic Gardens. He oversaw the removal of the orchid house and its large collection of terrestrial orchid species to the Black Hill Research Centre, and took the responsibility of maintaining and looking after the collection there until very recent times. Roy was an organiser of the Society's Annual Spring Show since its inception in 1981 and of numerous other shows and displays in South Australia. He organised several orchid rescues and was involved in numerous others. The Roy Hargreaves Prize is awarded annually for the best terrestrial species displayed at our Spring Show. On 26 January, 1997, Roy was awarded the Order of Australia Medal for his many contributions to the conservation of native orchids in Australia. He is a member of the Australian Orchid Foundation. NOSSA is honoured to have Roy as a Member.

Dockrillia cucumerina 1842 Macleay ex Lindley) Brieger
by Len Field A.N.O.S. Newcastle Group

The following text and photograph have been taken from Australian Native Orchids - Description and Culture Notes, written and published by Len Field for A.N.O.S. Newcastle Group. It has also been published in the Orchadian. (1997). The text has been retyped and hopefully no errors have been introduced into the text.

Common name cucumber orchid because of the cucumber shape of the leaves.

Named from the Latin *cucumerinus*.

Also known as *Callista cucumerinuma* Rev. Kuntze 1891.

First found by W. S. Macleay near Camden N.S.W. in 1842.

Found from the Burratorang Valley in Eastern N.S.W. Westward to the Blue Mountains and up to South East Queensland. It is an orchid of the Eastern Coast and adjacent ranges, (reaching its best growing area about 35 kilometres from the coast). It does not grow on the Western slopes and this is a Southern orchid that does not extend to the tropics, A strange orchid with a creeping much branched rhizome and alternate dark green leaves that are thick, tough and tuberculate.

Nearly always found on the River Oaks *Casuarina cunninghamiana* where it prefers to hang onto the underside of lateral limbs that overlook the water, although it can also be quite prolific on the main trunk. Can also be found growing on red cedar *Cedrela australis* now *Toona australis* and the Morton Bay Fig *Ficus rnacrophylla* also can sometimes be found growing on rocks (lithophytic). This orchid is very endemic to its growing area where it can become very prolific with the River Oaks absolutely covered in them while close by outside this area it can be non existent. While in nature their numbers would have been greatly reduced to what they once used to be as have all our native orchids, it does not seem to have sustained the loss of habitat that these other orchids have suffered. This is not due to any other reason than that the roots of their host tree, the mighty River Oak is needed to hold the banks of the rivers and streams to prevent erosion.



While on a very recent trip to the area where these orchids can be found I was able to see huge numbers clinging to the trees and one old River Oak that had fallen due to old age and high wind that was covered in this orchid. The long drought did not seem to have had any effect on them as they all looked quite healthy, but this is not always so as some I saw several years ago near Armidale N.S.W. where the heat and dry weather at the time had dried the creek up and allowed the orchids to dry out so much they had withered and fallen off the trees onto the ground. This would be unusual as they can tolerate severe cold and cold winds with no ill effects, also hot winds do not seem to effect them as long as they can hang near or over water with their backs to the sun preferably in shade, and then dry out during the day and then receive cool moist air at night from dew and fogs.

In 1969 a Mr and Mrs D. Walters found what was no doubt a natural cross between *Dockrillia cucumerina* and *Dockrillia bowmanii*. I was shown this plant a short time later and it left no doubt that this was a genuine cross of these two species. *Dockrillia cucumerina* is closely related to *Dockrillia linguiformis* with which it can be found growing with in the same area.

Flowering takes place quite often but irregular throughout the Summer extending from late Spring to early Autumn. Racemes and peduncle are short with four to ten flowers 13 mm to 18 mm in diameter coloured white or greenish with reddish stripes. This colour does not seem to alter much no matter from where the plant comes and flowers can last up to two weeks.



Cultivation: This would be one of the harder orchids to establish and grow, it is also a very slow grower and prefers shade (in nature it grows under limbs or on the South side of the host trees). When transplanting to its new host which should be a dry medium such as black tree fern, natural cork, hardwood etc., or attached to a made up cylinder, it should be attached firmly and better success can be had if only about six leaves of the growing ends are used. Transplanting should only be attempted during the Summer months. Nylon fishing line is a good material to use to attach it to its new host. It likes to be wet at night and then dry out during the day so it would need to be watered well during the warmer growing months. As I have said, this is a very hard orchid to grow and a sign that it is not happy and conditions are not right is that the plant slowly fades away over a long period until eventually there is nothing left. The main reason for this I feel is the loss of benefits it gained from its association with its near to water environment. A very weak solution of a Urea based fertilizer sprayed on can assist growth.

"The most successful and happy orchid growers seem to be those who have no reason for being successful and happy"
 Rankin from Orchid Wise by Roger Rankin

R. S. ROGERS SHADEHOUSE by Roy Hargreaves

When the Late Jim Simmons was President of N.O.S.S.A., he became involved with the Australian Orchid Foundation through Gerald McCraith. It was through this association that a decision to build a shadehouse (the R.S. Rogers Shadehouse) in Adelaide to cultivate a collection of Australian native terrestrial orchids was considered. The orchid house was built in 1982.

Jim Simmons and I were asked by the N.O.S.S.A. Committee to select one of two nominated areas at the Adelaide Botanic Gardens and recommend the one that would provide the better conditions for establishing a collection of native terrestrial orchids. The collection that was to be housed in a shadehouse was to be used for research by visiting scientists, and to maintain in cultivation, as many terrestrial orchids as viable that could be reintroduced into the bush should natural populations be destroyed through development or natural means. The site selected was immediately behind the "stables" in the south eastern sector of the gardens.

The galvanised pipe-framed shadehouse was partially funded by a \$1000 gift from the Australian Orchid Foundation, \$500 of which was later returned to the A.O.F. by N.O.S.S.A. Construction of the 6 metre x 3.7 metre x 2.1 metre high (20 ft x 12 ft x 7 ft) frame was supervised by Jim Jacobs. The frame was covered with 50% shade-cloth. Full length benches 0.6 metres wide were positioned along both sides of the shadehouse, with a 1.2 metre (4 foot) wide bench in the centre. Some 200 pots of terrestrial orchids, many from interstate, made up the collection, with Bob Bates supplying most of these.

In 1992, Dr Morley, Director of the Adelaide Botanic Gardens, advised me that he required a place for a glass-house and the shadehouse and collection were to be moved to the Black Hill Flora Research Centre (as it turned out, the glass-house was never built). Prior to being moved to Black Hill, N.O.S.S.A. had to demonstrate that the soil and tubers were free of *Phytophthora cinnamoni*, a deadly fungus that was (and still is) spreading through our soils, slowly devouring the root systems of a significant range of plants and destroying them. The collection was placed in quarantine in the shadehouse for 12 months. Mr T. Lee of the Botanic Gardens then directed me to remove one spoonful of soil from each side of every pot and to blend together the removed soil from groups of 10 pots. Aggregates of soil samples each representing soil obtained and pooled from 10 pots of terrestrial orchids and six samples from the floor of the orchid shadehouse, were placed into 4" clear plastic containers. Rainwater supplied by Mr Lee added to each container to about 1" from the rim and a pear was then placed in each. In all there were 37 containers of soil mixes representing the growing media of the entire R. S. Rogers House orchid collection.. Each container was positioned in a south facing window position in the Lecture Room at the Gardens for a period of 10 days. The pears were regularly inspected and turned and as no signs of *Phytophthora* were noted, the tubers were considered to be *Phytophthora* free and the go ahead to move the collection to Black Hill was given.

In early 1993, Ron Robjohns, Bill Dear, John Peace, Gerry Carne, Heinrich Beyrle and Roy Hargreaves , as far as I remember, were those who accurately took each pot, individually sieving for tubers and transferring the tubers and labels into paper bags, each pot's tubers being placed into separate bags, which were then sealed.

The Botanic Gardens pasteurised a trailer load of soil mix and 6 inch squat pots which were provided to N.O.S.S.A.. Several Members met in the potting shed at Black Hill to repot the tubers that were earlier placed into paper bags. Once the repotting was completed, the pots were placed in a newly constructed shadehouse (the new R. S. Rogers House). Due to its proximity to large trees, the new shadehouse proved to be too dark for ideal orchid growing conditions and after two years the 50% shadecloth was removed

and replaced with ½ inch square bird wire, the birdwire being used to keep the birds away from the orchids.

Conditions were still not ideal with considerable shade being provided by surrounding trees, and the collection was difficult to maintain. One of the success stories, however, was in finding seedlings of *Spiranthes sinensis* coming up in pots of other plants being cultivated at Black Hill, the seeds being dispersed naturally by the wind.

In 1984 and 1985, Black Hill won the Kay Nesbitt Trophy for a cross between *Caladenia flava* and *Caladenia latifolia*

In 1999, the Flora Research Centre told N.O.S.S.A. that they required the Rogers site for other purposes and the collection had to be removed.

Editor's note. Roy put in one day per week for seven years at the Black Hill Flora Research Centre, looking after the R. S. Rogers collection. This represents some 350 trips (some 10,000 kms) and more than 1000 hours of his time, at his own expense. Other members were also involved in looking after the collection, but none to the degree of Roy.

Pterostylis hians (the Opera Orchid)

This recently described orchid, the type specimen being collected in March 1989, may now be extinct!

Pterostylis hians (from the latin *hians*, yawning, gaping in reference to the wide gape in the flower above the sinus) is endemic to south-eastern New South Wales where it was known to occur only from the vicinity of the type locality on the south coast of New South Wales north of Ulladulla near Manyana. Due largely to "unscrupulous people who regularly dug up the few remaining plants", the orchid is now considered to be extinct from this location. It is likely the species is more widespread than the one location but other populations are not known. The species was first collected by Bob Trevenar who collected some plants for cultivation. Bob showed Ron Tunstall the location and flowering plants were found.

Pterostylis hians is a distinctive and diminutive member of the *Pterostylis* genus, characterised by the small, broad, orbicular to reniform rosette leaves, moderately small prominently veined erect flowers of about 13-16 mm which are green with white on the dorsal sepal and petals. The galea is open from the front with the tip curving slightly forward but pointing up. The short, broad labellum is pale green with brownish margins. Flowering stems are to 5 cm with up to 3 ovate spreading stem bracts. *Pterostylis hians* grows in moist sandy clay loams in shady conditions under *Baeckea virgata* and *Leptospermum* sp. in open forest which has a well developed understory. It tends to grow close to creeks, among rank grasses where it is almost invisible because of its small size. Flowering period is from March to April.

For further reading, description and drawings/photographs of the orchid, readers should refer to an article authored by David Jones and published in The Orchadian Volume 12 Number 4 (June 1997) "Two Rare New Species of *Pterostylis* R. Br. (Orchidaceae) Allied to *P. alveata* Garnet" and the "Field Guide to Orchids of New South Wales and Victoria" by Tony Bishop and published by the University of NSW Press (1996) Pg 101, photograph 250 .

Please advise one of N.O.S.S.A.'s Committee Members if you have this orchid in your collection as seed from orchids in cultivation could lead to the species reestablishment in the bush.

art work has been provided by Ron Robjohns (*Dendrobium tetragonum*) and Lisa Carne (*Dendrobium cucumerina*).