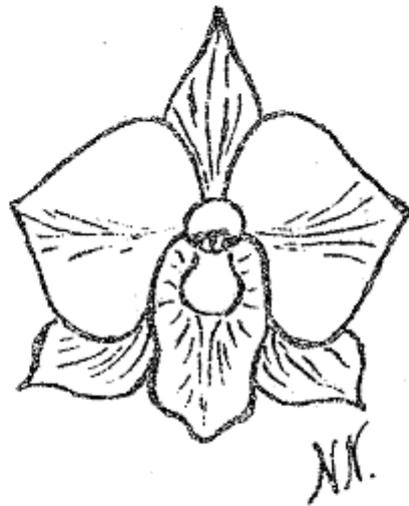
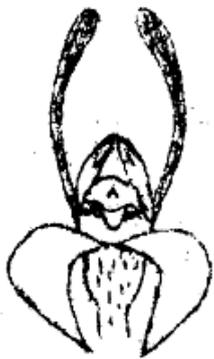


NATIVE ORCHID
SOCIETY
of
SOUTH AUSTRALIA
JOURNAL



- JUN 1981



NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

JOURNAL

Volume 5, No. 5, June, 1981

Registered for posting as a publication Category B. Price 40c

PATRON: Mr T.R.N. Lothian

PRESIDENT:	Mr J.R. Simmons 4 Gothic Avenue STONYFELL S.A. 5066	SECRETARY:	Mr E.R. Hargreaves 1 Halmon Avenue EVERARD PARK SA 5035 Telephone 293 2471 297 3724
VICE-PRESIDENT:	Mr G. Nieuwenhoven	COMMITTEE:	Mr R. Shooter Mr P. Barnes Mrs A. Howe Mr R. Markwick
TREASURER:	Mr R.T. Robjohns		
EDITOR:	Mr G. Nieuwenhoven		

NEXT MEETING

WHEN: Tuesday 23rd June, 1981 at 8.00 p.m.

WHERE: St. Matthews Hall, Bridge Street, Kensington.

SUBJECT: David Cannon the well known, hybridizer of Native Orchids from Victoria will speak on "Cool Growing Epiphytes". Slides will be used to illustrate his talk. David has registered several hybrids he has created. This evening is certain to be a highlight to anyone who grows native epiphytes, as David has a reputation for being an interesting and informative speaker.

P.S. I have been reliably informed some seedlings will be available for sale, Please bring the necessary.

FIELD TRIP

There will be a field trip to Horse Gully, Kersbrook on Saturday 25th July. One of the objectives is to look for *Pterostylis alata* var. *alata*. Meet at 1.30 p.m. in the main street of Kersbrook in front of Les and Kay Nesbitt's Nursery.

SUBSCRIPTIONS

Subscriptions are now overdue. This is a final reminder to anyone who has forgotten to pay their subs. If you want to keep receiving your Journal please submit \$4.00 Single, or \$6.00 Family to your Secretary now.

HERBARIUM VISIT

Have you ever wondered what the inside of an herbarium looks like and how it works? Well, here is your chance! We will be visiting the Adelaide herbarium on the evening of July 13th at 7.30 p.m. There will be a limit of 20 people. Please leave your name with our Secretary Roy at the next meeting, or ring him on one of the above telephone numbers.

SHOWS

The N.E.D.O.S. Winter Show will be held on July 16th-18th at St. Phillips Hall, Galway Avenue, Broadview. Those of you who wish to enter are invited to do so. Any orchids are welcome, but particularly natives, of course. Set-up is on Wednesday 15th and removal Saturday evening 18th. For further details see Les Nesbitt at our next meeting.

LAST MEETING

Our speaker, Margaret Stewart, who spent fifteen years in Western Australia and has been a member of the Western Australian Native Orchid study and conservation group, took us on a mouth-watering tour of different areas of Western Australia where she photographed a wonderful array of orchids not seen outside that State. She mentioned that one of the highlights of her trip had been the discovery of *Caladenia corynephora* in a burnt swamp and *Caladenia lobata* near an almost dried up river during a ten mile (or sixteen kilometre) hike. (I noticed some of our terrestrial growers casting longing glances at some of the more spectacular plants seen). Amongst the 85 species Margaret found we saw, for instance, *Drakaea elastica*, *D. glyptodon*, two un-named *Caladenia*, *Diuris laevis*, *Diuris setacea*, *Spiculaea ciliata*, *Epiblema grandiflorum*, some beautiful Prasophyllums, Thelymitras - in fact, too many to mention. A most enjoyable evening was had by all.

Plant Display and Commentary

Terrestrials. Commentary - Harold Goldsack

The number of plants on display is gradually increasing as we build up to a climax, in springtime. On display were: A single flowering plant of a *Corybas* species from New South Wales, one pot *Pt.* species and *Chiloglottis* plants only. *Pt. concinna* in what appeared to be a commercial soil mix. *Pt. alata* var. *robusta* three pots, one large with several flowering plants. *Pt. toveyana* - two pots, one with six flowering plants. *Pt. reflexa* - one pot, three blooms and one pot with what appeared to be a green *Pt. reflexa*. *Pt. vittata*, *Pt. ophioglossa* var. *collina*, *Pt. obtusa*, three pots *Pt. nana*, both the hills form and smaller mallee form. *Pt. truncata* - large flower on short stem, typical of the species. The colourful flowers of *Pt. revoluta* were present with two flowers. *Chiloglottis formicifera* - one 7" pot, four flowers and numerous buds. The un-named *Pterostylis* species, from the mallee, lovely red flower, as Harold mentioned approximately half-way between *Pt. alata* var. *alata* and the var. *robusta* and an un-named *Spathoglottis* species, pink and white in colour.

Epiphytes. Commentary - Ron Robjohns

Cadetia taylori, a nice healthy looking plant, only one flower, but pretty. Grown cold by its owner. *Den. bigibbum* on natural cork, a most attractive *Den. johannis* x *bigibbum* var. *bigibbum*, two spikes of purple flowers. *Den. Hilda Poxon* (anna) - a very good clone, with its flowers facing upwards instead of the usual drooping variety. *Den. gracilicaule* var. *howeanum* x *tetragonum* var. *giganteum* - five spikes. *Den. Hilda Poxon* and a *Den. tetragonum* on a natural branch.

Popular Vote: *Den. Hilda Poxon* (anna) R. & C. Chisholm

Pt. revoluta

G.J. Nieuwenhoven

Raffle: *Pt. baptistii* R. Bates

Malaxis latifolia Chris Chisholm

Den. gracilicaule B. Baker

Do you have any problems you would like answered about your orchids? Or perhaps a plant that is not thriving? Well our July meeting is devoted to a question night - write your questions down now and a panel of experts will try to answer them for you. A box will be provided next meeting to place your questions in.

A REPRINT

Roy Hargreaves.

A book printed by the Government Printer "S.A. National Parks and Wildlife Reserves", which is now out of print, included a section illustrated by line drawings on native orchids in our National Parks, and written by Mr. Harold Goldsack, a member of N.O.S.S.A., who for over 50 years has been a keen and informed Botanic observer and student of the growth and habitat of native orchids.

In 1965 the Field Naturalists' Society had this section reprinted and N.O.S.S.A. now has autographed copies available at our meetings for \$1.00 each or \$1.50 posted by the Secretary.

THE EFFECTS OF AN EARLY SPRING DROUGHT ON FLOWERING OF ORCHIDS
IN SOUTH AUSTRALIA

R. Bates.

The first four months of 1980 were the driest on record over much of South Australia, This had very little effect on the growth of spring flowering orchids which are normally dormant until May. Winter flowering species did flower later though, because of this Autumn drought.

May, June and July, by contrast, were much wetter than usual over most of the State, and by mid-August it appeared that it would be an excellent year for the orchids. But that was not to be. After the good rainfall of mid-July further rain was patchy and some areas did not again receive rain until October. This drought came at a crucial time for the orchids, especially those of the more marginal areas on Yorke and Eyre Peninsulas, the Flinders Ranges and the Murray Mallee. Light showers in the Mt. Lofty Ranges were enough to ensure a reasonable flowering in that district, but in the Mallee a high proportion of flowers aborted as leaves shrivelled and browned off.

The flowering of some species was brought forward. *Caladenia dilatata* and *C. filamentosa* in many areas had finished flowering by late August. This appeared to be an attempt to utilise the last of the remaining soil moisture. Other species remained in bud throughout this period (*Thelymitra canaliculata*, *Calochilus campestris*), seemingly waiting for the next rain. Those species which did flower generally had much shorter stems than usual (*C. dilatata* had normal sized blooms on stems only 3 - 4 cm. tall). Multiflowered species like the *Prasophyllums* produced only a few flowers, the upper ones generally aborting. In a few areas which also missed July rainfall most species did not produce any flowers at all, and there was probably some loss of actual plants. Seedling survival in mallee areas during 1980 was probably negligible.

Good October rains meant that late flowering species in all but the worst hit areas flowered reasonably well.

PHOTOGRAPHING NATIVE ORCHIDS: No 7 of a Series R.J. Markwick.

Lighting the Subject, the Natural Way.

One of the biggest problems facing a close-up photographer is getting enough light onto the subject to keep exposure times short (sufficient to "freeze" any movement of the subject), and allow a small enough aperture to be used to obtain sufficient depth-of-field. As lens extensions get longer and exposure corrections become greater, more light is needed. Since our orchids are generally quite small, the problem is to concentrate sufficient light onto them.

Lighting for orchid photographs should be soft if the true colours and textures are to be shown. Direct sunlight is not good because it tends to produce excessive contrast which can "burn out" textural details. Furthermore, problems with reflected ultra-violet light can cause blues to be rendered as shades of violet. (The use of a skylight filter is helpful in these circumstances) The natural light of an overcast day is, however, ideal for outdoor shots, and a subject in shade can be better lit by reflecting light from a white card or some other reflective surface. Different kinds of reflectors produce different effects. Side lighting or back lighting can be used to enhance textural details. Orchids can look very effective photographed against the light as many are translucent.

It may not be generally realized by natural light photographers, but it is a fact that the colour of the sunlight varies during the day. As a result, blue, green and purple flowers, are best photographed in the mornings, while reds, yellows, and oranges are best reserved for late afternoons. If you abide by these guidelines the colour saturation of your orchid photographs will be greatly enhanced. Remember to avoid strong direct sunlight. If possible, use the softly diffused and natural lighting of a cloudy day, where colour saturation is at a peak.

To maintain realism, I prefer to photograph orchids in their natural environment. However, movement caused by wind, and increased exposure times, can combine to prevent the more extreme close-ups unless flash lighting is used, and this opens up a whole new ball-game. Some purist photographers even advise against using flash for flower portraiture, because, depending on the surface reflectivity of the plant, the instantaneous burst of intense light will sometimes cause glare which results in undesirable, unnatural white spots

Next month: Lighting the subject with flash.

EPIPHYTES NATURALLY

G. Nieuwenhoven

Have you ever stopped and remarked to yourself or to a friend, how well some of our epiphytic orchids are grown in pots when displayed at monthly meetings? And have you also ever stopped and wondered how many epiphytes grow in pots naturally? Not many, are there? In fact, I have never seen one growing this way. In their native habitat, as we all know, they grow on the bark of trees, or many grow on rocks or boulders or in amongst them, as semi terrestrials. Yet, how often do we see them growing in captivity, naturalized on an artistic looking branch or piece of natural looking tree stump, or perhaps an interesting looking piece of rock? So instead of that practical piece of compressed cork or plastic pot as host or anchor, Why not try a chunk of rock, not too large, perhaps approximately 250mm. in diameter? A piece of River Murray cliff limestone would do nicely, as this rock often has holes or

depressions in it - beaut places to plant some moss on, then try establishing some pieces of *Sarcochilus ceciliae* on it, because that is how they grow naturally. They can be attached with a small daub of Selleys silicone sealer to the base of the plant -- it soon dries and will hold it until the plant has a chance to put some roots onto the rock.

Let your imagination run riot and you will soon find many plants suitable for this type of culture. For instance, *Dendrobium linguiforme*, I have seen growing on almost bare rock around Sydney. Or how about *Bulbophyllum exiguum* - in the right places it can cover the face of a boulder in shaded gullies near the Blue Mountains. Another one suitable is *Liparis coelogynoides*, a lovely small bulbed plant with fairly long sprays of flowers which have a reasonably broad labellum.

All these plants are suited to grow outside in your shade house, so if you do not have a glasshouse there is no excuse for not trying. Put your rock amongst other plants where it gets good light, but shade from our strong summer sun. You will, of course, have to water your rock frequently, as most rocks do not hold water for very long, although that could be a boon to some species which like to have their roots exposed with plenty of air movement

Some other species which are suitable that spring to mind are *Den. bigibbum* var. *superbum* sub. var. *compactum* - this occurs naturally as a lithophite - you may need a glasshouse for this one, or *Den. speciosum* - here you probably need to look for a large rock or the plant will outgrow its host. (Any rock weighing more than 50 lbs. need not be brought into meetings). *Liparis reflexa* - this one grows on rocks or rock ledges - put a bit of sandy compost into a hollow in a piece of rock and plant your *Liparis* on top, and presto! instant nature. Doesn't it look better than that plastic or clay pot? *Den. striolatum*, another rock dweller - many of these plants are regularly available from Nurseries. There probably are many more orchids which will grow this way, particularly amongst some of our *Bulbophyllums* or other (like *Sarcochilus fitzgeraldii*) - tuck in a few bits of moss, or if you can find a suitable rock with deep enough holes, try planting a small fern or two for a really good effect.

Getting interested yet? Good! I like to see us all try something different for a change instead of trying to grow orchids which are the biggest or best, or carry umpteen flowers. Let's make an attempt at growing something aesthetically pleasing - your orchids may appreciate it more too. It is more difficult, yes, but you obtain more satisfaction too, when you succeed. I have made a start why don't you?

METHODS AND MADNESS OF AN ORCHIDOLOGIST R.C. Nash.

Your Editor asked me to write an article on orchids. I balked and asked to be allowed to think it over. Well, I have thought it over, and after considering various ideas, decided upon the following. I hope you approve.

When I was a member of N.O.S.S.A. I heard several people remark at various times that they wanted to know how to grow orchids. Until a few years ago almost all I grew were the South Australian native terrestrial orchids, those little plants that generally show good wisdom by sleeping through our hot dry summers. This sleeping time is termed the dormant period, and as it occurs during the summer, could also be expressed as the aestivation period. We do have a few

species that will sleep through the winter if conditions become cold enough. I may discuss these at another time.

Before we progress further it would be best to sort out as to whether you are suited to grow these plants. First, are you keen on the idea of succumbing to a fatal ailment? I personally know of few people who have become orchid enthusiasts and then fully escaped this ailment, even though they have tried. I myself have made several attempts, but so far have failed each time, mostly because I could not throw the whole lot out into the rubbish bin. While a person hangs on to one orchid plant, then that person is still afflicted. Generally the other afflicted souls will not give you peace. I think all orchid material should, by law, have the following attached - "Warning: orchid caring is a fatal affliction."

If that has not put you off, will you pass the next test?

This test is really tougher, for you will need to examine your attitude to life. What or how do you feel about acquiring things, those things you deeply desire, that are valuable or difficult to come by, yet are not. To obtain these items you could buy, or if lucky, be given some, or you can go out and help yourself to as many as you please, but this will harm the things you are after, and later, yourself. So you reply "If I can grab as much as I like, who cares?" Well if this is your attitude, give up the idea of going into our Native Orchids, for you are a person of little patience or concern and would do much harm to our orchids. If you are prepared to obtain a few plants and be patient by showing these plants love, care and concern, then continue to read.

If you haven't just completely given up I am about to start on the more interesting stuff, I hope. I ask you not to take all the following for granted, you will find that some modifications may have to be made to some, or quite a lot, for the culture of the terrestrial orchids to be successful. By this I mean you must take into account many variables, the major being the way the plants will respond to your location, both the district and your garden habitat.

Before we proceed too far I think it would be best to discuss tools and materials for potting. I am not going to list them, this will be up to you, but I will discuss these things.

One of the important items you will need is a bucket. With the aid of this common device you will be able to wash sand and compost material, carry these materials or temporarily store plants. Having mentioned sand I will deal now with this most important material. Good sand may be purchased in the form of propagating sand, such as that put out by "Sure Gro". Failing this you may know of a place where good river sand may be obtained. A source of such sand, other than a river is the common "Concrete Sand". This sand however, needs a little pre-treatment by mixing a little garden soil into it, then letting it stand for a few months, while being kept damp all this time.

To prepare your sand, this includes even the nice white clean sand, fill your bucket to about three parts full and with the aid of the garden hose, wash the sand clean of all light and coloured material. Push the hose to the bottom of the bucket and swirl it around until the unwanted material has been cleaned from the sand and the bucket. This may not take long if you stop periodically and gently pour off the collection of unwanted material on the top.

Having washed the sand it must now be drained and dried, as in the next stage we will be sorting out this sand. Here you will need to obtain a few sieves. The larger size is of the type used about the garden with a mesh of about 3 mm. or a little larger - this is used to remove the coarse fraction from the sand. Do not throw this coarse fraction away as this will be handy later, so store it. Next obtain one of those fine meshed sieves, preferably the metal type with a bronze mesh, commonly found about the kitchen. Tut tut! you must not take the one the cook uses otherwise you may suffer on the food front. If the cook has the type you want, either buy a replacement or get yourself one of the same. With this sieve remove all the very fine material from your sand. Now store both fractions separately - the larger will be used fairly often, while the finer will be useful for special occasions. Do not sieve all the sand but keep some in the mixed state. This will mean you will need four storage bins.

Now the sand is sorted out you will need to obtain some Peat (German) Sphagnum Moss (to be chopped up fine), Vermiculite, a bag of "Gardenitis" growing mix, coarse sawdust or wood shavings, preferably Eucalyptus (this should be aged by being stored in a damp condition until it starts to decompose, and then dried out), a small collection of various types of loam from sandy Mallee soils to the heavier Mt. Lofty Ranges soils, some organic fertilizer like Blood and Bone, some Superphosphate, Urea plus, etc., and others as you find new materials for yourself. Again, these things will need to be stored.

Later, when you start to mix the compost a measuring device will be required, so hunt around for something like an old mug, etc. A piece of wood or metal about 30 cm. long by 3 cm. high and up to 1 cm. thick should be obtained, as this will prove handy for scraping sand or compost into a heap, forming holes in the potted mix and many other small jobs.

At this stage we must consider a controversial item - pots. Since the advent of the plastic pot much argument has ensued over these containers; some growers swear by terracotta, while others are most adamant about plastic. I personally use both and find that it just depends upon the species being grown and where it is being placed. I am afraid generally you will have to make your own decision I will not be drawn into this argument.

Finally a potting table or concrete slab will be needed as a work area. even though I seem to have closed the book on things to get, I have yet one, or is it two? items of importance. These are some labels and a note book (including pens) which, hopefully completes the list. Having collected all the above items I would suggest that you store them somewhere safe from the other members of the household, which includes all pets.

Before we discuss the potting system, I think we should look at the way our native terrestrials grow in the wild, especially the soil structure in which they live. If you are able to examine these plants in their native soil you will find little humus material lower than a few centimetres. Many soils lack humus material almost completely. The surface in most cases will contain various amounts of humus material, often quite thick in a sheltered spot. Agents involved with the decomposition of this humus include some insect action, earth-worms, and the major contributor, fungi. It is

common knowledge in this interest that orchids live in a partnership called symbiosis, with various species of fungi, which feed upon dead organic material. This is why such material in the form of humus will be included in the compost.

Another aspect of the wild soil is drainage. This is often quite efficient, there are exceptions, but generally for many species excess water soon drains or soaks away. So to quickly sum up, before a species is potted up, some knowledge of the native soil would be useful. For most growers or would-be growers to obtain this first hand knowledge could be impossible, so I will give some leads later and perhaps other experienced growers could add to this knowledge.

Most terrestrials generally grow in situations where they either get some direct or moving broken sunlight, or they are well exposed to indirect light. These conditions vary greatly even for one species.

As is shown above, the food source that the plants will be looking for is going to be from above, e.g. the rotting humus is at the surface of the soil, with the nutrients washing down, or the fungi feeds upon the humus while penetrating the soil to eventually contact the orchid's stem or roots. So the following suggested. potting method will be based upon this system. The area below the tubers will be mostly neutral.

Let us now suppose you have been given. some orchid tubers, but you have no idea what their natural soil conditions were like. First it would be safe to assume that good drainage is essential, any humus in the pot will be above the tubers. While the plants are growing the mixture should be kept damp, how damp may be a problem. During the growing period the plants will need a good exposure to direct or indirect sunlight.

Okay, so let's start to pot up these unknowns. First take a clean pot of your choice, say a 10 cm. one, into this we should put no more than five tubers. Over the drainage hole/s place some broken pieces of pot or similar material - this material MUST be so placed as to block the entry of slugs, etc., but allow water to escape. Into the pot carefully place some of the coarse fraction sand, making sure not to dislodge the covers over the drainage holes.

You may fill the pot almost up to the halfway mark with this coarse sand. Now fill the pot to within 4 or 5 cm. from the top with the medium fraction sand. Into this sand gently push your tubers if they are large, or just place them on top if small, with the eye of the tuber pointing up. If the tubers are small they may be placed near each other, larger ones should be spaced out further. Some orchids do like company. Cover the tubers with a mixture of four parts medium fraction and one part fine fraction sand to about one cm. depth. Now mix two parts peat, one part chopped Sphagnum moss, one part Vermiculite, one part aged sawdust, wood shavings or "Gardenitis", a sprinkle of blood and bone with 30 parts of medium fraction sand. This mixture should be made damp by mixing two parts of water into it. Fill the pot with this mixture and gently tamp down so that almost 1cm. is left between the compost and the lip of the pots

To complete the potting place a thin layer of just one of the coarse humus materials on top, e.g. crushed Wood shavings, chopped Sheoak or pine needles, or "Gardenitis".

Continued next month.

© Copyright

Born April 19th, 1841 in East Prussia, Otto Tepper arrived in South Australia with his family in 1847. (Ferdinand von Mueller, one of Australia's more famous botanists arrived in Adelaide the same year).

He grew up in the Barossa Valley and worked first as a shearer and later as a teacher at Gomersal, Monarto, Nuriootpa, Ardrossan (1878-81) and Clarendon (1881-83), making extensive collections of orchids, particularly in the latter two areas. Tepper joined the Museum staff in 1888 and died in Adelaide in 1923.

Otto Tepper was South Australia's first orchidologist, but he was also interested in such diverse fields as entomology, geology and physics, publishing many papers on these subjects.

His articles on orchids include "Our Local Orchids" in Garden and Field (1885), "Native Plants about Ardrossan" (1880) and "Die Flora von Clarendon u Umgegend" (1895) His most important work on orchids was his "Orchids of Clarendon and Vicinity". This manuscript included drawings and paintings of some thirty different orchids with names and notes on several new orchid varieties. One of these, his *Caladenia candida* was later described by Rogers as *C. rigida*.

He also named *Caladenia dilatata* var. *petita* (The small flowered mallee form of *C. dilatata*.) The yellow form of *Orthoceras* he named *Orthoceras strictum* var. *luteoviridis* (1894), and for the white form of *Caladenia latifolia* he coined the name var. *candida*. Unfortunately this paper was never published. It was presented to the Field Nats. for publication, but lack of funds prevented this.

Otto Tepper was one of our first conservationists. He was Chairman of the first Native Fauna and Flora Conservation Committee in 1892.

His name is commemorated in such diverse plants as *Dodonea tepperi*, *Stylidium tepperianum*, the rust *Ustilago tepperi*, the fungus *Battarea tepperianum*, and an orchid *Prasophyllum tepperi* (synonym *P. nigricans*)

Tepper published a few species himself. The best known of these is *Drosera praefolia* Tepper (syn. *D. whittakeri* var. *praefolia*.)

Tepper worked closely with Baron Ferdinand von Mueller, who named many of our Australian orchids. He also assisted Prof. Ralph Tate and Dr. Rogers. He was a pioneer botanist in South Australia.

References: Black, J.M., Flora of South Australia, Parts 1 - 4. Govt. Printer (various dates)

Lothian, T.R.N., "Topper's trigger plant, *Stylidium Tepperianum*" South Aust. Naturalist 43:104-6 (1969)

Kraehenbuehl, D.N., "The Life and Works of J.G.O. Tepper, F.L.S." South Australian Naturalist 44:23-42 (1972)

Tepper, J.G.O., Various articles in the Transactions of the Royal Society of South Australia {1880-1896}

Tepper, J.G.O., "Orchids occurring at Clarendon and Vicinity" (Drawn 1882-6) Unpublished Z Collection, State Library, Adelaide.

New Zealand is considered the southern limits of this genera, not unreasonably. A total of nineteen species are described in the Flora of New Zealand by Moore and Edgar. Several new species have recently been discovered in the Wellington region (3) and the Taranaki region (1) and are awaiting confirmation and description. Several genera are common to Australia and New Zealand.

E.D. Hatch tried to sort out the alliances logically during the late 1940's in the Royal Society of New Zealand journal. He cites 67 species in the area of New Guinea, Australia, New Caledonia and New Zealand. He grouped the genera into three types, namely Australis, Falcata and Obtusa (Vol. 77, Pt. 2, 234-246. Vol. 78, Pt. 2, 101-105. Vol 80, Pte. 3 & 4, 323-327 and 403-404).

Species common to New Zealand and Australia have been listed (Vol. 76, Part 1, 58-60) as Pt. furcata, nutans, foliata, nana, mutica barbata, cycnocephala (Wellington Bot. Soc. Bulletin No. 26).

Species currently described with flowering periods are

Multiflowered:- mutica (Oct-Jan), cycnocephala (Oct-Jan).

Single flowered:- barbata (Oct-Nov), nana (Sept-Nov), nutans (Aug- Sept), trullifolia (June-Oct), brumalis (Apr-July), alobula (Apr-Oct), foliata (Oct-Dec), micromega (Nov-Feb), oliveri (Dec-Jan), venosa (Nov-Jan), humilis (Dec), areolata (Nov-Dec), australis (Dec- Jan), banksii (Oct-Dec), graminea (Sept-Jan), graminea var. rubricaulis (July-Oct), montana (Nov- Jan), irsoniana (Nov-Jan).

Quick reference guide based on leaf characteristics.

Petiolate leaves:- alobula, trullifolia, brumalis

Cauline leaves:- barbata, nana, nutans foliate

Linear lanceolate leaves:- banksii, graminea, montana, irsoniana

Shape Change upwards:- areolata australis, oliveri

Orbicular - broad oval:- venosa

All alike:- humilis

Broad elliptic wavy margins:- micromega

Shape Change downwards:- mutica, cycnocephala

The quick reference guide was devised for use in the field to make tentative identifications especially in unflowered plants or those with seed heads.

Currently investigative work is being carried out by amateur orchidists in the Wellington area on three species that are not described, one of these was first located in a public park on a main walking track, but owing to it resembling an immature flowering specimen of another plant was over- looked until recently. The other two were found in an area being developed for forestry and collected in October 1980. Further work remains to determine whether it is a local type or. has a larger range, vis than 2 km.

NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA. BY-LAWS

Sale of Plants through the Society.

1. General

The Society encourages the sale of members plants at its meetings, but is concerned that the sales are well conducted and on a moderate scale. Because many buyers of plants are not experienced growers, and because the Society's good name is to some extent affected by the quality and condition of plants offered for sale, it is important that all concerned observe these By-laws which have been compiled with the objective of safeguarding the best interests of the Society, the buyers and the vendors.

2. Plant Health and Condition

All plants offered for sale must be clean, healthy, and free from disease and insect infestation. If sold in pots or mounted they should be well established and rooted. Although this is the preferred condition, plants may be offered for sale newly potted or mounted provided they are clearly labelled to this effect or they may be sold bare rooted.

3. Plant Age and Size

The sale of very young and small plants to other than experienced growers is not encouraged. Although no clear-cut rules can be made in this regard the intention should be clear enough:- avoid making a sale where it seems likely that the plant will not survive.

4. Labelling and Scheduling

To assist with identification and accounting the following procedures, must be observed by all vendors offering plants for sale through the Society's sales organization. (a) The name of each plant offered for sale must be listed on a 'Schedule of Plants for Sale'. (b) Each plant must have a tie-on label showing the Vendor's name, the Plant Number as indicated on the 'Schedule of Plants for Sale', and the price. This label is removed when the plant is sold. (c) In addition to 'b' above, each plant must be clearly labelled with the plants full name, and must contain details of whether grown Hot, Cold or Intermediate. This label stays with the plant when it is sold. If the above requirements are not met the plants may not be accepted for sale.

5. Sales Commission

The Society charges a commission of 25% on all sales made through the Society's sales organization.

6. Rejection of Plants

The Society reserves the right to reject from sale any plant which in its opinion is unsuitable for sale or where the requirements set out in these By-laws have not been met.

7. Care and Responsibility

The Society will take all reasonable measures to safeguard the plants left in its care, but it cannot accept responsibility for their loss or damage. The vendor shall be solely responsible to ensure any unsold plants are collected and any monies due to him are received from the Plant Sales Committee.