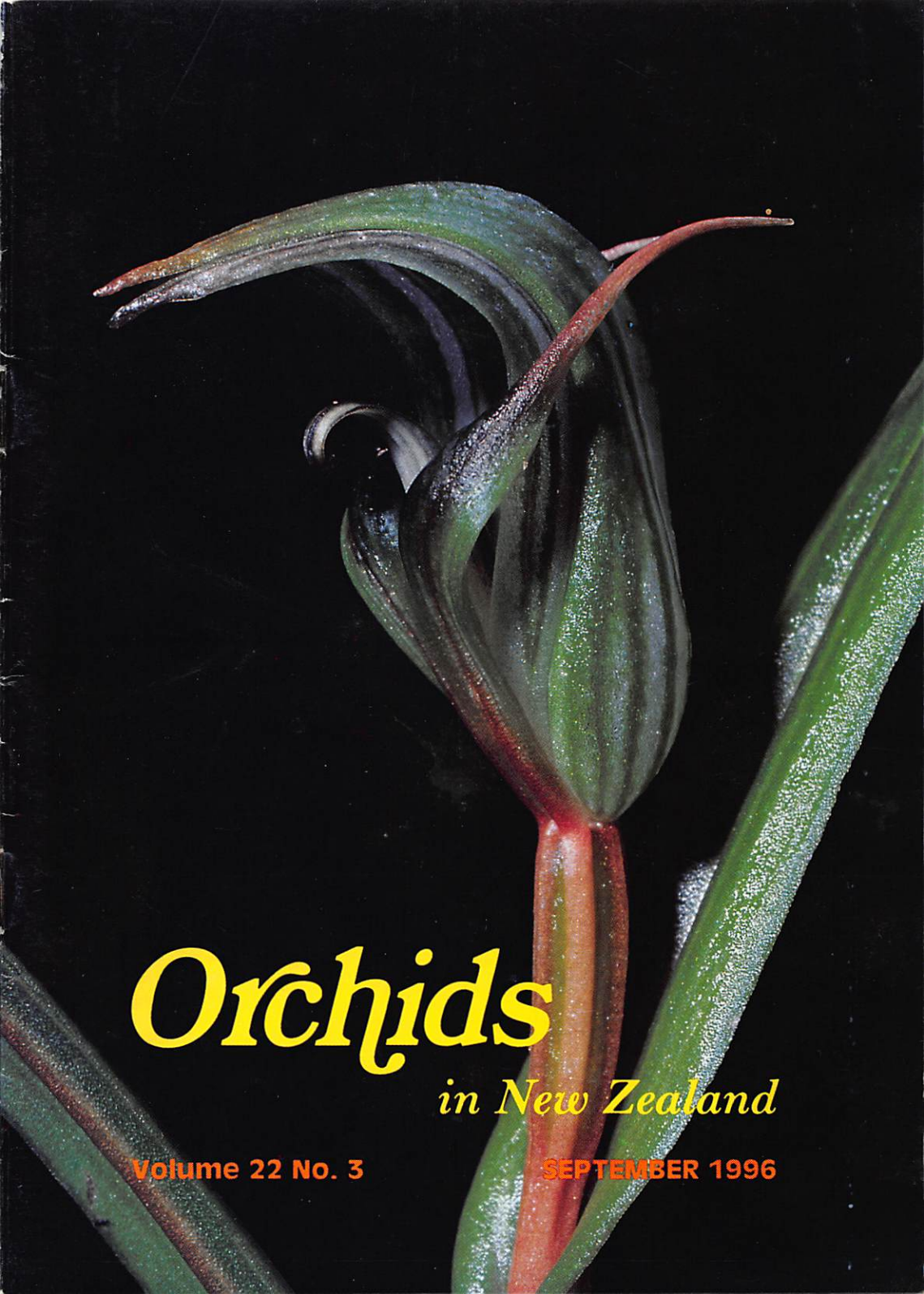

# Orchids in New Zealand

Volume 22 No. 3 SEPTEMBER 1996

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# Orchids

## *IN NEW ZEALAND*

*Official publication of* *Orchid Council of New Zealand* *New Zealand Orchid Society*

Vol. 22 No. 3 SEPTEMBER 1996

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Back cover *Howeara* Mini Primi

*BACK ISSUES*
*Are you missing copies of earlier issues of Orchids In New Zealand?*
*We have available copies of many issues of this magazine, especially the more recent issues. Details of price and availability contact Trevor Gillbanks, P. O. Box 181 Palmerston North*

# CAUTION WITH PESTICIDES

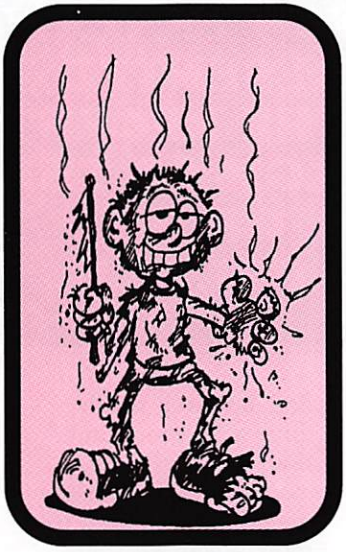
1. Correct choice and timing is most important to maximise effectiveness against the pest and avoid harm to any beneficial insects.

2. Read the label first. It will give you information about what the substance is suitable for, compatibility, dose, toxicity and precautions to take.

3. Store away from children, pets and absent minded adults. A locked cupboard is desirable. Most pesticides retain their effectiveness longer if stored in the dark away from extremes of temperature.

4. Wear protective clothing when handling chemicals. Add the concentrate to the required quantity of water in the container to be used. Follow the recommendations exactly; higher dosages may cause damage to the plant and lower dosages may build up resistant strains.

5. Avoid using a spray on a windy day. Unpredictable changes in wind conditions can create a dangerous situation. Drift of the spray will also limit it's effectivenes. 8 When spraying within a



shadehouse, always work from the back of the house towards the exit.

6. If you accidentally spill a chemical stop whatever you are doing and clean it up. Volatile vapours can be given off from such concentrates. To clean up a spill cover it with sand or soil to absorb the liquid, then bury it or dispose of it in a responsible manner. Afterwards hose down the affected are so as to dilute any remains.

**NAPTHALINE MOTH BALLS** are very handy to hang in your glasshouse/shadehouse etc. Use an old piece of panty hose or similar, place the Naphthalene Moth Balls in and you will find that aphids etc. are not very keen to enter. But remember that these are dangerous as well. The amount of naphthalene in a moth ball can be fatal to an infant if ingested. Avoid direct inhalation and wash your hands with soap and water after handling.

Talking of poisons, how many of you know the number to dial in an emergency that involves an accidental poisoning? It is 0-3-474 7000. If you have to handle these products make a note of the number and place it by the telephone.

# REPORT OF EDITOR OF *ORCHIDS IN NEW ZEALAND* PRESENTED AT THE RECENT AGM OF THE ORCHID COUNCIL.

THE 1995/1996 year has been one of challenge. We have continued to produce the magazine within the significant resource constraints which have existed, despite a number of significant challenges during the year.

A major development has been the change to computer assembly of the magazine. The Orchid Foundation facilitated this move with its generous financial support in financing the purchase of the computer programme. The change was the only one we could make, but did create a number of significant difficulties that we did not anticipate. Unfortunately one person who we were relying on did not give the assistance expected, and this resulted in a number of quite significant problems during the transition process, and this did considerably negatively affect a number of issues. Once those difficulties were overcome, then the assembly of the magazine become much easier.

The computer programme allowed the complete assembly process to be done. It did, however, involve quite a bit more time than was originally expected, although the magazine was taken to a more advanced stage than was originally contemplated and should have resulted in appreciable cost savings to Council. The limited resources, especially time, resulted in quality compromises to avoid the problems of very late delivery which in the past attracted major criticism, and will continue to create difficulties unless significant further resources can be found and applied to the production process. Money and people are the resources most required.

The content of the magazine has been dictated by the material submitted. We have been fortunate with the contributors who have done a splendid job without reward. The continuing support of contributors will be fundamental to the success of any changes to the publication.

Over recent years we have surveyed readers to ascertain their wishes and desires. Culture, personality profiles of orchid growers and society news are articles often requested. Unfortunately few societies have supplied such material, despite requests in the

magazine and at various meetings. Much comment was made that subscription numbers would increase if we could increase the amount of colour. We have had a full colour magazine for some time, but the recent renewals indicate that colour has not attracted readers. I know the number of orchid growers in affiliated societies has significantly fallen over recent years, but the reduction in subscribers to the magazine appears to be even greater. If we have not provided what you have wanted, then why has this not been indicated earlier. There has been plenty of opportunity for this. If it is a question of my editorship, then I am happy to step down. I initially indicated that I only wished to do it for 2 years, so, with 7 years, I have significantly exceeded my original intentions.

I believe many readers do not appreciate the fact that the magazine is very largely produced by volunteers, in their own time, and often late at night. While we may be commercial in the sense that readers pay a subscription, we certainly are not commercial in the true business sense. If we were to produce the magazine on a fully commercial basis, the subscription would at least have to double and perhaps even treble, and there would be no way this would be viable.

There has also been a disappointing level of


criticism of the magazine. Some of this may be valid, but must be measured against the restricted resources we have had available and the level of assistance provided by many societies, which has dictated how it is produced. Positive criticism is welcomed, but much has been negative, and has been rarely accompanied with offers of practical assistance or realistic suggestions for improvement. When criticism stops a person contributing, as has happened, one must question the motives of some individuals. Through the Letter to the Editor column we have tried to encourage readers to express their views publicly, and to allow dialogue to develop on significant orchid issues, but with little success. The lack of response from the majority of orchid growers and magazine readers has made the management of the magazine difficult; if we do not know what you feel or what you want it is difficult to respond positively. No comment has been taken as satisfaction, but perhaps in light of recent developments and subscription numbers, this has been wrong.

I have produced the magazine for 7 years by December. During this time the offers of support I have received have been very limited. There have been a good number of contributors, but other assistance has been limited. Three people have supplied good numbers of photographs for stock, but only one person has come forward to offer practical assistance with production (and that

only over recent weeks). There have been some societies who have offered good support for the magazine, but there are a number who have provided little assistance. If the publication is to continue in whatever form is finally decided upon, then the extent of support from societies and individual members will be critical, and will have to be greater than we have experienced recently to be successful. The co-operative nature of the magazine has been emphasised a number of times, but it appears this has not been recognised by many societies and orchid growers.

I believe in the magazine. It has a grand history. There is considerable support from a core of readers, but the economics of production have caught up with us. The discussion at the AGM is therefore critical, and I trust the issues receive the consideration deserved. The proposals are positive, and the ability to reach all orchid growers who are members of individual orchid societies is a very positive move, and one I fully support. But there is a vital need for more than good intentions; ongoing positive action is demanded. Physically putting the magazine together is the easy part, overcoming the widespread apathy and negativeness currently displayed by many orchid growers is the real challenge, as is the necessity of getting more people involved in the various parts of the production process.

The production of the magazine is a combined effort. I would like to pay particular thanks to

- The Publication Committee - Patricia Elms, Lyn Sherlock and Graham Jackson
- Trevor and Teresa Gillbanks - distributors
- Bill and Ngaire Deed
- and all others who have contributed over the year

- without their support we would not have been able to do what we have.

Philip C. Tomlinson

June 9, 1996

# THE

IT IS WITH much regret that I have to advise readers that our Magazine *"Orchids in New Zealand"* will cease publication at the end of this year.

It is a pity that after all these years and much effort by volunteer workers who have built the magazine up to a high standard we now find that despite all this effort we have been unable to increase subscribers to a level to sustain the cost of printing. In fact the number of people taking the magazine has decreased drastically.

Over the past two years we have suffered considerable losses but were always trying different ideas to increase subscribers and were always hopeful that some bright new idea or sponsorship proposal would come along to save the magazine. We thought that by reducing the number of issues from six to

# PRESIDENT reports

four each year would bring the savings required to make the magazine viable. Unfortunately in April this year the Executive Committee had to face reality as we could not subsidise the magazine any longer.

A remit was put to the 1996 Annual General Meeting in Oamaru recently to replace the magazine with a Year Book and two newsletters each year, these publications to be distributed to ALL financial members of affiliated societies. The remit was passed with only three societies voting against.

I personally will miss getting the magazine and I am sure that I speak for many other orchid growers but the hard decision had to be made for the benefit of the Council and societies in general.

I would like to thank all the editors past and present and those people who have given their time to distribute the magazine. Also to all those who have assisted in any way to keep the magazine going over the years. Without the help of these volunteer workers the magazine would have failed earlier.

In hindsight we can see that if the magazine had been part of the society subscription like many other organisations we would not have had to face this unpalatable decision.

The Council now looks forward to the challenge of changing direction and are optimistic that with the support of societies we will be able to produce a Year Book that will be distributed to all members. This is an exciting challenge and if the enthusiasm of the Executive Committee is anything to go by I am sure that we will be successful.

Once again thanks for your support over the years.

Harold Bayram
President O.C.N.Z.

OUR MAGAZINE

Publication isto cease fromDecember 1996

AS I LIE HERE IN MY HOSPITAL BED in the rest home that I am at present living in, I have a wonderful view of a very old, what looks to be, a New Zealand native tree. It appears to be quite an age judging by a heavy coating of lichen growing all over the seven or eight large trunks of the tree, and surprise, surprise, the branches are well covered with N.Z. native orchids, all in flower at the moment.

I am able to see a lot of little waxeyes (white eyes) as well as fantails, moving from flower to flower in the morning, getting the nectar, as well as the tiny grubs and other food from out of the lichen.

Although this article is not about my favourite orchids, paphiopedilums, I cannot help thinking what pleasure this carefully preserved tree can give to someone who is confined to bed all day and every day. It is at times like this that you really appreciate what nature has given us over the years, especially when you stop and look around and see how man has gone about destroying these wonderful native bushlands, all in the name of progress. Unfortunately man has been so busy destroying New Zealand's heritage, that the younger future generations of New Zealanders will never really know history or the beauty of nature that we of older generations took for granted.

I leave with these words as food for thought.

Written by
Peter John Stephens
July 1996,
shortly before his death on 18th July 1996

*EARINA MUCRONATA* BY DOROTHY PORTER

# SLIPPER ORCHIDS ANYONE CAN GROW THEM

Nicky Zurcher's

*paper presented at the 3rd NZ International Orchid Expo at Palmerston North.*

Paphiopedilum and also Phragmipedium hybrids will grow quite well as indoor plants. The single most important point to keep in mind is that they are shade loving plants which feel comfortable in an environment where African Violets or fine Maidenhair Ferns do well. They should be pulled back from direct sunlight, except in the morning and late afternoon or in the middle of winter. Draught or air movement should be kept to a minimum, it will only blow away any humidity from around the plants. The kitchen is usually the best place, where some extra humidity is produced. A very light bathroom may be even better. They can be stood on the windowsill where it faces south. To create extra humidity immediately around a plant, it can be placed on top of a gravel bed in a large dish or saucer. The water must be kept at a level just below the tips of the gravel so that the bottom of the pot has no direct contact with the water. Phragmipediums grow very well if stood in another, smaller saucer, only slightly wider than the pot diameter and placed on top of the gravel. It can be left full of water most of the time with the plant sitting in it. Paphiopedilums however, are likely to get root rot if left standing in water for more than a day. For seedlings or very delicate plants requiring higher humidity, a plastic dome cover or tent can be put over the whole lot. The cover is best removed or opened during the night, when the ambient humidity is usually adequate. While the

room is being heated or during dry weather, the cover should be left in place or kept closed. Ventilation for one hour a day is enough.

Going one step further and with a bit more expense, a miniature tropical environment can be created in a fish bowl, fish tank or any size aquarium. Again the plants should be standing above about five cm of water, either on coarse gravel or a rack. If an aquarium heater is used to keep the temperature around 18°C, even the most delicate seedlings and species should succeed.

Going on to greenhouse culture, most slippers can be grown without artificial heating in a well built greenhouse during frost free nights. I really feel that a nine month active growing period is sufficient for all plants but the smallest seedlings, without worrying about growth during the three colder months, when besides the temperature the photo period (day lengths) is an other limiting factor. Minimum night temperatures as low as 5°C are not damaging to plants provided the day temperatures are reasonably high. In a temperate climate it does not cost a lot to run a fan heater during those few really cold nights below 5°C. Day temperatures of 25°C in a greenhouse even in the middle of winter can be achieved on a sunny day if most of the shade has been removed. That is also the time to open the ventilators or the door for a fresh air exchange. I try to have an air exchange most days, even if it is only for five minutes during cooler weather. If you have a larger greenhouse and want to keep a higher minimum temperature, electric fan heaters are too expensive to use. I am amazed that it is still not better understood or known that compression heating on average produces about two and one half times more heat from the same amount oil electricity as resistance heating. In practical terms, a fan or bar heater costs two and one half times more than a good reverse cycle air conditioner to produce the same amount of heat. I have used them for years, they are as reliable as and maintenance free as a fridge (which works on the same principle). However, a reverse cycle air conditioner is not suitable for cooling a greenhouse in summer (produces dry air, too expensive) or for heating in an area where it gets much below freezing for longer periods.

A hotbed which is an electric heating cable buried in a few centimetres of sand on a bench in a greenhouse is quite suitable and economical for a small collection. Again a plastic cover can be made to go over a frame, making a mini greenhouse within a greenhouse. If only a few plants require extra warmth they can be stood on an electric heatboard (very low running cost, about as much as a light bulb for a small size) or a propagation tray.

**Choosing the Plants**

For beginners it is important to choose plants which are known to grow vigorously rather than produce the most desirable flowers. Above all they should have a healthy root system, but how can you see inside the pots? When buying plants picking up the plant at the base only and if the pot falls off, put it back. If buying by mail order, only accept bare root plants so that you can see the condition of the roots. Plants sent by whatever means usually get loosened or dislodged in pots anyway. It is much better not having to pay freight for the heavy mix

and pot and put them into your own uniform mix, the way they should be potted. Buyers beware of nurseries offering seedlings in certain pot size! I have seen small seedlings being planted into 50 mm pots straight from flasks. On the other hand I have also flowered many seedlings in the same size small pots. A rational description of seedling size is the leaf span from the tip of one leaf to the tip of the opposite leaf which in a 50 mm tube could be anything between 40 mm (from flasks) to 200 mm (near flowering size).

A few years ago I felt an increasing demand for slippers from cymbidium growers who were looking for a bit of variation in their collections. They only had a shade house and in some cases a flowering house to accommodate them. I thought to myself "what's the point in producing all these magnificent paphs if only a select few people can grow them". As there were very few breeds to choose from I set out to make several crosses using the following species as parents with novelty and standard hybrids:

# SLIPPER ORCHIDS

- the vigorously growing *Paph. insigne* incl. the *alba* forms;
- the beautifully mottled leafed *Paph. venustum*
- the glossy *Paph. villosum* incl. the var *boxallii;*
- the wine red *Paph. charlesworthii;*
- the elegant *Paph. fairieanum;*
- the purple *Paph. hirsutissimum;*
- the pretty *Paph. spicerianum.*

These all come from the cool foothills of India and Burma. These days many so called experts would probably snuff with disrespect at seeing *Paph. insigne* listed in a crossing but I believe it is beautiful as well as unique in more than one way. It is by far the fastest growing Slipper, normally producing two new leads from the old flowering growth and it does very well at temperatures down to just short of freezing. The same low temperature tolerance goes for the others mentioned too, especially *Paph. venustum*. The resulting seedlings which were bought by growers mostly in cooler climates, most have flowered. On a recent trip to Tasmania I was shown some hobbyists growing and flowering them very well, even in shade houses, where only the night frost was kept out but temperatures remained low all day. Yet for other people they grew very poorly. You may find it hard to believe that the reason for it was the same as I found in Queensland earlier. TOO MUCH LIGHT! In Tasmania, growers with only a few plants put them with their cymbidiums and in Queensland the people who said they could not grow Slippers had them sitting among dendrobiums and cattleyas. Growing them under the leaves of large cymbidiums can be successful.

An easy test for the correct light intensity is moving a hand over the panels about 50 cm above the foliage. If during the warmer seasons more than the slightest shadow is cast, there is too much light. This may require two layers of heavy shade

cloth. With a lower light level also comes a lower temperature and higher humidity. A win-win situation in the hot weather, provided drying winds are kept out of the growing area. Paphs grown under adequate shade will display that lush growth, so pleasing to the eyes. They will also grow much faster and produce longer flower stems, even in winter, after most of the shading has been removed. Less shading and more light can be provided between the end of May and beginning of September.

**Watering and feeding**

Slippers do not have pseudobulbs like many other orchids for water storage. They should, therefore, be kept moist at all times but less so during winter, when it is better to keep them on the dry side. I always use a hose with a rose and apply rainwater (with fertiliser) over the top of the plants, losing very few buds due to "damping off". Rotting of buds is, I believe, caused by high evening and night humidity. A long spouted watering can is easier to use in a small collection.

I think too much importance is given to feeding as compared to other more important conditions such as light and humidity. Of course, if they are growing in a bark mix, a regular nitrogen supply is important. Often and little, quarter strength with most waterings, is the golden (green) rule. The brand is not really important but the newer seaweed or other organic (animal or plant derived) fertilisers, alternating once a month with a high nitrogen mineral (salt) fertilizer should bring good results. No feeding is needed during June and July. Do not apply any sort of fertiliser in a dry form!

**Pests**

The few pests living off Slippers are mealy bug, sometimes aphids in spring and if there are no screens over the openings, caterpillars. Three sprays one week apart, with Rogor is very effective against mealy bugs and aphids.

Dipel will give caterpillars the runs. Of course always be on the lookout for snails and slugs. Always choose a cool day for spraying to avoid leaf burn damage.

The hard leaved species or primary hybrids (a crossing of two different species) such as the multi-flowering Paphs. *parishii, philippinense, haynaldianum rothschildianum*, St. Swithin, Glaucupar, Julius, etc. require a slightly stronger light intensity. They can be put into a less shaded corner or end of greenhouse or hung up near the roof. They are also reasonably cold tolerant, therefore cold coming in from the roof or the sides will not hurt them. In fact it may help to induce flower buds.

When starting to grow paphiopedilums, it is most important to begin with hybrids but never species (*Paph. insigne* may be the exception). Many hobbyists say they want to grow the species in order to preserve them. In reality they are doing exactly the opposite. They are helping to destroy them. Species are much more difficult to grow and countless numbers have died in the hands of inexperienced fanciers. Each species is genetically programmed to grow under the very specific conditions in which it evolved. While some species have a considerable amount of tolerance to survive under modified conditions, many will require more closely simulated treatment in cultivation. Both *Paph. armeniacum* and *Paph.*

# SLIPPER ORCHIDS

*primulinum* are considered to be difficult or at least slow growers. Yet, the crossing between the two which is named Gold Dollar, grows very well and flowers very freely and is just as beautiful with its brilliant pure yellow colour. *Paph. javanicum* and *Paph. glaucophyllum* used to be very common. Where are they now? Have the species collectors saved them? I believe we must be very successful in growing hybrids first before allowing yourself to indulge in attempting natures most precious jewels, the species.

When buying orchids think of yourself as the person you are buying the orchids for. Don't be told by judges (who often can't see the beauty anymore) or anybody else as to what is a nice flower or what you should like. Preserve your own personal taste and integrity. There is no poor taste when it comes to paphs. A collection of all awarded plants would not necessarily be the most interesting but quite likely the most expensive.

**Diseases**

Root rot caused by either Pythium or Phytophtera but also Rhizoctonia and rarely by other fungi can be a problem. Most diseases attack during the mild and often humid "in between" seasons, lying dormant during winter and summer. Any plant which looks sick or is loose in the pot with a poor root system should be repotted immediately, no matter what time of the year. All dirt and dead root parts should be removed, carefully rinsed under the tap and bathed in a Fongarid solution for two hours.

Newly acquired plants should be given the same treatment unless they are growing very well in pots. The same solution can also be used to thoroughly spray the plants when conditions for disease attacks are favourable. Placing a plastic bag over a sick plant will reduce further dehydration, this greatly speeds up the recovery. Frequent checks are necessary in case the disease should recur under those very favourable conditions. Bacterial rot (Erwinia) can be a real problem at times. It attacks the leaves or more often the base of young or mature growths, going straight for the centre. These fast developing, watery blotches can kill a plant in a few days. After cutting away all the affected parts, a paste of neat fungicide can be painted over the cuts and surrounding areas, keeping a close watch for any recurrence. During cold and wet weather the common furry grey mould (Botrytis) often starts growing on dead flower stems and wet flowers. A small fan or ceiling sweep fan near the roof, blowing air gently over the plants is usually enough to keep this fungus away. Opening the growing house for fresh air also helps. I only run air circulating fans during the night and cool humid weather when the greenhouses are closed. During warm weather fans will only dehydrate the plants. Well-grown plants resist most pests and diseases except for mealy bug and the occasional bacterial rot on some susceptible species.

Hygiene should always be in a growers mind whenever plants or anything else associated

with plants are handled. Do not use the garden shovel to turn over your potting mix. Never let the mix or pots get into contact with soil.

Avoid water splashing from the floor onto plants. Only handle plants, pots, tools and mixes with clean hands.

**Mix and Potting**

Very few growers are preparing their own bark these days, I certainly don't. Graded, and it must be composted bark, is readily available in most places. For small seedlings I use a 4-6 mm size and for larger plants 10 mm. This can be used straight from the bag, making sure it is moist but never wet. Some successful growers add one or more of the following: a small amount of dolomite lime, up to 1/3 of fine polystyrene granules, a bit of sphagnum moss, charcoal, fine gravel. No fertiliser is added to the mix. Being mostly terrestrial orchids, Slippers prefer a closer mix than cattleyas or phalaenopsis, which is able to hold moisture for a reasonable period. This may not apply in tropical and subtropical areas where plants are grown in a shadehouse and get a lot of summer rain. A more open quick draining mix may be preferable there.

Adult plants should be repotted at least every two years and seedlings yearly. Always remove all the old mix and dead old roots. If there are signs of root rot and no yellow growing tips, they should be rinsed and dipped in Fongarid. Use the smallest possible pot which can comfortably accommodate the roots. This is most important. When in doubt use the smaller size. More plants are killed by over potting than any other cause. The mix should be "vibrated" in between the roots by tapping the pot all around the outside and finally pressed down when full. The first root should be about 1 cm below the surface.

***In summary, the three most important points that lead to success are:***

***1. Choose hybrids not species;***

***2. Grow under heavy shade;***

***3. Use small pots.***

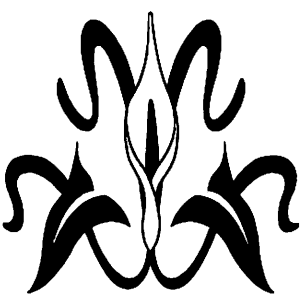
**Try growing slippers — they are a gentle and very rewarding challenge.**


Sir,

At the Palmerston North Expo last October, Allan Moon spoke of the culture of odonts in rockwool. Could some one please give me the name of a supplier as I would like to try it in our growing conditions and compare it with spaghnum moss and bark.

Ann Irving
Waimatua 11 RD
Invercargill

*If anyone can assist, could they please write direct to Ann with a copy to me for publication, as there may be others interested in this product.*
*EDITOR*



# ORCHID COUNCIL AWARDS IN NZ

by R. Tucker

IN THIS SERIES OF ARTICLES I hope to illustrate what awards are being granted to New Zealand Orchid growers and that a high standard of quality plants are being produced in N.Z. In 1993 70 plants were given OCNZ awards with most major genera represented. In the Odontoglossum Alliance one of the first awards for the year went to Miltonlopsis Kennedy 'Elizabeth' gaining an HCC/OCNZ grown by A. Campbell of Christchurch. A well filled in form of Miltoniopsis with 5 flowers on one spike overall width 110mm Also in early 93 the Odontoglossum species Odm. wyattianum grown by A. Locke was recognised with an HCC/OCNZ to the variety 'Locharen Glory'. The very large flowers of good shape and glistening texture with a well displayed spike of 7 flowers overall width 47mm.

Another type of Odont Alliance flowering in 1993 with the cross of Odontoglossum x Oncidium = Odonocidium Odcdm. Geyser Cascade 'Redvale' grown by R. Tucker gained an HCC/OCNZ. The tall branching spikes of 22 flowers on a well displayed plant with a greenish yellow with heavy pink spotting and the reverse of the lip red overlay overall width 48mm. The more complicated Beallara (Odontoglossum x Cochlioda x Miltonia x Brassia) was recognised with Beallara Witches Cauldron 'Magic Brew' gaining an HCC/OCNZ with its large flat flowers


of deep reddish purple markings surrounded by white presenting themselves perfectly overall width 127mm. The owner being G. Parkinson of Hawera.

The Intergeneric Wilsonara (Odontoglossum x Cochlioda x Oncidium) was well represented with two fine examples gaining recognition for their owner R. Tucker. The first Wilsonara Star Trail 'Milky Way' HCC/OCNZ for its large spike of 15 flowers and 4 buds, a dark purple colour with lilac mottling and overall width 78mm. This type of Orchid illustrates all the good points when different genera are combined together and

improvements in form and colour are achieved. Also from the same grower another Wilsonara Salgrin 'Stubble' also achieving an HCC/OCNZ. This plant was exhibited with one spike of 64 flowers and 4 buds. The overall size of the flowers was 74mm and had good size and a more filled in shape that achieved a better overall appearance yet was still only able to achieve the same award.

Cymbidiums in 1993 were well represented with a number of awards, yet still as N.Z's major genera 'II only a minority of awards were granted. Cym. Richard Tauber 'Ken's Choice' gained an HCC/OCNZ for its owner Tudor Orchids with a fine display of 23 flowers on an arching spike with a natural spread (overall width) of 65mm Another fine example of N.Z. hybridisers at work is the Cym. Rust Hastings 'Jody' exhibited by Gray and Reid of New Plymouth gained an HCC/OCNZ. The flower has a deep green colour with very good substance and texture and an overall width of 93mm and acceptable size for its type. Also from the same cross Cym. Ruth Hastings 'Glen Avon' HCC/OCNZ with 16 flowers on 2 spikes another fine example of Standard Cymbidiums overall width 85mm.

A fine example of an Intermediate Cymbidium was exhibited by M. Kay, the plant Cym. Dark Ruby 'My Choice' gained an HCC/OCNZ and was Grand Champion of the North Shore Orchid Society's 20th Anniversary Show, having 110 flowers and nine buds on nine evenly placed pendulous spikes overall width 60mm.

Also from the hybridisers Gray and Reid of New Plymouth Cymbidium Valley Courtier 4N 'Glen Avon' gained an HCC/OCNZ for a vibrant yellow and salmon pink lip, it had one spike of 8 flowers, overall 'width 102mm.

Another genera which has attracted much attention and is now being recognised by way of awards is the Australian Dendrobiums, several awards were granted but some slides were not reproducible for this magazine. Two fine clones were exhibited by B. Mooney of Levin, the first of Den. (Gillian Leaney x Zip) 'Heather Mooney' gained an Award of Distinction (AD/OCNZ) for its spectacular colour of white with magenta edging around the flower on I spike with 6 flowers. The second exhibited by the same grower was Den. Kingianum 'Glenbrook' AD/OCNZ a line bred Kingianum with well shaped flowers on upright spikes with a deep magenta colour and white contrasting lip.

Paphiopedilums were again well represented during the year and one of the first was Paph. wardil 'Tawa' given an HCC/OCNZ and grown by D & M Patchett of Tawa. This well grown plant with 8 spikes of clear green with a dusting of mahogany spots overall width 100mm, it was a well deserved CCC/OCNZ. Another fine species Paphiopedilum was grown by J. Dudley of Levin and Paph. sukhakulii 'Jans Delight' was given an AM/OCNZ for its excellent size and form, overall width 157mm. Its petals and sepals were large and broad this resulted in an excellent award.

Again it's not possible to comment on all awards granted during the years but we will try and catch up a bit more.

# Australasian Hybrids

by Malcolm Campbell

Hybrids between Australian and New Zealand allied genera is a subject which to date has had very little attention. Australia has over 600 species of which about 400 are terrestrial, covered by 52 genera and about 200 are epiphytes covered by about 30 genera. Many hold considerable promise for hybridisers. New Zealand on the other hand, had only just about 120 species, of which only eight are epiphytes and of those only three really hold some promise for hybridisers.

To date only three hybrids have been registered in Sander's where one parent is Australian and the other is a New Zealander. The first native orchid was *Sarcomoanthus (Sran.)* Maugatepere in January, February 1992 by O. Blumhardt of Whangarei. The second was *Sran.* Emarcy Gem in August 1993 by M. R. Campbell. Yes that is me. The third, *Sran.* Little Sparkle by L. Dougherty of Wellington, was made in October 1995.

They all use *Drymoanthus adversus* as the pollen parent. The first uses *Sarcochilus fitzgeraldii* as the pod parent. The second uses *Sarco. ceciliae*. The third uses *Sarco. falcatus*. When you see these three you will see that at least New Zealand orchids have charm to offer. Next you have to consider that we can make an infusion of cold tolerance which could help make some of your warm growers in he north suitable for growing in the south. Six of our eight epiphytes grow as far as Stewart Island New Zealand.

There are several other hybrids in the pipeline using *Sarcochilus* as pod parents, some of which may flower by October or November 1996.

Following these I have made a start using *Dry. flavus* which is a newly named species and crossed it with *Sarco.* Lois. This is still in flask. I am not very knowledgable on chromosomes but it is interesting to note that *Dry. flavus* has a count of 2n=38 (M.I. Dawson and B.P. Molloy) and is regarded as a diploid with an effective base number of x=19. By comparison, the somatic number determined for *Dry. adversus* is 2n=4x76, a tetraploid. (M.I. Dawson).

In the normal course of events, to make an easy cross, you need both parents to have the same

base number and that their gametes are in the same order.

Lets do a short and very basic exercise so you will understand what I have to say about breeding on these hybrids. If the base number is 19, then that is n=x=19, this is called a haploid. A 2n=base 19x2=38 is called a diploid. These represent the normal ploidy. However sometimes when we get to the 2n stage of counting we find we have 2n=3x=57 which is three times the base number and is called a triploid. Sometimes we get a count of 2n=4x=76 and this is called a tetraploid. Triploids are mostly sterile and usually result from a cross between a diploid and a tetraploid. They will occasionally set a few seeds. Nature finds a way. Tetraploids are usually fertile and strong growers.

Armed with this information i can tell you the *Sran.* Emarcy Gem breeds well when sib crossed and I also have plants in flask when used with *Plecyorrhiza tridentata.* However *Sran.* Maungatepere and *Sran.* Little Sparkle to date do not breed.

Other numbers of concern for this exercise are:- *Sarco. fitzgeraldii* 2n=38 (Dawson and Molloy) diploid. *Sarco. ceciliae* 2n=76 (Dawson and Molloy) tetraploid. As yet I do not have a count for *Sarco. falcatus.*

Now you will begin to see a problem. *Sran* Maungatepere, (*Sarco fitzgeraldii* a diploid crossed with *Dry. adversus* a tetraploid) has a chromosome count of 2n=57, a triploid and thus is probably sterile. *Sran.* Emarcy Gem (*Sarco. ceciliae* a tetraploid crossed with *Dry. adversus* also a tetraploid) not surprisingly has a count of 2n=76, a tetraploid that should breed on. Until I can get a count for *Sarco falcatus* I can't explain why *Sran.* Little Sparkle won't breed, except to say that it is probably a triploid.

It is a well documented fact that some triploids will produce a few plants and that the odd one will breed quite well, a trait that can improve in further generations. A lot depends on the degree of homology in the relevant sets of gametes of both parents. A very small proportion of nuclear events leading to the production of gametes to 'wrong' in one way or another, and those 'wrong' gametes do sometimes result in a viable cross - thus and unreduced diploid can land up 2n instead of n, and in a cross with a tetraploid with its reduced 2n gametes can give a normal fertile tetraploid instead of a triploid. Individual chromosomes can be shed either during gamete production of in formation of the zygote, which is the product of the fusion of two gametes, (or the unpaired chromosomes can get tucked into a micronucleus), and the end result is that very rarely, but sometimes, an 'impossible' cross happens. Different approaches should be used to try to achieve difficult crosses where incompatibility is partly related to non-matching chromosome sets. Some F1 hybrids may be male sterile only. Reciprocal crosses and tests of pollen vitality by vital staining should determine this. What it boils down to, is that theory is very useful in letting you know what is going on and in guiding you along profitable paths, but some of the science of plant breeding is in fact the art of doing the (almost) impossible.

The third of our epiphytes which has considerable potential is

our *Dendrobium cunninghamii*. I have crossed this with *Den.* Phil Dean and the plants are very vigorous but could take a while to flower as *Den. cunninghamii* is very slow to flower from seed. Hopefully the infusion of a **Dendrocoryne** section dendrobium will help both this problem and the fact that it is very difficult to transplant, except when very small, and then they take forever to flower.

Chromosome numbers for *Den. cunninghamii* are 2n=40; *Den. agrostophyllum* 2n=38; *Den. falcorostrum* 2n=?; *Den. kingianum* can be 2n=38, 57 or 76; *Den. ruppianum* 2n=38; *Den. tetragonum* v.g. 2n=38.

From this you can see that breeding with Den. cunninghamii is to say the least, going to be interesting, but we do know that combinations of these species do work, because at this stage we are aware of two other hybrids using it. One is Den. agrostophyllum done by Os Blumhardt and the other with Den. falcorostrum done by John Creeggan. The following dates may be of interest. *D. cunninghamii* x *D.* Phil Dean - pollinated 28-12-93; Pods flasked 28-4-94; deflasked 22-9-95. *D. cunninghamii* x *D. falcorostrum* - pollinated 2-1-91; Pods flasked 8-5-91; deflasked 26-10-92.

We can only guess at this stage what the chromosome numbers in these crosses are and whether they are going to be able to breed on.

Some probable combinations are:-

A 2n=38 x 2n=39.

A 2n=40 x 2n=57 = probably 2n=48 or 49.

A 2n=40 x 2n=76 = probably 2n=58.

If a 40 x 76 proves to be fertile, then the way to breed with *Den. cunninghamii* os to select tetraploids such as are available in species like *Den.* kingianum, or some of the hybrids from it, which have produce accidental tetraploids instead of triploids.

There are of course, plenty of other dendrobiums which are 2n-40 but they are in non Australian sections such as Latouria in Papua New Guinea.

Now lets look at terrestials. I think that they offer a lot of possibilities and although some Aussie x N.Z. have been made, none have yet been registered. A hybrid between Thelymitra pulchella and *Calochilus paludosus* has been made and flowered by Doug McCrae. Pterpstylis, Thelymitra include *calochilus* and for orthoceras include the donkey orchid Diurus. Australasian hybrids within the genus are growing well and could flower by September 1996.

To finish up I would like to say, don't be put off by the chromosome problems, to be aware of them is half the battle, and remember that nature can often find a way.

M.R. Campbell

# THE ELUSIVE LABEL EATER

My greenhouse has attracted an orchid pest about which little has been written. It seems that the pest exists mostly in larger collections. I was not bothered when I grew plants on a card table in the dining room. The pest I refer to is the Elusive Label Eater, hereafter referred to as the ELE. To my knowledge, no one has ever seen an ELE, but many orchid friends have had outbreaks of varying degrees. The ELE. cannot be very large because it attacks pots put closely together on benches. It must be able to fly because it attacks pots hanging from the rafters. It must have extremely sharp teeth and strong jaws because it consumes heavy plastic labels and coated wires used to attach them. It is a very thorough eater - you seldom if ever find a partially consumed label and rarely does it drop the label chosen for its meal except at great distances from the plant from which it came. Lastly, it must be nocturnal or else someone would have seen it.

When I first became aware of the problem of missing labels, I discussed it with friends and followed up on suggestions:

1 Maybe the neighbours children were responsible. Reasonable, but then I remembered that they were over 30 and practising medicine in Texas.

2. Squirrels! That, too is possible, but in all these years I've never seen a squirrel in the greenhouse. They don't need it - they spend their time in the bird feeder.

3. Cockroaches! They don't need labels. They have roots and flowers at meal times.

4. Snails and slugs! Same as above.

5. Sloppy potting techniques. Never—I don't make mistakes. This leaves the Elusive Label Eater.

Our A.O.S. Representative, who has had some experience with the ELE, has proposed that it may be in the same tribe, if not the same genus, as that inhabitant of washing machines - the Ubiquitous One-Sock Eater. They certainly share many characteristics.

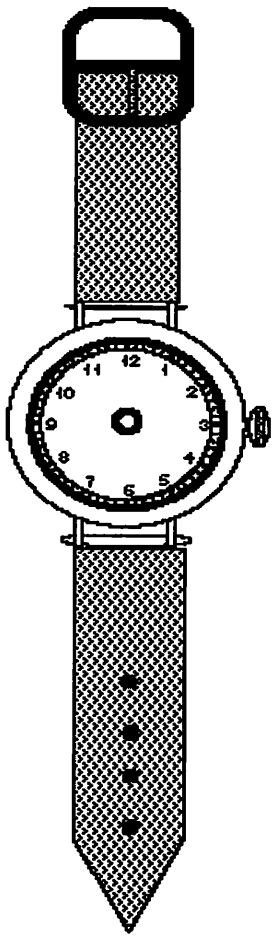
If anyone out there has seen, caught, or can describe one, if you have an effective ELE-cide, please call, I need help!

—Emily K. Grimball, A.O.S.B. November 1987 and the Poverty Bay East Coast Orchid Society Newsletter July 1996

As Cymbidium spikes are generally initialized by environmental conditions and genetic timing I observed when my culture gets better and the weather is kind some of my cymbidiums flower at the beginning of the season, continue through the season and even extended into the next year so that the one plant flowers continually for 12 months.

# A Question of Timing

One example of this has been Glory 'Pumpkin'. Now as I am doing a bit of breeding with cymbidiums and looking for answers, if somebody has any please enlighten me. I have bred *Cym.* Peter Pan 'Greensleeves' 4N with *Cym. devonianum*. Firstly, when will it flower and secondly why does it flower at that time? I have one or two ideas of the 'top shelf'.



Idea 1. Because Peter Pan flowers in March (NZ time) and *devonianum* in December (NZ time) it should flower mid-season.

| | ½ Time | | |
|---|---|---|---|
| March | | June | December |
| 3 | 6 | | 12 |

This idea is probably the most historically correct guess.

Idea 2. This idea is probably more radical, because cymbidiums must exist without logic and survive the simplest ever possible way. It will require more effort to move a flowering cycle 3 months than 1½ months.

| | | ½ Time | |
|---|---|---|---|
| eg. 1 March | | June | December |
| | 3 | 6 | 12 |
| | move 3 mths | | move 3 mths |
| | | ½ Time | |

| | | |
|---|---|---|
| eg. 2 December | Mid January | March |
| 12 | 1 | 6 |
| move 1½ mths | move 1½ mths | |

Therefore the flowering could be Mid January. This idea has a historical draw back and I have been told it doesn't happen, but why I ask?

My argument started at the top with some cymbidiums flowering for over 12 months. I have mixed the genetics so a cymbidium can't tell itself when it should flower, so it may only be the environment seasonal factors which tell this

Ross Tucker
51 King Edward Ave. Bayswater, Auckland 9

# CHEMICAL TOXICITY

OCCASIONALLY orchid plants will be injured by a pesticide or herbicide spray or even by other chemical fumes or when plants come into contact with structures treated with certain wood and metal preservatives. The type of injury that occurs will vary, depending on the chemical and physiological age and condition of the plant Damage is usually the result of improper measurement of the chemical when mixing, using the wrong chemical, or using the chemical at the wrong temperature.

Herbicide injury can include one or more of the following: complete loss of foliage, distortion of new growth, loss of chlorophyll in all or parts of the leaves, or burning of the leaf margins.

Unfortunately, by the time most chemical injury is observed, there is little that can be done about it. Once a deformed new growth is evident, the damage has been done. You can hope that if the injury is not too severe, the plant will grow out of it. However **IF** the error is discovered at the time it occurs, immediately apply copious amounts of water to the medium and wash off the foliage. This will help reduce damage and may even prevent it from occurring. It is also wise to repot into a new medium to avoid any delayed reaction from materials that still may be lodged in the mix.

Pesticide injury can be symptoms such as scorched leaves, dead spots on the ;leaves, bands of white or yellow on new leaves or even colour change in the leaves.

Errors in calculating the amount to use, applying pesticides too often (trying to use up a tank by going over the plants again) or spraying at too high (or low) a temperature all can lead to injury. Again, use only those pesticides labelled for orchids and follow the directions on the label.

*Bay of Islands Orchid Society Newsletter 1996*

# COELOGYNE LAWRENCEANA

by Lyn Sherlock

So you grow *Coel. massangeana* and *cristata* and it's a breeze; masses of flowers without too Much cossetting. Then along comes someone who calls themselves a friend and challenges you to grow *Coel. lawrenceana.* The slight, twisted grin at the time should have been a warning - yes, sure you can grow the thing but heck, trying to get it to flower is another! After numerous experiments in various litigations, all without success, the last resort is tried which is (of course) give it to your husband - any detection of that familiar twisted grin being purely arbitrary. A quick reference to Hawkes **Encyclopaedia of Cultivated Orchids** confirms spring flowering, intermediate to hot conditions, and hails from Vietnam. So husband dutifully takes over control and before long finds out how frustrating *Coel. lawrenceana* can be the flower spikes appear but abort. In sheer desperation and after many attempts trying to discover it's best location, the plant is banished from the various greenhouses to a shadehouse which is open to everything Dame Nature can throw until one spring it finally, flowers.

We (notice the Royal we) have come to the conclusion that the larger amount of rainfall the plant received over winter was sufficient to rot the restricting sheath which all too often in the past had stopped the flower emerging. A simple lesson learnt by accident but easily transferred into greenhouse culture.

28 Dec. 1995

# BITS AND PIECES

● A specimen plant is meant to be large and well grown for its type, and to have many blooms, well displayed over the plant. Optimum display is achieved with uniform lighting in the growing environment. Highly directional lighting will have every bloom facing one way, and growth may be highly directional too. Having all blooms facing one way

● Stake the developing stem of a Paphiopedilum loosely, and do not tie at the top of the stem until the flower has fully opened and set. Then tie back the stem top to make the flower sit up and invite its audience to admire it. (Not for multiflorals).

● Air temperature is measured using a maximum/minimum thermometer, The thermometer ideally needs to be in a special louvred box, open at the bottom and facing north/south. Suitable readings can however be recorded by mounting the thermometer on a

sheltered south facing wall where it. is not influenced by direct sun. Readings should be taken at 8 a.m. every day. The maximum and minimum temperatures are added together and then divided by two to give the average temperature over the last 24 hours. Air temperature triggers chemical reactions that promote growth, and creates hormonal reactions that affect the flowering or fruiting of plants.

● If you have a rainfall gauge make sure that it is mounted 300 mm off the ground in an open area twice the distance of the height of the nearest building or tree.

● Salting up is often the result of enthusiastic fertilising without cleaning out subtrate with water between fertiliser applications. The roots will stop growing, often developing a black tip. Although the fertiliser regime is sometimes quoted as being "very little and often" the failure to wash out the subtrate adequately, be it a pot or a slab, results in the accumulations of fertiliser salts. This concentration causes ex-osmosis (reverse water flow) at the root tip. Some growers alternate fertilisers of inorganic salts and organic materials (e.g. fish emulsion) to minimise salt build up.

● Orchids without pseudobulbs (phal. and Vanda) require fertiliser all year round, slightly lesser amounts in the winter months.

● Rain contains nitrogen. That is why it is better than tap water.

● A good general rule for reporting cattleyas . . . if the sheaths on the new lead are still fresh and green when the plant flowered, then allow a short rest period after reporting for the lead to mature. If the sheaths on the new lead were dry and brown before flowering, then the lead is already mature and no rest period is necessary.

● Now is the time to add magnesium sulphate in the form of Epsom Salts at the rate of 1 tsp. per 5 litres of water to your cymbidiums.

● Do wash your hands in warm, soapy water after smoking and before touching plants.

● Always sterilise cutting tools. Trisodium phosphate. Immerse tools for 10 minutes and rinse thoroughly in clean water before using on plants. The solution is hard on metal tools.

● Virkon ... is a veterinary sterilant. Immerse tools for one minute. It is less austic to metal and will not harm plants.

● Milk . . . Immerse tools for one minute change the milk every day. Less harmful to tools, but the ability to kill virus particles from cymbidium orchids is unknown Some notes on Disa . . . I know Lesley is getting quite keen on this particular general note that they obtain their nutrients from decaying humus, bird and animal manure! Now being a farmers wife, animal manure should be no problem to obtain, but how about the bird manure! Suggest you head to the beach with a large bag of stale bread and a WIDE brimmed hat. Sit and feed the seagulls and when home, carefully remove hat, preferably close to the growing area of your Disas and commence to hose down vigorously.

From Bay of Islands Orchid Society Newsletter


Sir...

**Hope that you can use the enclosed article, though you must be very frustrated and demoralised over publishing.**

**I am deeply saddened by enthusiasts lack of support for *Orchids In New Zealand* and more so by those who only criticize and produce nothing constructive. I suppose we collectively get what we deserve.**

**George Fuller**
**Taranaki**

Sir...

The Executive of the **Auckland Orchid Club** would like to complain about the use of the articles in our Club Bulletin being reprinted in *Orchids in New Zealand.*

In less than a year you have printed three of our articles. We feel very flattered that you think the standard of them is of the quality you require for your magazine. What we object to, however, is that you have never acknowledged the source of the said articles. Surely this is a common courtesy.

We hope in future that if you find an interesting piece written by one of our members you will at least give them credit for their research and time spent in compiling it.

Glenys MacRae
Secretary.

*Thank you for this letter.*

*Firstly, I must correct a common misconception which you have also made in the letter. This is not MY magazine, but yours. It is owned by all Orchid Council affiliated orchid societies in this country, and through them all the individual members of those affiliated societies.*

*It is the policy of this magazine to always acknowledge the author and source of any reprinted material. However, with limited time and resources available, sometimes this is not picked up.. Within the various production and editing process the acknowledgement can be deleted or accidentally lost. Unfortunately, we do not have the resources to check everything back to the source document. Also, we sometimes reprint articles that may have also been reprinted by another society without adequate acknowledgement, in some cases quite some time after the original publication, making it very difficult to identify the original publication or even the author. I have, myself, experienced the same disappointment many times in the past.*

*I apologise to the Auckland Orchid Club and the authors involved for this unintentional omission.*

*It is not my desire to republish material that has already appeared in this country, but if orchid clubs who own* Orchids in New Zealand, *the affiliated members and other readers are unable to provide sufficient original material for the magazine, we have no alternative but take some material from newsletters in order that you have a full magazine to read. If sufficient material was provided this problem would not arise!!!! Its over to you..*

*Editor*

# Long Tailed Mealy Bug

George Stapley.

***(Pseudococcus longispinus)***

SOME KNOWLEDGE of the life and habits of this Australian pest is helpful in understanding why the spray schedule is necessary.

The adult male Mealy Bug is about lmm long with a pair of clear win . He is rarely seen, hiding deep in the leaf overlaps, of Orchids or bark of-trees. He undergoes two instars [skin shedding] before building a cocoon.

The breeding female is wingless, up to 4mm long and "lays" up to 200 crawlers (live young ) at a time. The crawlers shelter under Mum for a few days before dispersing. The female undergoes five instars before becoming adult, then seeks privacy to complete development.

In glasshouse temperatures of around 14°C (58°F) the young will feed all year round and at least three distinct crops of young will be born.

The Mealy Bugs seen on flowers or suddenly appearing on plants are still feeding, as well as being able to fly.

***BEWARE BREEDING BUGS NEARBY***

Orthene appears to be the best of the current batch of sprays. Used at the rate of 4mls per litre of water, it will kill anything. Feeding on the sprayed plant, but has no effect on those bugs in the cocoon stage. As Orthene has an in plant life of 18-21 days, **three** sprayings are necessary at 20-21 day intervals in warm weather In the cooler months (May - September) four or five sprays may be needed, as the cocoon stage will be slower.

As Orthene is expensive, the vegetable oil Codacide can be mixed with the Orthene before adding the water, halving the amount of Orthene used per litre of water. Follow directions on Codacide Label.

As the Long Tailed Mealy Bug has been found breeding happily in the (warmer) parts of the country, outdoors, on the following range of plants and the complete **spraying all plant life in the same area as your orchids is a must.** Apple, pear, citrus spp, docks, grapes, Maidenhair Fern, begonia, cineraria, ivy, hebe, broom, cyclamen, runner beans, kowhai, fig, passion flower fruit, guava, kangaroo vine, grapefruit and others.

Using Codacide Oil and Roundup I have had good control of weeds using half the Roundup advocated.

# A.G.M '96

**Report on OCNZ AGM 1996 by the President of the Orchid Council, Harold Bayram.**

THE ANNUAL GENERAL MEETING of the Orchid Council of New Zealand was held at the Brydone Hotel Oamaru on Saturday 15 June 1996.

It was disappointing that there were only 19 Delegates present but most had proxy votes from the Societies that had not sent Delegates.

The following reports which had been sent to all Societies were formally presented to the meeting:

**President's Report** presented by Harold Bayram

**Treasurer's Report** presented by Graham Jackson

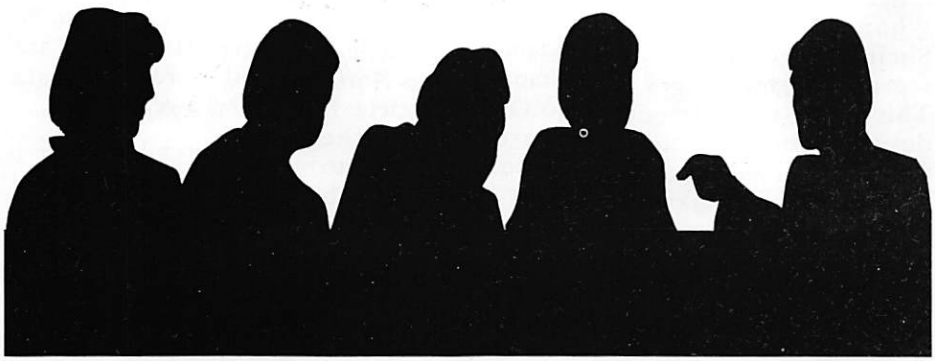
**Magazine Report** presented by Patricia Elms

**Judging Report** presented by Patricia Elms

**Expo 1995 Report** presented by Patricia Elms

After the presentation of the Expo 1995 Report in which the successful conclusion was outlined, and in particular the financial outcome the President asked the Waikato Delegate to give a brief report on the Expo to be held in Hamilton on the 16/25 September in the year 2000.

Jeanette Hewer, President of the Waikato Society spoke about the preliminary preparations in forming a Committee and its association with the Orchid Council under who's umbrella the Committee would be working. It was announced that Joe Vance, Vice President, would be the Council's representative on the Committee Other members of the Executive Committee would also visit Hamilton from time to time.



The President encouraged Societies to start planning now for the big event in the year 2000.

**Raffle Report:**

Joe Vance gave a brief report on the last National Raffle which was moderately successful as some Societies sent the tickets back without attempting to sell them. However, the net profit was $10,997.

**NZ Arts Assembly and Creative New Zealand Report:**

Rod Marshall spoke to his report and outlined the difficulties in getting money from Creative New Zealand. The Executive Committee had discussed the problem and were now looking at the Lottery group. Congratulations to Rod on his election to the Executive Committee of the NZ Arts Assembly.

**Remits:**

Remit No 1 from the Whangarei Orchid Society - re two day registration for Judges. This remit was passed despite some contrary views expressed by the Manawatu and Waikato Societies.

Remit No 2 from the Manawatu Orchid Society - re magazine included in capitation fee. The originating Society sought permission to withdraw the remit. This was agreed to by the meeting.

Remit No 3 from the OCNZ - re rescinding 1995 Expo Special Rule for Postal Ballot. This remit was passed.

Remit No 4 from OCNZ - re magazine. After a lengthy discussion this remit was passed with only 3 dissenting votes.

Confirmation of Nominations for Executive Committee: No election required. (List circulated)

The Governor General had agreed to be Patron of the Council for his term of office.

**Capitation Fees:**

In view of the passing of Remit No 4 the capitations fees would be increased to $5.00

A very successful meeting despite the poor attendance with excellent hospitality by the North Otago Orchid Society. It was great for the Executive Committee to be seen in the South Island.

The next AGM to be held in Hamilton in June 1997, date to advised.


Sir,

In the March issue of *Orchids in NZ* the article written by Mark Dawe, *Hybridising for Commercial Cut Flower Cymbidiums* caused me to put pen to paper.

I would like to disagree with his last statement - *'it appears much simpler to breed for award quality than for cut flower quality cymbidiums'*.

My observations are based on shows and awards given in the last twenty years. At present in Australia for early shows (June to August) only 3 varieties seem capable of winning champion cymbidiums. - Wallamurra 'Jupiter' (red) 15 years, Royale Fare 'No 5' (green) 5 years, and Royal Fare 'Krista' (yellow) 5 years.

In September there is Narella "Jennifer Gail' (pink) Lake Macquarie 'Winsome' (white) and Jubilation 'Geronimo' (yellow)/ The last plant is 30 years since it was first

shown as a seedling and if flowered correctly still takes a lot of beating.

In Victoria some Valley Zenith's seem to be making inroads into championships but the ones that I have seen so far will not beat the three plants first listed if grown in a good manner.

Also, in the A.O.C. Awards, for the year 1994 only one standard cymbidium, one intermediate and one miniature cymbidium obtained awards Australia wide. When considering the many thousands of seedlings that must have flowered, the results were very minuscule.

I do agree with Mark Dawe that any hybridising must use the best possible parents available or hopefully combine the best qualities of each parent into some of the seedlings. The only difference between cut flower and show is the ideal standards which are desired, but the chances of getting an award quality one is like winning the lottery.

Good growing

Peter Hestelow
"Four Winds"
5 Binalong Road
Belimba Park
N.S.W. 2570
AUSTRALIA



# OTAGO CELEBRATES BIRTHDAY WITH South Island SEMINAR

1996 is proving to be a busy year for the Otago Orchid Club. This year we are celebrating our 20th Birthday by hosting the South Island Seminar which will include a Judging Seminar.

The venue is John McGlashan College in Maori Hill, Dunedin. The date is Labour Weekend, 26-28 October 1996.

The Displays and Commercial Sales Areas will be open to the Public from noon on Saturday 26th until noon Monday 28th.

Several speakers have been invited to speak during the weekend.

Our special Birthday Dinner will be held on the Saturday Evening.

Register interest for more detailed information from the Secretary, Graham Letts, 41 Elliffe Place, Dunedin. Ph 03 4542113

So, come to Dunedin at Labour Weekend and help us celebrate.

# Cultural Conditions required for Odontoglossum and other cool growing species.

When preparing this paper, I was concerned about the direction that should be made because of the differing local environments that many growers have to contend with. In my travels, I learnt that in most parts of the world 20 miles away can be an entirely different environment to one another 20 miles away, and this is why any one set of instructions can be very misleading to another grower, before I decided to attempt to go back to the basics that is required from growers wherever they may reside.

The first requirement is to have some sort of appreciation of the regions from where many of these COOL GROWING species originate. Many of these COOL GROWING species come from the tropics, but at an altitude that is so totally different to the one many of us associate at sea level. For instance in Ecuador, on the equator, a very rich country for orchids, such as masdevallias and various odontoglossums, pleurothallis, stelis, lycastes etc. grow between 2000 to 3000 m and above because at that altitude cloud and light rain is constant throughout the year, therefore the bush never dries out for any space of time, while at the same regions, the snow line is about 5000 m. There is a constant movement of air at these altitudes, the clouds clear allowing sunshine, then more clouds to slow up the process dehydration at all times. The day length does not alter to any extent throughout the year while the

**Gerald McCraith's paper to the 3rd New Zealand International Orchid Expo delivered at Palmerston North in 1995**

temperatures vary from 8°c to about 25°c at these altitudes.

Some species such as maxillarias, lycaste, odontoglossums etc. at these altitudes will grow in the canopy of the bush, or in a position where light can penetrate, while the masdevallias will be found much lower in the trees where the light is broken more by the canopy above, very few orchids are found in the very dense regions other than in the canopy of the bush. Some orchids are found growing as terrestrials but many of these began their life on a tree branch which in time has broken from the tree and found an acceptable spot on the ground and the roots have found the leaf litter a suitable for its survival, most plants broken from their host plant do not survive. A number of these terrestrial orchids when examined reveal that while the root system may be quite extensive in the leaf litter, the roots never penetrate the soil underneath. The same has been observed in the Highlands of P.N.G. with many of their species.

The first and essential lesson to be learnt is that wherever these COOL GROWING orchids are being grown, some provision must be made to exclude the outside elements to a degree where frost conditions may be severe, strong drying winds, very open conditions are all reasons that protection will be very necessary for the well being of COOL GROWING orchids. When temperatures fall below 5°C growth will stop and this period can be disastrous to the grower unless a mild air movement to the plants can be provided. At the other end of the temperature range, when temperatures are allowed to exceed 35°c growth will stop, unless more shading or the use of an evaporative cooler is installed.

Most orchids that are available to the home grower, begin their life in sterile flasks, and these are readily available from the commercial growers, but very often when flasks are mentioned to the home grower, he shudders because of a disaster they may have suffered in an earlier attempt. Very often the failure has occurred by watering these very tender seedlings before the leaves have had a chance of hardening to the outside elements. These seedlings should be potted into small pots, and use a medium of at least 70% sphagnum moss, and only water from the bottom by soaking in a tray of water that will cover 2/3 of the pot for about six weeks at least. The pots can be held in an old polystyrene box with moss or some moisture holding material on the bottom, the small pots placed on this material and the top covered by glass sheet to protect the seedlings from accidental spraying of water. These pots should be soaked once a week while in this nursery when the leaves of the seedlings will have hardened sufficient to withstand the outside elements. The commercial grower will be skilled in deflasking and possibly could not spare the time with this procedure. The home grower will have a minimum of losses by following this simple procedure with any of the COOL GROWING orchids.

It has been my good fortune to visit many orchid growers who were located suitably or by desire to grow COOL GROWING orchids with a basis of the Odontoglossum Alliance orchids and have been intrigued by the variety of

potting media that has been used with reasonable results. Dependence of what was available in their regions was the deciding factor, it was a question of how that material was managed, principally how frequent and the amount given at each watering. There is more than one way success can be achieved, its a matter of management control. Personally, after many years of using various materials, have settled down to 70% sphagnum moss, the remainder made up of a mixture of bark, gravel, polystyrene chips, oak leaves, with the addition of poultry manure for all pots under 4" (100mm) for all the genera that I grow, and in the pots of the larger plants, 50% moss, and the rest made up of the conglomerate. I have not included Cymbidiums or many of the Australian epiphytic orchids in this talk because they are considered as garden plants here, but does refer to the many orchids that originate in the tropic zone at altitudes about 2000 m (6000 ft. above sea level), whether they originate in South America, Northern India, or Papua New Guinea.

Air movement within the glasshouse is most important at all times of the year, this can be best achieved by mechanical means, the evaporative cooler is the most effective in this direction, many changes of moistened air per hour to the plants benefit.

Shading is another necessary factor, as the days lengthen after winter Odontoglossums are a good indicator, because some plants in this alliance will show a distinct bronzing in the leaves of some plants. This is an excellent indication that more shading is required, and also the evaporation rate becomes more rapid. In Melbourne, the shades 75" shade cloth goes on about mid September and stays on until about mid April.

Catering the plants has always been a problem whether to water or not, in the cooler weather always leave it until tomorrow, but in the warmer months of the year, it is reasonably safe to go ahead and water. The great majority of the species from the higher altitudes do not experience long periods of dryness, and are more comfortable with moisture around the root system. This is the great benefit of sphagnum moss.

In the tropic zone, the day length throughout the year, does not alter to any extent, therefore the day light of each day is a great deal different from regions far removed from the equator, for instance, the day light length in Melbourne is four hours shorter at the 22nd June than it would be equatorial regions, a factor that is often overlooked.

In a mixed COOL GROWING orchid collection there are a number of plants that require good shading, such as odontoglossums, and masdevallias, pleurothallis species, and these should be well removed from being grown nearer the glass or plastic while there are other orchids that prefer much more light to their advantage, such as the dendrobiums ,laelias, sophronitis and maxillarias can be given space that is closer to the glass where the extra light and warmth will be to their advantage. I have installed six inch square guttering high above the benched plants and in which can be placed a number of plants, a slight slope gives the necessary drainage when watering.

Apart from the usual daily routine of maintenance of the

plants. I find that it is necessary to handle every plant that is growing in the glass house at least four times a year. Some will be found to be very dry, probably protected by leaves of other plants and not receiving the full watering at each watering, while others may show infection of some sort, others will be found to require reporting or potting-on. By actually handling each pot, a reasonable accessment can be made on each plant.

There are many factors in the successful management of your COOL GROWING orchids and each must be balanced with the conditions that the grower has to contend with in their locality, and whether it is a light constructed plastic covering or a solid glasshouse, each requiring careful thought, always remember that there is one way, of one fixed set of cultural instructions to cover all the different local climates that do exist but a combination of each of the factors that are involved.

If in doubt, always seek local advice rather than read cultural notes that may be very successful some distance away where conditions maybe totally more favourable or otherwise. The majority of these charming COOL GROWING orchids require a little more protection than the popular and tough growing Cymbidium but require a lot less growing space.

Gerald McCraith AM.

(AM = A Member of the Order of Australia).

# ORCHID SHOWS 1996

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|---|---|---|
| Aug. 30, 31, Sept. 1 | **WHANGAREI** | North Exhibition Hall, Whangarei (21st Birthday) |
| Aug. 30, 31, Sept. 1 | **AUCKLAND** | Corbans Winery, 426-448 Great North Rd., Henderson |
| Sept 7,8 | **SOUTH AUCKLAND** | Papakura Community Hall, Great North Road, Papakura |
| Sept. 7,8 | **NELSON** | Stoke Hall Nelson |
| Sept. 13,14,15 | **NEW ZEALAND** | Mt Albert War Memorial Hall, New North Road, Auckland |
| Sept. 14,15 | **LEVIN** | Horowhenua College Hall, Weraroa Road, Levin |
| Sept. 14,15 | **NORTH OTAGO** | St Pats Hall, Oamaru |
| Sept. 20,21 22 | **TAURANGA** | Greerton Hall, Cameron Road, Tauranga |
| Sept. 20, 21 | **HAWKES BAY** | Indoor Basketball Stadium, Railway Road, Hastings |
| Sept. 20,21,22 | **TAURANGA** | Greerton Hall, Cameron Road, Tauranga |
| Sept. 21,22 | **TAUPO** | Great Lake Centre, Taupo |
| Sept. 27,28 | **WAIROA** | Presbyterian Methodist Hall, Queen Street, Wairoa |
| Sept. 28,29 | **MANAWATU** | Community Leisure Centre, 569 Ferguson St Palmerston North |
| Sept. 28,29 | **HOWICK** | All Saints Church Hall, Cook Street, Howick |
| Sept. 28,29 | **WAIKATO** | Venue not advised |
| Oct. 5,6 | **TARANAKI** | Westpoint Complex, Gill St, New Plymouth |
| Oct. 5,6 | **WANGANUI** | Wanganui City College Hall, Ingestre St, Wanganui |
| Oct. 11,12,13 | **NORTH SHORE** | Browns Bay Community Centre, Bute Rd. Browns Bay Auckland |
| Oct. 19,20 | **WAIRARAPA** | Masterton Town Hall **21st birthday show** |
| Oct. 26,27,28 | **OTAGO** | **SOUTH ISLAND SEMINAR** John McGlashan College, Pilkington Street, Maori Hill, Dunedin |
| *Jan. 10,11,12 1997* | ***TARANAKI*** | *Central School Hall, Pendarvis Street, New Plymouth.* |

**WITH *ORCHIDS IN NEW ZEALAND* CEASING PUBLICATION AT THE END OF THE YEAR, PUBLICATION OF SHOW INFORMATION WILL ONLY BE POSSIBLE IN THE PLANNED NEWSLETTERS OF THE ORCHID COUNCIL. AT THIS STAGE PUBLICATION DATES AND CONTACTS ARE NOT AVAILABLE.**

# ODONTOGLOSSUMS

by Peter Hawkins

"Crispum" type odontoglossums are like me, they like to be comfortable. Ideal temperatures are above 10°C and below 25°C. Temperatures outside this range cause plants to stop growing.

However, in a cold-hot climate like the Wairarapa, odont. alliance plants are grown well if crosses using warmer growing species are kept, e.g. Wilsonarias using oncidiums (*Wils.* Widecombe Fair x with *Onc. Icurarum*) and Maclellanaras (*Maclellanara* Pagan Lovesong x with *Brassia verucosa*. Also Beallaras and Alicearas, and several other crosses are suitable. However, these plants are not so tolerant of cooler temperatures.

Odont. alliance orchids in winter like more light and less water, but should never be kept too dry. In the spring and summer I put shade cloth over the orchid house to cut the light back, which keeps the plants cooler and with the increased watering, also helps raise the humidity. I feed weekly most of the year except in the winter when I feed every two weeks.

**Hobby Flasks** - I often buy plants that do not grow very well. My excuse is I have brought a tail-end plant. There is a good way round this problem - buy a hobby flask. You will still get some "tailenders", but you will also get some good ones. Most hobby flasks I have bought usually have 8-15 plants in them. Try to buy flasks with strong looking green plants in them. Pick the flasks up and you should see the roots in the agar. Watch out for flasks with many spindly plants especially if they are yellow in colour. These plants will be very hard to get growing again as they have probably used all of the nutrients in the agar and are just existing.

Flasks can be bought from the larger shows, also some specialists orchid groups sell them. Another good source is from speakers on lecture tours. They also can sometimes be bought mail order. You can expect to pay from $25 to $45 a flask. The Odont. alliance people sell them to their members at $25. The flasks brought across from Australia by a speaker-grower would be $40-$45 each.

Most of my experience with deflasking has been with odontoglossums. I have also tried Zygopetalums and Aussie dendrobiums. I have had very mixed results - from losing the lot to a 100% survival rate.

It's very easy to deflask and grow plants. If you get spindly yellow plants with no roots, you will have trouble growing them. Some people keep their flasks some time before deflasking. They like to keep them in similar temperatures to what they will grow them. Others like to deflask in the spring and then have six months of good growing conditions ahead of them.

I believe starting from flasks is the best and cheapest way to grow orchids. Having ten plants of one cross give you a better chance of getting a really good one. Also you have the option of using different mixes and/or growing them under differing conditions.

***Wairarapa Orchid Circle newsletter***

# *Howeara* Mini Primi

**Grown by Owen and Audrey Henson**

**Photograph by John Gilliland**

**Howeara *Mini Primi was seen in hundreds some years ago, but now appears to have largely disappeared from many collections. These notes by Owen Henson records his technique behind the successful flowering of the plant illustrated.***

**This plant was purchased as a seedling in 1990, and has doubled the number of spikes each year until 1995 when it produced 32, although sadly a snail ate 5.**

**It has been grown in a glasshouse which is painted with a solar shade paint and has shade cloth over the roof. Inside there is bubble plastic under the roof and a fan goes 24 house a day. We have it growing on the top shelf where it gets bright light and a minimum temperature of 10°C.**

**During the spring it is fed with Phostrogen plus a high nitrogen fertiliser. After Christmas the nitrogen is replaced with potash again mixed with Phostrogen. It is never allowed to dry out during the warmer weather but has reduced watering in the winter.**